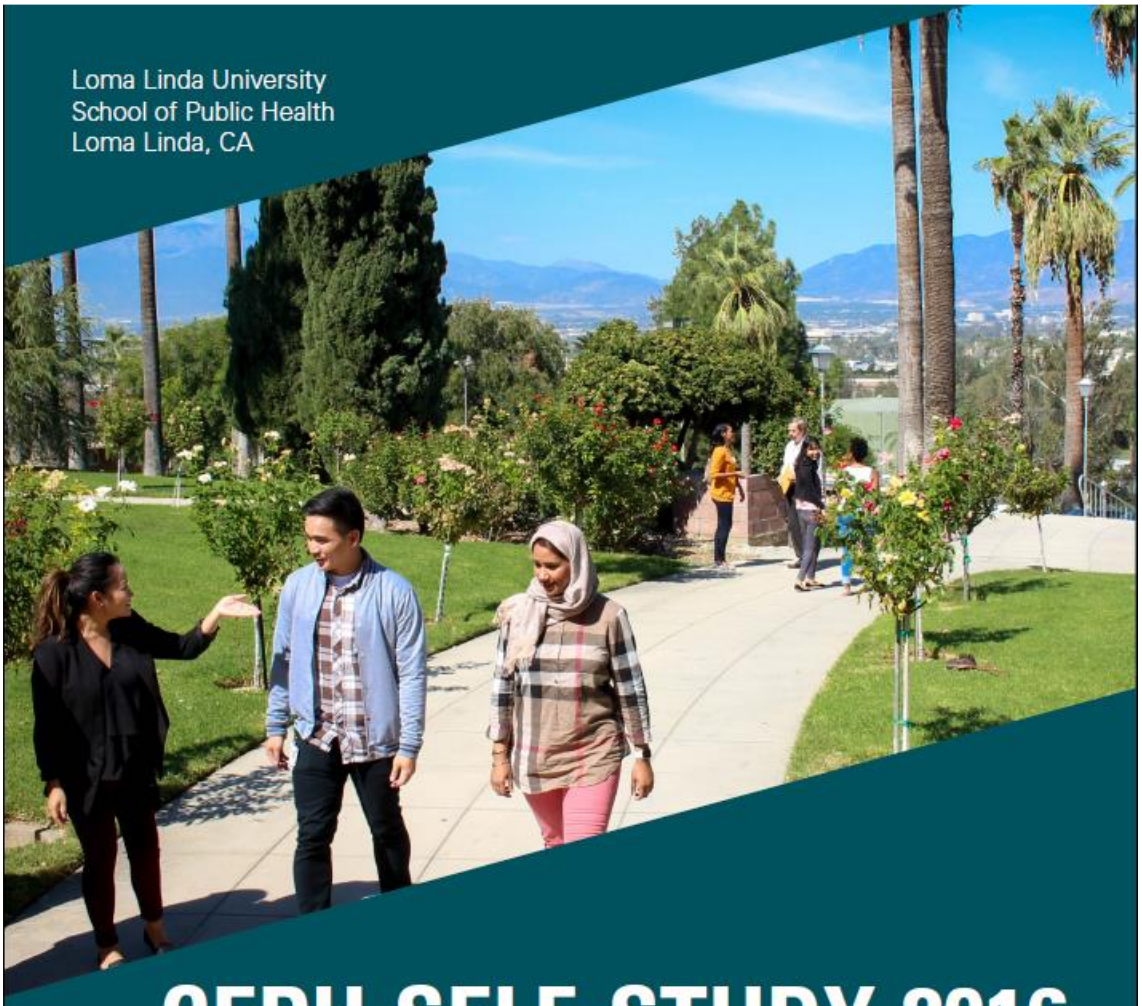
Loma Linda University
School of Public Health
Loma Linda, CA



CEPH SELF-STUDY 2016
Final Report

LOMA LINDA UNIVERSITY
School of Public Health

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Acronyms and Abbreviations

Acronym or Abbreviation	Term
Academic Dean	Assistant Dean for Academic Administration
APO	Academic Programs Office
ADAA	Assistant Dean for Academic Administration
ADPHP	Assistant Dean for Public Health Practice
ADR	Associate Dean for Research
ASPPH	Association of Schools and Programs of Public Health
Canvas	Canvas Learning Management System
CCR	Center for Community Resilience
CEPH	Council on Education for Public Health
Centers	Collaborative Centers
CLHS	Center for Leadership in Health Systems
CNHLDP	Center for Nutrition, Healthy Lifestyles and Disease Prevention
CHP	Center for Health Promotion
CHR	Center for Health Research
CRO	Chief Research Officer
DCR	Degree Completion Reports
DPC	Doctoral Programs Committee
DSC	Doctoral Subcommittee
EAD	Executive Associate Dean
ERF	Electronic Resource File
ERML	Environmental Microbiology Research Laboratory
GIS	Geographic Information Systems
GISr	GIS Systems of Record
ICP	Institute for Community Partnerships
IDC	Indirect Cost
ILO	Institutional Learning Outcome(s)
IOI	Intentional Outreach Intervention
LLU, university	Loma Linda University
LLUH	Loma Linda University Health
LLUMC	Loma Linda University Medical Center
LLUSPH, School	Loma Linda University School of Public Health
LMS	Learning Management System
OPHP	Office of Public Health Practice
PCOR	Public Health Core
PD	Program Director(s)
PLO	Program Learning Outcome(s)
RCG	Research Consulting Group
RPT	Rank, Promotion, and Tenure
SBCUSD	San Bernardino City Unified School District
School	Loma Linda University School of Public Health
SDA	Seventh-day Adventist
SMGC	San Manuel Gateway College
SPH	School of Public Health
SVP	Senior Vice President
University	Loma Linda University
WASC	Western Association of Schools and Colleges

Introduction

Education, research, and service from a faith-based perspective are at the core of what we do at Loma Linda University School of Public Health (LLUSPH, SPH). The school, founded and accredited in 1967, continues to be the hub for public health initiatives at Loma Linda University Health (LLUH), a Seventh-day Adventist (SDA) Christian organization. Our commitment to our students is an exceptional learning experience that instills confidence and skills that shape leaders in public health and health care administration. As we head into our 50th year of operation, 2017, we reflect on the accomplishments of the last half century, while facing the challenges that lie ahead. We approach this self-study with a re-organized structure and new opportunities built on a solid foundation of strong academic programs, a growing breadth of research and service opportunities, and a commitment to local and global service from a faith-based perspective.

Transitions and challenges

The LLUSPH has undergone significant organizational and operational changes since the last self-study period and reaccreditation in 2010. Beginning in 2013, the Dean at the time, Dr. Penniecook, initiated a series of regular faculty meetings to present and discuss the key themes of the school, and explore ways to foster and encourage interdisciplinary collaboration. The effort was prompted, in part, as a result and in anticipation of the future changes in the field of public health as outlined in the Association of Schools and Programs of Public Health (ASPPH) *Framing the Future Taskforce Report* and the competency modeling work on public health graduate education. In September 2013, the development of working groups made up of students, and faculty and staff members provided the foundation for initiating significant changes in the school's approach to public health education, research, practices, policy and administration, and operations. Three of 21 cross-cutting working groups focused on the mission and values of the school, while 18 working groups addressed the school's strategic goals and objectives. Some recommendations were adopted immediately to make operational enhancements, improve the educational experience, or to improve efficiency. Other recommendations are under review and will be evaluated through a deliberate and systematic and comprehensive strategic planning initiative that was introduced at a faculty meeting in May 2016 and is in the process of being formally launched this autumn term.

As part of the reorganization of the LLUDPH, the six department structure of the school was dissolved as of January 1, 2014, and replaced by three Collaborative Centers (Centers) with the purpose of fostering interdisciplinary research and service activities: the **Center for Nutrition, Healthy Lifestyles, and Disease Prevention (CNHLDP); the Center for Community Resilience (CCR); and the Center for Leadership in Health System (CLHS)**. The academic structure was strengthened to provide more consistency in expectations and performance across academic programs with the establishment of an Academic Programs Office to support students equally in all programs in matriculation, tracking, student success and degree compliance. Since then, program directors have met regularly at both master's (MPH, MBA, MS) and doctoral (DrPH, PhD) levels to provide greater direction, collaboration and consistency across programs, and create synergy across disciplines. This is a distinct departure from the previous model, where academic issues were addressed primarily within the department or discipline, which resulted in considerable discrepancies in practice and support across the school.

Adjustments in leadership since 2014 have helped address some of the challenges faced due to re-organization. An established administrator and researcher, Dr. Joan Sabaté, identified by the working group for the Center as a potential candidate to lead CNHLDP, was asked to serve as Director in January 2016. He works closely with the other Center Director, Dr. Karl McCleary (CLHS and CCR), the Dean, and the rest of the SPH administration to address the needs and challenges of the school. Each Center has adopted signature themes as areas of strategic emphasis which aim to lead jointly and inform the next

generation of public health thinking related to innovations on building a culture of health, particularly around prevention and population health.

The LLUSPH has also experienced changes in school leadership during the organization transition, with Dr. Penniecook resigning in December 2014, followed by an Interim Dean (the LLU Provost, Dr. Carter) while the search committee, Chaired by LLUH President, Dr. Hart, conducted the search for a new Dean. Dr. Helen Hopp Marshak, who served as Academic Dean, was selected by the search committee and appointed by the LLUH Board of Trustees in April 2015.

The sudden and unexpected loss of Dr. Sam Soret, due to a massive myocardial infarction, in late August of this year has deeply affected our school and our leadership in LLUSPH. Dr. Soret served as the Director of the Center for Community Resilience and as the Associate Dean for Research, and was a long-serving faculty member and administrator in the school for over 21 years. We still mourn his loss, and the significant role he played in the reorganization and the future of our school. Dr. Karl McCleary was named Interim Director for the CCR to maintain a level of consistency and support, as he is already part of the administrative team and worked closely with Drs. Soret and Sabate during this past year. The administrative positions Dr. Soret held will not be immediately posted until the strategic management process is underway and we can determine what positions are necessary to fill.

In addition to challenges resulting from organizational change and transitions in leadership, there has been a year-over-year drop in applications and enrollment, during this same time period, which appears to be due, in part, to increasing competition in public health education. This has resulted in fiscal challenges due to a heavy reliance on tuition as the revenue base for operations, which is now being felt in other program areas at Loma Linda University (LLU, university). LLUSPH is working with LLU leadership to address this in a more comprehensive and enterprise-wide manner, which sustains the quality of education while enhancing the financial viability of operations. While there are challenges in attracting external funding from traditional governmental funding sources, a shift towards securing funding from foundations and other non-governmental sources provides opportunities for broadening the school's financial base for the future.

Accomplishments and opportunities

Though faced with significant challenges over the last several years, the LLUSPH has also experienced tremendous accomplishments:

- *Enhanced innovation and collaboration in teaching and education*, through primarily faculty-led initiatives. This is reflected in the integrated and collaborative public health core coursework, or PCOR, expansion of online and synchronous learning opportunities, and many other efforts.
- *Service learning expansion*. LLUSPH now has 10 designated service learning courses as of April, 2016, and is leading the campus in high quality service learning experiences.
- *Considerably strengthened practice and career opportunities for all students*. The establishment of a central LLUSPH Practicum Office and Writing and Career Center in 2014 provides clear direction and standards for quality practice experiences, job listings and career opportunities for all students and graduates in our school.
- *An enhanced research and service infrastructure*, with established leadership in those areas, and focused direction on the core themes of the Centers. While this is still in development, we anticipate this will provide more focus for our research and service efforts over time.
- *Workforce development opportunities through revised certificate programs* which adjusted the 27-unit certificate programs to a more streamlined and attractive 13-unit experience. This will enable us to address key workforce needs in an efficient and effective manner, by developing high quality online certificate coursework to address and respond to workforce needs.

- *Enhanced philanthropy initiatives*. LLUSPH was gifted its first endowed professorship in 2016, along with a notable increase in giving among faculty and alumni connected with our school. The strategic plan for enhancing philanthropic efforts will further bolster this important area of advancing the school's mission.

Planning for the future

Here at the LLUSPH, we live our mission with unwavering purpose and are deeply committed to delivering the best public health education consistent with our faith-based legacy. We are equally committed to public health education that is consistent with the complex challenges of health in the 21st Century.

The school will continue its efforts through the development of a comprehensive strategy management system. This system will involve the development and implementation of explicit plans to build upon the foundational work of LLUSPH working groups; thus, extending alignment efforts to strengthen the school's capacity for service sustainability, and competitive advantage. Dr. Karl McCleary, the Director of the Center for Leadership in Health Systems, and now Interim Director of the Center for Community Resilience after the sudden loss of Dr. Sam Soret, has taken a leadership role in providing direction to LLUSPH administration on engaging with faculty and staff to develop a sustainable system that will provide on-going direction, based on evidence, for our school. We believe this approach will be vital to the success of our school going forward.

1.1 Mission. The school shall have a clearly formulated and publicly stated mission with supporting goals, objectives and values.

1.1.a. A clear and concise mission statement for the school as a whole.

Our Mission. To bring hope, health, and healing to communities throughout the world through the discovery and dissemination of knowledge while integrating the Christian values of the SDA Church.

Our Vision. Preparing ourselves and others to maximize personal and community wellness through excellence in faith-based public health education and practice.

Our mission aligns our legacy of promoting health, wholeness, and longevity with LLUH's faith-based emphasis on the teaching and healing ministry of Jesus Christ. Together they provide an environment for "hope, health, and healing" which focuses on the practical effects of building a culture of health and wholeness. As we actively engage our communities, we seek to create wholeness in individuals and populations: that is, the harmonious balance that exists when healthy individuals thrive in resilient communities supported by sustainable health systems.

1.1.b. A statement of values that guides the school.

Our Values. The school remains committed to three linked core values: *diversity-global health, wholeness-faith based,* and *engagement-health equity.* Each is expressed as follows:

1. ***Diversity-Global Health.***

To humbly learn from all people, while embracing and celebrating their healthy beliefs and practices.

The learning environment at LLU is enhanced by a rich diversity of students who reflect various cultural, ethnic, and religious backgrounds. Students gain a wide breadth of perspectives and viewpoints that prepare them for their respective profession. Similarly, the school's global view of whole-person health addresses transnational health issues, determinants, and solutions. Our faith-based tradition aspires to take "hope, health, and healing to the entire world," thus supporting our vision.

2. ***Wholeness-Faith-based.***

To support the process of integrating spirituality with physical, social, emotional, intellectual, and character development.

The LLUSPH has a history, much like the university, of advocating for the care of the whole person. To this end, we believe that health is more than the physical absence of disease. It refers to all aspects of life that contribute to overall health and well-being. We encourage students, and faculty and staff members to "live wholeness" with the goal of thriving and living lives filled with boundless possibilities.

The school's wholeness theme is reinforced by its three Centers:

a. Nutrition, Healthy Lifestyles and Disease Prevention (whole individuals)

b. Community Resilience (whole communities)
c. Leadership in Health Systems (whole systems)

Since our beginning in 1967, we have believed that faith motivates action. It supports embedded values which reflect responsible stewardship toward others – from individuals to our environment. Our faith compels us to treat all with dignity, respect, and compassion, and encompasses each facet of implementing the whole person perspective.

3. ***Engagement – Health Equity***

To be active contributors and participants in our profession as educators and learners.

The school actively seeks to provide students with opportunities to discuss, collaborate, and learn from other individuals, organizations, and communities with the goal of promoting health equity for all, regardless of their social or economic status. We believe engagement is possible when barriers, impediments or disadvantages that limit one's full health potential are mitigated, reduced or removed. Without ensuring successful access to engage with others in this endeavor, parity and full participation cannot be realized by all who desire it.

1.1.c. One or more goal statements for each major function through which the school intends to attain its mission, including at a minimum, instruction, research and service.

The goals presented in Table 1 were developed by the leader/administrator and team responsible for each major function, and refined with input from reviewers.

Table 1 Strategic Goals

Strategy	Goals	Relationship to Mission and Values
Academics – Master's Level	**Academic Goals:** Goal 1: To standardize the public health culminating experience across disciplines and reflect the breadth of skills necessary for entry into the profession. Goal 2: To demonstrate program quality for all MPH and MBA programs, summative assessment shall be performed of program learning outcomes (PLOs). Goal 3: To integrate faith and learning into a public health worldview that enhances the quality of instruction and supports the foundations for ethical public health practice.	Public health education that disseminates actionable knowledge and develops competent students equipped with the tools to impact the health and wellbeing of communities is a central tenant in the mission of LLUSPH.
Academics – Doctoral Level	**Academic Goals:** Goal 1: To standardize the doctoral culminating experience across disciplines and reflect advance training and leadership in public health. Goal 2: To foster a climate of enriched learning experience for students in educational pedagogy and scholarship.	Preparing competent, advanced practice public health professionals for the complex challenges and opportunities of achieving healthy communities in the 21st century is an enduring theme in the mission

Table 1 Strategic Goals		
Strategy	**Goals**	**Relationship to Mission and Values**
		of doctoral education in LLUSPH.
Research	**Research Goals:** Goal 1: To increase the externally funded support for the research portfolio of the school through implementing Center-based research initiatives and school-wide policies. Goal 2: To improve the integration of doctoral students into the research conducted by the Centers. Goal 3: To set up formal practices for mentoring faculty in research scholarship.	Innovative scientific discovery and knowledge dissemination that advances interdisciplinary research will extend the school's longstanding research program that examines the benefits of healthy lifestyles, nutrition, and other important determinants that contribute to improved population health.
Service	**Service Goals** Goal 1: To identify and clearly describe the school's areas of public health practice. Goal 2: To promote faculty engagement in at least one designated emphasis area of public health practice. Goal 3: To increase student involvement in public health practice through opportunities outside the required field practicum experience.	Student and faculty engagement in the communities we serve bolsters mutual interests that foster health investments and well-being.
Diversity	**Diversity Goals:** Goal 1: To recruit and maintain/retain underrepresented minority (URM) students Goal 2: To maintain/retain the current number of URM faculty. Goal 3: To maintain/retain the current percentage of Black and Hispanic staff. Goal 4: To integrate health disparities, cultural competency and diversity issues into all the SPH discipline/concentration areas. Goal 5: To integrate health disparities, cultural competency, and diversity issues into the public health core course (PCOR). Goal 6: To encourage and build cultural competency knowledge and skills among staff and faculty within the SPH.	Building on the inherent diversity of our environment, we aim to leverage the many strengths of those who seek to take part in our unique faith-based environment by creating learning that fosters greater opportunities to influence the health, well-being, and equity in our region and beyond.

1.1.d. A set of measurable objectives with quantifiable indicators related to each goal statement as provided in Criterion 1.1.c. In some cases, qualitative indicators may be used as appropriate.

Table 2 Strategic Goals and Objectives	
Strategy	**Goal**
Teaching – Masters Level	Goal 1: To standardize the public health culminating experience across disciplines and reflect the breadth of skills necessary for entry into the profession.
	Objective 1.1: By the end of 2016-2017, 80% of MPH students shall score a 3.0 or better overall on the assessment of their culminating experience.
	Goal 2: To demonstrate program quality for all MPH and MBA programs, summative assessment shall be performed of program learning outcomes (PLOs).
	Objective 2.1: By the end of 2016-2017, 80% of students shall score at the 75th percentile on each assessed PLO.
	Goal 3: To integrate faith and learning into a public health worldview that enhances the quality of instruction and supports the foundations for ethical public health practice.
	Objective 3.1: By the end of 2016-2017, increase by 20% the number of modules in the Public Health Core (PCOR 501-503) to integrate faith and public health disciplines.
Teaching – Doctoral Level	Goal 1: To standardize the doctoral culminating experience across disciplines and reflect advanced training and leadership in public health.
	Objective1.1: 80% of the doctoral students shall score a 2.0 or better (on a 3.0 scale) overall on the assessment of their culminating experience (doctoral dissertation). Objective 1.2: Beginning 2017-2018, 100% of the doctoral students shall submit at least one manuscript from their dissertation for peer reviewed publication.
	Goal 2: To foster a climate of enriched learning experience for students in educational pedagogy and scholarship.
	Objective 2.1: By academic year 2017-18, all of the doctoral programs will require doctoral students to serve as teaching assistants for at least one quarter. Objective 2.2: Beginning in 2017-2018, 80% of the students that serve as teaching assistants shall score a 3.0 or greater (on a four-point scale) on PLO related to educational pedagogy.
Research	Goal 1: To increase the externally funded support for the research portfolio of the school through implementing Center-based research initiatives and school-wide policies.
	Objective 1.1: To develop at least one interdisciplinary research group within each Center by the end of 2017. Objective 1.2: To have each interdisciplinary research group at the Center submit at least two grant applications per year seeking extramural funding by the end of 2017.

Table 2 Strategic Goals and Objectives	
Strategy	**Goal**
	Objective 1.3: To have all full-time faculty members have at least 20% of their LLUSPH workload covered by extramural funding by the end of 2019. Objective 1.4: To reduce "hard funded" protected time for research for all faculty members by 25% by the end of 2018.
	Goal 2: To improve the integration of doctoral students into the research conducted by the Collaborative Centers.
	Objective 2.1: To achieve by the end of 2017, the integration of 50% of all LLUSPH doctoral students into research initiatives in the collaborative centers. Objective 2.2: To further increase this portion to 90% by the end of 2018.
	Goal 3: To set up formal practices for mentoring faculty in research scholarship.
	Objective 3.1: To develop a mentoring program to match junior faculty with PI-level mentors within the SPH and LLUH research environment. Objective 3.2: To implement an organized school activity (i.e. panel discussions, mentor/mentee lunches, workshops, peer circles, mentee online forums) that promotes mentor/mentee interaction and enrichment.
Service	Goal 1: To identify and clearly describe the school's areas of public health practice.
	Objective 1.1: By June 2017, the Office of Public Health Practice (OPHP) will have implemented work within all five of the clearly defined areas of focus. These five areas will be reviewed annually to ensure practice stays relevant with the community's needs. Objective 1.2: By November 2016, update the OPHP website to reflect our areas of emphases and will be maintained continuously. Objective 1.3: By November 2016, establish a standing committee of external advisers. Membership will be evaluated quarterly to ensure effective community involvement. The committee will meet quarterly.
	Goal 2: To promote faculty engagement in at least one designated emphasis area of public health practice.
	Objective 2.1: By June 2017, at least 50% of faculty will have engaged in at least three community practice activities.
	Goal 3: To increase student involvement in public health practice through opportunities outside the required field practicum experience.
	Objective 3.1: By June 2017, OPHP will conduct a minimum of four school-wide meetings, discussing service opportunities for students to become involved. These meetings will continue quarterly. Objective 3.2: By June 2017, at least 50% of the graduating class will have engaged in at least three community practice activities. This rate will continue into the future.
Diversity	Goal 1: To recruit and maintain/retain underrepresented minority (URM) students.

Table 2 Strategic Goals and Objectives	
Strategy	**Goal**
	Objective 1.1: Increase the number of URM Native American students to at least four (one each year) over the next four years, starting in the 2017-2018 school term. Objective 1.2**:** Over the next three years, we will maintain/retain the average of 17% of the student population of U.S. Black students; recruited from SDA institutions across the country.
	Goal 2: To maintain/retain the current number of URM faculty.
	Objective 2.1: Over the next three years, we will maintain/retain a minimal of 17% of Black/African American faculty. Objective 2.2**:** Over the next three years, we will maintain/retain a minimal of 20% of Latino/Hispanic faculty.
	Goal 3: To maintain/retain the current percentage of Black and Hispanic staff.
	Objective 3.1: We will maintain/retain the average percentage of Black and Hispanic staff to mirror the demographics of the SPH student population for the prior three years.
	Goal 4. To integrate health disparities, cultural competency, and diversity issues into all the SPH discipline/concentration areas.
	Objective 4.1: Beginning in the 2018-2019 school term each discipline (health education; nutrition, environmental health, epidemiology, biostatistics, health policy, and preventive care) in the SPH will have included in <u>one of their core courses</u> at least one assignment and one lecture related to health disparities, diversity, and cultural competency.
	Goal 5: To integrate health disparities, cultural competency, and diversity issues into the PCOR.
	Objective 5.1: Beginning in the 2018-2019 school term, the PCOR (a blend of all the public health core courses) will include at least one lecture and one assignment related to health disparities, diversity, and cultural competency into <u>each of the public health focus areas</u> (environmental health, epidemiology, biostatistics, health behavior change, nutrition, and ethical issues).
	Goal 6. To encourage and build cultural competency knowledge and skills among staff and faculty within the SPH.
	Objective 6.1.a: Every year, starting in fall 2017 all faculty and staff will complete a cultural competency self-study module which will be available on the Canvas Learning Management System (Canvas). Objective 6.1.b: After the completion of the self-study module on Canvas, all faculty and staff will submit a certificate/confirmation of completion on Canvas, before the beginning of fall quarter.

1.1.e. Description of the manner through which the mission, values, goals and objectives were developed, including a description of how various specific stakeholder groups were involved in their development.

In anticipation of the future changes in the field of public health as outlined in the ASPPH *Framing the Future Taskforce Report* and the competency modeling work on public health graduate education (master's and doctoral), LLUSPH reassessed and reviewed its mission and values, goals and objectives.

Since September 2013, working groups made up of students, and faculty and staff members have initiated changes in the school's approach to public health education, research, practices, policy and administration, and operations. Three of 21 cross-cutting working groups focused on the mission and values of the school. These groups are described in Table 3.

Table 3 Core Value Working Groups

Working Groups	Member Composition	Group Charge	Core Value Addressed
Faith-based	Donn Gaede, Chair Biblia Kim Candice Gomez Donna Gurule Diane Moran-Goulding Elisa Blethen Jisoo Oh Jerry Lee Marina Hoecker Mirna Gonzalez Jason Penniecook Manjit Randhawa Pamela Mukaire* Sam Soret Walleska Bliss Wesley James Zane Yi	To propose ways of intersecting faith with ALL aspects of the LLUSPH, through practice and research, teaching, personal spiritual growth and a theoretical/theological framework.	Wholeness
Global Lens	Jayakaran Job, Chair Godwin Aja S. Marci Anderson Khaled Bahjri Walleska Bliss Elisa Blethen Jerry Daly Danjuma Daniel* Wesley James Katherine Jones Biblia Kim Rachel Lawrence Ronald Mataya Rafael Molina Manjit Randhawa Holly Schuh Ryan Sinclair Pramil Singh Padma Uppala Najah Zaaeed	To inform, promote, and integrate core global health concepts, knowledge, skills, perspectives and worldview within all components of public health education, research/practice and collaboration/interactions	Diversity
Health Equity	Sherma Charlemagne-Badal, Chair	To develop a strategy that involves a diverse group to lead the work on	Engagement

Table 3 Core Value Working Groups			
Working Groups	**Member Composition**	**Group Charge**	**Core Value Addressed**
	Richard Blanco Natalie Eloskof Linda Hart Ed McField Jason Penniecook Yohani Ramos Manjit Randhawa Diadrey-Anne Sealy Sam Soret Xochitl Torres* Jennifer Vaughn-Blakely	integrating equity throughout LLU. To create or sustain a culture of focus on health equity within LLUSPH. To develop a long-term equity agenda for LLUSPH.	

*Student Representative

Eighteen SPH working groups addressed the school's strategic goals and objectives. Some recommendations were adopted immediately to make operational enhancements, improve the educational experience, or to improve efficiency. Despite the breadth of areas covered by the SPH working groups, there is an opportunity to revisit, integrate, and clearly communicate our mission to all of our constituents. Among the faculty, staff and students, the potential to modify or reaffirm and further align our mission with the institution's mission is appropriate in the context of the future of public health and where we are at present. To this end, other recommendations are being reviewed and evaluated through a deliberate and systematic or comprehensive and ongoing strategic planning initiative introduced in May 2016 and revisited at the Fall Faculty Meeting in September 2016. The recommendation reports can be found in 1.1 of the Electronic Resource File (ERF). Leadership for each of the working groups is provided in Table 4.

Table 4 Working Group Leadership	
Working Groups	**Chairs and Co-Chairs**
Admissions	Wendy Genovez
Alumni	Dwight Barrett
Curriculum Review, Assessment, and Competencies	Leslie Martin and Helen Hopp Marshak
Community Resilience	Sam Soret
Educational Models	Loretta Wilber
Faculty Development	Huma Shah
Finance	Manjit Randhawa
Leadership in Health Systems	Richard Chinnock and Donna Gurule
Marketing	Wesley James
Media, Communications and Technology	Marcus Chapman
Nutrition, Healthy Lifestyle and Disease Prevention	Michael Orlich
Policies	Leonard Gashugi
Practicum	Rhonda Spencer-Hwang and Sam Soret
Recruitment	Hildemar Dos Santos
Research	Gary Fraser and Pramil Singh
Student Experience	Donna Gurule

Table 4 Working Group Leadership	
Working Groups	**Chairs and Co-Chairs**
Teaching	Larry Beeson
Undergraduate	Daniel Handysides

1.1.f. Description of how the mission, values, goals and objectives are made available to the school's constituent groups, including the general public, and how they are routinely reviewed and revised to ensure relevance.

The school makes its mission, values, goals and objectives available to several key constituents in several ways. First, the school's mission and values are prominently listed on our website (http://publichealth.llu.edu/about/mission-vision-and-values). Second, key university leadership monitors and reviews goals, objectives, and progress, and provides feedback during administrative meetings. This includes quarterly reports to the LLUH Board of Trustees. Third, the university's catalog contains information about the school's mission, vision, values, and goals (http://llucatalog.llu.edu/public-health/). This information is readily available on the internet to both the university community and the public.

The school's goals and objectives are communicated more generally to the public through our partnerships and collaborations with local entities which share goals for improving the public's health in this region. One example of this is our annual *Healthy People in Healthy Communities Conference*. This event is a long-standing, annual conference which has been is classified by LLU as a "signature event". Conference themes focus on current topics in public health and are specifically designed to reinforce the values, goals and objectives we have as a school of public health. In March 2016, this year's conference theme was inspired by the Robert Wood Johnson Foundation's *Building a Culture of Health Action Framework*—a framework that fit very well with the school's legacy of health and wholeness. Past years have focused on nutrition, the built environment, and other timely, relevant public health topics.

Future foci will be identified as we formally revisit our strategic plans during the autumn 2016. We will identify ways to better communicate what we are doing, why we are doing it, and how we plan to achieve our goals. We will incorporate new plans for quality improvement into our operations as we have done in the recent past.

1.1.g. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. The school and its programs are grounded in the mission, vision, and values of the SDA Christian faith. The LLUSPH clearly reflects the history of our university's strong mission and faith-based heritage, one that brings many from around the world to live, study, and work together. People come to LLUH because of its purpose-driven mission and focus on a community outreach that spans the world. For many others, personal identification with our Christian values plays a significant part in their decisions to choose this environment over other viable academic options currently available.
2. LLUSPH has identified goals and objectives that will best align the school with the emerging future of public health. Many individuals provided broad involvement and multidisciplinary input on the teaching, research, service, and administrative aspects of the school. LLUSPH

working groups composed of faculty, staff and students laid the foundation for strategic discussions and community engagement.

Weaknesses:

The school lives its mission with unwavering purpose and is deeply committed to delivering the best public health education consistent with our faith-based legacy. It is equally committed to public health education that is consistent with the complex challenges of health in the 21st Century. To this end, LLUSPH has made recent efforts to better position itself for the future of public health. During this transition period, the school has not been without its challenges. The lag between the structure and strategic changes has included varying levels of employee engagement. Change is always a process and brings many opportunities for improvement. Faculty and staff members remain very committed to the future success of LLUSPH, especially its mission, values and goals.

Plans for Improvement:

LLUSPH will continue to seek opportunities to more clearly communicate and live its mission. The school will revisit or affirm, integrate, and develop plans for further communicating our mission to our constituents through the efforts to develop a comprehensive strategy management system. This system will involve the development and implementation of explicit plans to build upon the foundational work of LLUSPH working groups; thus, extending alignment efforts to strengthen the school's capacity for service, sustainability, and competitive advantage.

1.2 Evaluation. The school shall have an explicit process for monitoring and evaluating its overall efforts against its mission, goals and objectives; for assessing the school's effectiveness in serving its various constituencies; and for using evaluation results in ongoing planning and decision making to achieve its mission. As part of the evaluation process, the school must conduct an analytical self-study that analyzes performance against the accreditation criteria defined in this document.

1.2.a. Description of the evaluation processes used to monitor progress against objectives defined in Criterion 1.1.d, including identification of the data systems and responsible parties associated with each objective and with the evaluation process as a whole. If these are common across all objectives, they need be described only once. If systems and responsible parties vary by objective or topic area, sufficient information must be provided to identify the systems and responsible party for each.

Table 5 includes a description of the school's comprehensive evaluation process that is used to monitor progress towards objectives.

Table 5 Data Systems and Responsible Parties Relating to Objectives Defined in Table 2		
Objective	**Data Systems**	**Responsible Parties**
Strategy – Academics – Master's Level		
Objective 1.1: By the end of 2016-2017, 80% of MPH students shall score a 3.0 or better overall on the assessment of their culminating experience.	Rubric scores in LiveText[1]	Program faculty; Assistant Dean for Academic Administration
Objective 2.1: By the end of 2016-2017, 80% of students shall score at the 75th percentile on each assessed PLO.	Rubric scores in LiveText	Program faculty; Assistant Dean for Academic Administration
Objective 3.1: By the end of 2016-2017, increase by 20% the number of modules in the Public Health Core (PCOR 501-503) to integrate faith and public health disciplines.	Rubric scores in LiveText	Program faculty; Assistant Dean for Academic Administration
Strategy – Academics – Doctoral Level		
Objective 1.1: 80% of the doctoral students shall score a 2.0 or better (on a 3.0 scale) overall on the assessment of their culminating experience (doctoral dissertation).	Rubric scores in LiveText	SPH Doctoral Programs Committee
Objective 1.2: Beginning 2017-2018, 100% of the doctoral students shall submit at least one manuscript from their dissertation for peer reviewed publication.	Doctoral programs internal system	SPH Doctoral Programs Committee
Objective 2.1: By academic year 2017-18, all of the doctoral programs will require doctoral students to serve as teaching assistants for at least one quarter.	Doctoral programs internal system	SPH Doctoral Programs Committee; Doctoral Program Directors
Objective 2.2: Beginning in 2017-2018, 80% of the students that serve as teaching assistants shall	Rubric scores in LiveText	Program faculty; SPH Doctoral Programs Committee

Table 5 Data Systems and Responsible Parties Relating to Objectives Defined in Table 2		
Objective	**Data Systems**	**Responsible Parties**
score a 3.0 or greater (on a four-point scale) on PLO related to educational pedagogy.		
Strategy - Research		
Objective 1.1: To develop at least one interdisciplinary research group within each Center by the end of 2017.	Collaborative Center internal system	Associate Dean for Research Center for Health Research
Objective 1.2: To have each interdisciplinary research group at the Center submit at least two grant applications per year seeking extramural funding by the end of 2017.	Collaborative Center internal system	Associate Dean for Research Center for Health Research
Objective 1.3: To have all full-time faculty have at least 20% of their LLUSPH workload covered by extramural funding by the end of 2019.	Central tracking system to be developed based on the integration of existing SPH and LLU repositories, together with new documentation systems	Associate Dean for Research; Executive Directors of Collaborative Centers
Objective 1.4: To reduce “hard funded” protected time for research for all faculty by 25% by the end of 2018.	Central tracking system to be developed based on the integration of existing SPH and LLU repositories, together with new documentation systems	Associate Dean for Research; Executive Directors of Collaborative Centers
Objective 2.1: To achieve by the end of 2017, the integration of 50% of all LLUSPH doctoral students into research initiatives in the Centers.	Internal documentation system	Associate Dean for Research; Executive Directors of Collaborative Centers
Objective 2.2: To further increase this portion to 90% by the end of 2018.	Internal documentation system	Associate Dean for Research; Executive Directors of Collaborative Centers
Objective 3.1: To develop a mentoring program to match junior faculty with PI-level mentors within the SPH and LLUH research environment.	Internal documentation system	Associate Dean for Research; Executive Directors of Collaborative Centers
Objective 3.2: To implement an organized school activity (i.e. panel discussions, mentor/mentee lunches, workshops, peer circles, mentee online forums) that promotes mentor/mentee interaction and enrichment.	Internal documentation system	Associate Dean for Research; Executive Directors of Collaborative Centers

Table 5 Data Systems and Responsible Parties Relating to Objectives Defined in Table 2		
Objective	**Data Systems**	**Responsible Parties**
Strategy - Service		
Objective 1.1: By June 2017, the Office of Public Health Practice (OPHP) will have implemented work within all five of the clearly defined areas of focus. These five areas will be reviewed annually to ensure practice stays relevant with the community's needs.	Internal documentation system	Assistant Dean for Public Health Practice
Objective 1.2: By November 2016, update the OPHP website to reflect our areas of emphases and will be maintained continuously.	OPHP Website	Assistant Dean for Public Health Practice
Objective 1.3: By November 2016, establish a standing committee of external advisers. Membership will be evaluated quarterly to ensure effective community involvement. The committee will meet quarterly.	Internal documentation system	Assistant Dean for Public Health Practice
Objective 2.1: By June 2017, at least 50% of faculty will have engaged in at least three community practice activities.	Internal documentation system	Assistant Dean for Public Health Practice
Objective 3.1: By June 2017, OPHP will conduct a minimum of four school-wide meetings, discussing service opportunities for students to become involved. These meetings will continue quarterly.	Internal documentation system; agenda and minutes	Assistant Dean for Public Health Practice
Objective 3.2: By June 2017, at least 50% of the graduating class will have engaged in at least three community practice activities. This rate will continue into the future.	Internal documentation; LiveText (student portfolio)	Assistant Dean for Public Health Practice
Strategy - Diversity		
Objective 1.1: Increase the number of URM Native American students to at least four (one each year) over the next four years, starting in the 2017-2018 school term.	University data warehouse	Chair, SPH Diversity Committee
Objective 1.2**:** Over the next three years, we will maintain/retain the average of 17% of the student population of U.S. Black students; recruited from SDA institutions across the country.	University data warehouse	Chair, SPH Diversity Committee
Objective 2.1: Over the next three years, we will maintain/retain a minimal of 17% of Black/African American faculty.	University data warehouse	Chair, SPH Diversity Committee
Objective 2.2**:** Over the next three years, we will maintain/retain a minimal of 20% of Latino/Hispanic faculty.	University data warehouse	Chair, SPH Diversity Committee
Objective 3.1: We will maintain/retain the average percentage of Black and Hispanic staff to mirror the demographics of the SPH student population for the prior three years.	University data warehouse and HR data system	Chair, SPH Diversity Committee
Objective 4.1: Beginning in the 2018-2019 school term each discipline (health education; nutrition, environmental health, epidemiology, biostatistics,	Canvas; syllabi	Chair, SPH Diversity Committee; Assistant

Table 5 Data Systems and Responsible Parties Relating to Objectives Defined in Table 2		
Objective	**Data Systems**	**Responsible Parties**
health policy, and preventive care) in the SPH will have included in one of their core courses at least one assignment and one lecture related to health disparities, diversity, and cultural competency.		Dean for Academic Administration
Objective 5.1: Beginning in the 2018-2019 school term, the PCOR (a blend of all the public health core courses) will include at least one lecture and one assignment related to health disparities, diversity, and cultural competency into each of the public health focus areas (environmental health, epidemiology, biostatistics, health behavior change, nutrition, and ethical issues).	Canvas; syllabi	Chair, SPH Diversity Committee; Assistant Dean for Academic Administration
Objective 6.1.a: Every year, starting in fall 2017 all faculty and staff will complete a cultural competency self-study module which will be available on Canvas Learning Management System (Canvas).	Canvas	Chair, SPH Diversity Committee; Administrative Committee
Objective 6.1.b: After the completion of the self-study module on Canvas, all faculty and staff will submit a certificate/confirmation of completion on Canvas, before the beginning of fall quarter.	Canvas	Chair, SPH Diversity Committee; Administrative Committee

[1] LiveText is the software of choice for LLU to collect student artifacts and assess learning outcomes. More information can be found at www.livetext.com.

In addition to the above data systems, the school also utilizes the following systems:

Qualtrics Survey Software. Qualtrics is used to collect feedback from students, alumni, and employers. Surveys and reports are distributed centrally by the school's Assessment Office annually as well as on an ad-hoc basis. The *Survey Deployment Plan* outlines the schedule for survey distribution and can be found in 2.7 of the ERF (Assessment Procedures/Surveys).

Academic Management System (AMS). This software system was developed by the University's IT staff to enable the University's Office of Educational Effectiveness to monitor assessment plans and activities across all schools on campus. Each year, every program must report their progress on the Institutional Learning Outcome (ILO) for that year and specify their action plan. The assessment schedule for the LLU ILO's are found in 2.6 of the ERF.

m-Power. This software system is used to generate reports on student information data and faculty data. The school's Assessment Office generates regular annual reports for external entities as well as for regular and ad-hoc internal requests.

coursEval. coursEval software is used for student evaluation of courses and instructors. Instructors are able to generate reports for their own courses within the software system.

1.2.b. Description of how the results of the evaluation processes described in Criterion 1.2a are monitored, analyzed, communicated and regularly used by managers responsible for enhancing the quality of programs and activities.

Evaluation results impact decisions made at all levels in LLUSPH. Student course evaluations are one source of information used by faculty members when considering how to improve courses; and by supervisors and administration in faculty evaluations. Student survey results from the various Qualtrics surveys are taken into account when evaluating student services (admissions, records, and finance, for example) and SPH programs.

Results of evaluation processes that pertain to our objectives, as outlined in Table 5, are used specifically to monitor our approach to achieving our strategic goals. While a number of objectives are new, they are the result of our ongoing evaluation processes. For example, the 2013 Working Groups identified that we needed to have more consistency across MPH programs, advisement, seminar requirements, non-course requirements, field practicum, and professional guidance. Criterion 2.5 describes how the unified requirement in the culminating experience came about. Objective 3.1 for "Teaching – Master's Level" is directly related to student midterm and end of course evaluations. Objective 1.1 for "Teaching – Doctoral Level" is related to feedback from the 2013 Working Groups and town hall meetings. Working Group discussions have also contributed to our research objectives.

Through the use of our various data collection and reporting systems as described in 1.2.a, information is available for use in ongoing evaluation. In some cases, it is through these systems that information is primarily communicated. For example, the University's Office of Education Effectiveness utilizes the Academic Management System (AMS) and LiveText to monitor and evaluate the school's effectiveness in achieving the University's objectives as well as those of the school.

In other cases, evaluation results are analyzed and communicated during various meetings. For the academic objectives, evaluation results are most often analyzed within each program during their regularly scheduled meetings. From there the results will be shared with the committee or administrative unit that oversees the program. Results are also shared with the Assistant Dean for Academic Administration, the Assistant Dean for Records and the school's Assessment Specialist. This team will meet and discuss the results and evaluate the process itself. Because we now have our first set of results for Phase 1 of our systematic approach to assessment (described in 2.7.a), it is imperative that we evaluate, and refine the process if necessary. Further, each program will utilize the results to refine their assessment plan which provides details on what is assessed, how results are evaluated, and with whom results are shared. Assessment plans are found in 2.6 of the ERF.

While there are different levels of committees involved in the school's evaluation processes, managers responsible for enhancing the quality of the school's programs and activities often sit on multiple committees and are active participants in the evaluation process. This not only facilitates communication but ensures cohesiveness in planning, implementation, and evaluation. To illustrate, the Assistant Dean for Academic Administration is also the Academic Dean and works closely with master's program directors and the Chair of the Doctoral Programs Committee who works closely with the Assistant Dean for Academic Records who is the LiveText implementation coordinator for the school and Chair of the school's Student Success Committee which has assessment as its charge.

Both the Assistant Dean for Academic Administration and the Assistant Dean for Records are members of the school's Administrative Committee chaired by the Dean. The Dean not only obtains results from ongoing evaluation efforts, but often utilizes data obtained through the various offices in the school whether for University or school-level meetings. Examples would be presentations to the Board of Trustees on the state of the school and annual all school faculty and staff meetings.

1.2.c. Data regarding the school's performance on each measurable objective described in Criterion 1.1d must be provided for each of the last three years. To the extent that these data duplicate those required under other criteria (eg, 1.6, 1.7, 1.8, 2.7, 3.1, 3.2, 3.3, 4.1, and 4.3), the school should parenthetically identify the criteria where the data also appear. See CEPH Outcome Measures Template.

Many of our outcome measures support of new goals and objectives that came about after reorganization so we do not have past data. In such cases, "NA" is listed in the table below. For some of the outcome measures, tracking systems/processes will be developed. Where appropriate, development of the systems/processes have been set-up as milestone targets.

Table 6 Outcome Measures – Strategic Objectives				
Outcome Measure	**Target**	**2013-14**	**2014-15**	**2015-16**
Strategy – Academics- Master's Level [2]				
Percentage of MPH student scores on culminating experience within desired range (1.1)	80% score three or better (by end of 2016-17)	NA	NA	
Percentage of student scores on each assessed PLO within desired range (2.1)[1]	80% score at 75th percentile (by end of 2016-17)	NA	NA	In progress
Percentage increase of modules in PCOR 501-503 that integrate faith and public health disciplines (3.1)	20% increase (by end of 2016-17)	NA	NA	NA
Strategy – Academics- Doctoral Level [2]				
Percentage of doctoral student scores on culminating experience within desired range (1.1)	80% score 2.0 or better (on a 3.0 scale)	NA	NA	In progress
Percentage of doctoral students submitting at least one manuscript from their dissertation for peer reviewed publication (1.2)	100% submit at least one manuscript (beginning 2017-18)	NA	NA	NA
Percentage of doctoral programs requiring doctoral students to serve as teaching assistants for at least one quarter (2.1)	100% (by 2017-18)	40%	40%	40%
Percentage of students that serve as teaching assistants score within desired range on PLO related to educational pedagogy (2.2)	80% score 3.0 or better (on a 4.0) scale (beginning 2017-18)	NA	NA	NA
Strategy – Research [2]				
Number of interdisciplinary research groups within each collaborative center (1.1)	1 per collaborative center (by the end of 2017)	NA	NA	NA

Table 6 Outcome Measures – Strategic Objectives				
Outcome Measure	**Target**	**2013-14**	**2014-15**	**2015-16**
Number of grant applications seeking extramural funding submitted per year by each interdisciplinary research group (1.2)	2 (by the end of 2017)	NA	NA	NA
Percentage of full-time faculty workload covered by extramural funding (1.3)	20% of all full-time faculty workload (by end of 2019)	NA	NA	NA
Percent reduction in "hard-funded" faculty protected time for research (1.4)	Reduce by 25% (by end of 2018)	NA	NA	NA
Percentage of LLUSPH doctoral students integrated into research initiatives in the collaborative centers (2.1)	50% (by end of 2017)	NA	NA	NA
Increased percentage of LLUSPH doctoral students integrated into research initiatives in the collaborative centers (2.2)	90% (by end of 2018)	NA	NA	NA
Number of mentoring programs for matching junior faculty with PI-level mentors within the SPH and LLUH research environment (3.1)	1	NA	NA	NA
Number of organized school activities that promote mentor/mentee interaction and enrichment (3.2)	1	NA	NA	NA
Strategy – Service [2]				
Number of areas in which work is being implemented by OPHP (1.1)	5 areas (beginning June 2017)	NA	NA	NA
Percentage of areas of emphasis reflected on website (1.2)	100% (beginning November 2016)	NA	NA	NA
Number of meetings with external advisors on standing committee (1.3)	1 meeting per quarter (committee to be established by November 2016)	NA	NA	NA
Percentage of faculty that engage in at least three community practice events (2.1)	50% or more (by June 2017)	NA	NA	NA
Number of school-wide quarterly meetings held for student involvement (3.1)	At least 4 (by June 2017)	NA	NA	NA

Table 6 Outcome Measures – Strategic Objectives				
Outcome Measure	**Target**	**2013-14**	**2014-15**	**2015-16**
Percentage of graduating class that engaged in at least three community practice activities (3.2)	50% or more (beginning June 2017)	NA	NA	NA
Strategy – Diversity [2]				
Number of URM Native American students (1.1)	1 per year over the next four years (beginning 2017-18)	NA (See Table 20)	NA (See Table 20)	NA (See Table 20)
Percentage of U.S. Black students (1.2)	17%	Met (See Table 20)	Met (See Table 20)	Met (See Table 20)
Percentage of Black/African American faculty (2.1)	17%	Met (See Table 20)	Not Met (See Table 20)	Not Met (See Table 20)
Percentage of Latino/Hispanic faculty (2.2)	20%	Not Met (See Table 20)	Not Met (See Table 20)	Not Met (See Table 20)
Percentage of Black and Hispanic staff (3.1)	Average percentage to mirror SPH student population for the prior 3 years	Black – Not Met Hispanic – Met (See Table 20)	Black – Not Met Hispanic – Met (See Table 20)	Black – Not Met Hispanic – Met (See Table 20)
Number of assignments and lectures in one core course of each discipline related to health disparities, diversity, and cultural competency. (4.1)	At least 1 assignment and 1 lecture (beginning 2018-19)	NA	NA	NA
Number of assignments and lectures in each public health focus area in PCOR, related to health disparities, diversity, and cultural competency. (5.1)	At least 1 assignment and 1 lecture (beginning 2018-19)	NA	NA	NA
Percentage of faculty and staff completing cultural competency self-study module. (6.1.a)	100% (beginning fall 2017)	NA	NA	NA
Percentage of faculty and staff submitting certificate/confirmation of completion before beginning of each fall quarter. (6.1.b)	100% (beginning fall 2017)	NA	NA	NA

[1]Assessment results for 2015-16 obtained thus far, are in ERF 1.2 LiveText Assessment Summaries. Process still in progress for some programs.

[2]Milestone targets and/or other progress metrics will be provided on-site.

1.2.d. Description of the manner in which the self-study document was developed, including effective opportunities for input by important school constituents, including institutional officers, administrative staff, faculty, students, alumni and representatives of the public health community.

The self-study document was developed collaboratively with representation across the school. Leaders were assigned to each criterion based on their areas of responsibility. The document went through multiple draft iterations with specified timelines. Input was gathered from university, SPH administration, faculty, staff, students, alumni, and representatives of the public health community, in part, through the following mechanisms.

At the beginning of the 2015-2016 academic year, the school formed "Strategic Planning Groups" for the purpose of ensuring broad involvement in conducting and developing the self-study. The groups were initially comprised of faculty and staff members with students and alumni to be added at the discretion of each group. A survey was sent to faculty and staff members so that they could choose the CEPH criteria in which they were most interested in focusing on. A total of 46 of the faculty and staff members volunteered to join groups. The groups were utilized in a variety of ways. In some cases, members provided portions of the narrative, and in other cases, the group served in an advisory capacity with regards to content or reviewed the document and provided feedback.

1.2.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. Multiple perspectives and a variety of methods are used to evaluate our effectiveness which provides a comprehensive view of the results of our efforts and includes input and feedback from a broad spectrum of constituent groups.
2. The collaborative structure and environment of the school and its various committees enables effective communication of evaluation results and provides broad involvement in the planning and decision-making processes.
3. The school has useful data systems and tools for collecting and analyzing data in order to monitor progress.
4. Targets are externally and historically informed, and in line with internal standards and expectations.
5. The self-study process was conducted with participation from a wide range of constituents.

Weaknesses:

1. The significant changes that have been implemented to the school structure and portions of the curriculum, have placed us in "new territory" and thus some of our objectives have targets for which we have not yet collected data.
2. Inclusion of external constituents in the evaluation process for some of our goals does not occur on a regular basis.
3. Datasets for our smaller programs, combined with our dedication to preserving anonymity, have inhibited our ability to distribute survey results for timely monitoring of student feedback.

Plans for Improvement:

1. Where applicable, utilize data from previous approaches during the analysis of new outcome measures.
2. For areas where appropriate, increase involvement of external constituents by regularly including them in meetings in an advisory capacity.
3. Improve accessibility or frequency of distribution of survey results for centrally-collected student evaluations.

1.3 Institutional Environment. The school shall be an integral part of an accredited institution of higher education and shall have the same level of independence and status accorded to professional schools in that institution.

1.3.a. A brief description of the institution in which the school is located, and the names of accrediting bodies (other than CEPH) to which the institution responds.

The SDA church is one of the largest Protestant, non-governmental providers of education and health care delivery worldwide. LLUH is often referred to as the flagship of this system. Its demonstrated leadership in many disciplines of health serves as a major academic health sciences center in southern California with an international reputation for health and wholeness.

Within this context, LLUSPH began in 1948 as the School of Tropical and Preventive Medicine for research and teaching. In 1964, plans were laid for meeting the requirements of the Committee on Professional Education of the American Public Health Association (APHA). Three years later, the School of Nutrition and Dietetics (established in 1922) and the Division of Public Health and Tropical Medicine were accredited by APHA. It was organized under the name Loma Linda University School of Public Health in 1967. This name changed to School of Health in October 1970 to reflect more clearly the school's emphasis on lifestyle. In response to changing perceptions of health and the definitions of public health, the original name as a School of Public Health was readopted in August 1987 and continues to present, nearly fifty years later. LLUSPH has maintained its public health accreditation over the span of the school's existence.

As part of LLUH, LLU is an SDA health sciences university. Originally founded in 1905, as the College of Medical Evangelists by the SDA Church, it became Loma Linda University in 1961. The university became part of the Loma Linda University Adventist Health Sciences Center (LLUAHSC) on March 27, 1997 as part of the institution's strategic efforts to align its member corporations for both sides of the enterprise, and leverage the diverse education, clinical or health care, and research capabilities of the organization. Recently, LLUSHSC began doing business as Loma Linda University Health (LLUH), which is comprised of the academic (LLU) and health services portion of the enterprise (LLUMC, LLUCH, LLUBMC, etc.). See: http://home.llu.edu/about-us/about-loma-linda-university-health. LLU is comprised of eight schools including Allied Health Professions, Behavioral Health, Dentistry, Medicine, Nursing, Pharmacy, Public Health, and Religion. Besides the eight schools, there is a Faculty of Graduate Studies, composed of faculty members who serve academic programs across the schools. Several faculty members in SPH are also part of the Faculty of Graduate Studies, particularly those who serve the PhD program in Epidemiology.

LLU has many centers, institutes, and outreach programs that further support the institution's mission. The student body exceeds 4,000 students and provides over 100 programs from certificates of completion and associate in science degrees to doctor of philosophy and professional doctoral degrees.

LLUH is a nonprofit religious corporation in Loma Linda, California, around 60 miles east of Los Angeles. LLUH serves as the parent or corporate umbrella organization for its core and affiliate organizations that link the university (academic or educational) and the clinical (or health services) entities into "One Loma Linda." Core organizations and affiliates include:

- LLU
- LLUMC and its affiliates (such as the LLU Proton Treatment Center, LLUMC East Campus, etc.)
- Loma Linda University Children's Hospital (a *new* separate entity recently approved and recognized by Children's Medical Services [CMS] and the State of California Department of Public Health)
- LLU clinical faculty corporations (such as the Faculty Medical Group, the Loma Linda University Behavioral Medicine Center, etc.).

LLUH complies with many regulatory and accrediting bodies that represent its academic or educational and clinical interests. LLU is accredited by the Western Association of Schools and Colleges (WASC) Western Association of Senior College and University Commission ("the Commission" or WSCUC) until October 2020. WSCUC is "a regional accrediting agency serving a diverse membership of public and private higher education institutions throughout California, Hawaii, and the Pacific as well as a limited number of institutions outside the U.S…and is recognized by the U.S. Department of Education as a certifying institution for federal funding[1]." LLU is also accredited by the Adventist Accrediting Association of Seventh-day Adventist Schools, Colleges, and Universities (AAA)[2]. The university recently participated in a mid-term administrative review site visit on December 16-17, 2015 and is accredited to 2020 (http://adventistaccreditingassociation.org/images/stories/docs/accreditationstatus.pdf).

A partial list[3] of the primary bodies that accredit programs and schools at LLU include:

- School of Allied Health
  - Commission on Accreditation for Respiratory Care (CoARC)
  - California Department of Public Health (CDPH)
  - National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
  - American Society of Cytopathology (ASC)
  - Commission on Accreditation of Allied Health Education Programs (CAAHEP)
  - Council on Academic Accreditation in Audiology and Speech-Language Pathology (CAA)
  - Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM)
  - Accreditation Council Education in Nutrition and Dietetics (ACEND) of the American Dietetic Association
  - The Accreditation Council for Occupational Therapy Education
  - National Commission on Orthotic and Prosthetic Education (NCOPE)
  - Commission on Accreditation in Physical Therapy Education (CAPTE)
  - Accreditation Review Commission on Education for the Physician Assistant (ARC-PA)
  - The American Registry of Radiologic Technologists (ARRT)
  - Joint Review Committee on Education in Radiologic Technology (JRCERT)
  - Joint Review Committee on Education in Diagnostic Medical Sonography (JRCE-DMS)
  - California Department of Public Health Radiologic Health Branch (RHB)
- School of Behavioral Health
  - Commission on Accreditation for Marriage and Family Therapy Education (COAMFTE)
  - American Psychological Association (APA)
  - Council on Social Work Education

[1] Retrieved from https://www.wascsenior.org/about on May 17, 2016.
[2] Information on the Adventist Accrediting Association of Seventh-day Adventist Schools, Colleges, and Universities (AAA) can be found at http://adventistaccreditingassociation.org/.
[3]Please find detailed accreditation information associated with each school's academic programs at http://llucatalog.llu.edu/general-information/accreditation-status/ and at http://llucatalog.llu.edu/general-information/accrediting-approving-agencies/.

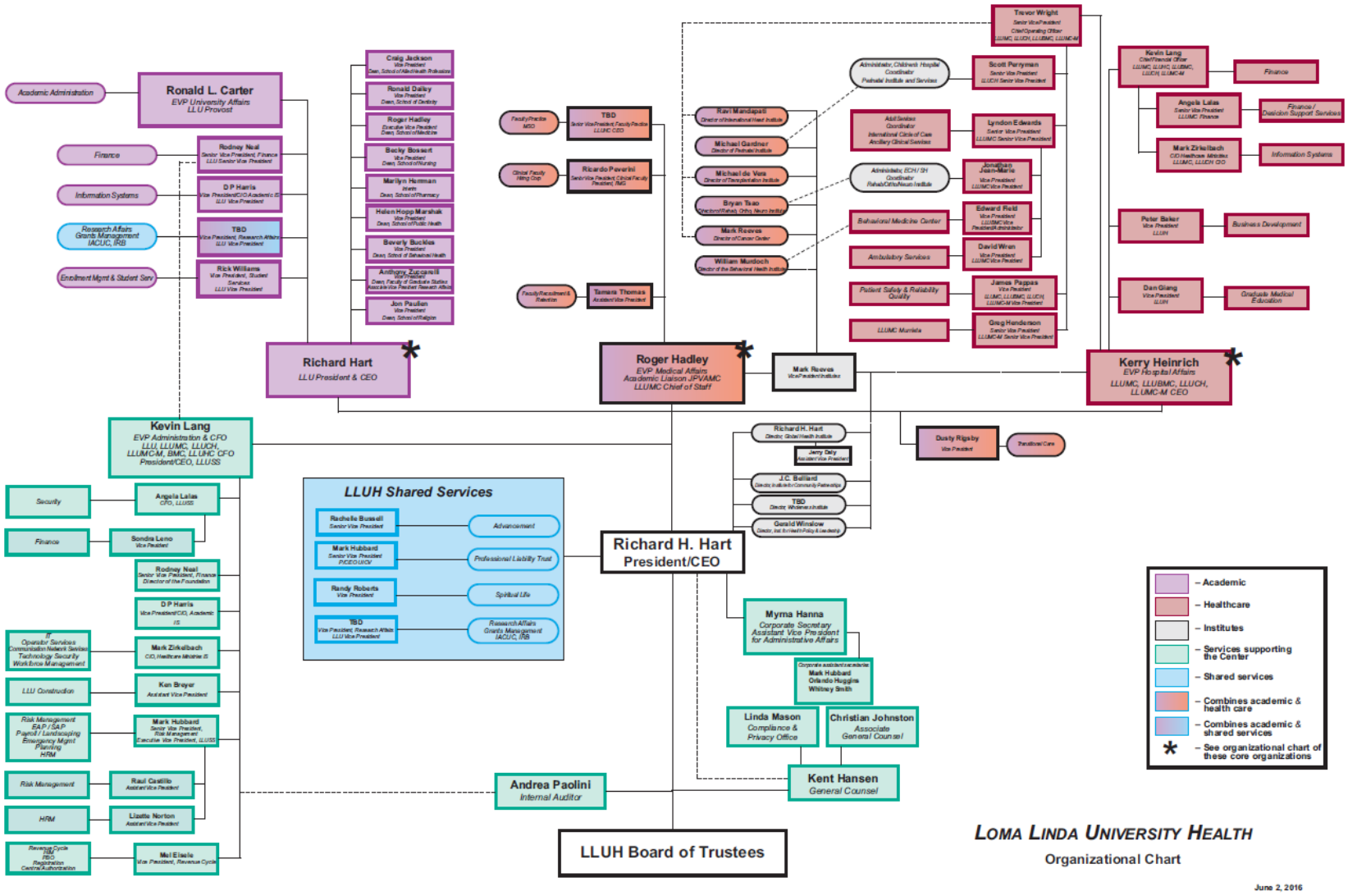
- School of Dentistry
    - Commission on Dental Accreditation (CODA)
- School of Medicine
    - Liaison Committee on Medical Education (LCME)
- School of Nursing
    - Commission on Collegiate Nursing Education (CCNE)
    - Council on Accreditation of Nurse Anesthesia Educational Programs
- School of Pharmacy
    - Accreditation Council for Pharmacy Education
- School of Public Health
    - CEPH
    - Commission on Accreditation of Healthcare Management Education (CAHME)—initial accreditation application denied; school and program are planning to address the deficiencies raised by the Commission and pursue accreditation recommended actions within the next 18-24 months
- School of Religion
    - Association for Clinical Pastoral Education (ACPE)

1.3.b. One or more organizational charts of the university indicating the school's relationship to the other components of the institution, including reporting lines.

Figure 1 is an organizational chart for LLUH (also found in 1.3 of the ERF). Richard H. Hart, MD, DrPH serves as the President and Chief Executive Officer of LLUH, an appointment and office he assumed in February 2008. Prior to becoming President, Dr. Hart served as the chancellor and chief executive officer of the university from 2001. The school has a unique tie to President Hart in that he is one of the few senior level university leaders with direct leadership ties to LLUSPH administrative history. Dr. Hart served as Dean of the school from 1990 until his appointment as University Chancellor in 2001.

The President's LLUH administrative team consists of four individuals who hold the following areas of responsibility: Executive Vice President for Finance and Administration (CFO), Executive Vice President for Hospital Affairs, Executive Vice President for Medical Affairs, and the Executive Vice President for University Affairs and Provost. LLUSPH Dean, Helen Hopp Marshak, PhD, MCHES, is part of the LLUH administration, serving in the capacity of Vice President for Public Health Education.

Figure 1 LLUH Organizational Chart



1.3.c. Description of the school's level of autonomy and authority regarding the following:

i. Budgetary authority and decisions relating to resource allocation

LLUSPH functions with semi- autonomy and discretion as it relates to budgetary authority and resource allocation. The university employs a decentralized budget and resource allocation model approach with clear expectations for ethical leadership and accountability which is applied to all schools on campus. Specifically, each school works to develop independently its resources needs and budget based on their plans and targets. This process is performed annually, but generally is projected over a three-year horizon for planning purposes (that is, projected revenues off-set by projected expenses). The school develops its annual budget independent of other schools.

Each spring the school's administration, with input, submits a proposed budget for the upcoming academic and fiscal year (July 1 through June 30). Once reviewed, negotiated, and consolidated into a cohesive budget, it is presented to the Office of the Senior Vice President (SVP) for Financial Affairs for review and administrative approval before going to the Board of Trustees.

The budget must be balanced. Over the past three years, however, the school has been operating at a deficit. Details surrounding the nature of the circumstances and the details for attending to them are addressed elsewhere under criterion 1.6 Fiscal Resources. It is mentioned here to simply note two things. First, LLUSPH has strong financial commitment from LLUH's senior administration, despite the financial shortfall. In addition to providing LLUSPH multi-year projects, monthly meetings are held with the SVP for Financial Affairs and access is freely granted to LLUSPH financial managers.

Second, despite the expected monitoring associated with these circumstances, central administration remains an active co-partner in supporting the school's plans for a fiscal turnaround strategy through constant communication and feedback. As such, it is the school's intention to be fully transparent about the nature of our current situation and the plans to address this directly.

There are other ways the school can maintain oversight of revenue generation. As with most universities, revenues are generated through various traditional sources. The LLUSPH maintains control of its revenues except for the following university taxes uniformly applied to support administrative infrastructure and resources:

1. 14.5% on tuition revenue
2. 5% on internal training and service awards
3. 8.5% on research, clinical trials, and human study awards.

Indirect costs from grants and contracts are retained within the school's budget following applied taxes. Deans negotiate for appropriating indirect costs when faculty members take part in grants and contracts managed by other LLU schools. In such cases, each contract is negotiated separately and under the existing faculty or staff member's time availability and school workload requirements.

ii. Lines of accountability, including access to higher-level university officials

The Dean serves on several university standing committees where she is joined by the deans and other leaders to discuss academic, fiscal, and other matters. These meetings include: a) the Dean's Council (weekly), b) the Joint Officers-Dean's Council (monthly), and c) the President's Committee (quarterly, just prior to every LLUH Board of Trustees meeting). The President, the Provost, and LLU Deans are present at these key meetings.

The Dean consults directly with the University President during in-person, monthly meetings to discuss issues of strategic and operational importance. She has frequent and direct communication with LLUH officials through in-person meetings, electronic mail, and telephone on a routine basis.

Several faculty and staff members also serve on university standing committees including academic affairs, rank and tenure, learning and teaching, financial operations, faculty policy development, and diversity. The school is integrated into the structure and governance of the larger institution as noted in the list of university committees the SPH serves is in 1.3 of the ERF.

iii. Personnel recruitment, selection and advancement, including faculty and staff

LLUSPH maintains the primary responsibility for managing the human resources, selected recruitment, selection, and advancement of its faculty and staff members. Recruitment and selection functions are performed in conjunction with the University's Talent Management Services. Position announcements are generated locally, posted and initially screened centrally, and submitted back to the school with a pool of qualified applicants.

Selections and recommendations for hires are made within the school and recommended to the dean's office for approval and appointment. Faculty appointments are subject to subsequent recommendation and approval by the Board of Trustees. Staff hires are generally decided at the unit level within the school, subject to the same protocols and approval from the Dean.

Faculty advancement or promotion is based on university policies and recommendations of the Rank, Promotion and Tenure (RPT) Committee to the Dean. This applies to determining rank for new faculty members, (at the associate and full professor levels), assessing qualifications for existing faculty members seeking promotion, or any other formal change in employment status. After review of the RPT Committee's recommendations and approval by the Dean, formal application is submitted to the University President's Committee and the LLUH Board of Trustees for final approval.

Additional requirements are in place prior to granting tenure. Upon submission of the school's RPT recommendation for tenure, the University Tenure Committee. Reviews and votes upon the recommendation. Once approved, the President's Council and Board of Trustees consider assignment of tenure. Details are outlined under Criterion 4.2 Faculty Policies and Procedures.

iv. **Academic standards and policies, including establishment and oversight of curricula**

LLUSPH strives to maintain autonomy over its academic affairs through its Academic Council. This council is charged with overseeing all academic program, courses and matters relating to curricula and adherence to university policies. The Assistant Dean for Academic Administration and the Chair of LLUSPH Doctoral Committee co-chair the LLUSPH Academic Council and jointly represent the school on the University's Academic Affairs Committee (UAAC). The committee's composition is detailed under Criterion 1.5a Governance, and is made up of program directors and other faculty representatives. Following university conventions, new programs and the termination of existing programs must be approved by the Academic Council before being forwarded to the University's Academic Affairs Committee, the University President's Committee, and ultimately the Board of Trustees for review and final disposition. This practice remains unchanged.

1.3.d. Identification of any of the above processes that are different for the school of public health than for other professional schools, with and explanation.

None exist.

1.3.e. If a collaborative school, descriptions of all participating institutions and delineation of their relationships to the school.

LLUSPH is not a collaborative school.

1.3.f. If a collaborative school, a copy of the formal written agreement that establishes the rights and obligations of the participating universities in regard to the school's operation.

LLUSPH is not a collaborative school.

1.3.g. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. The SPH, as part of LLU, is accredited by WASC as an academic institution of higher education. The university and its eight schools share this accreditation status as an academic health sciences university, with all the rights and privileges that apply.
2. The SPH has maintained continuous accreditation since its start in 1967 by the American Public Health Association, and later by the current accrediting body, CEPH.
3. The SPH is an active member of the Association of Schools and Programs of Public Health (ASPPH), with regular participation of the dean and section leadership at annual meetings.
4. Consistent with existing university policies and procedures, the school retains control over its organizational structure, budget or fiscal resources, personnel, and academic standards associated with maintaining the desired standards for public health education.

Weaknesses:

1. The school's MBA program in health administration will revisit its plans for attaining CAMHE accreditation in the near future and will work to incorporate needed changes and resources into the program over the next 18-24 months.
2. LLUSPH does not currently have a balanced budget in place.

Plans for Improvement:

1. The SPH will continue its efforts to strengthen and maintain a healthy institutional environment to provide high quality, public health education. Being a part of LLU's rich academic environment, with all of its schools and programs, provides many choices for strengthening its local institutional environment while continuing to build on the existing competencies of the institution as a whole.
2. LLUSPH has a fiscal turnaround strategy for balancing the budget, developed in collaboration and consultation with university leadership.

1.4 Organization and Administration. The school shall provide an organizational setting conducive to public health learning, research and service. The organizational setting shall facilitate interdisciplinary communication, cooperation and collaboration that contribute to achieving the school's public health mission. The organizational structure shall effectively support the work of the school's constituents.

1.4.a. One or more organizational charts showing the administrative organization of the school, indicating relationships among its component offices, departments, divisions or other administrative units.

The organizational chart (Figure 2) presents a detailed illustration of the school's administrative structure and includes three collaborative centers. Faculty affiliations are designated in one of the collaborative centers, while academic programs leading to public health careers are supported and managed by faculty who teach, advise, or may serve as program directors of Master's and Doctoral programs. Figure 3 depicts this dual or parallel structure where collaborative centers and academics coincide. Each area is supported by appropriate personnel, infrastructure, and an administrative core. These capable assistants and program coordinators serve on the front lines of our organizations, interfacing with students, faculty, and other parties that come in contact with our school on a daily basis. The current organizational structure or approach is intended to promote greater interdisciplinary cooperation and collaboration within our school.

Figure 2 LLUSPH Organizational Chart

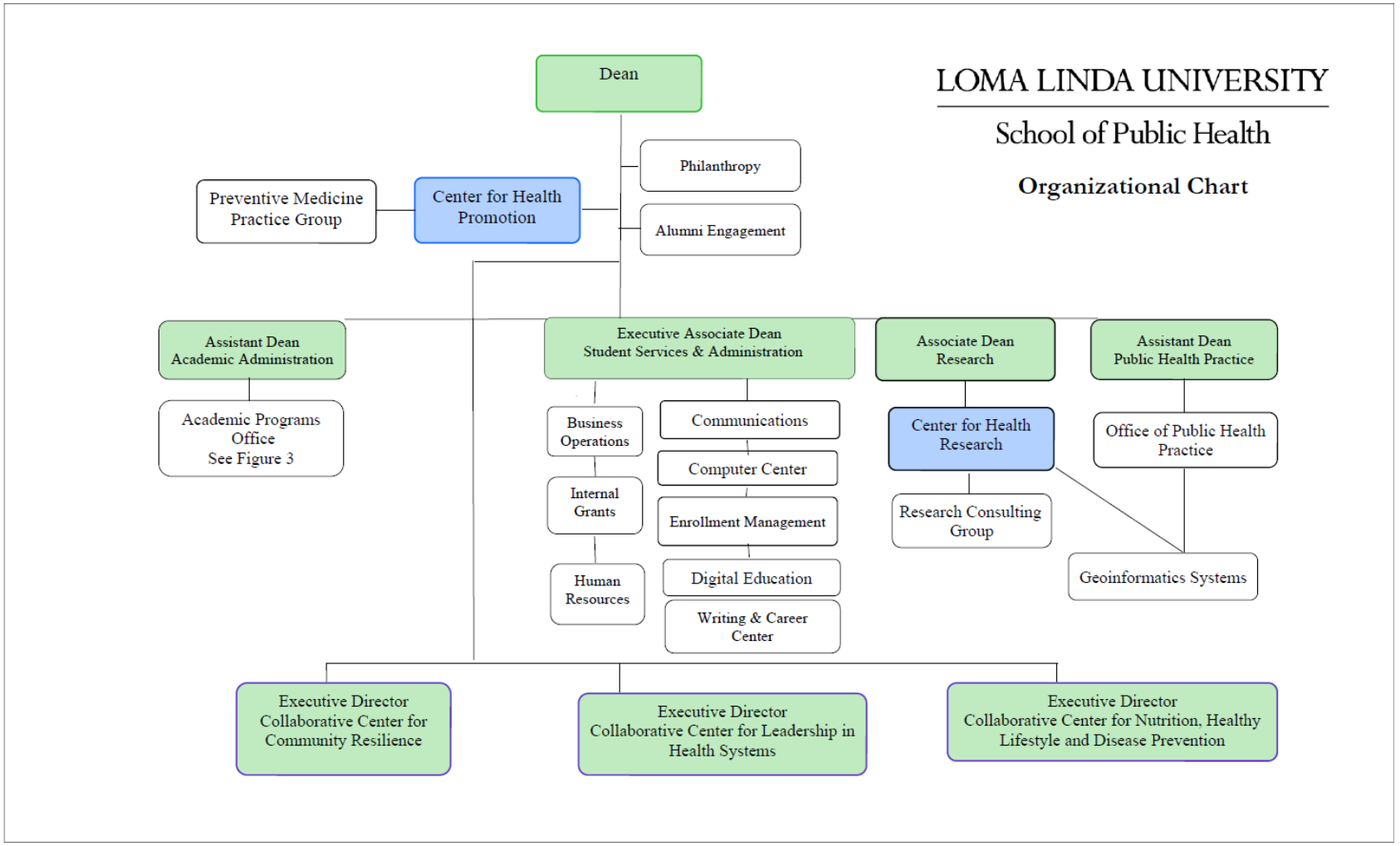
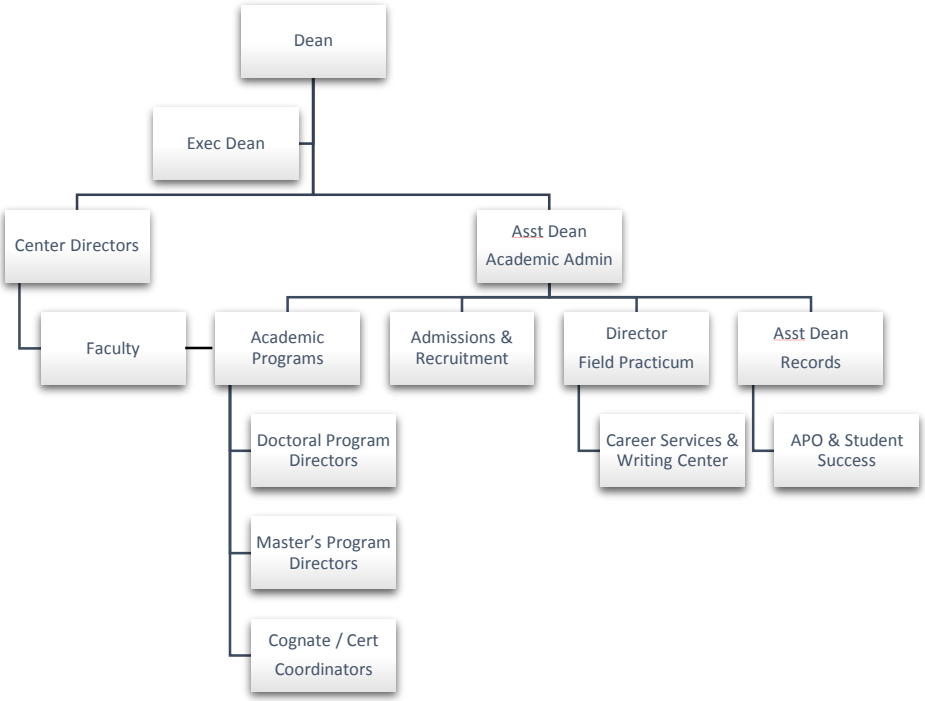


Figure 3 Academic Administration Organizational Chart



1.4.b. Description of the roles and responsibilities of major units in the organizational chart.

Following are the roles and responsibilities associated with key administrative personnel and their respective areas:

Dean: The Dean, Helen Hopp Marshak, PhD, MCHES, serves as the school's Chief Executive Officer and bears primary responsibility for "maturing and implementing the mission and vision of the university in all aspects of the school's activities."[4] The dean is the school's representative to LLUH administration, a liaison to other university leadership, and the broader facing external community. The dean is also responsible for key areas such as strategic planning and visioning, philanthropy and school advancement initiatives, faculty appointments and promotion (or rank, promotion, and tenure), and budget priorities. Establishing school goals is done with input from SPH administration or senior leadership, faculty members, students, and alumni. Determining budgeting priorities is done with assistance from SPH administration, and in consultation with LLUH senior administration. The dean works with the school's senior leadership team to address personnel issues requiring her input. She is also responsible for evaluating the administrative team's performance. Given the breadth of responsibilities, the dean leads and is assisted by a school administrative team that includes the Executive Associate Dean, Associate Deans, Assistant Deans, and Center Directors. This group is further advised and aided by an Administrative Committee that is comprised of the school administrative team, with selected program directors, and a Faculty Advisory Council (FAC) representative. The charter and composition of the Administrative Committee is described elsewhere under Criterion 1.5.a with school standing committees.

Moreover, the dean balances the priorities of maintaining the quality and integrity of our academic educational experiences; learning, scholarship in research and practice, and service. This is achieved

within the university's context of wholeness, including a priority on spiritual nurturing and personal development in fulfillment of our institution's larger faith-based mission.

- ***Special Assistant to the Dean, Philanthropy:*** The Special Assistant to the Dean for Philanthropy leads and helps the SPH Dean with all philanthropic and advancement initiatives within LLUSPH. In this role, Albin Grohar, PhD, serves as the school's local representative and liaison with the University's Office of Advancement, keeping a close relationship with those officers and the larger corporate initiatives for LLUH. Since the university is amid a large capital campaign called Vision 2020, the school's philanthropy officer plays a key role in helping our organization to meet its larger commitments to this campaign and in fulfilling our varied school-specific needs.
- ***Director, Alumni Engagement***
  The Director for Alumni Engagement serves our school in the critical capacity of maintaining connections with our alumni. In this role, Ernesto "Ernie" Medina, DrPH, MPH, serves as the school's primary point of contact with our alumni. As a former alum and long-standing respected preventive care specialist with the Beaver Medical Group, he uniquely understands the needs of our alumni. This externally facing office works to bridge the link between former students and current happenings, existing students, and strategic priorities of the school. This is accomplished through many contact hours, developing a strong online and social media presence, among other activities that maintain ties with this important stakeholder group. This office is supported by the diligent efforts of Wanda Lewis, Administrative Assistant, Sr. Together, they work as a team to drive this function for our school.

Executive Associate Dean for Administration and Student Services: The Executive Associate Dean for Administration and Student Services serves as the school's Chief Operating Officer (COO). In this role, Dwight Barrett, EdD, provides leadership in the areas of Human Resources (particularly with school staff), Business Operations, Finance, services oversight, and facilities (which includes the school's physical plant, resources, and space allocations). With the recent retirement of Gordon Hewes, MBA, in the fall of 2015 (November) as our Associate Dean for Finance, Dr. Barrett has subsumed this important functional area for the school. He is assisted by the Manager for Administrative Operations, Rebekah Cannady, MBA. Ms. Canady reported to the former Associate Dean for Finance and has been formally trained in the operations of that function. By working together, the Executive Associate Dean and the Manager for Administrative Operations perform the duties of the school's finance function. Additionally, Dr. Barrett now serves in the capacity of the former Associate Dean for Finance, providing representation in that capacity on all the university governance committees which address that role.

Last, the Executive Associate Dean has other areas and staff that fall under his responsibility which include:

- ***Internal Grants:*** The Manager for Administrative Operations assists faculty members with financial administration and budget support for grants and contracts mechanisms, in coordination with the Associate Dean for Research, Director of the Center for Health Research, and the University's office of the Vice President for Research Affairs.
- ***Communications:*** The Director of Communications, Marcus Chapman, MFA, leads LLUSPH communication efforts, from internal corporate conventions and resources to coordinating external communications with key stakeholders. This is done in cooperation and coordination with the LLUH Office of Public Relations in order to communicate the university's external affairs.
- ***Computer Center:*** The Director of Computer Services, Paul Hisada, MA, MEd, leads the LLUSPH Computer Center. His team is responsible for all of the acquisition, development, maintenance and support engineer services for all computer and information technology needs for the school

in support of students, staff, and faculty. His office maintains all LLUSPH technology laboratories, from regular computing to geographic information systems (GIS).

- ***Enrollment Management:*** The Director of Enrollment Management, Bobby Brown, MBA, leads LLUSPH enrollment activities. In this position, he provides strategic and tactical leadership for analysis, planning, implementation and control of the marketing, recruitment, and promotion of our academic program offerings and certificates. The Director of Enrollment Management works closely with the Assistant Director for Admissions, Stephen Sledge, MBA. Mr. Sledge is responsible for assisting with all aspects of the admissions and recruitment process. Specifically, he provides admissions information and often the front-line communication for inquiries, from the Schools of Public Health Application Services, (SOPHAS), information and inquires to pre-application questions and information, applicant follow-up and processing, acceptance letters and confirmations, and deferrals.
- ***Digital Education:*** The Chair of the Digital Education Committee, Rafael Molina, MEd, provides leadership, technical support, and resources in support of the LLUSPH online educational offerings, from online academic programs to activities and services that supports learning in an online environment.
- ***Writing Center and Career Services:*** The Writing Center and Career Services Project Editor and Lead, Molly Dougherty, provides our students with expert services that develop the writing skills and capabilities that are essential for academic and professional success. Since the graduate school experience is fairly writing intensive, our students must demonstrate proficiency in this area. Similarly, students must know how to prepare communications that are accurate, persuasive, and clear. The Career Services component of this unit focuses on preparing students for the public health professions job market. Many need assistance with determining the right job fit, cover letter, resume or CV preparation. Job fairs, interviewing skills, and resources are among the many resources organized and facilitated through this office.

Academic Affairs: Three key administrative positions are responsible for academic affairs. They work together as part of a comprehensive academic affairs team to direct curriculum review and development, implement student success efforts, review assessment and monitoring processes, and ensure that standards are set and met consistently across degree programs. Again, their roles are highlighted in Figure 2, along with the support structure for academic administration in our school (Figure 3). Each position and responsibility is described below.

- ***Assistant Dean for Academic Administration:*** The Assistant Dean for Academic Administration, Donna Gurule, DrPH, MPH, is chiefly responsible for all things related to academic affairs for the school. Specifically, she directs curriculum and planning efforts across all degree programs, with a particular focus on enhancing the student experience in Masters Programs. The goal is to make the curricular offerings more efficient and effective. Dr. Gurule is also part of the new PCOR curriculum implementation and assessment team, which includes interfacing with LiveText, a browser-based e-portfolio and assessment management web application. The Assistant Dean for Academic Administration also provides leadership for the Academic Programs Office (APO). The APO's primary purpose is to facilitate the students' successful transitions into the academic environment and support student success across all programs in the school. Key support responsibilities include: a) assisting students with registration; b) assisting students with mapping out their academic programs based on the university Catalog or Degree Completion Report (DCR) requirements and program maps provided by their Academic Program Directors (in accordance with guidelines for federal aid and visa requirements); and c) processing academic forms such as graduation petitions, academic variances, change of major and extension of degree completion. The APO provides many other support functions that enable

effective operations associated with academic administration in support of students and on behalf of program faculty. The Assistant Dean for Academic Administration works together with the Collaborative Center Directors to promote scholarship in the areas of teaching and learning, and research and practice, respectively.

- ***Assistant Dean for Academic Records:*** The Assistant Dean for Academic Records, Wendy Saravia-Genovez, MS, leads our academics records team. In this role, her office provides information and coordinates services for students from their first registration through the final stages of the degree process. With a focus on student success, her office ensures an accurate record of each student's academic experience, and assists in the interpretation of academic policies. This role includes making sure all records processes are efficient, standardized and in adherence with university policies. This task is accomplished by setting up school-wide systems for records (e.g., Degree Works, LiveText, course schedule, student academic progress audits). Mrs. Saravia-Genovez has signatory rights to sign off on academic forms and processes. She is the main administrator for LiveText and is part of the assessment team overseeing student success. As Assistant Dean for Academic Records, she approves registration reinstatement requests. Last, she provides leadership for planning and implementing contract faculty hiring processes.
- ***Chair, SPH Doctoral Committee:*** The Chair of the SPH Doctoral Committee, Sujatha Rajaram, PhD, provides leadership in doctoral programs by working with all doctoral program directors to identify a foundational set of doctoral level courses required for all DrPH and PhD degree programs. As Chair, Dr. Rajaram also actively works to maintain consistency across all doctoral programs while balancing disciplinary flexibility. The goal is to adhere to high quality standards for advanced public health education commensurate with doctoral level training.
    - ***Academic Program Directors:*** The Academic program directors are responsible for assuring the quality and overall functioning of the programs under their charge. This group is responsible for coordinating and assuring the quality of the academic curriculum, facilitating effective program delivery, and addressing programming concerns and issues as they arise. The following is a list of individuals within LLUSPH with responsibilities for academic programs.

Table 7 Academic Program Directors

Academic Program	Program Director
MPH	
Biostatistics	David Shavlik, PhD
Environmental and Occupational Health	Robin Smith, PhD
Epidemiology	David Shavlik, PhD
Global Health	Donn Gaede, DrPH, MPH
Health Education (on-campus and online)	Anna Nelson, DrPH, MPH
Health Policy and Leadership	Jim Banta, PhD, MPH
Lifestyle Management (Online)	Hildemar Dos Santos, MD, DrPH
Nutrition	Celine Heskey, DrPH
Population Medicine	Robin Smith, PhD
MIP/MPH	
Master's International/Master of Public Health (Peace Corps)	Carmen West
MBA	
Healthcare Administration	Elisa Blethen, MBA, DMiss(c)

Table 7 Academic Program Directors	
Academic Program	**Program Director**
MS	
Nutrition	Ella Haddad, DrPH
DrPH	
Epidemiology	Jayakaran Job, MD, DrPH
Health Policy and Leadership	Edward McField-Morgan, PhD
Health Education	Anna Nelson, DrPH, MPH
Nutrition	Sujatha Rajaram, PhD
Preventive Care	Hildemar Dos Santos, MD, DrPH
PhD	
Epidemiology	Jayakaran Job, MD, DrPH

Associate Dean for Research: Regrettably, our Associate Dean for Research, Samuel Soret, PhD, MPH, a beloved colleague, professor and friend, passed away unexpectedly from a heart attack while on a trip to Spain in August 2016. Dr. Soret faithfully served LLUSPH for 21 years, most recently as the Associate Dean for Research and Executive Director of the Center for Community Resilience. As the former school's Chief Research Officer (CRO), Dr. Soret began essential work in establishing initial goals, objectives, and high-level priorities that govern the research infrastructure. He directed the Office of Research for LLUSPH. In that capacity, he worked directly with the Center directors, and the Centers for Health Research and Health Promotion. As Associate Dean for Research, he served as the LLUSPH representative or liaison with the university's office of the Vice President for Research Affairs where he takes part in meetings with his counterparts from the other schools on campus to discuss and address enterprise-level priorities for LLUH. The Dean is actively considering succession plans for Dr. Soret's roles within the school. Temporary responsibilities for research are being supported by the Center for Health Research Director, Dr. Pramil Singh, until a decision is made about this position.

Assistant Dean for Public Health Practice: The Assistant Dean for Public Health, Daniel Handysides, DrPH, leads the school's Office of Public Health Practice and sets goals and objectives for public health activities. Additionally, Dr. Handysides and his team create and support many workforce development initiatives within our community and region in keeping with the desired needs of local public health professionals.

Collaborative Centers: Three new Centers were created in 2014 to foster greater interdisciplinary collaboration, and a move away from discipline-specific departments. Given the LLUH focus on *wholeness*, LLUSPH defines it as the harmonious balance that exists when healthy individuals thrive in resilient communities supported by sustainable systems of health. Each Center has adopted one of these signature themes as an area of strategic emphasis as described below. As a school, these three centers aim to lead jointly and inform the next generation of public health thinking related to innovations on building a culture of health, particularly around prevention and population health.

- ***Collaborative Center for Community Resilience.*** As previously mentioned, the Collaborative Center for Community Resilience was led by Center Executive Director, Samuel Soret, PhD, MPH. Dr. Soret also served as LLUSPH Associate Dean for Research. The primary focus of this Center is on "whole communities," where collaboration, capacity building, information sharing and community based stewardship are fostered. Faculty members in this Center examine how the social determinants of health, the built environment, and the role of community ecological factors contributing to conditions of whole communities and individual health conditions in those settings. Interim responsibilities for this role are being supported by the Center for

Leadership in Health Systems Director, Dr. Karl McCleary, until a candidate is selected for this position.

- ***Collaborative Center for Leadership in Health Systems.*** The Collaborative Center for Leadership in Health Systems is led by Center Executive Director, Karl McCleary, PhD, MPH. The primary focus of this Center is on "whole systems," where a health system consists of all organizations, people and actions whose primary intent is to promote, restore or maintain health. Faculty members in this Center are committed to promoting health improvement and a culture of health through health systems. Specifically, Center faculty investigators focus on health systems research and policy — where analyses, practice, education, and high-impact interventions have the potential to improve health outcomes, strengthen, and transform health systems.
- ***Collaborative Center for Nutrition, Healthy Lifestyle and Disease Prevention.*** The Collaborative Center for Nutrition, Healthy Lifestyle and Disease Prevention is led by Center Executive Director, Joan Sabaté, MD, DrPH. Building on the unique Adventist Health Study's legacy of lifestyle and plant based diet research, the primary focus of this Center is on "whole individuals." Faculty investigator collaborations are aimed at reducing preventable risk, morbidity and mortality associated with diet, physical activity, tobacco and alcohol use related non-communicable diseases.

Center for Health Promotion: The Center for Health Promotion is led by Warren Peters, MD, MPH. For over twenty years, the Center for Health Promotion has provided preventive medicine specialty care and primary medical services in the Inland Empire of Southern California. The focus of this Center's work has been on providing high quality medical services and eliminating preventable disease. One unique aspect of this clinical practice is the provider training in public health and specialty focus on wellness and lifestyle medicine. Associated with both the LLU School of Public Health and the LLU School of Medicine, the Center also offers the same services to the university community and study body, with wholistic care option to pediatric and adult patients.

Center for Health Research: The Center for Health Research is led by Pramil Singh, DrPH. Established in 1990, the Center for Health Research (CHR) has provided research and evaluation services for clinical, public health, and community-based entities at the university and in the local and global community. CHR has completed over 1,300 projects of varying scale since its inception. The Center is organized into two sections. The first is an administrative core that provides technical assistance with research development for the school, support with proposal development and administrative preparation support for grant proposals. The administrative core also awards pilot grants to help investigators with seed projects that have potential for external funding from other agencies. Through the Center, Dr. Singh often aids faculty with stipends for research travel and conferences, and publication awards. The second unit is a Research Consulting Group (RCG) of multidisciplinary faculty and research analysts providing expert assistance in health research and evaluation on a consultation basis. Geoinformatics services are also available through both the Center for Health Research and the Office of Public Health Practice, depending on the portal of entry and interest for the consultation.

1.4.c. Description of the manner in which interdisciplinary coordination, cooperation and collaboration occur and support public health learning, research and service.

Teaching or Public Health Learning:
At LLUSPH, one of the great examples of interdisciplinary coordination, cooperation and collaboration for learning occurs at the master's level in the PCOR 501-503 curriculum. This common core or foundational curriculum provides an interactive learning experience for MPH students and is supported by a team of faculty members who integrate public health topics from across multiple disciplines to

provide a unique, team-based student learning experience. Here's a description of the PCOR learning environment. When the students participate in class, activities are given to the groups to complete (both face-to-face and online). These learning activities are selected to reinforce and illustrate the learning objectives and content covered for that class time. Examples of such activities include case studies, problem solving and other short exercises that will help students to apply the knowledge and give the groups projects to work together to complete. An example of a learning activity developed is called San Bernardino City Priorities based on the Wilderness Survival exercise in which participants must select items from a pre-determined list necessary to survive in winter conditions until rescued. Once completed, the discussion includes the "correct" list of necessary survival items and their purpose, as indicated by survival experts. In our exercise, a list of 20 different items were compiled for the city of San Bernardino, a neighboring city that has deteriorated in crucial areas such as economics, health, crime and other key indicators. In October, 2014, the PCOR faculty team brought a group of key SPH faculty members together to review this information and rank the items that, according to public health, would be the most important for the residents' survival in this poor, high crime environment. The faculty took this exercise seriously, really engaged and discussed the items listed. In the end, PCOR faculty team obtained the "correct" answer list based on our faculty's expertise. This activity was then used with a pilot group of students before launching it with the inaugural cohort of students.

Interdisciplinary collaboration also occurs within the SPH doctoral programs in a variety of ways. The SPH Doctoral Programs Committee organizes three seminars per year for the SPH doctoral community students. This is an opportunity to network with peers from across various public health disciplines. These forums also provide opportunity for faculty from various programs to share their research interests, for students to learn about process and policies related to their program and dissertation. Examples include Institutional Review Board (IRB) and human subjects training, and preparation for dissertation defense. The dissertation guidance committee must consist of a chair and one member who are from the student's program, but the third member must be from either outside SPH or from a different discipline or a cross discipline faculty. Research topics usually also integrate more than one discipline (for example, Nutritional Epidemiology). One of the goals of the SPH Doctoral Programs Committee for this next academic year is to identify a foundational common core for doctoral programs. Once this core is identified, the next step is to determine what set of courses would help attain these competencies (new or existing course work). These courses would then be collaboratively developed and taught as they will be common across doctoral programs.

Research:

The school has several areas of existing interdisciplinary collaboration and coordination. The Adventist Health Studies examine the relationships between lifestyle, diet, and disease among Seventh-day Adventists in the United States and Canada, enrolling over 97,000 church members from more than 4,500 churches. Not only does it involve collaboration between faculty investigators with expertise in epidemiology, nutrition, and health education, it represents a large-scale, multi-site community-based engagement and coordination to facilitate this ongoing study over many years. Currently led by Principal Investigator, Gary Fraser, MD, PhD, this study remains a priority for both LLUSPH and LLUH administration.

Tobacco control research and international research capacity programs have been conducted for over a decade by an interdisciplinary group of faculty members from epidemiology, global health, and preventive medicine. This interdisciplinary initiative continues with a collaborative team supporting grant applications and research on current trends in tobacco control.

Another emerging area of scholarship in LLUSPH is in the area of environmental nutrition and sustainable diets. Examining public health impacts of social, economic, and environmental factors on

the food system, this research team contains one of the Center Directors (Drs. Sabaté), a post-doctoral fellow, and investigators from Andrews University and Oregon State University.

More detailed examples are enumerated under Criterion 3.1 Research.

Public Health Practice:
In the area of public health practice, the Intentional Outreach Intervention (IOI) is a great example of interdisciplinary collaboration and coordination in action. The IOI is an ongoing research project based on a partnership between LLUSPH, Azusa Pacific University nursing program, and CrossWalk Church, a local SDA congregation with strong community outreach efforts and planning. IOI engages local residents in the neighborhoods in the one-mile radius around CrossWalk church, an area that is the intersection of three diverse cities: Loma Linda, San Bernardino, and Redlands. The project seeks to develop and pilot a model of public health from community- and faith-based perspectives in an interdisciplinary manner—ultimately developing a neighborhood-level health "hub" that addresses health holistically.

Thus far, faculty members, researchers, students, and collaborating agencies have come to participate in IOI from diverse backgrounds and disciplines, including public health, nursing, faith-based organizations, geographic information systems, and local elementary schools. IOI is currently in Phase 1, collecting baseline data from a range of community residents, local partner organizations, and congregation members and will use their unique perspective to pursue interdisciplinary collaboration that is truly community-focused. Additional phases will continue to incorporate an interdisciplinary approach to intervention/service development, project implementation, and evaluation, as we develop and provide services with diverse partners. Besides basic services provided by physicians, nurses, nurse practitioners, physician assistants, allied health professionals (such as physical therapy and speech therapy), and counselors, IOI is in the process of providing spiritual assessment training to enhance a model of integrated and accessible physical, mental, and spiritual health. This initiative clearly reflects the mission and values of LLUDPH, in a community-based interdisciplinary approach to serving the local population from a faith-based perspective.

Service:
In the area of service learning, the school's centralized Practicum Office was created with one of the main goals of fostering the development of public health professionals with a greater understanding and appreciation for interdisciplinary collaboration and practice. The office has implemented three main components to the practicum to increase interdisciplinary collaboration: a) develop sites where students from different disciplines can be placed; b) strategically look for projects that allow for interdisciplinary team work; and c) quarterly public practicum poster presentations representing students from a variety of public health and health care administration disciplines. We have identified and been actively placing a variety of students at approximately 50% of our routine sites which we are building as hubs for interdisciplinary practice of public health; all of which have benefited more than one academic program. With these interdisciplinary sites we are able to cultivate projects that allow students from each program to work together and with different professions at the practica locations. Summer quarter 2016 was the seventh poster presentation with students across disciplines participating to report and be queried by faculty members, site supervisors and prospective employers about their projects. Below are specific examples of the positive effects of these efforts at improving public health practice infrastructure and system.

The first interdisciplinary placement and project we arranged was for a patient satisfaction survey project for a specialty clinic in Redlands, CA. The project was assigned to an MBA student, but the analysis became more complex. In this particular case, the site's software was not typically taught to

our MBA students. MBA students frequently conduct analyses with MS Excel and use spreadsheets. While good for general business statistics, it does not have the same analytic capacity for analyses used in more social, behavioral, and health research such as capabilities found in SPSS or SAS. This challenge presented an opportunity to have a biostatistics student collaborate at the same site and on the same project. Through this collaboration, the biostatistics student provided the MBA student with the opportunity to learn more about SPSS and the analytic approaches for patient experience surveys. For the biostatistics student, this provided an opportunity to learn what information is important to clinicians, and better ways to clearly present data for managerial decision making by health care administrators. Not only did both students come from different academic programs, but the project itself had the students interacting with the clinical and administrative personnel at the host organization. The positive feedback our practicum office received from both students was very encouraging and we have worked to increase these types of opportunities for interdisciplinary collaboration among our students and public health and health care administration supervisors at the practicum sites.

At the end of each quarter, MPH students who have completed their practica and MBA students who have completed 400 hours (800 required for completion) present at an internal SPH poster presentation session in the main hallway of Nichol Hall. Students from every program present together providing the opportunity for public health students, and faculty and staff members along with attending site supervisors, to mingle and share ideas and questions. Computer stations are set up so that online students can also participate in the poster presentation sessions. Each area of expertise represented helps push the students to see their practica from different perspectives. The most common positive feedback from students has been that this experience has helped them feel more confident in the work they did and that they appreciate support from across the school that this interaction provides. This has been a strong positive learning outcome demonstrated by our students.

1.4.d. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. LLUSPH has a new organizational structure and function that is formally approved, recognized, and supported by the LLUH Board of Trustees.
2. LLUSPH is structurally and functionally integrated into the operations of LLUH, from administrative leadership to the governing and non-governing communities of the university.
3. LLUSPH is poised with many of the foundational elements for building a stronger and more engaging learning environment for students, staff, and faculty. The school is attempting transformative change in public health education that is consistent with ASPPH and many changes espoused by thought leaders in the field. Also, consistent with its mission and values, LLUSPH consistently participates in interdisciplinary collaboration in teaching, research, and service. Interdisciplinary public health is valued and supported by the school.

Weaknesses:

LLUSPH is still dealing with the results of the organizational changes. Specifically, implementation of the new Centers has not adequately addressed sensed concerns around the roles and responsibilities of Centers. Despite earlier efforts, this area has not been explained well and easily understood by all. This has delayed some readiness for change and administrative initiatives in support of its purpose. Nevertheless, school students, staff, and faculty seem resilient and

committed to making any needed refinements or adjustments that will better align the structure with its originally proposed intent to foster greater interdisciplinary public health.

Plans for Improvement:

The dean recently met with SPH faculty and staff on May 9, 2016 and September 12, 2016 to discuss the "State of the School." Clear plans were proposed at that meeting for identifying and addressing the school's strategic priorities. Again, a formal and systematic planning process began in autumn 2016 to align and strengthen the strategy, structure, and operations of the school in preparation for the future of public health practice. Additionally, our school suffered a tremendous loss with the sudden passing of Dr. Soret, who served in two important capacities within the school. The dean and SPH administration now have the task of succession planning after the loss of a long-time colleague. While Dr. Soret can never be replaced given his important contribution to the school, LLUSPH will strive to find individuals with commensurate experience and qualifications who can shoulder the responsibilities in those vital areas, continuing the important work he has contributed to our institution, the community, and its students.

1.5 Governance. The school administration and faculty shall have clearly defined rights and responsibilities concerning school governance and academic policies. Students shall, where appropriate, have participatory roles in the conduct of school and program evaluation procedures, policy setting and decision making.

1.5.a. A list of school standing and important ad hoc committees, with a statement of charge, composition and current membership for each.

Table 8, found in the membership lists folder in section 1.5 of the ERF, contains a list of LLUSPH standing and important ad hoc committees, with each group's charge and composition.

1.5.b. Description of the school's governance and committee structure's roles and responsibilities relating to the following:

i. General school policy development

University policies provide the institutional framework for how general school policy development, implementation, evaluation and monitoring are conducted. Both university and school-specific policies are detailed in the following documents: a) *LLU Faculty Handbook;* b*) LLU Faculty Handbook: School-Specific Policies* (School of Public Health); c) *LLU Student Handbook;* and d) *LLU Employee Handbook*. Administrative policies for the university, and hospitals and health systems are located on the MYLLU portal under *Policies and Handbooks* (http://myllu.llu.edu/faculty/). Information for each group is available separately through this portal. The faculty portal has access of all four sets of documents. Therefore, LLUSPH governance, policy development, and procedures are the prerogatives of administration and faculty within the larger institutional framework for governance.

The university requires that each school maintains certain standing committees. The faculty, staff, and students participate, per policy, in governance primarily through committee membership and center-related activities. LLUSPH maintains the standing committees listed in Table 8. These committees are charged with setting goals, responding to stated administrative or academic priorities, and developing consensus on pertinent matters. Standing committees meet regularly at varying intervals throughout the year. Policies can be created or modified as drafts at the committee level, and subsequently are forwarded for review by the Administrative Committee. Many such policies are operational in nature. Other significant changes or revisions, if deemed appropriate, rise to the level of requiring changes in the *school-specific* policies of the *LLU Faculty Handbook—SPH*. The Administrative Committee is empowered to make final decisions on local or school governance issues. Similarly, the Academic Council provides oversight and is the final authority for matters related to academic policy. Major revisions must also follow corporate conventions and make way to LLUH administration and the Board of Trustees for final approval.

ii. Planning and evaluation

Planning is the primary responsibility of the SPH administration, including the dean, associate and assistant deans, center directors, and other administrators. The goal is to elicit and achieve broad faculty and staff input on key facets that affects the daily operation of the school. These goals are tied, where possible, to future plans that affect budgeting, personnel, and general forecasts on our school's anticipated needs. Such input may also be the basis for plotted out performance improvement plans to enhance academic and operational effectiveness. Collectively, these school-specific actions are tied with broader strategies and plans for LLUH as an enterprise.

Additionally, two important decisions and investments should be mentioned. First, as previously cited, LLUSPH will be formulating and implementing a formal strategy management system. This new approach will link the development of our strategic plans to school operations. It also includes steps to build and incorporate key performance indicators for evaluation in all areas and at different levels throughout the organization. While strategic planning efforts have been attempted in the past in various ways, they have been met with mixed results in sustaining its implementation. As such, the current dean and administration will work to provide a system that is embedded in the culture and norms, reflected in how the school performs and fulfills its charter on a daily basis. Second, the school is actively participating in university's Office of Educational Effectiveness efforts to strengthen core aspects of the academic and learning environment. For example, in areas of assessment, the school has created program curriculum maps for outcome implementation and assessment rubrics. Likewise, professional development efforts have emphasized the need to improve teaching and instruction, student learning and assessment, and the use of educational technology in the delivery of content. Last and certainly not least, the school is promoting more mission-focused learning that emphasizes our faith-based beliefs in teaching, research and practice activities.

iii. Budget and resource allocation

SPH administration, in coordination with other area administrators with budgets, confer with the Manager for Administrative Operations, the Executive Associate Dean, and the Dean in the development, implementation, and monitoring of annual budgets. Faculty input is provided through their representative Center director or SPH administrator. Faculty input can also be conveyed through the Faculty Advisory Council representative. Other routine budget and resource allocation decisions are brought to the Administrative Committee for discussion and finalization.

iv. Student recruitment, admission and award of degrees

The Director of Enrollment Management (Chair, Marketing and Recruitment Committee) and the Assistant Director for Admissions (Chair, Admissions Committee) work on the front-lines of our school's student recruitment, promotion, and admissions processes, and are actively involved in supporting those functional areas. The Awards and Traineeship Committee, chaired by the Executive Associate Dean for Administration and Student Services, provides oversight for the schools awards and scholarships that promote student scholarship and recognize the accomplishments of our student body. Awarding of degrees is overseen by the Assistant Dean for Academic Records and her team, in concert with University records, ensuring that student records are accurate that each individual meets the requirements for the

academic degree programs before the awarding or conferring of LLU degrees at our institution's graduation ceremonies.

v. Faculty recruitment, retention, promotion and tenure

Faculty recruitment is governed by the university's policy in the *Faculty Handbook*, as it relates to our institution's policy of Non-Discrimination and Affirmative Action. At the same time, as a faith-based institution, we recruit individuals who will support the mission and values of this institution as a Seventh-day Adventist Health Sciences University.

The Executive Associate Dean and the Manager for Administrative Operations provide human resources support to the Center directors and other SPH administrators in recruiting faculty and staff members. On behalf of the Office of the Dean, these individuals interface with the university's human resources area to assist with advertising, promoting, and posting job announcements on the various external sites and on our corporate portal. University human resources aids with collecting applicant information, initial screening of potential candidates, and the like. After generating a sufficient pool of applicants, those names are turned over to the school and the chair of the search committee for further assessment and evaluation for fit against the posted job or position requirements through a formal search process that involves the Center directors, SPH administrators, faculty, staff, and students (all as deemed important to the role being recruited for at the school). Top selected candidates are recommended to the dean for review and approval. The dean confers with the president before extending any formal offers to prospective candidates. Names must go the President's Committee and the Board of Trustees for final approval. LLUSPH adheres to the university policies in this area and has further drafted a Faculty Search Guidance document that is being pilot tested by one of the Center directors in a faculty search, and expanded to another faculty position (biostatistian).

LLUSPH seeks to provide a work environment that offers many opportunities for faculty members to be engaged, with rewarding opportunities for personal and professional development. Attracting and retaining our human capital is a vital component to our success as an educational entity. We had a faculty work group that examined development issues of our school. SPH administration is working to incorporate many of those recommendations to enhance our ongoing efforts in this area.

The university provides an annual tuition benefit to the faculty where a member can receive eight units of tuition at an accredited school of their choice. The university provides numerous continuing professional education opportunities, which are either free or low cost to faculty members. Our school's Office of Public Health Practice is actively engaged in providing such activities for our faculty as well, especially through the annual Healthy People in Healthy Communities Conference. Additionally, faculty members receive a modest annual faculty incentive to support their individual professional development activities. The faculty member has some discretion in deciding how to earmark those monies, as long as the decision falls within the boundaries of clearly defined activities that will foster greater professional development. Examples include professional memberships, journal subscriptions (especially those not covered by access through the university's library system), and

conferences and presentations. While those monies may not cover all the faculty member's expenses, they can be coupled with funds granted to their Centers, and travel stipends from the Center for Health Research, or requests and approval for use of foundation account funds designed to support such activities. The Associate Dean for Research has also worked to develop refinements to the faculty incentive policy, to encourage and reward the efforts of faculty members involved in pursing of externally funded research and contracts. This policy is currently under review by SPH administration, and will be submitted to the Faculty Advisory Council for review and feedback before approval by the Administrative Committee. Our school has also made significant financial commitments in helping fund select, promising junior faculty at the rank of instructor or assistant professor with the opportunity to pursue their doctoral training with the expressed intent of returning to LLUSPH and giving service to the institution. These individuals are considered a value to the future of the school. In the past, the university has extended loans to select new faculty members in support of home purchases in the historically expensive southern California real estate market.

Promotion and tenure is recognized as another important mechanism for developing and recognizing the contributions of our school's faculty, both to the institution and the broader professional and lay communities. The RPT committee is guided by the university and the school-specific policies for promotion and tenure. The committee adheres to this framework when deciding about each faculty member's developmental progress within a given rank or designation. This committee is comprised of representatives from within school and other select non-SPH members from the university, many of whom are involved or experienced with such processes within their own school on campus. Committee actions are considered in an advisory capacity to the dean. The dean, upon the committee's advisement, makes an informed decision and recommendation to the President's Committee and the Board of Trustees for final approval per university policy.

vi. Academic standards and policies, including curriculum development

Academic standards and policies, including curriculum development, are developed, monitored, and revised as deemed appropriate by the Academic Council. Chaired by the Assistant Dean for Academic Administration, it is comprised mostly of academic program directors and assessment coordinators, with the exception of two ex-officio members (Associate Dean for Research/Center Director for Community Resilience, and the Director for Enrollment Management). Major policy revisions are addressed by this committee as the final arbiter of academic standards and policies within the school. That is, while academic standards and policies may arise under the auspices of one of the other LLUSPH committees charged with academic-specific matters (like the Master's Programs Committee; the Doctoral Programs Committee; the Field Practicum Committee; the Distance/Digital Learning Curriculum Committee), the local disposition of policies and standards falls under the charge of the Academic Council. Again, all decisions fall within the institutional governance framework for academic standards and policies, and in keeping with the purview of the university Academic Affairs Committee. Furthermore, as a faith-based institution, the Spiritual Life and Wholeness Committee examines ways to strengthen and integrate faith and learning into the academic standards for the school in accordance with the university's spiritual masterplan. See the LLUH Spiritual Plan 2016-2020: https://home.llu.edu/sites/home/llu.edu/files/docs/lluh-spiritual-plan-2016-2020.pdf

vii. Research and service expectations and policies

Our research and service expectations, and related policies, are outlined in the *LLU Faculty Handbook*. These policies are reiterated in greater detail contextually within the *LLU Faculty Handbook: School-Specific Policies* (School of Public Health). Within the school-specific policies, faculty members are also given specific examples or expectations of the various types of evidence that reflects scholarship in research and service. Expectations for research are reinforced through the Office of the Associate Dean for Research, the Center Directors, and through the Center for Health Research. The Office of Public Health Practice maintains opportunities and actively supports faculty and student participation in public health practice engagements around the region. The Practicum Office provides numerous service-learning opportunities for students as part of a standard culminating experience. Some of these training opportunities arise and are developed as part of faculty course curricula. Faculty members and students often collaborate in the submission of peer-reviewed publications and presentations at national, regional, and international conferences.

1.5.c. A copy of the school's bylaws or other policy documents that determine the rights and obligations of administrators, faculty and students in governance of the school.

A copy of the school's policy documents (and faculty bylaws) that determine the rights and obligations of administrators, faculty and students in governance are found in the university and school-specific policies. Table 9 outlines the university policies in this area.

Table 9 University Policies that Determine the Rights and Obligations of Administrators, Faculty, and Students in the Governance of LLUSPH

University Document	Area of Rights and Obligations	Affected Party
LLU Faculty Handbook	Chapter 1 – Officers of the University: Job Description • Dean (Section 1.3.10a., Part 2e) – Educational Responsibilities: Student affairs – "To facilitate student participation in governance with meaningful input of students…"	Students
	Chapter 1 – University standing committees or councils or panels (Section 1.4.0) • Standing committees of the schools (section 1.4.5)	Faculty
	Chapter 1 – Faculty participation in governance (Section 1.5.0)	Faculty
	Chapter 3 – Responsibilities of faculty (Section 3.3.0) • Committees and sponsorship (Section 3.3.3) • Faculty participation in faculty meetings and organizations (Section 3.3.4)	Faculty

Table 9 University Policies that Determine the Rights and Obligations of Administrators, Faculty, and Students in the Governance of LLUSPH		
University Document	**Area of Rights and Obligations**	**Affected Party**
LLU Faculty Handbook: School-Specific Policies **(School of Public Health)**	Section – Standing Committees and Councils	Faculty
LLU Student Handbook	Section II: Student Life • Student Organizations, p. 16-17 o Loma Linda University Student Association and general assembly of leaders (including section on Sample Approved Organizations where LLUSPH is listed)	Students

1.5.d. Identification of school faculty who hold membership on university committees, through which faculty contribute to the activities of the university.

Table 10 contains a list of school faculty holding membership on university committees. A detailed list of the composition of each committee is found in the membership lists folder in 1.5 of the ERF – University Standing Committees/Councils/Panels 2015 (as of May 11, 2016).

Table 10 LLUSPH Faculty Membership on University Committees	
University Standing Committee/Council/Panel	**SPH Faculty Representative**
President's Committee	Helen Hopp Marshak –Dean
Dean's Council	Helen Hopp Marshak –Dean
Joint Officers and Deans Council	Helen Hopp Marshak –Dean
University Academic Affairs Committee	Donna Gurule – Assistant Dean Academic Administration Sujatha Rajaram – Chair, Doctoral Programs Committee
University Rank and Tenure Committee	Jayakaran Job – Chair, Rank, Promotion and Tenure Committee
Learning and Technology Subcommittee	Peter Gleason, Rafael Molina
Digital Education	Rafael Molina (Co-Chair, Digital Education) Michelle Hamilton – Assessment Specialist Lisa Wilkens – Academics Anna Nelson – Health Education MPH/DrPH Hildemar Dos Santos – Lifestyle Medicine Robin Smith – Population Medicine (replaces Manjit Randhawa)
Academic Deans Council	Donna Gurule – Assistant Dean Academic Administration Sujatha Rajaram – Chair, Doctoral Programs Committee
Provost Advisory Council	Helen Hopp Marshak – Dean

Table 10 LLUSPH Faculty Membership on University Committees	
University Standing Committee/Council/Panel	**SPH Faculty Representative**

Educational Effectiveness Committee
• Subcommittee Leadership
  ○ Learning Outcomes
  ○ Service Learning
	Kevin Nick
	
	Larry Beeson
	Juan Carlos Belliard

University Assessment Committee	Michelle Hamilton
Faculty Policy Subcommittee	Synnove Knutsen Sam Soret
Student Policy Subcommittee	Dwight Barrett – Executive Associate Dean
University Catalog Committee	Helen Hopp Marshak – Dean Wendy Genovez – Assistant Dean Records
University Faculty Grievance Panel	Jim Banta (10/2013-9/2015) John Morgan (10/2013-9/2016)
Diversity	Patti Herring
Financial Operations Committee	Dwight Barrett – Executive Associate Dean
Parking, Security, and Fleet Committee	Dwight Barrett – Executive Associate Dean
Plant Operating Committee	Dwight Barrett – Executive Associate Dean
Risk Management Committee	Dwight Barrett – Executive Associate Dean
Safety Committee	Donna Gurule – Assistant Dean Academic Administration
Talent Management Committee	Dwight Barrett – Executive Associate Dean
Information Systems – CIO Council	Paul Hisada
University Technology Services Committee	Paul Hisada Ming Ji
Center for Christian Bioethics Administrative Committee	Karl McCleary – Executive Director
Student Affairs Department Heads	Dwight Barrett – Executive Associate Dean

1.5.e. Description of student roles in governance, including any formal student organizations.

Students play a role in governance at our university. The list of university-level committees has designated participants, depending on the nature of the committee and their charge. Within LLUSPH, students are integrated into the governance through standing committees listed in Table 8 where designated as Student Representative. The school also has a student organization (LLUSPH Student Association) that is formally recognized by university administration. Students can hold office and elect fellow students to serve as officers. This student association is an active group within our school. They meet regularly with SPH administration regarding the needs and concerns of students, and hold quarterly Town Hall meetings where students are invited (both on-campus and online) to ask questions and receive answers from SPH administration. Additionally, students have access to the executive associate dean in his longstanding role for student services where their voices can be heard, whether through the formal mechanisms of their organization or through informal feedback and meetings. Dr. Barrett remains very accessible to our students and their concerns are taken seriously by our school's administration.

1.5.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. The university and LLUSPH have an institutional framework for governance; one that is governed by policies and standards with expectation for participants. Faculty members and students can serve on several standing committees or participate in organized groups on campus.
2. University Administration values shared governance and encourages its support and participation on our campus. These values are also shared by the dean and SPH administration.
3. The school's Faculty Rank, Promotion, and Tenure Committee have created an updated version of the proposed policies. The intent of the committee was to update the policies which have not been updated since 2007.

Weaknesses:

1. The school's recent reorganization has highlighted the need for an active Faculty Council. Historically, the Faculty Council has not been a group with high levels of faculty engagement, with infrequent and irregular meetings and poor attendance. In the past year, efforts have been undertaken to strengthen the Faculty Council and reconstitute the bylaws. The Faculty Council Executive Committee (FCEC) is also a group in transition due to recent faculty attrition by the past chair, who accepted another position outside of academia. Another member went on maternity leave, but has returned autumn 2016. The dean supports Faculty Council and faculty governance through the Faculty Council as it matures.
2. Student participation can be strengthened within the new structure, with greater representation on academic program committees, and research and practice committees.
3. Proposed changes in the RPT policies were reviewed by the Faculty Council and will now need to be reviewed by the Administrative Committee before any school-wide changes can be adopted.

Plans for Improvement:

LLUSPH plans to strengthen its governance functions for both faculty members and students through a strategic emphasis on creating a stronger culture of engagement through the university's Gallup Employee Engagement Action Planning. Additionally, more education and accountability around the implementation of our institution's existing corporate policies will be undertaken. SPH administration will work to strengthen student participation through the school's student association. Proposed RPT policy changes will continue to move through our existing governance processes, followed by intentional efforts by the RPT Committee, along with SPH administration (including the Center directors) in helping faculty members to develop individual development plans that match workload distributions and the strategic priorities of both the school and the Centers.

1.6 Fiscal Resources. The school shall have financial resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.

1.6.a. Description of the budgetary and allocation processes, including all sources of funding supportive of the instruction, research and service activities. This description should include, as appropriate, discussion about legislative appropriations, formula for funds distribution, tuition generation and retention, gifts, grants and contracts, indirect cost recovery, taxes or levies imposed by the university or other entity within the university, and other policies that impact the fiscal resources available to the school.

LLUSPH receives revenue each year from the following four sources, a) tuition and fees are collected through the university Student Finance Office and passed through to each school. The university assesses a tax of 14.5% (2015-16) to support student services, university records, libraries, and central administration; b) grant, contract and consulting income stay within the school. The university assesses a tax of 8.5% on research, clinical trials and human study awards and 5% on internal, training and service awards (2015-16) on total income (including IDCs awarded); c) gifts and donations for projects and endowments are processed by the university and transferred to LLUSPH in their entirety; d) patient and student health revenues from the Center for Health Promotion (CHP).

1.6.b. A clearly formulated school budget statement, showing sources of all available funds and expenditures by major categories, since the last accreditation visit or for the last five years, whichever is longer. This information must be presented in a table format as appropriate to the school.

See Table 11 Sources of Funds and Expenditures by Major Category 2009-2015 below (also found in 1.6 of the ERF).

Table 11 Sources of Funds and Expenditures by Major Category, 2008 to 2016								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Source of Funds								
Tuition & Fees	6,611,491	7,639,591	9,441,136	10,083,658	10,670,488	9,605,820	8,497,522	8,008,585
University Funds - AHS				187,500	250,000	250,000	250,000	250,000
Grants/Contracts	2,254,771	1,752,253	2,648,814	3,325,136	3,501,676	3,205,539	2,837,520	2,479,747
Indirect Cost Recovery	104,412	126,414	64,609	437,922	392,578	324,571	330,558	85,822
Endowment	190,760	119,811	164,188	154,642	119,397	1,117,691	6,349	92,480
Gifts	34,455	37,000	3,500	500	1,400	35,500	96,400	65,747
Other Operating Revenue	174,637	252,511	367,973	396,851	613,122	310,954	682,926	75,450
Clinic Revenue	1,796,232	1,924,490	2,112,778	2,176,809	2,148,404	2,299,543	2,386,126	1,975,300
EBS				(440)	(41,680)	168,415		
Total	11,166,758	11,852,070	14,802,998	16,762,578	17,655,385	17,318,033	15,087,401	13,033,131
Expenditures								
Faculty Salaries & Benefits	4,326,311	4,848,629	4,996,251	5,729,661	6,266,152	6,878,353	8,213,709	7,314,859
Staff Salaries & Benefits	2,119,338	2,101,650	2,278,055	2,439,646	2,730,882	2,499,057	3,188,628	2,932,695
Student Wages	166,145	129,375	147,398	193,344	279,481	272,549	414,692	383,617
Operations	1,066,088	1,598,495	2,521,810	2,634,381	2,480,811	3,195,491	1,487,447	1,174,534
Travel	181,299	191,324	248,722	219,376	283,361	194,923	107,796	139,762
Student Support	161,518	201,102	196,341	217,763	283,917	311,104	323,205	160,195
Grants/Contracts	2,274,771	1,777,602	2,648,331	3,320,791	3,501,525	3,205,539	2,903,244	2,499,744
University Tax	783,985	972,095	1,447,632	1,595,977	1,679,248	1,514,077	1,336,199	1,224,778
EBS				1,262	(150,769)	109,288		
Total	11,079,455	11,820,272	14,484,540	16,352,201	17,354,608	18,180,381	17,974,920	15,830,184

LLUSPH has been operating at a lost for the last 3 years due to the following reasons:

- Significant drop in student applications, acceptances and enrolment year over year. Loss of approximately 150 students since 2013.
- In 2013 the SPH lost its recruiter and was not able to replace this position until January of 2014 in a critical period when all schools are recruiting in the fall for the upcoming academic year.
- Loss of federal funding for 27 unit certificate programs due to changes in federal aid eligibility.
- Increased competition in the field of public health in the past 3-4 years with the remarkable growth of accredited and non-accredited schools and programs.
- Decreased external funding in a more competitive research/environment.

The school has been operating at a loss for the last three years due to the following:

- Significant drop in student applications, acceptances and enrollment year over year. Enrollments have decreased by approximately 150 students since 2013.
- In 2013 the LLUSPH lost its recruiter and was not able to replace her until January 2014, in a critical period when all schools are recruiting in the fall for the upcoming academic year.
- Loss of federal funding for 27 unit certificate programs.
- Increased competition in the field of public health in the past three to four years with the growth of programs, as evidenced in the expanded membership of ASPPH and reflected in an additional 13 schools of public health since 2011.
- Decreased external funding in competitive research environment.
- Significant number of educational agreements and loan repayments for faculty members.

1.6.c. If the school is a collaborative one sponsored by two or more universities, the budget statement must make clear the financial contributions of each sponsoring university to the overall school budget. This should be accompanied by a description of how tuition and other income is shared, including indirect cost returns for research generated by school of public health faculty who may have their primary appointment elsewhere.

The LLUSPH is not a collaborative school.

1.6.d. Identification of measureable objectives by which the school assesses the adequacy of its fiscal resources, along with data regarding the school's performance against those measures for each of the last three years. See CEPH Outcome Measures Template.

Outcome measures include expenditures per student FTE and research expenditures per FTE Faculty member**.**

Table 12 Outcome Measures – Fiscal Resources				
Outcome Measure	**Target**	**2013-14**	**2014-15**	**2015-16**
Tuition Revenue	Increase annual tuition revenue without large increases in tuition fees.	$9,605,820 $810 per unit MPH (6% increase) $840 per unit DrPH and PhD (5.7% increase)	$8,497,522 $850 per unit MPH (5% increase) $890 per unit DrPH and PhD (6% increase)	$8,008,585 $880 per unit MPH (3.5% increase) $925 per unit DrPH and PhD (4% increase)
Expenditures (excluding expenditures of Sponsored Research Funds)	Decrease expenditures as appropriate with funds available	$18,180,381	$17,974,920	$15,830,184
Sponsored Research Funds	Increase Sponsored Research funding	$3,205,539	$2,837,520	$2,479,747

1.6.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. MBA- Healthcare Administration – the only such program within a school of public health in the United States. The program has the ability to provide significant revenue for the school if marketed correctly. It also is housed in the LLUSPH which provides another significant financial caveat as we seek to distinguish ourselves from the competition. This is due to our healthcare system and our network that provides students with a link for experience that many schools of public health not affiliated with a medical enterprise such as ours. Thus providing an economic boon for our school which is currently mainly tuition driven.
2. GIS-Courses and Lab; ESRI is located in Redlands and is top in the country with many government and private contracts. ESRI has mapping, population, and statistical information of all parts of the world. This relationship provides revenue for the school in an area that is growing rapidly. This relationship can be strengthened to provide a collaborative effort in providing experience for our students and simultaneously bringing revenue to our school. The strength of this is further solidified with the eminent (December 2016) return of a faculty member (Seth Wiafe) from study leave who started the program.
3. Vegetarian Congress – Since the 1990's the world conference has been held at LLU every five years. The recurrence of this conference provides revenue for the school. It sees alumni and notable individuals return to our campus for a three-day event that highlights the leading trends in the nutrition industry.
4. The central administration is supportive of the SPH despite the financial challenges it currently has and has been allowing the SPH to carry a loss for the past three years as we seek to return to financial solvency.

Weaknesses:

1. Due to many circumstances we do not have a balanced budget for the 2015-16 school year:
    a. Student enrollment has fallen over the last few years by 25-30%. The school is hopeful this will rebound with the hire of the new director of enrollment. In addition, the school was without an enrollment director during a peak time of recruiting (June 20, 2013 –January 1, 2014).
    b. In response to organizational change and to address the anticipated needs in faculty with skills for the future, new faculty members were added in 2012-13, and 2013-14, for mentoring opportunities. This increased the budget shortfall, as enrollment dropped at the same time. Some faculty members have left in 2015-2016 to pursue other opportunities.
    c. Research, contracts and consultations have dropped off during the past few years, despite a reorganization that had an area set up to help those wishing to apply for grants, and contracts.
2. The university has agreed to let us have a negative balance in the current year budget and the university financial sr. vice president and controller are working with LLUSPH on budgetary plans for the next three to five years. Due to these efforts, we anticipate to have a positive bottom line in the next two to three years. University administration has supported and continues to work with us as we seek to return to financial sustainability. This is evidenced in their providing financial support in key areas.

Plans for Improvement:

1. Streamline personnel:
    a. 2015-16: reduction of $800,000 in personnel costs achieved
    b. 2016-17: reduction of $600,000 in personnel costs anticipated
    c. 2017-18: will be based on assessments conducted in the current (2016-2017) fiscal year
2. Consolidation of administrative team (not replacing two associate dean positions).
3. A more extensive assessment of faculty workload and faculty numbers to safeguard appropriate management of financial resources.
4. Implementation of aggressive marketing plan of specific programs to increase student enrollment.
5. Renegotiating of faculty contracts upon renewal to consider 10-month contracts with possible buy-out from external funding for 12-month contracts.
6. Review of tuition rates to remain competitive.
7. Continue to improve efficiency of operations and evaluation of expenses.
8. Limit educational agreements and loan repayments of new faculty.
9. Strategic use of foundations funds to potential revenue-generating activities such as use of seed monies for research and practice activities that may ultimately generate external funding.
10. Increased focus on generating external funding for research and practice activities.
11. The development of a financial strategic plan (one to five years), based on strategic management plan for the school; revisited and revised annually.

1.7 Faculty and Other Resources. The school shall have personnel and other resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.

1.7.a. A concise statement or chart defining the number (headcount) of primary faculty in each of the five core public health knowledge areas employed by the school for each of the last three years. If the school is a collaborative one, sponsored by two or more institutions, the statement or chart must include the number of faculty from each of the participating institutions.

Table 13 Primary Faculty in Core Knowledge Area			
	2014-15 (201502)	**2015-16 (201602)**	**2016-17 (201702)**
Biostatistics	4	5	3
Environmental Health	8	6	4
Epidemiology	8	7	6
Health Services Administration	10	6	7
Social and Behavioral Sciences	14	10	9
Total Core Knowledge Areas	**44**	**34**	**29**
Global Health	10	6	4
Nutrition	7	8	8
Total	**61**	**48**	**41**

Primary faculty in the core knowledge areas have decreased from 44 in 2014-2015 to 29 in 2016-2017 in response to rightsizing after a significant loss in tuition revenue based on decreasing enrollment in the school. Adjunct and other faculty help support the teaching, research and service needs, where and as needed.

1.7.b. A table delineating the number of faculty, students and SFRs, organized by department or specialty area, or other organizational unit as appropriate to the school, for each of the last three years (calendar years or academic years) prior to the site visit. Data must be presented in a table format (see CEPH Data Template 1.7.2) and include at least the following information: a) headcount of primary faculty (primary faculty are those with primary appointment in the school of public health), b) FTE conversion of faculty based on % time appointment to the school, c) headcount of other faculty (adjunct, part-time, secondary appointments, etc.), d) FTE conversion of other faculty based on estimate of % time commitment, e) total headcount of primary faculty plus other (non-primary) faculty, f) total FTE of primary and other (non-primary) faculty, g) headcount of students by department or program area, h) FTE conversion of students, based on definition of full-time as nine or more credits per semester, i) student FTE divided by primary faculty FTE and j) student FTE divided by total faculty FTE, including other faculty. All schools must provide data for a), b) and i) and may provide data for c), d) and j) depending on whether the school intends to include the contributions of other faculty in its FTE calculations.

Note: CEPH does not specify the manner in which FTE faculty must be calculated, so the school should explain its method in footnote to the table. In addition, FTE data in this table must match FTE data presented in Criteria 1.1.a (Template 4.1.1) and 4.1.b (Template 4.1.2).

Table 14 Faculty, Students and Student/Faculty Ratios by Core Knowledge Area										
	HC Primary Faculty	FTE Primary Faculty	HC Other Faculty	FTE Other Faculty	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Fall 2014 (201502)										
Biostatistics [1]	4	4	4	2.25	8	6.25	13	11	2.75	1.76
Environmental Health	8	8	11	5.75	19	13.75	9	7.5	0.94	0.55
Epidemiology [2]	8	8	4	2.75	12	10.75	54	41.5	5.19	3.86
Global Health	10	10	7	2.5	17	12.5	48	41	4.10	3.28
Health Services Administration [3]	10	10	10	3.75	20	13.75	77	63	6.30	4.58
Nutrition [4]	7	7	3	1.65	10	8.65	66	57.5	8.21	6.65
Social and Behavioral Sciences [5]	14	14	11	4.5	25	18.5	139	92	6.57	4.97
Fall 2015 (201602)										
Biostatistics [1]	5	5	1	1	6	6	13	11.5	2.30	1.92
Environmental Health	6	6	5	1.75	11	7.75	8	7.5	1.25	0.97
Epidemiology [2]	7	7	5	2	12	9	41	34.5	4.93	3.83
Global Health	6	6	3	1.25	9	7.25	41	36.5	6.08	5.03
Health Services Administration [3]	6	6	13	5	19	11	85	69	11.50	6.27
Nutrition [4]	8	8	2	0.4	10	8.4	72	67	8.38	7.98
Social and Behavioral Sciences [5]	10	10	15	5.5	25	15.5	117	84	8.40	5.42
Fall 2016 (201702)										
Biostatistics [1]	3	3	1	0.75	4	3.75	10	10	3.33	2.67
Environmental Health	4	4	4	1.5	8	5.5	4	3.5	0.88	0.64
Epidemiology [2]	6	6	4	1.75	10	7.75	44	36.5	6.08	4.71
Global Health	4	4	6	2.25	10	6.25	28	27	6.75	4.32
Health Services Administration [3]	7	7	14	5	21	12	55	51	7.29	4.25

Table 14 Faculty, Students and Student/Faculty Ratios by Core Knowledge Area										
	HC Primary Faculty	FTE Primary Faculty	HC Other Faculty	FTE Other Faculty	HC Total Faculty	FTE Total Faculty	HC Students	FTE Students	SFR by Primary Faculty FTE	SFR by Total Faculty FTE
Nutrition [4]	8	8	2	1.15	10	9.15	73	67	8.38	7.32
Social and Behavioral Sciences [5]	9	9	14	4.75	23	13.75	99	71	7.89	5.16

FTE for 'Other Faculty' is calculated as the number of courses taught times .25 for a maximum of 1.0
FTE for graduate students is based on their categorization of full-time or part-time in the Student Information System. Full-time = 1 FTE; Part-time = .5 FTE.

[1]Biostatistics includes: MPH Biostatistics, MS Biostatistics
[2]Epidemiology includes: DrPH Epidemiology, MPH Epidemiology, MPH Epidemiology Medical Epidemiology, MPH Epidemiology Research Epidemiology, PhD Epidemiology
[3]Health Services Administration includes: DrPH Health Policy and Leadership, MBA Health Care Administration, MPH Health Policy and Leadership
[4]Nutrition includes: DrPH Nutrition, MPH Nutrition, MPH Nutrition Coordinated Program in Public Health Nutrition and Dietetics, MS Nutrition Coursework Track, MS Nutrition Research Track
[5]Social and Behavioral Sciences includes: DrPH Health Education (on-campus and online), DrPH Preventive Care, MPH Health Education (on-campus and online), MPH Lifestyle Medicine, MPH Lifestyle Management (online), MPH Population Medicine (on-campus and online)

1.7.c. A concise statement or chart defining the headcount and FTE of non-faculty, non-student personnel (administration and staff).

As of June 30, 2016, non-faculty personnel within the school included 44 full time and 13 part time staff members. Full time and part time staff are supported by SPH, extramural funds, grants, contracts and consulting, the Center for Health Promotion or a combination thereof.

1.7.d. Description of the space available to the school for various purposes (offices, classrooms, common space for student use, etc.) by location.

The SPH is currently housed in five university owned buildings. At present, Nichol Hall, Parkland Building, Evans Hall, RCG –Taylor St. and the Centennial Complex are equipped with eight lecture classrooms, four computer laboratories, and share a state of the art nutrition kitchen, three nutritional laboratories, and two environmental health wet and a water research labs. There are two teaching laboratories in the Centennial Complex, each with 20 workstations which are equipped with geospatial software and tools. These areas include 48,998 square feet and can accommodate up to 450 students.

Facilities accommodate activities such as interviewing and counseling participants, anthropometric, biochemical, dietary and clinical assessments, storage of biological samples, and nutrient related determination of assays. All rooms are listed in Table 15 and located in the six SPH buildings listed below.

Table 15 LLUSPH Available Space

Building	Total Space	Purpose
Nichol Hall	4,312.80	Classrooms
	770.60	Conference rooms
	2,088.00	Computer Labs
	547.10	Lounges
	12,491.10	Office
	2,973.10	Office AHS-2
	1,693.90	OF SVC
	1,447.40	NH Storage
	976.00	NH Lab
	1,373.30	Lab Nutrition
	630.30	NH Wet Lab
	275.20	Restrooms
	6,512.70	Corridor
	36,035.50	Total
Parkland Building	388.0	Conference room
	1,629.40	Offices
	296.00	Storage
	194.00	Corridor
	2,508.30	Total
Parkland Building Annex	801.56	Offices
	84.68	Corridor
	886.24	Total
Research Consulting Group	137.33	Offices
	137.33	Total
Evans Hall	242.70	CHP Conference Room

Table 15 LLUSPH Available Space		
Building	**Total Space**	**Purpose**
	3,701.50	CHP Clinic
	1,191.30	CHP Office
	144.00	R. Sinclair Research lab
	778.50	R. Sinclair Research office
	618.60	Of SVC
	175.10	Corridor
	100.802	Storage
	294.00	CHP Physician Office
	7,246.50	Total
Centennial Complex	1,844.10	Classrooms
	340.60	Office
	2,184.70	Total
	48,998.57	**Total**

1.7.e. A concise description of the laboratory space and description of the kind, quantity and special features or special equipment.

LLUSPH has adequate laboratory space at this time for the nutrition and environmental and occupational programs.

- The Nutrition labs are designed to support nutritional assessment and intervention studies that are conducted by faculty members and students. Facilities accommodate activities such as interviewing and counseling participants, anthropometric, biochemical, dietary and clinical assessments, storage of biological samples and nutrient-related determinations and assays.
- The environmental health program has an H_2O lab in Evans Hall that has helped the school obtain small grants and contract work.

The GIS lab in the Centennial Complex is used by most all of the on campus students, as each program has integrated GIS coursework into their programs.

Table 16 Laboratory Facilities	
Building Room Number	**Included in the Room**
Nichol Hall – Room 1109	• Stock room for chemicals and glassware
Nichol Hall – Room 1111	Biochemical lab equipped with the following: • Amino Acid analyzer (Beckman System 7300) • High Pressure liquid chromatography (HPLC) System which includes Pump (Shimadzu LC-10AT-VPUV-Vis Detector) (Shimadzu LC 10A-VP) Fluorescence Detector (Shimadzu RF 353) Automatic Injector, Column warmer, etc. • Spectrophotometer (Beckman DU 640) • Microplate Fluorescence Reader (BioTek FLX 800) • VU-VIS Fluorescence Reader (BioTek Synergy HT) • Evaporator and Pump (Labconco) • Computer
Nichol Hall – Room 1112	Biochemical lab equipped with the following: • Chemical hood and acid cabinet (Labconco)

Table 16 Laboratory Facilities	
Building Room Number	**Included in the Room**
	• Balances • Allegra 6R Refrigerated Centrifuge (Beckman) • High Speed microfuge (Beckman-Coulter) • Millipore water Filtration system • Flask Washer • Computers • Miscellaneous small equipment such as pH meter, vortex mixers, heating module, automatic pipettes, etc.
Nicholl Hall – Room 112A	• Two upright 8 ft. -80 degree freezers for the storage of biological samples
Nicholl Hall – Room A100	• Community nutrition lab-The room is set up for anthropometric assessment.
Nichol Hall – Room B122	Environmental and Occupational Health Lab Space • Environmental and Occupational Health Laboratory facilities housed in the Nichol Hall 1200 wing is comprised of two laboratories and one storage area. • The first laboratory is dedicated to environmental sampling and analysis lab work. It includes equipment such as autoclaves, PH meters, incubators, refrigerators, table-top refrigerated centrifuge, spectrometer, water baths, microwave, microscopes, computers, gas – chromatography equipment and a chemical hood. It also includes minor equipment such as water testing kits, microbiological supplies for growing bacterial cultures and analyzing food, air and water samples. • The second laboratory is dedicated to processing and storing blood samples belonging to the Adventist Health Study. The Protein Profiling study includes a physical repository that houses a 4 X 8 ft. -80*C freezer dedicated to the storage of all biological samples from the proteomic study and the Adventist Health Study.
Centennial Complex	There are two teaching laboratories, each equipped with 20 workstations which are loaded with a myriad of geospatial software tools and data. • The labs are used to teach geographic information systems (GIS), global positioning systems (GPS) and remote sensing (RS) technologies to LLU students. • The labs are also used to teach geospatial technology workshops for students and the public health workforce. • As scheduling permits, the space may also be available as general teaching/classroom space for SPH classes. • There is a support workroom (320 sq. ft.) located between the two labs that serves as a faculty office/student work area/printing and storage facility. This room houses two to

Table 16 Laboratory Facilities	
Building Room Number	**Included in the Room**
	four high end geospatial workstations, several color printers and a 42" poster plotter.
Evans Hall	Environmental Microbiology Research Laboratory (ERML) is made up of two laboratories and two offices located in the B2 suite of Evans Hall. • The BSL2 laboratory is equipped with incubators, shakers, bench workspace, water baths, a BSL2 hood, and ultrapure water system, a qPCR and other microbiology equipment. • The other lab has the infrastructure to test water filters, a 3D printer and tools to fabricate sensors for environmental health, pumps and scopes to calibrate industrial hygiene instruments and carryout other human exposure assessment experiments. • There is also a faculty and student office with three computer workstations. The two laboratories are set up to process field samples and perform experiments on the topics of environmental microbiology, food safety, water quality, wastewater management, household hygiene, hospital infection control and quantitative microbial risk assessment.

1.7.f. A concise statement concerning the amount, location and types of computer facilities and resources for students, faculty, administration and staff.

LLUSPH maintains its own computer center located in Nichol Hall room 1404 with two FTE staff members providing students, faculty and staff with hardware and software support as well as support for Exchange/Active Directory accounts and access to LLUSPH and LLUH network and intranet resources. The computer center maintains 170 faculty and staff workstations and 72 student computer lab workstations. Each faculty and staff member is provided with an Intel i5 or i7 based workstation. The computer center maintains five laptop computers for loan to faculty and staff members and students. Each academic collaborative center has a Konica Minolta C360 class or better MFP for scanning and printing. Each administrative office has access to black and white laser and color inkjet or laser printers.

LLUSPH provides four student computer labs, two located in Nichol Hall and two located in the Centennial Complex. Nichol Hall 1502 is the main teaching lab (available for general use between classes) and Nichol Hall 1501 is a general use lab. The Centennial Complex labs are made available through the LLUSPH GIS program. Each Nichol Hall lab has a black and white laser printer managed through the university Pharos printing system. Scanning and color printing are available at the computer center located in Nichol Hall 1404. The Centennial Complex labs provide black and white/color printing in addition to paid poster printing.

Table 17 Computer Lab Resources	
Location	**Number of Computers**
Nichol Hall – Room 1501	12
Nichol Hall – Room 1502	20

Table 17 Computer Lab Resources	
Location	**Number of Computers**
Centennial Complex – Room 3102	20
Centennial Complex – Room 3110	20
Total	72

In addition to school resources, faculty, staff and students are provided technical resources at LLUH Del Webb library. These include the following located on the library's 3rd floor:

- 19 workstations for student use
- Nine group study rooms, seven of which have computers
- Digital sharing station with a 47" LCD with HDMI connectivity
- 80" touchscreen for on the spot instruction
- Three scanners (two flatbed and one document fed)
- Two MFP devices for scan/copy/print

The library also has nine laptops and seven iPads available for loan.

The LLUSPH computer center provides support via walk-in, telephone, e-mail and text messaging. The computer center office in Nichol Hall 1404 is open 8:00 am – 5:00 pm Monday-Friday. The computer labs located in Nichol Hall are open 8:00 am – 11:00 pm Sunday-Friday and staffed by student lab assistants. The Centennial Complex labs are open Monday-Friday 8:00 am – 5:00 pm. The university also offers 24/7 telephone support for basic issues related to account access (password reset, access to shared resources).

1.7.g. A concise description of library/information resources available for school use, including a description of library capacity to provide digital (electronic) content, access mechanisms, training opportunities and document-delivery services.

The university library (the Del E. Webb Memorial Library, http://library.llu.edu/ provides a broad range of library resources and services to the SPH. These resources and services are facilitated through the library liaison program. The SPH liaison for many years has been Shirley Rais, MLS and is transitioning to Heather-Dawn Rodriguez-James, MLS. The library liaison is available to work with students and the faculty to provide instructional support for library resources and services, to provide subject specific seminars, assistance in research and literature searching, training on bibliographic management systems (Endnote), and assistance in selecting library resources that support the curriculum and programs. Students may meet with the liaison in person, via telephone, email, Zoom, or through Canvas if instructors elect to include a library module in their course work. Additional reference librarians are available during regular library hours. A literature search service is provided by the library's Research and Instruction department through a web-based literature service request form. An online library guide specifically developed for public health students is available from the library's home page (see http://libguides.llu.edu/).

As a health sciences-focused university library, the library's resources support public health by providing core public health specific journals, books, and databases as well as the broader health and social sciences literature useful for public health teaching and research. These resources are available in electronic and print formats. All of the library's resources (both print and electronic) are listed in the library's online catalog, found on the library's website. For electronic content, direct links are provided for on-campus, and off-campus access. In addition to the catalog, links to the library's journal collection can be found at the "Find Journals" link on the library's home page. Online bibliographic databases can

also be accessed through a separate link, “Databases A-Z.” This link provides an alphabetical and a subject list to the databases provided by the library. The subject list, “Public Health”, suggests several which are pertinent to the public health research.

Remote access to the library’s electronic resources is offered from the library home page and online catalog with authentication via a proxy-server. Digital content may also be accessed directly from the university’s learning management system, Canvas. The public health liaison librarian offers assistance in terms of technology, accurate links, and copyright issues to faculty who want to incorporate the library’s digital content within Canvas.

For resources beyond the library’s collection, the library offers document delivery through the Interlibrary Loan office via web-based service request forms for different types of content such as journal articles, books, and dissertations. For books, there is also a patron-initiated book borrowing service, Link+, a web-based service with participating academic and public libraries in California and Nevada. The library also participates in the IEALC, a consortium of academic libraries within the Inland Empire. Loma Linda students may apply at the circulation desk for a reciprocal borrowing card good at participating libraries.

1.7.h. A concise statement of any other resources not mentioned above, if applicable.

Common Resources
LLUH provides internet service to the campus via an ISP provided 500 mbps Ethernet connection and a Cisco-based network infrastructure for local network and intranet services. The entire LLUH campus is provided with secure wireless connectivity. VPN restricted access to LLUH and the SPH resources are available to students, the faculty, administration and the staff. LLUH provides general support to all university constituents via a central LLUIS department help desk that is responsible for management of resources utilized by all LLUH entities, such as email (Microsoft Exchange).

The school maintains its own computer center with two full-time employees to provide direct help desk support to students, faculty members, administration and the staff. This includes platform independent software, hardware and account (active directory, exchange, intranet) support. The computer center also liaises with LLUIS, LLUH communication network services and the university network administrator to provide telephone and network infrastructural support.

Student Resources
In addition to the resources above, the computer center provides two student labs which together contain 32 Intel i7 processor-based networked computers with printing via the Pharos system. General use computers and Pharos printers are also available to students at the Del E. Web library. Students have access to secured wireless in all areas of the school and campus. The computer center provides platform independent help desk support to students via walk in, email and telephone.

Faculty, Administration and Staff Resources
Each faculty member, administrator and staff member is, at minimum provided with an Intel Pentium i5 processor based computer and printing to a networked laser printer. Additional detail concerning the locations and types of computer facilities and resources can be obtained from the computer center.

1.7.i. Identification of measurable objectives through which the school assesses the adequacy of its resources, along with data regarding the school's performance against those measures for each of the last three years. See CEPH Outcome Measures Template.

Table 18 Outcome Measures for Resources				
Outcome Measure	**Target**	**2013-14**	**2014-15**	**2015-16**
Allocate office space for SPH's new structure to facilitate student support				
Provide one dedicated office space for a writing center and career service center located near other student services offices	Relocate Writing and Career Services to dedicated office in NH 1500 beginning 2013-14 AY and to be completed in 2014-15 AY	Begin MET	Complete MET	(no deliverable due)
Provide two strategically located office spaces for students to have access to school-wide practicum office	Relocate Field Practicum Office to two office spaces in NH 1500 wing beginning 2013-14 AY and to be completed in 2014-15 AY	Begin MET	Complete MET	(no deliverable due)
Allocate one office space for students to have access to finance coordinator	Relocate Finance Coordinator to office in NH 1500 wing beginning 2013-14 AY and to be completed in 2014-15 AY	Begin MET	Complete MET	(no deliverable due)
Reconfigure one office space in central NH hallway to facilitate the creation of the academic programs office	Creation of APO office located in NH 1500 wing beginning 2013-14 AY and to be completed in 2014-15 AY	Begin MET	Complete MET	(no deliverable due)

Upgrade classrooms in support of collaborative learning				
Upgrade student learning environment in 5 classrooms over 3 phases[1]	Begin and complete work on 3 classrooms for Phase I in 2015-2016	(no deliverable due)	(no deliverable due)	Begin and Complete Phase I MET
Ongoing support of teaching, learning, and research				
Student-Faculty Ratio	Student-faculty ratio of 10:1 or less for all disciplinary units.	(See Table 1.7.2) MET	(See Table 1.7.2) MET	(See Table 1.7.2) MET
Number of Faculty Support Staff at Collaborative Center level	One FT Administrative Staff Support per Collaborative Center	1 (per Collaborative Center) MET	1 (per Collaborative Center) MET	1 (per Collaborative Center) MET
Provide suitable research space in terms of sq. ft. for funded projects	Allocate a minimum of 2,500sq.ft. for funded research	MET ** Parkland Building under Remodel temporarily relocated to Mt. View Plaza	MET ** Parkland Building under Remodel temporarily relocated to Mt. View Plaza	MET
Dedicate Resources for ongoing student support				
Number of FTE to Support Writing and Career Center	1.5 FTE	1.5 MET	1.5 MET	1.5 MET
Number of FTE to Support APO	3 FTE	3 MET	3 MET	3 MET
Number of FTE to Support Practicum Office	3.5 FTE	3.5 MET	3.5 MET	3.5 MET
Number of FTE to Support Finance Coordinator Office	1 FTE	1 MET	1 MET	1 MET

[1] The three phases of classroom upgrades include:

Phase I – refurbish 3 classrooms (NH 1512, 1407, and 2011) with new furniture, lighting and modest upgrades to facilitate collaborative teaching. Begin and complete in 2015-16,

Phase II – refurbish 2 classrooms (NH 2019 and 1610) with new furniture, lighting and modest upgrades to facilitate collaborative teaching. Begin and complete 2016-17.

Phase III – Major renovation of NH 1610 to include structural modifications. Begin and complete 2017-18.

1.7.j. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. The administration addressed providing space to student needs. During the summer of 2014 the school relocated the writing and career services center, the field practicum office and the finance coordinator to the central area of Nichol Hall to provide a "one-stop-shop" area for students. In addition, the creation and strategic placement of the academic programs office in this key student services area ensures that students are able to have the necessary knowledge and resources to succeed.
2. Updated classroom furnishing contribute to more conducive learning environments in Nichol Hall rooms 1512, 1407 and 2011.
3. The school allocated conference room space to each academic center for faculty and research team meetings.
4. The school has a continued commitment to maintaining appropriate student/faculty ratios in its academic programs.

Weaknesses:

Despite being able to entirely comply with our space requirements, our laboratory spaces are becoming antiquated. The school will undertake developing a financial plan for their refurbishing as part of the strategic management system.

Plans for Improvement:

1. Our largest class room and meeting room, 1610, is scheduled to undergo dramatic change to facilitate the teaching and delivery of curriculum instruction that can more easily accommodate digital technologies and interdisciplinary learning groups. The projected end date for this upgrade is September 2017.
2. Space in our Parkland building has been earmarked for externally funded research projects that will provide needed space for our investigators to conduct clinical trials and other funded research efforts.

1.8 Diversity. The school shall demonstrate a commitment to diversity and shall evidence an ongoing practice of cultural competence in learning, research and service practices.

1.8.a. A written plan and/or policies demonstrating systematic incorporation of diversity within the school. Required elements include the following:

i. Description of the school's under-represented populations, including a rationale for the designation.

LLUSPH is known for its diversity in nationality, race, language, ethnicity, and religion. Diversity is one of the school's key strengths and is a true resource to the university and the community. The student body is able to engage the wide-ranging interests of community members. This fosters and supports the service learning culture within the school, where students from various cultural backgrounds are able to learn from and connect with a diverse community through their service and service learning projects.

One group that is under-represented at LLUSPH is Native American students. The percentage of American Indian/Alaska Native students has ranged from zero students in 2015, to three students in 2014; there are two students in 2016, or about 1% of the student population. The U.S. Census (2010) shows the percentage of the total population at 1.7 (alone or in combination). Thus, increasing this representation at LLUSPH would mean recruiting and retaining three to four students.

LLUSPH has shown a particular interest in recruiting from the much underrepresented Native American community. This has been a difficult to reach group despite the large number of tribes in the region. We anticipate that with our current pipeline efforts and special partnerships with Native American schools such as the Sherman Indian High School in Riverside, and the San Manuel Gateway College (SMGC) in San Bernardino that we will see an increased enrollment, though such efforts take some time to be realized. One of our outstanding Native American students, Rochelle Tuttle, has been instrumental in mentoring and guiding young Native American students in our community. Rochelle is a Gates Scholar who completed her MPH in health policy at LLUSPH and is now completing her DrPH in health education. She plans to continue working with us with our pipeline efforts, as an alumnus.

Diversity Recruitment efforts: Students

When reviewing the nationalities, ethnicities and races that make up the LLUSPH student body, we note that the recruitment process has fulfilled the mission in reaching a diverse student population "locally, nationally, and globally." Student characteristics attending the school are diverse with a majority (57%) of the student body with ethnicities other than Caucasian. These do not include international students who account for 15.5% of students (see figures 3-5). If we were to add international students to non-Caucasian students the percentage would grow to a remarkable 73.3%. This reality reflects in practice the university policy on diversity which states that "all groups – regardless of their ethnicity, race, culture, gender, religion, or physical condition – are valued, appreciated and included" (*LLU Student Handbook* p. 29) http://www.llu.edu/assets/central/handbook/documents/Student-Handbook.pdf)

Student recruitment is done across the country at a variety of schools and socio-economic settings. Since LLU is part of the SDA Church global network, some awareness of the university's programs is made through church publications that are distributed worldwide. Recruitment is also done at a variety of universities and colleges (faith-based and public) in the region and nationwide.

An evaluation of the number of Black (American-born and foreign-born) students shows that the majority of Black students are foreign-born. Thus, we feel the need to put more effort in recruiting more American-born U.S. Black students which represents our local and national population. These students, we believe, should ideally be recruited from our sister SDA colleges and universities across the U.S., as we have always done, but with more effort and concentration on this particular group.

Since we are such a richly diverse institution, with students from many nationalities, we plan to continue recruiting international and other students with diverse personal histories. The current percentage of Black/African American (15%) and Hispanic/Latino (19%) students will be maintained and adjusted depending on changes in the local and state demographic trends. The rate for Black/African Americans in California is above that for California (7%), and the national rate (13%). The percentage of Hispanics/Latinos is above the national rate of 16%, but below the 2014 rate in California (39%).

Based on our experiences with serving the needs of such a richly diverse population of both students and faculty members, we have naturally learned about their cultural and traditional beliefs and practices, and have thus created an environment conducive to some of their needs. One example of such accommodations which is in alignment with our faith-based focus is the LLUSPH multi-faith prayer room. The school has a designated prayer room that is very popular with students of all faiths, but is especially used by our Muslim students who appreciate having a dedicated space for their daily prayers.

Figures 4 through 6 (found in 1.8 of the ERF) depict trends in student diversity the last three years.

Diversity Recruitment efforts: Faculty

Based on LLU's commitment to inclusion and to addressing diversity through a focus on our motto "to make man whole," we have interwoven diversity through the faculty recruitment and program development. Diversity at LLU encompasses any personal characteristics – age, gender, race, genetic make-up, disability, veteran or marital status, religion, and others. Both core and adjunct faculty members are from a variety of backgrounds to represent diversity (see Figure 7 in 1.8 of the ERF). When recruiting faculty members, diversity of gender and race are considered to provide a variety of interactions which provide guidance to our diverse student body.

Although LLU is a SDA university, affiliation with the church is not a requirement for faculty appointment. Below are the statements of the university on diversity and discrimination.

Since our percentage of Under-Represented Minority (URM) is strong, and we haven't experienced issues in attracting URM faculty to the SPH, we want to maintain/retain the current percentage of URM faculty. Currently, there are 12.7% of faculty who self-identify as Hispanic/Latino, 19.0% as Asian, 15.9% as Black/African American, and 49.2% as White (4.8% did not report race or ethnicity).

Philosophy on Diversity

LLU and LLUH are committed to transforming lives through education, healthcare, and research. Our mission is guided by Biblical principles designed to create a culture where values of compassion, integrity, and excellence are deeply embedded. Culture and values form the basis and drive our efforts toward access, diversity, and inclusion in all we do.

At LLU, we recognize, nurture, and appreciate the differences among individuals. Our message of wholeness supports the "whole person," regardless of personal characteristics. Diversity provides us with an advantage for innovative thinking. By being inclusive, we generate a high level of satisfaction and engagement throughout our institution, particularly with regard to connection to mission. Ensuring

equal access gives individuals opportunities to rise as far and as high as their talents, abilities, and interest allow.

In September 2016, the University-wide Faculty Colloquium focused specific on inclusion of diversity among our faculty, with a special session that included a panel of faculty of other (non-SDA) faiths who addressed the question posed by the LLU Provost: "What I Wish I Knew about LLU Before Joining LLU." This provided an opportunity for faculty to share their perspectives on what was important to being a faculty member here, from diverse perspectives. After all panelists had an opportunity to share their viewpoints, the Provost reaffirmed the commitment by LLU leadership to fostering an environment where diversity of opinion is valued and respected. This approach by university leadership is key to encouraging faculty, staff and students in each school to express differences in opinion and background, while still maintaining the mission-focused values of our institution.

ii. A list of goals for achieving diversity and cultural competence within the school, and a description of how diversity-related goals are consistent with the university's mission, strategic plan and other initiatives on diversity, as applicable.

Table 19 Diversity Goals and Objectives	
Strategy	Goals and Objectives
STRATEGY DIVERSITY	**Goal 1**: To recruit and maintain/retain underrepresented minority (URM) students.
	Objective 1.1: Increase the number of URM* Native American students to at least four (one each year) over the next four years, beginning in the 2017-2018 school term. **Objective 1.2**: Over the next three years, we will maintain/retain the average of 17% of the student population of U.S. Black students; recruited from SDA institutions across the country.
	Goal 2: To maintain/retain the current number of URM faculty members**.**
	Objective 2.1: Over the next three years, we will maintain/retain a minimal of 17% of Black/African American faculty members. **Objective 2.2:** Over the next three years, we will maintain/retain a minimal of 20% of Latino/Hispanic faculty members.
	Goal 3: To maintain/retain the current percentage of Black and Hispanic staff.
	Objective 3.1: We will maintain/retain the average percentage of Black and Hispanic staff to mirror the demographics of the SPH student population for the prior three years.
	Goal 4: To integrate health disparities, cultural competency, and diversity issues into all the SPH discipline/concentration areas.
	Objective 4.1: Beginning in the 2018-2019 school term each discipline (health education, nutrition, environmental health, epidemiology, biostatistics, health policy and preventive care) in the SPH will have included in one of their core courses at least one assignment and one lecture related to health disparities, diversity, and cultural competency.
	Goal 5: To integrate health disparities, cultural competency and diversity issues into the public health core courses (PCOR).
	Objective 5.1: Beginning in the 2018-2019 school term, the PCOR (a blend of all the public health core courses) will include at least one lecture and one assignment

Table 19 Diversity Goals and Objectives	
Strategy	Goals and Objectives
	related to health disparities, diversity, and cultural competency into each of the public health focus areas (environmental health, epidemiology, biostatistics, health behavior change, nutrition, and ethical issues).
	Goal 6: To encourage and build cultural competency knowledge and skills among staff and faculty within the SPH.
	Objective 6.1.a: Every year, starting in fall 2017 all faculty and staff will complete a cultural competency self-study module which will be available on Canvas. **Objective 6.1.b:** After the completion of the self-study module on Canvas, all faculty and staff will submit a certificate/confirmation of completion on Canvas, before the beginning of fall quarter.

***Underrepresented Minorities** (URM): Blacks/African Americans, Latinos/Hispanics, American Indians/Alaska Natives—"who have historically comprised a minority of the U.S. population" (http://www.nacme.org/underrepresented-minorities).

iii. Policies that support a climate free of harassment and discrimination and that value the contributions of all forms of diversity; the school should also document its commitment to maintaining/using these policies.

LLUH has clear documented anti-harassment policies for employees and students.

For employees the policy states:

Loma Linda University Adventist Health Sciences Center (LLUAHSC) is committed to providing a work environment that is free of discrimination and harassment in any form. In keeping with this commitment, LLUAHSC strictly prohibits all forms of harassment, including sexual harassment and harassment based on race, color, national origin, medical condition, physical handicap, or age. Also prohibited is retaliation of any kind against individuals who file valid complaints or who assist in a LLUAHSC investigation. (LLUH Human Resources Policy, Code I-16).

Student Policies:

Policies can be found in the *LLU Student Handbook*
http://home.llu.edu/sites/home.llu.edu/files/docs.student-handbook.pdf
Students are required to acknowledge that they have been informed that the Handbook is available to them online, and accept responsibility for understanding the policies in the Handbook.

Grievance procedure
Grievances related to sexual harassment, racial harassment, or discrimination against the disabled shall be pursed in accordance with university policies specifically relating to these issues. Grievances related to academic matters or other issues covered by specific school policies shall be made pursuant to the policies of the school in which the student is enrolled. A student who questions whether the process provided by the school has followed the policy of the school in regard to the student's grievance may request the Office of the President to conduct a review of the process used by the school in responding to the academic grievance.

If a school of the university has its own academic review and grievance policy, the policy shall be followed for students of that school (*LLU Student Handbook*, p. 57).

Nondiscrimination and affirmative action policy

This policy was updated on January 5, 2016.

Loma Linda University affirms that Christian principles are not compatible with various forms of discrimination that have divided societies. Loma Linda University further affirms that all persons are of equal worth in the sight of God and that they should be so regarded by all of His people. Moreover, this nation was founded upon the ideals of equal worth of all persons and equal opportunity for each individual to realize his or her fullest potential. Therefore, the university is committed to teaching and observing the biblical principles of equality.

The law does not require Loma Linda University to have a written program of affirmative action; but, in the spirit of the law, the university has issued this program as a guide to employees, supporters, and students to enlighten and assist in implementing a policy of affirmative action throughout the university. The university reserves the right to express disagreement from time to time with reference to specific remedies and regulations that may be proposed to eradicate discrimination.

A delicate balance must be found between affirmatively seeking to assist those in a discriminated class and providing equal opportunity for all individuals, whether or not in such discriminated class. The university is committed to going the second mile and beyond to try to strike this delicate balance. The task is impossible if the only resources are legislation and litigation, but it is possible in an atmosphere of cooperation and understanding among all concerned.

The free exercise of religion guaranteed by the Constitution of the United States includes the right to establish and maintain religious educational institutions. Loma Linda University is incorporated as a California religious nonprofit corporation, owned and operated by the Seventh-day Adventist Church as an integral part of the church's teaching and healing ministries. Federal and state guidelines clearly recognize the right of religious institutions to seek personnel and students who support the goals of the institution, including the right to give preference in employment of faculty and staff and admission of students to members of the church that sponsors the institution.

The university is committed to equal education and employment opportunities for men and women. While LLU gives preference in its selection processes to students and employees who are aligned with the faith-based mission of the university and Seventh-day Adventist Church, LLU does not and shall not unlawfully discriminate on the basis of race, color, religion, gender, sexual orientation, gender identity, national origin, medical condition, physical handicap, mental condition, veteran's status, or age in the provision of any of its services. Further, LLU is committed to providing a work environment that is free of unlawful discrimination and harassment. In keeping with this commitment, LLU strictly prohibits all forms of harassment, including but not limited to sexual harassment and harassment based

on race, color, religion, gender, sexual orientation, gender identity, national origin, medical condition, physical handicap, mental condition, veteran's status, or age. Also prohibited is retaliation of any kind against individuals who file complaints in good faith or who assist in an LLU investigation. These policies apply to admissions, financial affairs, employment programs, student life and services, or any university-administered program (*LLU Student Handbook*, p. 58-59).

Disabilities Accommodations:

The Disability Accommodation Policy

Introduction
Section 504 of the Rehabilitation Act of 1973 states that: "No otherwise qualified person with a disability in the United States … shall, solely by reason of … disability, be denied the benefits of, or be excluded from participation in, or be subjected to discrimination under any program or activity receiving federal financial assistance." Loma Linda University supports the integration of all qualified individuals into the programs of the university and is committed to full compliance with all laws regarding equal opportunity for all students with a disability. At LLU, students, faculty, deans or dean's designee, department chairs, and the Grievance Committee on Students with Disabilities all play a joint role in ensuring equal access to campus facilities and programs.

The policy spells out the definition of an individual with disability, and the requirements for documentation of a disability, how accommodation requests are handled, documented, determined, and the confidentiality of such records. Details of implementing accommodations or a denial of accommodation is clearly spelled out, along with the student grievance procedure relative to the school's determination of edibility, accommodation, or denial of same (*LLU Student Handbook*, p. 51-56).

iv. Policies that support a climate for working and learning in a diverse setting.

Non-Discrimination Policy
"Loma Linda University and Health System is an equal opportunity employer committed to the principles of diversity. We provide equal opportunities in all aspects of the employment process to every individual, regardless of gender, race, color, age, national origin, ancestry, physical or mental disability, marital or veteran status, genetic information or any other characteristic protected by law. In addition, we will provide reasonable accommodations for otherwise qualified individuals requesting an accommodation due to a disability.

v. Policies and plans to develop, review and maintain curricula and other opportunities including service learning that address and build competency in diversity and cultural considerations.

Until 2015, all MPH students were required to take a health disparities class that dealt with cultural competency and health disparities. The school is in the process of integrating the content from that course into the public health core course (PCOR) series.

There is also an elective course, Cultural Issues in Health Care that addresses issues of racism, culture, ethnocentrism, power and privilege in healthcare. This class attracts students from other LLU schools as well as LLUSPH. Guest speakers include a traditional healer, and a former director of the Global Center for Adventist-Muslim Relations. For some of these guest lectures students outside of the class are welcome to attend and engage in discussion.

The LLUSPH is a leader in service learning among the eight LLU schools on campus. The university is currently going through a process of classifying service-learning courses. The Institute for Community Partnerships' Academic Service Learning Committee reviews and approves all service learning courses that are designated on the bulletin. University policy regarding service learning was Board approved in 2015 to ensure that all LLU graduates will have graduated having taken at least one service learning course in their programs.

The university's service learning definition is the following: Service-learning is a structured learning experience that combines community engagement with academic preparation, reflection, and ongoing assessment (LLU Service-Learning Committee, 2014).

As of October 2016, the LLUSPH has 10 designated service learning courses and is leading the campus in service learning depth and breadth:

- GLBH 545 Integrated Community Development
- GLBH 565, GLBH 567, GLBH 569 Interventions in Community Health and Development I, II, III
- HPRO 537A, HPRO 537B, HPRO 537C Community Programs Laboratory

Dr. Juan Carlos Belliard is the director of the Institute for Community Partnerships (ICP) and the Assistant VP for Community Partnerships and Diversity. Dr. Belliard is also a faculty member in the LLUSPH. His public health background has helped him develop the institute and promote community engaged scholarship across campus. ICP and its programs (Community Benefits, Community Academics Partners in Service, and the *Promotor* Training Academy), have benefited from the work of faculty and students from the LLUSPH. Students have worked, volunteered, and completed field practica and service learning projects through ICP. (http://lluhcommunityengagement.org/our-work/service-learning)

One of our most exciting projects is the San Manuel Gateway College (SMGC) in the community next door in San Bernardino. The SMGC shares a building with an LLU-affiliated federally qualified health center known as the SACHS clinic. This clinic system expanded and moved into the new building in July 2016. The building was made possible with support from LLUH and through donations, of which the largest donation was made by the San Manuel Band of Mission Indians for 10 million dollars. The SMGC provides certificate training programs that will last six to 12 months and will allow recent high school graduates from low income neighborhoods in San Bernardino and the surrounding region to find gainful employment in health care. This initiative is being lauded as perhaps the most impactful project that the City of San Bernardino has seen in recent history. This is a possible "gateway" or pipeline that will

enable residents of the Inland Empire to acquire higher education in the health sciences, including but not limited to public health. For more information please go to http://lomalindauniversityhealth.org/sanbernardino/san-manuel-gateway-college .

vi. Policies and plans to recruit, develop, promote and retain a diverse faculty.

Because our percentage of URM faculty is strong, and we haven't had issues over the years attracting URM to the SPH, we want to maintain/retain the current percentage of URM faculty members. Active recruitment of a diverse faculty has, so far, not been necessary. Thus, we will continue to emphasize and support university practices and policies that encourage diverse faculty to come to and remain at LLUSPH. This includes opportunities for faculty growth and development, leadership and teambuilding, both within and outside of LLUSPH.

vii. Policies and plans to recruit, develop, promote and retain a diverse staff.

Since staff diversity is high, the school's focus will be on retaining our already existing diverse staff and provide a working environment that respects and values the various communities they represent. Thus, we will maintain/retain the average percentage of Black and Hispanic staff to mirror the demographics of the SPH student population for the last three years.

viii. Policies and plans to recruit, admit, retain and graduate a diverse student body.

See Table 19 above. Current policies that have been effective in attracting a diverse student body will continue, with added emphasis on incorporating health disparities, diversity, and cultural competency into each of the public health focus areas and into the public health core (PCOR) coursework content. In addition, opportunities for engagement in LLUSPH Student Association leadership and activities are made available and encouraged among on-campus and online students. Retention and student success strategies are in place for all students, with particular emphasis in addressing the concerns of those who face financial barriers and life challenges, regardless of background.

ix. Regular Evaluation of the effectiveness of the above-listed measures.

The LLUSPH Diversity Committee meets regularly to review and revise the school's diversity goals and objectives. This committee assesses progress and revise policies and plans as goals are met or need different strategies in order to be met.

The SPH Diversity Committee are dedicated to the recruitment, development and advancement of underrepresented minority faculty at SPH. We believe that the diversity in our student, faculty, staff and administrators should be reflective of the LLU mission "to make man whole," by including those most vulnerable and underrepresented. We will work diligently (including the students) to achieve this end. The Diversity Committee provides an opportunity for dialogue and networking within and outside the SPH, particularly with sister SDA institutions.

We meet regularly and are comprised of diverse faculty and staff members, and students. We plan to actively participate in outreach and recruitment efforts designed to attract and retain underrepresented minority students, and faculty and staff members.

1.8.b. Evidence that shows the plan or policies are being implemented. Examples may include mission/goals/objectives that reference diversity or cultural competence, syllabi and other course materials, lists of student experiences demonstrating diverse settings, records and statistics on faculty, staff and student recruitment, admission and retention.

One of our goals is to integrate a study of health disparities, cultural competency, and diversity issues into all the SPH discipline/concentration areas.

We will accomplish this by: Beginning in the 2018-2019 school term each discipline (health education, nutrition, environmental health, epidemiology, statistics, health policy, and preventive care) in the SPH will have included in one of their core courses at least one assignment and one lecture related to health disparities, diversity, and cultural competency.

We also plan to integrate health disparities, cultural competency, and diversity issues into the public health core course (PCOR). We plan to do this by: Beginning in the 2018-2019 school term, the PCOR (a blend of all the public health core courses) will include at least one lecture and one assignment related to health disparities, diversity, and cultural competency into each of the public health focus areas (environmental health, epidemiology, biostatistics, health behavior, health policy, nutrition, and ethics).

To provide evidence that our efforts produces desired results, we will distribute a survey to the students and faculty and staff members after training to determine if there are perceived improvements in addressing health disparities, diversity, and cultural competency or include questions on these areas in the annual Student Satisfaction Survey distributed electronically to all students. We anticipate that the plans for expressly including these areas into training, for students, faculty and staff will result in improved perceptions and behaviors that support an environment of inclusion.

1.8.c. Description of how the diversity plan or policies were developed, including an explanation of the constituent groups involved.

The diversity plans included in this report were developed by the LLUSPH Diversity Committee which has student, staff, faculty, and administration representation. The recommended diversity plans were drafted by the committee and reviewed by LLUSPH administration.

1.8.d. Description of how the plan or policies are monitored, how the plan is used by the school and how often the plan is reviewed.

The LLUSPH Diversity Committee meets regularly, at least quarterly, to review and revise the school's diversity goals and objectives. This committee assesses progress and revises policies and plans as goals are met or need different strategies in order to be met. New recommendations will be shared with constituents during faculty, staff, and student meetings, then presented to LLUSPH administration for final approval.

The SPH is celebrating 50 years beginning in 2017 and is experienced in opening its doors and hearts to all people from all walks of life, regardless of ethnicity, race, culture, gender, and religion. Thus, we have policies and procedures in place that have guided recruitment and practice for many years. Because the

world is changing, and because our students, faculty, and staff members come from all walks of life and from all over the world, we would like to hear from them as to what we can do better in recruiting and retaining URM at the SPH. We will do this by conducting focus groups with students at least twice a year to capture such perceptions, and identify ways to effectively address diversity in our school.

1.8.e. Identification of measurable objectives by which the school may evaluate its success in achieving a diverse complement of faculty, staff and students, along with data regarding the performance of the program against those measures for each of the last three years. See CEPH Data Template 1.8.1. At a minimum, the school must include four objectives, at least two of which relate to race/ethnicity. For non-US-based institutions of higher education, matters regarding the feasibility of race/ethnicity reporting will be handled on a case-by-case basis. Measureable objectives must align with the school's definition of under-represented populations in Criterion 1.8.a.

Table 20 Diversity Outcomes						
Category/Definition	**Method of Collection**	**Data Source**	**Target for 2020**	**13-14**	**14-15**	**15-16**
Student Race/Ethnicity: American Indian/Alaska Native	Retrieve from Records Office data	Records Office data	1-2% (4)	1% (3)	0% (0)	1% (2)
Student Race/Ethnicity: Black/African American	Retrieve from Records Office data	Records Office data	17%[3]	20%	17%	15%
Faculty Race/Ethnicity: Black/African American	Retrieve from faculty database	Faculty data	17%	17.4%	14.9%	15.9%
Faculty Race/Ethnicity: Hispanic/Latino	Retrieve from faculty database	Faculty data	20%	13.0%	17.6%	12.7%
Staff Race/Ethnicity: Black and Hispanic/Latino	Retrieve from staff database	Staff data	Match SPH student demographics	NA	NA	NA
SPH Disciplines: Each discipline (major) will include at least one assignment and one module on health disparities, diversity and cultural competency	Retrieve from Canvas records (module and assignment)	Module and completed assignments	100%	NA	NA	NA
SPH PH Core Coursework (PCOR): Will include at least one module and one assignment related to health disparities,	Canvas records	Completion of module and assignments; Certifications of completion issued	100%	NA	NA	NA

Table 20 Diversity Outcomes						
Category/Definition	**Method of Collection**	**Data Source**	**Target for 2020**	**13-14**	**14-15**	**15-16**
diversity, and cultural competency in each of the public health focus areas						
Faculty/Staff Diversity Education: All faculty and staff will complete a cultural competency self-study module which will be available on Canvas	Canvas records	Completion of module and assignments; Certifications of completion issued	100%	NA	NA	NA

1.8.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. LLUSPH has long been characterized for its student diversity in regards to race, ethnicity, nationality, and religion. It is the most diverse school at LLU and one of the most diverse schools of public health in the country. One group that has seen a dramatic increase at LLUSPH has been Latino students, showing a significant growth from 54 (12%) Latino students in 2014 to 72 (19%) Latino students in 2016. This is one of the areas of improvement that the school identified during its last accreditation period, when the school decided to increase its efforts in recruiting Latino students to better represent a community where Latinos are 50% or higher, and with one local school district that has 73% Latinos.
2. Service learning courses at the school provide a wealth of opportunities for students to mentor community youth, and delve into important issues affecting public health like health inequities, social determinants of health affecting communities of color, and educational justice issues among others. The LLUSPH is the leader at LLU for the number of service learning courses offered to students.

Weaknesses:

1. LLUSPH has been impacted by the national trend in lower enrollment (at the graduate level) in schools of public health in the last three years, as more schools and programs open and are accredited. LLUSPH has seen an 18% decrease in student enrollment from 460 students in 2014 to 375 students in 2016. Thus, the decrease in the number of minority students, especially Black students, in the school is consistent with the decrease in overall students. Nonetheless, minority student numbers have decreased at a slower rate than Caucasian students during this time.
2. The formerly required health disparities course is no longer being taught when the collection of core coursework was redesigned from eight or more courses to the integrated public health core coursework in 2015. The intent is for these issues to be explicitly taught and discussed in the PCOR series and in the discipline-specific major required coursework. While discussion of

disparities is inherent in most of the public health issues addressed in the core and major coursework, plans are to make this explicit by 2018.

3. Despite the rich diversity of the school, or perhaps because of it, there have not been strong policies, metrics, or structures to shape and continue to improve the diversity of the school. We have relied on a tradition of diversity and have lacked intentionality in some areas.

Plans for Improvement:

1. LLUSPH has shown a particular interest in recruiting from the much underrepresented Native American community. This has been a difficult to reach group despite the large number of tribes in the region. We anticipate that with our current pipeline efforts and special partnerships with Native American schools like Sherman Indian High School in Riverside, and the San Manuel Gateway College (SMGC) that we will see these numbers increase. One of our star Native American students, Rochelle Tuttle, has been instrumental in mentoring and guiding young Native American students in our community. Rochelle is a Gates Scholar who completed her MPH in Health Policy at LLUSPH and is now finishing her DrPH in health education. She plans to continue working with us with our pipeline efforts.
2. An area of concern is the decrease in Black students, while it reflects the decrease in overall student enrollment, it is an area of opportunity. Having more Black faculty members involved in recruitment efforts may result in attracting more students from this population. Our partnership with Oakwood University in Alabama presents an opportunity to raise awareness about public health, and recruit students who can address health disparities in their communities.
3. We will increase our efforts in recruiting local students from the Inland Empire Region. Our various health career pipeline programs, including the SMGC, will provide ample opportunity to recruit local students from our communities to address the public health issues that affect them directly.

2.1 Degree Offerings. The school shall offer instructional programs reflecting its stated mission and goals, leading to the Maser of Public Health (MPH) or equivalent professional master's degree in at least the five areas of knowledge basic to public health. The school may offer other degrees, professional and academic, and other areas of specialization, if consistent with its mission and resources.

2.1.a. An instructional matrix presenting all of the school's degree programs and areas of specialization. If multiple areas of specialization are available within departments or academic units shown on the matrix, these should be included. The matrix should distinguish between public health professional degrees, other professional degrees and academic degrees at the graduate level, and should distinguish baccalaureate public health degrees from other baccalaureate degrees. The matrix must identify any programs that are offered in distance learning or other formats. Non-degree programs, such as certificates or continuing education, should not be included in the matrix. See CEPH Data Template 2.1.1.

The school offers a variety of master's degrees (MPH) in the five core public health areas (biostatistics, environmental health, epidemiology, health education and health policy/leadership) in addition to nutrition, lifestyle management, global health and population medicine. Three of these programs are offered fully online in an asynchronous format: health education, lifestyle management and population medicine. Two academic master's degrees (MS) are offered in biostatistics and nutrition. The school also offers a Master of Business Administration (MBA) in healthcare administration.

Doctoral degree programs are offered in five areas: Epidemiology (DrPH and PhD), and the DrPH degree in the areas of health education, health policy and leadership, nutrition and preventive care. The DrPH in health education is offered online (combination of synchronous and asynchronous) as well as on-campus.

See Table 21 below for a listing of all degree programs.

Table 21 Instructional Matrix – Degrees & Specializations		
	Academic	***Professional***
Master of Public Health (MPH)		
Biostatistics		X
Environmental & Occupational Health		X
Epidemiology (Medical)		X
Epidemiology (Research)		X
Global Health		X
Health Education		X
Health Education (online)		X
Health Policy & Leadership		X
Lifestyle Management (online)		X
Nutrition		X
Nutrition (Coordinated Program with Dietetics)		X
Population Medicine (on-campus)		X
Population Medicine (online)		X
Master of Science (MS)		
Biostatistics	X	
Nutrition (Coursework track)	X	
Nutrition (Research track)	X	
Master of Business Administration (MBA)		
Healthcare Administration		X
Doctor of Philosophy (PhD)		
Epidemiology	X	
Doctor of Public Health (DrPH)		
Epidemiology		X
Health Policy & Leadership		X
Health Education		X
Health Education (online)		X
Nutrition		X
Preventive Care		X

2.1.b. The school bulletin or other official publication, which describes all degree programs identified in the instructional matrix, including a list of required courses and their course descriptions. The school bulletin or other official publication may be online, with appropriate links noted.

The link to the School of Public Health catalog for 2016-2017: http://llucatalog.llu.edu/

The MPH program in Epidemiology is under review based on enrollment and coursework. The two tracks were originally designed and developed to attract a) health care professionals and b) traditional public health Epidemiology professional. Over time, many of the health care professionals shifted enrollment to the Population Medicine program due to the type of coursework and training provided.

2.1.c. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. The school offers a wide array of degree programs that meet the requirements for accreditation and speak to our areas of specialization, values and mission: lifestyle management, global health, (vegetarian) nutrition and disease prevention.
2. Continued very low enrollment programs such as Maternal Child Health (MPH) and Global Health (DrPH) were closed. This allows strengthening of existing programs consistent with our mission and current faculty resources.
3. The new public health core coursework (PCOR) serves all MPH programs with efficiency, in a collaborative, integrative learning environment that speaks to the future of public health practice.

Weaknesses:

1. Although we have greatly reduced the number of tracks within majors due to low enrollment, some still exist (Epidemiology MPH, Nutrition MS) that will need review as to whether such distinctions are necessary.
2. Interest has been expressed to provide the MBA program in an online format to be able to offer courses to working professionals and students within other degree programs at LLU (e.g., PharmD, DDs, MD).

Plans for Improvement:

1. In order to best understand faculty needs for the school, each program director has completed a matrix to determine discipline areas needed for each program. Resulting data will be analyzed to determine faculty resources school-wide. For example, if a social behavioral scientist is needed by Global Health, Preventive Care and Health Education, the workload can be evaluated to determine how many faculty members are needed for the school and delegate those resources appropriately.
2. Other LLU schools have initiated conversations regarding offering second degree programs such as the (MBA) with Pharmacy, Medicine, Dentistry, and Behavioral Health. We are in discussions for ways to effectively and efficiently offer our degree programs to other LLU schools.
3. Conversations have commenced with program directors to determine how LLUSPH can create a market niche in spite of increased competition of graduate-level public health education. It is hoped that the recent changes to CEPH accreditation criteria will allow us the flexibility to focus

on areas that are consistent with our mission while still providing high quality education in the fundamentals of public health practice.

4. LLUSPH continues to receive requests for collaboration within the LLUH organization and externally to create real-world learning opportunities for our students.

2.2 Program Length. An MPH degree program or equivalent professional public health master's degree must be at least 42 semester-credit units in length.

2.2.a. Definition of credit with regard to classroom/contact hours.

According to the LLU *Administrative Handbook* policy C-9, credit is granted in terms of a quarter unit which represents 10-12 contact hours per unit of didactic course credit—- together with requisite study, preparation and practice; a minimum of 20 contact hours for one unit of seminar credit; and a minimum of 30 contact hours for one unit of laboratory credit. Three semesters are equal to four quarters (multiplying one semester unit by one and one third will equal a quarter unit). A minimum of 100 hours of supervised field work earns one credit.

2.2.b. Information about the minimum degree requirements for all professional public health master's degree curricula shown in the instructional matrix. If the school or university uses a unit of academic credit or an academic term different from the standard semester or quarter, this difference should be explained and an equivalency presented in a table or narrative.

The minimum number of credits for professional degree curricula is a minimum of 56 quarter units for MPH degree as shown in the instructional matrix as described in Criterion 2.1. Minimum units in doctoral programs vary due to dissertation units. School-wide unit requirements are a minimum of 60 post-master's units plus dissertation. Total units for doctoral degrees for the 2016-17 academic year are as follows:

- DrPH Epidemiology = 103 units
- PhD Epidemiology = 83-87 units
- DrPH Health Education = 95 units
- DrPH Health Policy and Leadership = 89-94 units
- DrPH Nutrition = 90-92 units
- DrPH Preventive Care = 90 units

School policy states that the minimum units cannot be reduced below the minimum requirement. Therefore, if a student requests to substitute or waive a course from the curriculum, that does not reduce their overall number of units below the minimum required. It would require that the student take additional elective units to fulfill the degree units. Over the past three years, no degrees have been awarded under the minimum number standard.

2.2.c. Information about the number of professional public health master's degrees awarded for fewer than 42 semester credit units, or equivalent, over each of the last three years. A summary of the reasons should be included.

The LLUSPH curriculum was modified in order to be compliant with the amended criteria in September of 2006, and was implemented in the *2007-2008 Catalog*. Only students accepted before the 2007-2008 academic year were awarded degrees for less than 56 quarter units. Since 2013, no degrees were awarded below the minimum 56 units for a Master of Public Health degree.

2.2.d. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. All degree programs meet the required number of curriculum units.
2. Also, since reorganization, most MPH programs have adjusted their curricula to accommodate a cognate in a related field which enhances the students' learning experience through application of foundational knowledge to specialized areas, such as emergency preparedness and response, healthcare administration, health geoinformatics and lifestyle intervention.

Weaknesses:

None

Plans for Improvement:

1. Due to having multiple catalogs in effect, the school is now phasing out the teach-out for the traditional curricula and is seeing a better use of faculty resources for teaching and mentoring students. This will allow better planning of course offerings for the coming year.
2. Plans are in place for faculty training on distance education instruction, with support from the school's Office of Distance Education and the university's Office of Educational Effectiveness, which started in summer 2016 and will continue in fall 2016.

2.3 Public Health Core Knowledge. All graduate professional degree public health students must complete sufficient coursework to attain depth and breadth in the five core areas of public health knowledge.

2.3.a. Identification of the means by which the school assures that all graduate professional degree students have fundamental competence in the areas of knowledge basic to public health. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each program.

Master of Public Health
All students in an MPH degree are required to complete the 15-credit public health core curriculum shown in Table 22.

The MPH Core Curriculum has recently been redesigned following the *A Master of Public Health Degree for the 21st Century* report (ASPPH, 2014). There are three courses, each including content from all five of the Core Knowledge Areas. The courses are designed to be integrated and collaborative, so students will not only learn the individual disciplines, but also understand the relationships across the five Core Knowledge Areas. PCOR students are arranged in multi-disciplinary groups with student members representing a variety of program disciplines in each group. Groups are given assignments to complete as a team with two or more topics represented in each assignment. For example, a group assignment that the PCOR students completed involved analyzing state and local transportation fatality data using SPSS (biostatistics) and determining if a Complete Streets policy (policy) had an impact on fatality outcomes. The challenges with developing this type of learning are twofold; textbooks are still written for a specific topic rather than multi-disciplinary topics and course materials and assignments are lacking which require a significant amount of time to create.

All students complete all three courses, PCOR 501, PCOR 502, and PCOR 503, for a total of 15 units. The curriculum is designed so that one fifth of the curriculum is dedicated to each of the five core knowledge areas. PCOR course syllabi from 2015-2016 can be found in 2.3 of the ERF.

Table 22 Core Public Health Knowledge – MPH

Core Knowledge Area	Course Number & Title	Total Credit towards Core Knowledge Area
Biostatistics	PCOR 501 Public Health for Community Resilience (5 credits) PCOR 502 Public Health for a Healthy Lifestyle (5 credits) PCOR 503 Public Health and Health Systems (5 credits)	3
Epidemiology	PCOR 501 Public Health for Community Resilience (5 credits) PCOR 502 Public Health for a Healthy Lifestyle (5 credits) PCOR 503 Public Health and Health Systems (5 credits)	3
Environmental Health Sciences	PCOR 501 Public Health for Community Resilience (5 credits) PCOR 502 Public Health for a Healthy Lifestyle (5 credits) PCOR 503 Public Health and Health Systems (5 credits)	3
Social and Behavioral Sciences	PCOR 501 Public Health for Community Resilience (5 credits) PCOR 502 Public Health for a Healthy Lifestyle (5 credits) PCOR 503 Public Health and Health Systems (5 credits)	3

Table 22 Core Public Health Knowledge – MPH		
Core Knowledge Area	**Course Number & Title**	**Total Credit towards Core Knowledge Area**
Health Sciences Administration	PCOR 501 Public Health for Community Resilience (5 credits) PCOR 502 Public Health for a Healthy Lifestyle (5 credits) PCOR 503 Public Health and Health Systems (5 credits)	3

Doctoral Degrees

All students in the DrPH programs are required to complete the public health core curriculum shown in Table 23. Some of these requirements are met as prerequisites prior to entrance into the program, and some are met through courses integral to the degree programs.

Table 23 Core Public Health Knowledge - DrPH		
Core Knowledge Area	**Course Number & Title**	**Total Credit towards Core Knowledge Area**
Biostatistics	STAT 509 General Statistics OR STAT 521 Biostatistics I OR HADM 505 Managerial Statistics and Epidemiology OR STAT 549 Analytical Applications of SPSS OR Previous MPH degree	2-4
Epidemiology	EPDM 509 Principles of Epidemiology OR HADM 505 Managerial Statistics and Epidemiology OR Previous MPH degree	3
Environmental Health Sciences	ENVH 509 Principles of Environmental Health OR Previous MPH degree	3
Social and Behavioral Sciences	HPRO 509 Principles of Health Behavior OR Previous MPH degree	3
Health Sciences Administration	HADM 509 Principles of Health Policy & Management OR Previous MPH degree	3

2.3.b. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. All graduate curricula have a well-defined path which allows students to achieve fundamental competence in the areas basic to public health.

2. The MPH core curriculum is integrated across disciplines, enabling students to see relevant connections between core knowledge areas. The traditional model of distinct public health core coursework made it difficult for students to connect the discipline-specific competencies, and had led to duplication and disconnection across courses.
3. There is strong administrative support for the redesign of courses to achieve current learning goals.

Weaknesses:

The redesigned PCOR coursework is relatively new, and there has not been sufficient time to track longer-term student learning outcomes related to this change. Assessment plans are in place using Canvas, LiveText and Qualtrics surveys to determine desired learning outcomes related to this course re-designation.

Plans for Improvement:

The curriculum redesign process is in its early stages for several courses, and will continue to evolve to include the most relevant content and most effective learning approaches.

2.4 Practical Skills. All graduate professional public health degree students must develop skills in basic public health concepts and demonstrate the application of these concepts through a practice experience that is relevant to students' areas of specialization.

2.4.a. Description of the school's policies and procedures regarding practice experiences, including the following:

- **selection of sites**
- **methods for approving preceptors**
- **opportunities for orientation and support for preceptors**
- **approaches for faculty supervision of students**
- **means of evaluating student performance**
- **means of evaluating practice placement sites and preceptor qualifications**
- **criteria for waiving, altering or reducing the experience, if applicable**

The field practicum is a supervised work experience for emerging public health professionals in Master of Public Health (MPH) programs at LLUSPH. The purpose of the practicum is to provide students with the opportunity to live out the motto of LLU "*To Make Man Whole*," through the application of knowledge and skills necessary for their professions along with LLU values of compassion, integrity, and excellence in an interdisciplinary environment. This is done within the context of carefully planned and implemented field-based applications, in real world settings. The practicum is participatory in nature, rather than observational, and is designed to address students' cross-cutting competencies, core program learning outcomes and career interests, while making contributions to the placement site/organization.

Practicum and Internship Office

The LLUSPH Practicum and Internship Office is a centralized service for all MPH students. The Practicum Office faculty and staff oversee the practicum process by: a) arranging and maintaining contracts with approved sites; b) providing advisement for students during site selection, while coordinating with the academic programs and potential sites; c) facilitating registration for the practicum course; d) evaluating student progress and deliverables; e) instructing students on professionalism, and f) advocating for the students as needed. While the practicum hours are spent at the project site, the student's work is guided and evaluated by the Practicum Office through the online student practicum course in Canvas and LiveText, LLUSPH's learning management system and assessment application, respectively.

During the last two years the practicum has gone from each academic program being responsible for providing guidance for their student practica to a single office overseeing the practicum process. The single office system has allowed for enhanced tracking and monitoring of students with standardized requirements and practicum deliverables across programs. A non-credit prep course was created to address professionalism and practicum requirements before placement to ensure each student begins with an understanding of practicum expectations. The other major addition to the practicum experience was the end of practicum poster/oral presentation. Poster presentations are conducted at the end of each quarter for all students completing their practica that quarter. LLUSPH faculty, staff and students attend and faculty are invited to participate as reviewers at this event. Site supervisors and public health professionals are also invited to attend and participate in the review and assessment process.

Evaluation of Sites and Site Visitor (Preceptors)
Practicum sites are selected from organizations engaged in public health, such as hospitals, local public health departments, and community organizations, at the local, state, national, or international level. The school has a list of criteria for sites and for site supervisors at these sites which is included in the practicum handbook as well as formatted as a checklist and sent to sites to ensure a successful practicum experience for both student and organization.

The site and supervisors' ability to offer appropriate experiences and support are evaluated by their respective students at the end of each quarter of placement. Site visits are also conducted annually for active sites, as time allows. The LLUSPH has instituted a site-specific self-evaluation which provides site supervisors the opportunity to self-evaluate how well they are meeting the criteria (2.4 of the ERF - Self Evaluation). These evaluations are used to assess if they are qualified to continue to participate in the practicum program.

Practicum Procedures
Planning and Preparing for the Practicum (Pre-requisites)
Students are encouraged to begin preparing for the practica early in their programs. During the first three quarters students are encouraged to discuss their plans with their faculty advisors and research specific areas of interest for work upon graduation. This process is guided by the preparatory course.

The SPH Practicum Community in Canvas contains the practicum prep course as a self-directed, online course, with videos and reading materials designed to assist students preparing for, choosing, registering for, and completing their practica. The preparatory course is updated as needed to provide current pertinent information for student success.

Students are able to choose among three optional schedules for their practica:

- During the summer following the first three quarters of study
- Concurrently with course work during the second year of study
- Following completion of the academic program

Students select sites by reviewing the SPH field practicum database online and working with the practicum office to find the best fit for their areas of interest and future goals. Once a site(s) has been selected, the student interviews with the site to ensure it is a good match for all parties. After the site accepts the student, the project(s) are discussed and the school completes a Memorandum of Agreement (MOA) and Description of Proposed Activities (DPA). These forms are submitted to the practicum office to be evaluated by the respective LLUSPH program director, and the practicum instructor to ensure that the projects will provide the student an optimal learning experience.

Once all contracts, MOAs, and DPAs are completed and approved, students register for the practicum course that matches the number of hours they are scheduled to complete during the quarter of registration.

Employment toward Practicum
If students request to use current employment toward their practicum requirement they must prove that the work will extend beyond or be something other than his or her regular work duties and allow application of knowledge and skills being learned. The organization must also agree to the arrangement and have policies that allow an employee to use their employment for academic credit. The same process is followed for site and project approval. Site criteria must be met and the MOA and DPA are

submitted and approved before the practicum is approved to start (pg. 19 Practicum Handbook – 2.4 in the ERF).

Criteria for Waiving Field Practicum

All requests for waiver, transfer credit, substitution, advanced standing, and other departures from the standard program are submitted to the School of Public Health Office of Academic Records using a petition for academic variance form. Practicum waivers are rarely approved. A partial waiver for the practicum is given if the student has participated in the Peace Corps either before acceptance or during the program. Once a student has participated in the Peace Corps he or she is required to register for a 100-hour course and complete the final practicum deliverables of a paper and poster presentation. All other waiver (including partial waiver) requests are reviewed on a case-by-case basis. Guidelines for how a request is evaluated are outlined in the handbook (MPH Handbook found in 2.4 of the ERF).

Faculty Supervision and Evaluation of Students

MPH students conducting their practica receive supervision from the Practicum Office as well as their Faculty Advisors and Program Directors. The Practicum Office is staffed by two faculty members, one full-time who serves as the Practicum Director and one part-time to assist with grading and academic components. The practicum director carries primary responsibility for guiding students and works closely with program faculty and the site supervisors to ensure the students are successful in meeting program competencies.

Faculty mentorship starts during the practicum planning process with required meetings with faculty advisors and the Practicum Director to ensure that students get the most out of the practicum experience (Practicum Handbook and Practicum Prep Course). Mentorship and supervision continues into the practicum with required meetings between the student and practicum director for each quarter for which the student is registered. At the end of the practicum experience there is a final meeting between the Practicum Instructor and the student to review and evaluate the practicum experience as a whole. Additional meetings are scheduled with the Practicum Office Personnel, Practicum Director, and other faculty members providing students with necessary mentorship on specific issues arising from projects and tasks assigned during the practicum.

Site supervisors evaluate students quarterly and help them gauge how they are progressing on projects and how they are being perceived. The practicum instructor reviews the evaluation of the students and progress during the quarter with the one-on-one meetings with each practicum student. Email communication between the site supervisor and practicum office provide feedback on students' work between the formal evaluations so problems can be quickly addressed.

Quarterly evaluations completed by students and a final practicum meeting with the practicum director/instructor are used to improve the support provided to students during the practicum.

2.4.b. Identification of agencies and preceptors used for practice experiences for students, by program area, for the last two academic years.

The complete list of the sites and site supervisors that have been used over the last two years, 2014-2015 and 2015-2016 is found in 2.4 of the ERF. The sites are categorized by program, number of students per year and type of site.

2.4.c. Data on the number of students receiving a waiver of the practice experience for each of the last three years.

Although it is infrequent, practicum waivers are given on a case-by-case basis to students who are able to clearly demonstrate that they have significant work experience that can be applied toward the practicum requirement. Each waiver requires significant documentation to be presented and reviewed before approval is given. There are three types of waivers that are given:

1. Returning Peace Corps Volunteer. The Global Health program accepts a verified Peace Corps experience for the practicum. When a student is accepted into a program after completing a Peace Corps experience the student is only required to register for 100 hours and complete the practicum final deliverables. The rest of the practicum course units are waived. These are accounted for in Table 24 as a partial waiver and account for all four-recorded partial waivers given for the global health program. Students are expected to complete the final practicum deliverables of a paper and poster presentation. The Peace Corp (Master's International Program, or MIP) has been discontinued nationally, thus, after 2016-2017 this is no longer expected to be an issue.

2. The Residency program includes rotations that, for residents in the Population Medicine program, may be applied toward the practicum requirement. Descriptions of these rotations are found in the additional materials section. The practicum course requirement is waived, but deliverables for demonstrating practice experience in public health are required for all medical residents. These particular academic variance waivers (but not waivers of the practicum requirement) account for all seven waivers listed for the Population Medicine program.

3. The third type of waiver given is for extensive work experience completed before acceptance into the program. Each program has a slightly different process, which is being reviewed and standardized. Waivers required documentation of the experience being applied toward the practicum requirement. This type of waiver is almost always given as only a partial waiver; rarely if ever are all hours waived. This type of waiver accounts for one partial in the nutrition program, one full and two partial waivers in the health education program, and all of six partial waivers in the preventive care doctoral program.

Table 24 Academic Variance Waivers by Year

Program	**2013-2014**		**2014-2015**		**2015-2016**		**Total**	
Type of Wavier	full	partial	full	partial	full	partial	**full**	**partial**
Biostatistics	0	0	0	0	0	0	**0**	**0**
Environmental & Occupational Health	0	0	0	0	0	0	**0**	**0**
Epidemiology	0	0	0	0	0	0	**0**	**0**
Global Health	0	0	0	2	0	2	**0**	**4**
Health Education	1	1	0	1	0	0	**1**	**2**
Nutrition	0	0	0	1	0	0	**0**	**1**
Policy	0	0	0	0	0	0	**0**	**0**
Population Medicine	0	0	1	0	5	0	**7**	**0**
Preventive Care	0	3	0	2	0	1	**0**	**6**
Total	**1**	**4**	**1**	**6**	**5**	**3**	**8**	**13**

2.4.d. Data on the number of preventive medicine, occupational medicine, aerospace medicine and general preventive medicine and public health residents completing the academic program for each of the last three years, along with information on their practicum rotations.

Over the past three years there were a total of 22 residents who completed their academic programs in preventive and occupational medicine, with eight in 2014, eight in 2015, and seven in 2016. The program includes three residencies: preventive medicine, occupational medicine, and a combined family medicine and preventive medicine. For all three programs, the MPH and practicum years are combined, with students completing the MPH coursework simultaneously with practicum rotations.

A total of 10 Preventive Medicine residents have obtained an MPH in the past three years: four in 2014, two in 2015 and four in 2016. One occupational medicine resident has received an MPH degree in 2014, two in 2015 and none in 2016.

Table 25 Residency Program Completions by Program and Year			
Program	**2014**	**2015**	**2016**
Preventive Medicine	4	2	4
Occupational Medicine	1	2	0
Total	**5**	**4**	**4**

Required Practice Experience

Practicum rotations include clinical experience at a local county health department, hospitals, and clinics, as well as administrative experiences with local organizations. Rotation information is provided in more detail in the additional materials.

In addition, residents are required to conduct and complete senior research projects which are approved by one of the Residency Advisory Committees. If the resident designs the project to meet the requirements of both the MPH program and the residency research project, it would need to be approved by the department and the residency program. As one of the final requirements for the completion of an MPH and the residency, the resident submits a written report in publishable form to the project advisor. A list of senior projects for the past three years can be found in 2.4 of the ERF.

2.4.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. A central resource for practice experiences has been in place since January 2014. Program director involvement is an efficient means of ensuring these experiences are relevant to each student's area of specialization.
2. Compared to the previous self-study, there are now well defined guidelines on the practicum process.
3. There is clearly defined documentation to track the progress of the student from choosing the practicum to completion of all the practicum deliverables.
4. Evaluation of the process is embedded in the program.
5. Efficient and effective ways have been built into the system for monitoring the student's success while in the practicum.

Weaknesses:

While the program verifies that distance learning sites meet stated criteria by collecting necessary documentation for the site, the program does not make personal contact with every distance learning site. We see that as a barrier to ensuring the quality of these sites. The projected goal to ensure that site quality is maintained for online students or on-campus students selecting a practicum site more than 20 miles away from the school. To do this the Practicum Office personnel will need to consistently conduct telephone or web meetings with site supervisors before approval is given for distant placement.

Plans for Improvement:

1. Make the practicum preparation more interactive, intuitive, and empowering for students:
    - *Creating a more interactive web-based database.*
      This is already under construction. The site database is being moved online and basic information about the sites are available. The school is preparing to add videos of students who were previously placed at sites and are exploring ways sites can more actively promote what they provide students.
    - *Providing structure to mentorship during the planning stage of the practicum.*
      The school has added a specific requirement that the faculty advisor meet with students during the practicum prep course. Printed materials clarify expectations for mentorship. The school will develop a strategic mentorship plan and require faculty members to be trained for effective mentorship.

2.5 Culminating Experience. All graduate professional degree programs, both professional public health and other professional degree programs, identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.

2.5.a. Identification of the culminating experience required for each professional public health and other professional degree program. If this is common across the school's professional degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each.

MPH

Until the reorganization of the school, degree programs were housed in academic departments and each had a different culminating experience, ranging from a combination of a research project, oral presentation, written paper, comprehensive exam, portfolio and exit interview. This created considerable confusion among students and led to inconsistencies in regard to standards and proficiencies. On occasion, assessment occurred at a minimum level such as a memo from the program director stating that the student had met this non-course degree requirement. No consistent assessment or monitoring occurred across programs due to varying criteria.

During the 2014-15 academic year, master's program directors met together and agreed to develop a standardized culminating experience for all master's students. This standardized requirement was implemented during the 2015-16 academic year and is divided into two categories:

1. *Professional presence*. Documentation can include a resume or CV, membership in a professional organization, professional social media site, among other items.
2. *Proficiency in the discipline*. Documentation can include CPH credential, comprehensive exam, preparation of an abstract and/or poster, recorded oral presentation, preparation of a manuscript for publication, preparation of a grant application to a funding organization, recipient of award, preparation of policy brief for a targeted audience, and other items.

Courses are developed within LiveText, and students enroll upon registration. The course is designed to look like a portfolio, which affords graduates the option to continue this cloud-based system for a nominal fee. Graduates can also send a link of their portfolio to prospective employers, demonstrating their skills and proficiency within the discipline.

MPH students upload materials into assignment categories with required artifacts. Faculty advisors assess students' performance using assessment rubrics standardized across majors. This standard process has greatly improved the consistency of expectations and quality of the culminating experience for our students.

MBA

The MBA program requires a capstone course, HADM 690, in which students complete in their final quarter guided by the program director. This course is designed for summative assessment of some program learning outcomes. The culminating experience is met through completing a professional ePortfolio during the Capstone course as well as completing the final presentation for the required practicum experience.

DrPH

The common culminating experience across all doctoral programs is the completion of a dissertation (written and oral defense) that addresses current and relevant issues within a specific discipline and has public health implications. The dissertation should represent original work with clearly articulated research aims and study objectives, well documented background, adequately justified rationale and significance to public health, a thorough review of literature, detailed study protocol or methods section (quantitative, qualitative or mixed methods), data analyses, interpretation of the research findings that reflects critical thinking skills, two peer-reviewed publishable papers, and a reflective final conclusion section. The choice of research methods and research emphasis may vary by program and is outlined in section 2.5 in the ERF. The oral defense of the dissertation is an announced event and is conducted in the presence of program faculty, dissertation guidance committee (DGC) members, other LLUSPH faculty and students and guests. The details of the dissertation process from the selection of DGC and development of the dissertation concept paper to the successful defense are provided in sections 14-32 of the doctoral handbook, which is found in 2.12 of the ERF. This process is the same across all doctoral programs in the school. Sample dissertation documents will be available at the time of the site visit. In the past, assessment of the student's written dissertation and oral defense varied by program. Under the current LLUSPH structure all doctoral programs are under the oversight of the SPH Doctoral Programs Committee (DPC). The DPC, along with input from Program Doctoral Subcommittees (PDSC) has approved and adopted a standardized rubric to assess both the written dissertation and the oral defense of the dissertation. This rubric is found in 2.12 of the ERF. The DGC members of the student assess student performance using this standardized rubric.

While the dissertation is the common culminating activity for all doctoral programs, some may have additional requirements such as professional portfolio, presentation at a scientific conference or exit interview.

2.5.b. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. Each MPH program has a consistent Culminating Experience with a standardized assessment rubric.
2. Programs can customize what competencies are required for each discipline, but still have a standardized format and assessment.
3. Students work with their faculty advisor and program director to determine the unique content of their portfolio.
4. This approach allows more flexibility, both to the student and to the program, in identifying the content of the culminating experience. While retaining consistent and clear standards across programs.
5. Doctoral programs: Moving away from the traditional dissertation document to having the results chapter replaced with publishable papers has improved the rigor and quality of the dissertation work and has resulted in a higher likelihood of published manuscripts in peer-reviewed journals.

Weaknesses:

1. This is the first year following implementation of a standardized culminating experience for the MPH students, so assessment data are limited to determine trends.
2. Doctoral programs: Submission of manuscripts for peer reviewed publications in a timely manner has been a challenge.

Plans for Improvement:

1. Significant changes to the MPH programs were implemented in 2015-16. As assessment continues, recommendations for improvement will be identified and decided with input from the program directors.
2. Doctoral programs: Beginning 2017-2018 academic year, the objective is to have 100% of our DrPH students submit at least one of their dissertation manuscripts prior to graduation for peer reviewed publication as an element of the culminating activity.

2.6 Required Competencies. For each degree program and area of specialization within each program identified in the instructional matrix, there shall be clearly stated competencies that guide the development of degree programs. The school must identify competencies for graduate professional public health, other professional and academic degree programs and specializations at all levels (bachelor's, master's and doctoral).

2.6.a. Identification of a set of competencies that all graduate professional public health degree students and baccalaureate public health degree students, regardless of concentration, major or specialty area, must attain. There should be one set for each graduate professional public health degree and baccalaureate public health degree offered by the school (eg, one set each for BSPH, MPH and DrPH).

The term "learning outcomes" is the preferred term of use at LLU and with WASC, thus, it is used as equivalent to competencies for the purposes of the self-study.

Master's Programs: The 15-unit Public Health Core (PCOR) is required for the MPH students and has specific master's learning outcomes (MLOs), which are identified in specific courses and projects. The MLOs are assessed through LiveText for the specific project and each student submits their assignment through Canvas into LiveText for assessment. In addition, the university has five competencies, called Institutional Learning Outcomes (ILOs) and the students are assessed for these competencies in PCOR. The ILOs and MLOs for PCOR are found in 2.6 of the ERF.

Table 26 Master's Learning Outcomes for the Public Health Core (PCOR)	
MLO 1	Applies concepts of surveillance, screening, immunity, and risk factors to a population-based study design.
MLO 2	Describes the environmental factors (biological, physical, and chemical) that affect human health and ways to minimize their impact.
MLO 3	Demonstrates adequate knowledge of behavioral and social determinants, including socio-economic and cultural, that impact human health.
MLO 4	Defines sustainable development and its relationship to population health.
MLO 5	Defines health inequities and strategies for addressing them to promote health and prevent disease across the life span.
MLO 6	Demonstrates knowledge of the structure and function of health care systems including access and financial issues; and systems interactions that affect population health.

Doctoral Programs: DrPH students must meet the public health competencies as described below:

1. All DrPH students are required to meet the public health core competencies listed for the MPH students (Table 22 Core Public Health Knowledge). This is a pre-requisite to their doctoral degree. In order to fulfill these public health pre-requirements, students must have an MPH from an accredited institution, complete 15 units from the Public Health Core (PCOR), or complete graduate level coursework in the five public health disciplinary areas (epidemiology, biostatistics, behavioral science/health education, environmental health and health administration/policy). This ensures graduate-level competency in professional public health practice for all students pursuing a professional public health degree.
2. At present, public health learning outcomes specific to the DrPH have not been articulated, although each DrPH program does require course work in at least three of the five core areas of

public health that is beyond the Master's level. Table 26 in 2.6 of the ERF provides specific course work in each of the three core public health areas (epidemiology, health education and health policy and leadership). DrPH students are required to take one or more courses from each of the three public health disciplines (either a specific course or select from the options provided). There is inconsistency across programs as to how DrPH students meet the requirements at present and processes are in place to address these inconsistencies.

3. Besides the core competencies in the public health areas, there are some cross-cutting competencies specific to the DrPH degree (ASPPH 2009 guidelines) that are addressed in our programs. These are not distinctly articulated as DrPH core competencies, but instead are integrated with the PLO's at the doctoral level. Some of these cross-cutting competencies addressed in our DrPH programs include critical thinking skills, oral and written communication, leadership, professional ethics, and programs and policy. These cross-cutting competencies are met through some coursework but mostly through non-course experiences such as dissertation, journal clubs and seminars, serving as teaching and research assistants and presentations at scientific conferences.

In the past, the LLUSPH structure was organized as departments and doctoral programs were housed in the respective discipline-specific department and administered by the department faculty. Therefore, the curriculum for each DrPH program was different, and there was great variations in how the core DrPH competencies were addressed by each program. Since the LLUSPH structure has been reorganized, academic programs are now housed under the Academic Programs Office and all doctoral programs come under the governance of the LLUSPH Doctoral Programs Committee (DPC). Members serving on this committee are the program directors of the different doctoral programs (5 DrPH programs and 1 PhD program). This committee recognizes the need to define a set of core DrPH foundational competencies and later identify a set of doctoral level course work and common non-course activities that will help attain these competencies. The plans to accomplish this important task are already underway and are described below (criteria 2.6.d).

2.6.b. Identification of a set of competencies for each concentration, major or specialization (depending on the terminology used by the school) identified in the instructional matrix. The school must identify competencies for all degrees, including graduate public health professional degrees, graduate academic degrees, graduate other professional degrees, as well as baccalaureate public health degrees and other bachelor's degrees.

A set of Program Learning Outcomes (PLOs) have been identified for each concentration, including identification of course(s) covering the PLO and the artifact to be assessed for each student. The PLOs are based on surveillance of the profession and similar educational programs, understanding the professional needs for graduates, and receiving input from alumni and other stakeholders through ongoing dialogue.

Table 27 Courses and Activities through which Competencies (Learning Outcomes) are Met is found in 2.6 of the ERF.

<u>Master's Level Program Learning Outcomes</u>

Biostatistics – MPH

1. Apply statistical methods to applied statistical problems.
2. Assist in design and implementation of research studies, including formulating research questions, appropriate study designs, sample size, sampling scheme, data-collection methods, and analyses.

3. Critically review literature relevant to statistical methods and interpretation of statistical findings and identify strengths and weaknesses of design.
4. Serve as statistical consultant to health professionals on research projects, communicate the results of analyses, and write the statistical methods and results sections of a research project.
5. Select appropriate statistical methods to analyze data and establish and manage databases using current computer software (e.g., SAS, R and others).

Environmental Health and Occupational Health– MPH

1. Analyze sources, pathways and routes of exposure to environmental and/or occupational contaminants and determine populations at risk; outline intervention and mitigation strategies.
2. Assess and evaluate environmental and occupational hazards pertaining to water, air, food and other exposure media locally, regionally and globally and design innovative techniques and methods or approaches to improve quality of life.
3. Apply environmental risk analysis (risk assessment), risk management and risk communication concepts, techniques and processes to develop effective outcomes, guidelines and policies to mitigate and manage environmental and occupational exposures and hazards to human health.

Epidemiology (Medical) – MPH

1. Evaluate and conduct clinical trials.
2. Extend existing clinical skills with the addition of epidemiologic training in the interpretation of statistical findings in biomedical research.
3. Conduct high-quality epidemiologic research – including appropriate study design, data collection, statistical analyses, interpretation, and reporting of results.
4. Be familiar with primary prevention, disease surveillance and response by state, county, and national health agencies.
5. Critically review the health literature and identify strengths and weaknesses of design, analyses, and conclusions as related to control and prevention of disease.

Epidemiology (Research) – MPH

1. Collaborate with or serve as a research consultant to health professionals.
2. Conduct high-quality epidemiologic research – including appropriate study design, data collection, statistical analyses, interpretation, and reporting of results.
3. Be familiar with primary prevention, disease surveillance and response by state, county, and national health agencies.
4. Critically review the health literature and identify strengths and weaknesses of design, analyses, and conclusions as related to control and prevention of disease.
5. Have experience with contemporary advancements in epidemiologic methods.

Global Health – MPH

1. Analysis and Assessment – 1.1 Describe the health status of global, regional, national, sub-national and/or community populations; 1.2 Describe the factors influencing the health of that populations; 1.3 Demonstrate understanding of global health within the context of global development.
2. Program Planning, Management and Evaluation – Develop, implement, evaluate and improve programs and services.
3. Cultural Competency – Describe and incorporate diversity of populations and individuals and how it influences policies, programs, services, and the health of a population.
4. Community Dimensions of Practice – a) conduct community health assessments, b) collaborate with community partners to improve health in a community.
5. Leadership and Systems Thinking – 5.1 Analyze health systems in high, medium and low-income countries; 5.2 Demonstrate leadership, teamwork, and professionalism.

Health Education (on-campus and online) - MPH

1. Design, develop, implement, market, and evaluate health promotion and education programs utilizing principles from human learning motivation.

2. Collaborate with other professionals in using resources to educate the public about health.
3. Evaluate and appropriately apply public health research findings to the practice of health education.
4. Provide leadership or technical assistance for public health projects in selected settings.
5. Meet didactic and professional practice requirements for certification as health education specialists.

Health Policy and Leadership – MPH

1. Identify social, political, economic and legal factors which contribute to disparities in health care and population health.
2. Develop, analyze, evaluate, and advocate for policy to improve the health status of populations.
3. Produce and distribute health policy communications for decision-makers and other intended stakeholders.
4. Demonstrate leadership, team building, negotiation, and conflict resolution skills to build consensus, partnerships and coalitions.
5. Adhere to professional ethics while promoting a high standard of personal integrity, compassion, and respect for others.

Lifestyle Management (online) – MPH

1. Assess health profile and needs of corporations.
2. Assess lifestyle-related risk factors for chronic diseases.
3. Provide interventions for risk factors – behavior, exercise and smoking cessation counseling.
4. Evaluate and apply lifestyle medicine research findings
5. Provide leadership and evaluation of community based health promotion projects.

Nutrition – MPH

1. Nutritional Science. Integrate knowledge of biological mechanisms underlying the effect of food and nutrients on health the solution of public health problems.
2. Leadership & Management. Function independently and collaboratively as leader or member of a team to plan, manage, and evaluate community-based nutrition promotion activities.
3. Research & Evidence-based Practice. Critically analyze studies and apply findings to nutrition interventions.
4. Nutrition Policy. Scrutinize public policies and processes related to food and nutrition and explore their impact on health outcomes.
5. Vegetarian Nutrition. Articulate the role of vegetarian dietary practices on human health, the environment, and ecology.

Nutrition (Coordinated Program with Dietetics) – MPH

1. Nutritional Science. Integrate knowledge of biological mechanisms underlying the effect of food and nutrients on health the solution of public health problems.
2. Leadership & Management. Function independently and collaboratively as leader or member of a team to plan, manage, and evaluate community-based nutrition promotion activities.
3. Research & Evidence-based Practice. Critically analyze studies and apply findings to nutrition interventions.
4. Nutrition Policy. Scrutinize public policies and processes related to food and nutrition and explore their impact on health outcomes.
5. Vegetarian Nutrition. Articulate the role of vegetarian dietary practices on human health, the environment, and ecology.
6. Nutritional Care Process. Demonstrate effectiveness in the nutritional care process consistent with competencies defined by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). (Track II)
7. Food Systems Management. Apply systems management and use of resources to the provision of nutritional services. (Track II)

Population Medicine (on-campus and online) – MPH

1. Competently engage in research and practice activities within the field of population medicine and describe the core framework for population-based healthcare approaches.
2. Apply population-based healthcare approaches at the patient and community level.
3. Conduct population-based applied and translational research, including the collecting, analyzing, and interpreting data.
4. Identify the need and design, implement and evaluate a population-based program(s) or intervention(s) intended to prevent, treat or manage public health related concern(s).
5. Develop and report findings which are culturally and linguistically appropriate for intended target audience (patient, community, and academic).

Biostatistics – MS

1. Apply appropriate statistical theory and methods to the solution of applied statistical problems.
2. Design and implement a research study, including formulating research questions, appropriate study designs, sample size, sampling scheme, data-collection methods, and analyses.
3. Critically review literature relevant to statistical methods and interpretation of statistical finding, and identify strengths and weaknesses of design.
4. Serve as statistical consultant and collaborator with health professionals on research projects, communicate the results of analyses, and write the statistical methods and results sections of a research paper.
5. Select appropriate statistical methods to analyze data and establish and manage databases using current computer software (eg, SAS, R, and others).

Nutrition (Coursework Track) – MS

1. Nutritional Science. Understand physiological and biochemical mechanisms influencing human systems and how food and nutrients impact function.
2. Vegetarian Nutrition. Understand the role of vegetarian dietary practices in human health, the environment and ecology.
3. Research. Demonstrate the ability to conduct and publish applied research in nutrition.

Nutrition (Research Track) – MS

1. Nutritional Science. Understand physiological and biochemical mechanisms influencing human systems and how food and nutrients impact function.
2. Vegetarian Nutrition. Understand the role of vegetarian dietary practices in human health, the environment and ecology.
3. Research. Demonstrate the ability to conduct and publish applied research in nutrition.

Health Care Administration – MBA

1. Understand the healthcare environment.
2. Demonstrate leadership skills and accountability aptitude.
3. Integrate strategic awareness and innovative thinking.
4. Demonstrate business management skills and stewardship principles.
5. Demonstrate public health, policy and global awareness.

<u>Doctoral Program Learning Outcomes</u>

Epidemiology - DrPH

1. Demonstrate knowledge of human disease etiology, progression, prevention and control as relevant to public health practice and research.
2. Identify and address public health issues from a broad range of disciplines and perspectives by applying evidence-based theory and research to design research proposals (e.g. using National Institutes of Health guidelines).
3. Use effective communication methods (including oral presentations and peer-reviewed publications) across diverse audiences to inform and influence public health actions.

4. Critically evaluate, analyze and synthesize biomedical literature and health-related data to advance programs, policies and systems to promote public health.
5. Apply professional, ethical leadership and administrative skills in public health settings.

Epidemiology – PhD

1. Demonstrate knowledge of human disease etiology and apply this knowledge to epidemiologic investigations.
2. Interpret descriptive epidemiologic data to generate hypotheses in the examination of possible risk factors for disease.
3. Critically evaluate the scientific literature pertaining to exposure and disease relationships, study designs, measures of association, and issues of bias, confounding and effect modification, and to identify gabs in knowledge.
4. Utilize classical, modern and innovate epidemiologic methods to design studies and in developing research proposals using National Institutes of Health (NIH) guidelines.
5. Apply quantitative skills to analyze and synthesize epidemiologic data, and use statistical software packages.
6. Communicate epidemiologic concepts and findings orally and in written format (e.g., publishable manuscripts) to diverse audiences.

Health Policy and Leadership - DrPH*

1. Learners engage in reflective leadership and are able to analyze a broad range of management and leadership issues, including governance, valuing diversity, planning, conflict resolution, and change management.
2. Learners are able to evaluate the health policy development process, including problem identification, policy formulation, and implementation.
3. Learners demonstrate commitment to ethical choices and values of justice and equity by formulating strategies for policy advocacy.
4. Learners analyze community building principles and develop strategies to address social determinants of health, including the delivery, quality, and costs of health and health care for individuals and populations.
5. Learners develop skills in evaluating, conducting, and reporting research.

Health Education (on-campus and online) - DrPH

1. Conduct health education research and evaluation utilizing basis statistical concepts.
2. Generate health-related educational training/curricular materials and conduct professional seminars and training programs.
3. Promote and assist in the development of grant-writing proposals and applications for community-based health education research.
4. Creatively apply theoretical concepts to program design for health education interventions/Write and submit manuscripts to professional journals.
5. Demonstrate educational leadership skills, policy development, and strategic planning for organizations and agencies.

Nutrition, DrPH*

1. Understand and apply advanced knowledge of the biological basis of nutrition, diet and disease relationship in performing nutritional assessment, evaluating nutrition programs and conducting nutrition investigation.
2. Propose relevant research questions or testable hypotheses, apply appropriate study designs, conduct research (data collection/abstraction), and utilize suitable statistical methods to analyze and interpret the data to advance the field and promote public health.
3. Disseminate research findings through oral presentations and writing scientific manuscripts to peer-reviewed journals.
4. Apply professional and ethical leadership skills in public health settings.

Preventive Care, DrPH

1. Design and implement wellness and lifestyle intervention protocols.
2. Provide lifestyle assessment and counseling for patients with lifestyle related diseases.
3. Provide chemical dependence interventions.
4. Contribute to the Theory of Preventive Care through Research.
5. Develop and conduct community and professional seminars and training programs.
6. Demonstrate leadership skills.
7. Provide clinical advice/consultancy to health professionals in the field of lifestyle medicine.

* The PLO's for the DrPH in Health Policy and Leadership and Nutrition have been edited (with appropriate verb) to more accurately reflect the level of competencies students attain in these programs. The PLO's had not been revised in many years and although the actual learning outcomes and assessment are at the advanced level, the PLO itself did not capture this. The edited PLO's will not be found in the current university catalog since changes to the catalog are made almost nine months prior to the start of a new academic year. However, the doctoral handbook (section 2.12 in the ERF) and the Nutrition and Health Policy and Leadership doctoral program doctoral guidelines (section 2.6 of the ERF) specify these edited PLO's. It should be noted that changing the measureable verb used does not change the assessment plan. It should also be noted that once the DrPH foundational competencies have been developed (see criteria 2.6.d below), each doctoral program will revisit their PLO's and make changes if necessary. The DPC will provide some structure and guidelines to the doctoral program directors on how to frame the PLO's.

The degree and concentration specific competencies are found in 2.6 of the ERF.

2.6.c. A matrix that identifies the learning experiences (eg, specific course or activity within a course, practicum, culminating experience or other degree requirement) by which the competencies defined in Criteria 2.6.a. and 2.6.b are met. If these are common across the school, a single matrix for each degree will suffice. If they vary, sufficient information must be provided to assess compliance by each degree and concentration. See CEPH Data Template 2.6.1.

PLOs and assessments by program are provided in Table 27 in 2.6 of the ERF. For each program, the program specific and institutional learning outcomes are listed and the supporting courses indicated. The level at which learning outcomes are met (primarily gained or reinforced) is provided, along with type of assessment (formative or summative).

The MPH programs have a requirement to complete the new Public Health Core (PCOR), which gives a basic exposure to the public health skills and knowledge at the graduate level. Assessment occurs in PCOR of the Master's Learning Outcomes (MLOs) as part of the integrated projects and activities that the students complete during one of the three quarters for PCOR. The MBA and MS programs complete different introductory public health core courses with a scaled-down version of the MLOs.

In addition to the core courses for the master's programs, the MPH and MBA students complete the discipline-specific core courses, electives or a cognate, a field practicum and a culminating experience (portfolio for MPH and capstone course for MBA). The MS programs replace the field practicum and culminating experience with research and thesis projects.

Doctoral Programs: Doctoral programs vary to some degree on the type of learning experiences that help attain the competencies, but they also share some level of commonality. Common assessment activities across all doctoral programs include doctoral seminar, comprehensive examination, qualifying examination or proposal defense (both written and oral defense), written dissertation, oral defense and submission of peer-reviewed publishable papers.

Curriculum maps were developed which link required courses/other learning experiences to their PLOs, and which reflect assessment points within the curriculum. These detailed curriculum maps can be found in 2.6 of the ERF. Where applicable, courses are listed in the order in which they are taken by students.

2.6.d. An analysis of the completed matrix included in Criterion 2.6.c. If changes have been made in the curricula as a result of the observations and analysis, such changes should be described.

Master's Programs: During the 2014-15 academic year, the PCOR was pilot tested with a team of faculty to accomplish the following goals:

- Develop an integrated public health core course series that met CEPH standards and ASPPH guidelines for emerging public health workplace needs;
- Assist the students to pass the CPH exam; and
- Allow multiple modalities to be taught through a "flipped" classroom experience.

During the 2015-16 academic year, refinements to the PCOR were completed during the first full year of implementation and the cognates were deployed starting in summer 2016 for the second year of the student's program.

Doctoral Programs: The current model of meeting PLO/competencies through course work and non-course related experiences is discipline specific and exposes the need for unifying the core experiences across the doctoral degrees. The overall goal is to improve the programs to better prepare the doctoral graduates for leadership roles in public health workplace of the future. This approach would also provide an opportunity to better align any changes with the revised criterion from CEPH and the DrPH for the 21st century report from ASPPH. Some major steps underway for changes to the DrPH curriculum at LLUSPH are:

- Identifying doctoral and DrPH specific foundational core competencies that would be adopted school-wide.
- Identifying a set of common course work and non-course related experiences through which these foundational competencies can be attained.
- Identifying a set of doctoral level courses (establish a minimum number of didactic units at the doctoral level) that are degree and discipline specific.
- Clearly distinguishing the DrPH from the PhD degree

(1) The process to identify the DrPH foundational core competencies began summer 2016 and the goal of the DPC is to have this approved by SPH Academic Council by November 2016.
    a. A workshop was convened summer 2016 consisting of the DPC members. This team identified the core DrPH competencies for the LLUSPH DrPH programs to adopt. These competencies are in alignment with the new revised CEPH criteria and the 2009 ASPPH guidelines for cross-cutting competencies for the DrPH. The draft of the foundational core competencies is provided in section 2.6 of the ERF.
    b. This was presented to the LLUSPH faculty during the 2016 fall faculty meeting. External stakeholders are being identified to who this document will also be sent. Feedback from SPH faculty and stakeholders should be received by end of October, 2016.
    c. The DPC will then revise and finalize the LLUSPH DrPH foundational common core.
    d. This will then go to the academic council in November 2016 for final approval.

(2) The next step is to identify existing doctoral level courses or develop new courses to meet these core competencies. The courses will be common across all doctoral and DrPH programs so it fosters collaboration.

a. Once the academic council approves the DrPH foundational core, the DPC will identify existing courses in the school that can help attain one or more of these competencies.
b. If existing courses do not cover one or more competencies then doctoral level new course/s will be developed.
c. The set of courses selected to attain the foundational core competencies will all be doctoral level and taught for doctoral students across programs.
d. This identified sequence of courses will then be presented to the program doctoral subcommittee and finally after revision will be sent for approval to the academic council.
e. The goal is to complete this process by spring 2017.

(3) Each program will re-evaluate and re-state their program learning outcomes to be more specific to their discipline. DPC will provide guidelines and structure to reframing the PLO's.
(4) Course instructors will be requested to update their syllabus indicating which of the learning outcomes (Institutional, Public Health, DrPH Foundational or Program) are met in their course.
(5) The DPC will also work towards clearly distinguishing the PhD curriculum and training from that of DrPH.
    a. At present, only the Epidemiology program offers both a DrPH and a PhD. So the Epidemiology doctoral subcommittee will be asked to lead in the efforts to differentiate the DrPH from the PhD program.
    b. Members from other disciplines in the school that may be interested in offering a PhD (Example: Nutrition) and the Faculty of Graduate Studies will be involved in these discussions.
    c. The process is to then go through the DPC and finally the academic council of the SPH, Faculty of graduate studies and the University Academic Affairs Committee.

2.6.e. Description of the manner in which competencies are developed, used and made available to students.

Each program is supported by a program faculty subcommittee with oversight provided by the SPH Masters Programs Committee or the Doctoral Programs Committee. Both program-specific and school-wide committees have input in developing, assessing and revising competencies. Criterion 2.7 outlines how the competencies are assessed and the assessment plan for each program. Students have access to the competencies in a variety of places: the SPH website, the LLU Catalog, SPH Doctoral Handbook and specific course syllabus.

2.6.f. Description of the manner in which the school periodically assesses changing practice or research needs and uses this information to establish the competencies for its educational programs.

Currently competencies are assessed by each program, although there are no specific guidelines relating to this at present. However a formal assessment using rubrics is being developed and deployed. For the purpose of this CEPH report, a rubric to assess one PLO (research related) is developed and this will assess one artifact (dissertation (culminating activity). The assessment plan is described in criterion 2.7. The assessment plan is outlined for all the doctoral programs in this section. According to this plan, every three years the complete assessment will be carried out and formal modification to the program curriculum will be made.

Currently we receive input of our alumni through exit interviews and employers of our graduates through survey. The employer feedback provides insights to what the real world requirements are for doctoral graduates in public health and helps to adapt our practice and research component

accordingly. For example, many of our graduates are placed in academia and public health setting that requires scientific writing skills. This need has driven our doctoral programs to move away from a traditional dissertation type culminating activity to having a quality written product (manuscripts for submission for peer-reviewed publications). This will help attain the competency related to scientific writing skills. Similarly specific assessment plans will be put in place for the DrPH core competencies that are currently being developed and for each of the PLO's.

2.6.g. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

The governance and oversight provided by school-wide Master's and Doctoral Programs Committees to all of the school's programs has standardized the processes related to policy, core experiences, and program course work. In turn, this equates to better use of faculty resources, a more standardized approach to learning and a better learning experience for our students.

Weaknesses:

1. Master's: The first year of implementation for the public health core coursework (PCOR) has just finished. Therefore, learning outcome data from the new core curriculum is still being compiled from the previous year's courses.
2. Doctoral: At present attaining the cross-cutting doctoral learning outcomes like scientific writing, research, communication, etc., varies by program. Plans are in place to standardize the selected learning outcomes for all doctoral programs.

Plans for Improvement:

1. Master's: Assessment of the PCOR is to occur during summer and fall 2016.
2. Doctoral: Standardization of the foundational doctoral core competencies across the doctoral programs started summer 2016 and is to be completed by spring 2017.

2.7 Assessment Procedures. There shall be procedures for assessing and documenting the extent to which each professional public health, other professional and academic degree student has demonstrated achievement of the competencies defined for his or her degree program and area of concentration.

2.7.a. Description of the procedures used for monitoring and evaluating student progress in achieving the expected competencies, including procedures for identifying competency attainment in practice or research, as applicable, and in culminating experiences.

Promoting student success for all students is a priority at LLUSPH. Our goal is to integrate various components of the student's academic experience, thus laying a solid foundation for assessing student progress and program effectiveness. Our approach to competency assessment is a blend of standard operational methods focused on student success and systematic assessment.

Standard Operational Methods

In the 2015-2016 Academic Year, LLUSPH allocated time for one staff member to oversee our student success efforts, under the direction of the Assistant Dean for Academic Records. Guidance is provided from the University Student Success Committee (http://home.llu.edu/academics/academic-resources/educational-effectiveness/committees/student-success-committee) which is under the direction of University Academic Affairs Committee. The mission of the University Student Success Committee is to facilitate and support the means and measures necessary to ensure success at Loma Linda University. As part of that commitment, the committee works towards defining terms and indicators of student success and generating reports to address the typical indicators of success (time to degree, graduate rate, retention rate) amongst others. In addition, Loma Linda University has moved to adopt LiveText as a campus-wide platform for academic assessment. The motivation was to adopt a software program that would meet the needs of our various programmatic/professional accreditation requirements while at the same time allowing LLU to extract data for WASC reporting and accreditation visits. Central administration, under the direction of the Office of the Provost, were strongly committed to the roll-out of LiveText and allocated resources to that end. The LLUSPH Assistant Dean for Academic Records is the LiveText implementation coordinator for the school and is supported by the Director for Field Practicum and the school Assessment Specialist who work in concert with the Dean of Master level programs and the Director for Doctoral level programs.

The SPH uses various efforts and measures to monitor student progress outlined in Table 28 Measures of Student Progress and in the Standard operational efforts section below in addition to the assessment of competencies. These procedures include 1) achievement in the classroom (which is measured by performance on group projects, presentations, and exams) and courses are aligned to competencies that are assessed in LiveText, 2) making satisfactory academic progress based on three measures (GPA, pace, and time frame), 3) fall re-enrollment which is captured by our retention rate report, 4) the practice experience where students maintain time logs on LiveText (they match tasks to competencies that best fit their work) and monitored by the instructor, through personal reflection in the practicum report, and oral presentation submitted in LiveText for assessment (See Criterion 2.4), the culminating experience differs by program; the masters standardized their culminating experience in 2015-2016 academic year and is designed to assure all graduating students have a professional presence and have acquired the necessary proficiency in the discipline captured in an E-Portfolio utilizing LiveText where the artifacts are collected and assessed with a single rubric (see Criterion 2.5), 5) exit survey, 6) alumni survey, 7) comprehensive exam (for MS students), 8) thesis (for MS students), 9) dissertation proposal

defense (for doctoral students), 11) advancement to candidacy, 12) published (for PhD students) or publishable paper (for DrPH students), 13) oral presentation at a scientific meeting (some doctoral students), 14) dissertation (for doctoral students), 14) academic review as needed to assure progress and clarify expectations. For the MBA program, the capstone course will capture summative assessments corresponding to program learning outcomes.

Table 28 Measures of Student Progress		
MPH	**MS**	**DrPH & PhD**
Institutional Learning Outcomes (ILOs)	Institutional Learning Outcomes (ILOs)	Institutional Learning Outcomes (ILOs)
Program Learning Outcomes (PLOs)	Satisfactory Academic Progress (SAP)	Program Learning Outcomes (PLOs)
Satisfactory Academic Progress (SAP)	Retention Rate	Comprehensive Examination
Retention Rate	Culminating Experience (when applicable)	Satisfactory Academic Progress (SAP)
Field Practicum and Oral Presentation	Thesis	Retention Rate
Culminating Experience (CE)	Oral Defense of Thesis	Dissertation proposal defense
Exit Survey	Exit Survey	Advancement to Candidacy
Alumni Survey		Published or Publishable research paper
		One presentation at a scientific meeting
		Dissertation Defense
		Academic Review

Standard operational efforts include:

- Communicating Resources: In LLUSPH, we look at the application of student success initiatives to achieve a "favorable or desired student outcome". Student Success is discussed at orientation (see, Student Success Orientation PPT in 2.7 of the ERF) so students are familiar with the individuals that can serve as resources throughout their years at LLUSPH. A handout is also provided (Student Success Brochure final Doc in 2.7 of the ERF) with similar information.
- Program Map: Newly accepted or re-accepted students work with the Academic Programs Office (APO) to map out the program requirements (i.e. didactic courses, non-course requirements, and field practicum/research experience) through completion based on full-time or part-time status. Students who take a quarter off or go on an approved Leave of Absence are required to adjust their program map to reflect their new timeline.
- Monitoring and Documenting Progress: The Office of Academic Records runs quarterly SAP (Satisfactory Academic Progress – http://llucatalog.llu.edu/about-university/academic-policies-information/#satisfactoryacademicprogresstext) reports that determine student status on three measures: qualitative (average grade point average GPA), quantitative (Pace), and maximum time frame. Students who are failing SAP on any of the three measures are immediately assessed for level of risk. Depending on each individual situation one or several of the following actions is needed:
    1) Phone call/email to student and copy Advisor
    2) Registration hold and student meeting to discuss/generate action plan
    3) New/revised Program Map is generated by Academic Programs Office

4) Meeting with student and Program Director
5) Academic Review is recommended
6) SAP Email/Letter is issued for Warning, Probation, Withdrawal or Dismissal
7) Campus resources are discussed
8) Review of school/university policies and procedures discussed
9) Student referred to Dean of Student Services
10) Follow-up meeting/phone call with student

Follow-up with student, academic advisor, and program director is maintained until the students reaches regular academic standing. Monitoring additionally happens as the Office of Academic Records collects rosters from SPH Faculty. Students who are not attending or are struggling are identified for follow-up. SPH Academic Records also monitors student activity on CANVAS and has been instrumental in the activation of student LiveText accounts.

Systematic Assessment

In the 2012-2013 academic year, the school hired an Assessment Specialist. Our initial focus was on our data reporting and data collection systems. The university released its first version of its school-accessible data warehouse, which holds student data from the Student Information System (Banner), to all of the schools on campus that academic year; each school having access only to its own student data. During that academic year, we developed a new alumni survey, exit survey, and student satisfaction survey; all of which are centrally managed by the school (the survey deployment schedule, survey instruments, and summarized survey results can be found in 2.7 of the ERF.

Having these two data repositories available for monitoring our effectiveness, is a significant advantage. As is often the case with data and software systems, there have been challenges which have since been resolved and we are well positioned for having a rich and reliable set of data to use for monitoring and decision-making. Our next phase with regards to data is to improve the accessibility of the information within LLUSPH.

Improvements in the LiveText assessment software system and the university's adoption of the system in the 2014-2015 academic year, has enabled us to begin utilizing it for our systematic assessment efforts. The university created a dedicated committee (LiveText Administrator's Committee) to aid the schools in transitioning to the system, by providing training, support, and communicating system enhancement requests to the vendor. Many faculty members and administrators from LLUSPH have gone through basic LiveText training with the expectation that all primary faculty will eventually be trained on this system.

Throughout the 2014-2015 and 2015-2016 academic years, we continued to implement more pieces of our strategy for putting a systematic approach to assessment. We developed an SPH Assessment Team for the purpose of providing leadership, guidance, support and training on the various aspects of assessment as well as LiveText implementation. We began executing a multi-phased approach to systematically performing assessment in the 2015-2016 academic year. Our first phase requires all programs to take at least one Program Learning Outcome (PLO), and the university's scheduled Institutional Learning Outcome (ILO) for the year, through the complete assessment cycle which culminates in the identification of an action plan, at minimum. In essence, we set out to define and pilot a systematic assessment procedure across all of the programs in the school during that academic year. This phased approach was chosen so that the assessment plan itself could be 'tested out' by each program, and adjusted if necessary, before using it for all of the PLOs, since our goal is to have a manageable and sustainable approach to assessment, moving forward.

The main steps for each program to execute in Phase I include:

- Developing/updating their curriculum map
- Developing Program Summative Assessment Plan
- Identifying/developing assessment measurement tools (rubrics, tests, etc.)
- Placing student artifacts in LiveText
- Assessing student artifacts in LiveText
- Reviewing and analyzing assessment results produced in LiveText
- Developing an action plan

Curriculum maps are included in Required Competencies/Curriculum Maps ERF 2.6 and Assessment Matrices are included in Assessment Procedures/Assessment Plans ERF 2.7.
The programs are currently in various stages of executing Phase I. Phase II will include refining the assessment plan, curriculum maps, and learning outcomes as necessary and then assessing all PLOs. The overall systematic assessment strategy is designed to leverage the single effort of assessing and documenting competency of each student, for program summative assessment and other assessment needs as well. This will be achieved via the features in LiveText. The strategy is also designed to support and promote collaboration and transparency.

2.7.b. Identification of outcomes that serve as measures by which the school will evaluate student achievement in each program, and presentation of data assessing the school's performance against those measures for each of the last three years. Outcome measures must include degree completion and job placement rates for all degrees (including bachelor's, master's and doctoral degrees) for each of the last three years. See CEPH Data Templates 2.7.1 and 2.7.2. If degree completion rates in the maximum time period allowed for degree completion are less than the thresholds defined in this criterion's interpretive language, an explanation must be provided. If job placement (including pursuit of additional education), within 12 months following award of the degree, includes fewer than 80% of the graduates at any level who can be located, an explanation must be provided. See CEPH Outcome Measures Template.

The maximum time to graduate for our master's programs is five years and seven years for doctoral programs. We have included six cohorts for the master's and eight cohorts for the doctoral degree completion tables since some students may have begun their program after fall of a given academic year; some as late as spring quarter.

Degree completion tables for the DrPH and PhD can be found in 2.7 of the ERF.

Table 29 Students in MPH Degree, By Cohorts Entering Between 2010-11 and 2015-16							
	Cohort of Students	**2010-2011**	**2011-2012**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**
2010-11	# Students entered	162					
	# Students withdrew, dropped, etc.	12					
	# Students graduated	1					
	Cumulative graduation rate	0.62%					
2011-12	# Students continuing at beginning of this school year	149	127				
	# Students withdrew, dropped, etc.	4	14				
	# Students graduated	50	1				
	Cumulative graduation rate	31.48%	0.79%				
2012-13	# Students continuing at beginning of this school year	95	112	130			
	# Students withdrew, dropped, etc.	2	7	7			
	# Students graduated	66	36	0			
	Cumulative graduation rate	72.22%	28.35%	0.00%			
2013-14	# Students continuing at beginning of this school year	27	69	123	90		
	# Students withdrew, dropped, etc.	1	1	5	8		
	# Students graduated	12	46	42	0		
	Cumulative graduation rate	79.63%	65.35%	32.31%	0.00%		
2014-15	# Students continuing at beginning of this school year	14	22	76	82	86	
	# Students withdrew, dropped, etc.	1	3	1	5	8	
	# Students graduated	5	12	46	27	2	
	Cumulative graduation rate	82.72%	74.80%	67.69%	30.00%	2.33%	
2015-16	# Students continuing at beginning of this school year	8	7	29	50	76	93
	# Students withdrew, dropped, etc.	1	1	3	4	9	0
	# Students graduated	4	4	18	38	33	0
	Cumulative graduation rate	85.19%	77.95%	81.54%	72.22%	40.70%	0.00%

Table 30 Students in MBA Degree, By Cohorts Entering Between 2010-11 and 2015-16							
	Cohort of Students	**2010-2011**	**2011-1012**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**
2010-11	# Students entered	22					
	# Students withdrew, dropped, etc.	2					
	# Students graduated	0					
	Cumulative graduation rate	0.00%					
2011-12	# Students continuing at beginning of this school year	20	49				
	# Students withdrew, dropped, etc.	1	6				
	# Students graduated	7	0				
	Cumulative graduation rate	31.82%	0.00%				
2012-13	# Students continuing at beginning of this school year	12	43	18			
	# Students withdrew, dropped, etc.	0	2	2			
	# Students graduated	11	11	0			
	Cumulative graduation rate	81.82%	22.45%	0.00%			
2013-14	# Students continuing at beginning of this school year	1	30	16	21		
	# Students withdrew, dropped, etc.	0	0	1	3		
	# Students graduated	1	13	8	0		
	Cumulative graduation rate	86.36%	48.98%	44.44%	0.00%		
2014-15	# Students continuing at beginning of this school year		17	7	18	27	
	# Students withdrew, dropped, etc.		0	0	1	2	
	# Students graduated		9	5	10	0	
	Cumulative graduation rate		67.35%	72.22%	47.62%	0.00%	
2015-16	# Students continuing at beginning of this school year		8	2	7	25	12
	# Students withdrew, dropped, etc.		0	0	1	1	2
	# Students graduated		5	0	5	18	0
	Cumulative graduation rate		77.55%	72.22%	71.43%	66.67%	0.00%

Table 31 Students in MS Degree, By Cohorts Entering Between 2010-11 and 2015-16							
	Cohort of Students	**2010-2011**	**2011-1012**	**2012-2013**	**2013-2014**	**2014-2015**	**2015-2016**
2010-11	# Students entered	0					
	# Students withdrew, dropped, etc.						
	# Students graduated						
	Cumulative graduation rate						
2011-12	# Students continuing at beginning of this school year		0				
	# Students withdrew, dropped, etc.						
	# Students graduated						
	Cumulative graduation rate						
2012-13	# Students continuing at beginning of this school year			0			
	# Students withdrew, dropped, etc.						
	# Students graduated						
	Cumulative graduation rate						
2013-14	# Students continuing at beginning of this school year				2		
	# Students withdrew, dropped, etc.				0		
	# Students graduated				0		
	Cumulative graduation rate				0.00%		
2014-15	# Students continuing at beginning of this school year				2	0	
	# Students withdrew, dropped, etc.				0		
	# Students graduated				1		
	Cumulative graduation rate				50.00%		
2015-16	# Students continuing at beginning of this school year				1		1
	# Students withdrew, dropped, etc.				0		0
	# Students graduated				1		0
	Cumulative graduation rate				100.00%		0.00%

Table 33 Destination of Graduates by Employment Type 2012-13 through 2014-15			
	2012-13	**2013-14**	**2014-15**
MPH			
Employed	40 (71.43%)	43 (71.67%)	30 (73.17)
Continuing education/training (not employed)	9 (16.07%)	12 (20%)	5 (12.20%)
Actively seeing employment	5 (8.93%)	4 (6.67%)	6 (14.63%)
Not seeking employment (not employed and not continuing education/training, by choice)	2 (3.57%)	1 (1.67%)	0
Unknown	N/A	N/A	N/A
Total	56 (100%)	60 (100%)	41 (100%)
MBA			
Employed	7 (87.50%)	12 (100%)	9 (100%)
Continuing education/training (not employed)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Actively seeing employment	1 (12.50%)	0 (0.00%)	0 (0.00%)
Not seeking employment (not employed and not continuing education/training, by choice)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Unknown	N/A	N/A	N/A
Total	8 (100%)	12 (100%)	9 (100%)
MS			
Employed	No MS Graduates for 2012-2013	No MS Graduates for 2013-2014	1 (100%)
Continuing education/training (not employed)			0 (0.00%)
Actively seeking employment			0 (0.00%)
Not seeking employment (not employed and not continuing education/training, by choice)			0 (0.00%)
Unknown			N/A
Total			1 (100%)
MSPH (degree program is now closed)			
Employed	0 (0.00%)	No MSPH Graduates for 2013-14	No MSPH Graduates for 2014-15
Continuing education/training (not employed)	1 (100%)		
Actively seeking employment	0 (0.00%)		
Not seeking employment (not employed and not continuing education/training, by choice)	0 (0.00%)		
Unknown	N/A		

Table 33 Destination of Graduates by Employment Type 2012-13 through 2014-15			
	2012-13	**2013-14**	**2014-15**
Total	1 (100%)		
DrPH			
Employed	7 (70%)	14 (87.50%)	10 (83.33%)
Continuing education/training (not employed)	0 (0.00%)	1 (6.25%)	0 (0.00%)
Actively seeking employment	3 (30.00%)	1 (6.25%)	2 (16.67%)
Not seeking employment (not employed and not continuing education/training, by choice)	0 (0.00%)	0 (0.00%)	0 (0.00%)
Unknown	N/A	N/A	N/A
Total	10 (100%)	16 (100%)	12 (100%)
PhD			
Employed	No PhD Graduates 2012-13	1 (100%)	No PhD Graduates 2014-15
Continuing education/training (not employed)		0	
Actively seeking employment		0	
Not seeking employment (not employed and not continuing education/training, by choice)			
Unknown		N/A	
Total		1 (100%)	

2.7.c. An explanation of the methods used to collect job placement data and of graduates' response rates to these data collection efforts. The school must list the number of graduates from each degree program and the number of respondents to the graduate survey or other means of collecting employment data.

Job placement data is collected through the use of a Qualtrics alumni survey which is sent to graduates of the previous academic year, each fall quarter. While this does not capture employment at the 1-year mark following graduation for all graduates, we have found that this timing for our data collection helps improve our response rate without reducing our job placement rate below the acceptable thresholds for most cases. If a situation occurs where the threshold is not met, a follow-up survey is conducted only for that particular degree and graduating cohort. The survey instrument and summarized responses can be found in 2.7 of the ERF.

The response rates are determined by using the number of responses to the Qualtrics alumni survey and the graduates identified in the Student Information System data and are reflected in Table 34. An exception to the number of recipients reflecting the number of graduates is for 2012-2013. That year, nine e-mail addresses were invalid thus, the number of recipients was adjusted to 165 from 174.

Table 34 Alumni Survey Response Rate			
	Number of Recipients	**Number of Respondents**	**Response Rate**
2012-2013	165	75	45.45%
2013-2014	178	89	50%
2014-2015	146	63	43.15%

Table 35 Graduates and Respondents									
Degree	**Number of Graduates**			**Number of Alumni Respondents**			**Response Rate**		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
MPH	130	127	97	56	60	41	43.08%	47.24%	42.27%
MBA	30	27	24	8	12	9	26.67%	44.44%	37.50%
MS	0	0	2	0	0	1	N/A	N/A	50.00%
MSPH	1	0	0	1	0	0	100.00%	N/A	N/A
DrPH	13	23	23	10	16	12	76.92%	69.57%	52.17%
PhD	N/A	1	0	N/A	1	0	N/A	100.00%	N/A

2.7.d. In fields for which there is certification of professional competence and data are available from the certifying agency, data on the performance of the school's graduates on these national examinations for each of the last three years.

Certified in Public Health (CPH) Exam

Fewer than five students have taken the CPH exam for the past three years. In conjunction with the change to the curriculum, we are considering requiring the exam as a key outcome measure.

Table 36 Certified Health Education Specialist (CHES) Exam Results Summary			
	Total Count	**Number Passed**	**Passing Rate**
April 2012-Oct. 2012	14	13	92.86%
April 2013-Oct. 2013	7	6	85.71%
April 2014-Oct. 2014	12	11	91.67%
April 2015-Oct. 2015	14	7	50.00%

According to the NCHEC report there has been a significant drop in the pass rate for the CHES exam among our students between 2014 and 2015. In looking closer at the report, the April 2015 statistics show an 83% pass rate, consistent with previous results, with only one out of seven students failing to pass the exam. All of these students were Health Education program graduates. For the October Exam, out of seven students tested, five identified themselves as Health Education/Health Promotion/Health Promotion and Education discipline. Out of these students, only one passed, resulting in a 20% pass rate for the October 2015 exam.

During a careful analysis of the program offerings from 2012, 2013, 2014, and 2015 we were not able to identify curriculum or faculty changes which could account for the lower pass rate. It is possible that

some of those taking the exam in October were earlier graduates who have completed the program some time ago, and therefore may not have been as well prepared or as current in the Health Education field. We do know that some of our graduates from many years ago take the CHES exam. Further, one of our long-time graduates from 1981, was a "high scorer" on the MCHES exam taken in 2014 (the press announcement can be found in 2.7 of the ERF).

Because the NCHEC report does not provide graduation information for the examinees, we cannot determine with 100% certainty whether the low pass rate is associated with the program itself or other factors. The program faculty, however, are most committed in ensuring that students have excellent preparation in the seven areas of responsibilities, and presently are conducting a careful review of all of the program courses in both Master's and Doctoral programs to ensure we maintain a close alignment with the Health Education competencies.

Table 37 Registered Dietician (RD) Exam Results Summary			
	Total Count	**Number Passed**	**Passing Rate**
2014	16	13	81.25%
2015	20	16	80%

The RD Exam results listed are for first-time test takers. The results for 2016 are not yet available. The bench-mark for the program is a first-time pass rate of 80%.

Table 38 Registered Environmental Health Specialist (REHS) Exam Results Summary			
	Total Count	Number Passed	Passing Rate
2013	1	1	100%
2014	1	1	100%
2015	1	1	100%

2.7.e. Data and analysis regarding the ability of the school's graduates to perform competencies in an employment setting, including information from periodic assessments of alumni, employers and other relevant stakeholders. Methods for such assessments may include key informant interviews, surveys, focus groups and documented discussions.

A variety of methods was used to gather feedback from employers. Some of the employers scheduled to attend the 2015 and 2016 Career Fairs, completed a survey; the purpose of which was to determine the most important and least important skills and other characteristics employers seek in a high quality and competent public health employee.

In winter 2016, the LLUSPH Employer Feedback survey was developed for the purpose of determining how well our graduates perform in an employment setting. The Practicum Office sent this survey to 8 practicum supervisors who employ our graduates. The Alumni Office sent the survey to 1 employer. The Dean's Office sent the survey to five DrPH Nutrition graduate employers and 9 MPH Nutrition graduate employers.

Also in winter 2016, a number of program directors contacted graduates from 2013-2015 to request employer contact information so that the employer survey could be sent to them. The MBA program director sent the request to 60 email addresses (with a few duplicates). This approach, however, yielded a relatively small number of employer contacts.

Employer perceptions of our graduates in the workplace indicate that 87.5% were satisfied or very satisfied with our graduates – 62.5% being very satisfied. Between 62%-75% of the respondents specified that graduates' skills in the five core areas of public health were in the proficient to highly proficient range. With regards to LLUSPH MPH graduates, 85.7% indicated that they are either just as prepared or more prepared in terms of knowledge, skills, and abilities in comparison to graduates of other universities. The remaining respondents felt the question was not applicable to their circumstances. For the same question but relating to our doctoral graduates, 25% felt our graduates were more prepared, 12.5% were unsure, and 62.5% felt the question was not applicable to their circumstances. In answer to the question as to whether or not they would be willing to hire other LLUSPH graduates, 100% responded 'Yes".

While the number of respondents to our employer survey was small, it does provide a helpful perspective on the abilities of our graduates to successfully perform competencies in an employment setting. We plan to find ways to obtain more feedback from employers as we continue to look to ensure that our graduates are competent, highly skilled and prepared for the workplace.

The employer related survey instruments and a summary of the responses are located in 2.7 of the ERF.

We also gather feedback from students nearing graduation via our Exit survey and from alumni via our Alumni Survey. The survey instruments and summary reports can be found in Assessment Procedures/Surveys/Exit Survey ERF 2.7 and Assessment Procedures/Surveys/Alumni Survey ERF 2.7 respectively. The following tables provides an overview of some of the results relating to their perceptions regarding career readiness.

Table 39 Alumni Perceptions of Career Readiness			
Alumni Survey			
(n) Total Overall Responses	2014 (n=89)	2015 (n=64)	2016*
Academic preparation for my career	Excellent-Good: 79.3% Average-Poor: 20.7%	Excellent-Good: 76.3% Average-Poor: 23.7%	Not yet available
Degree to which your LLUSPH field practicum/internship experience prepared you for employment or lead to an employment opportunity	Very much – Moderately: 64.2% A little – Not at all: 23.5% Not applicable: 12.4%	Very much – Moderately: 65% A little – Not at all: 20% Not applicable: 15%	Not yet available
Secured my current position as a direct result of the latest degree I earned from LLUSPH	Strongly Agree – Agree: 53.8% Neutral – Strongly Disagree: 46.2%	Strongly Agree – Agree: 55.1% Neutral – Strongly Disagree: 44.9%	Not yet available

*The survey has not yet been sent out for 2016

Table 40 Perceptions of Students Nearing Graduation Regarding Career Readiness			
Exit Survey (Results from Spring Quarter Only)			
(n) Total Overall Responses	2013-14 (n=73)	2014-15 (n=61)	2015-16 (n=49)
My LLUSPH program helped me reach my goals	Strongly Agree – Agree: 79.4% Neutral – Somewhat Agree: 17.5% Somewhat Disagree – Strongly Disagree: 3.2%	Strongly Agree – Agree: 73.5% Neutral – Somewhat Agree: 24.5% Somewhat Disagree – Strongly Disagree: 1.9%	Strongly Agree – Agree: 80.4% Neutral – Somewhat Agree: 15.2% Somewhat Disagree – Strongly Disagree: 4.3%
If you had it to do all over again, would you select Loma Linda University School of Public Health?	Yes – 60% No – 11% Maybe – 29%	Yes – 58% No – 12% Maybe – 30%	Yes – 55.8% No – 9.3% Maybe – 34.9%

The schedule for deployment of the surveys is found in 2.7 of the ERF.

In addition to surveys, we receive feedback from some of the practicum sites that hire our students after they graduate. Students also inform us of job offers they receive as a result of their practicum experience. Instances such as the one where a practicum site valued a student so much that they made changes to their hiring policy in order to hire her, or the one where a site hired a student to continue working on the project, speaks to the ability of our graduates to perform with competence in an employment setting.

2.7.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. LLUSPH uses a variety of methods to assess achievement of competencies/learning outcomes which provides a more comprehensive view of student learning and achievement.
2. Rich data repositories that we have confidence in and that are reliable and reproducible.
3. Utilization of software system to assess and store student artifacts and document competency, for easy access and reporting.
4. Collaborative approach to assessment among key individuals (including program directors).

Weaknesses:

1. While competencies/learning outcomes are published in the catalog, included in syllabi, and integrated within the curriculum, the degree of familiarity with them is not as strong as we would like.
2. Indirect assessment results are not easily accessed by program directors.
3. Systematic assessment is new to a number of program directors and faculty which impacts the pace at which full implementation of the strategy can occur.
4. Lower than desired response from employers on our graduates' ability to perform competencies/learning outcomes in an employment setting.

Plans for Improvement:

1. Continue implementing all phases of systematic assessment strategy.
2. Develop additional methods for obtaining employer feedback.
3. Build greater awareness of competencies/learning outcomes among all stakeholders by establishing continuous ties to them within the classroom and extending to our interaction with employers.
4. Consider additional ways to effectively and efficiently measure student achievement such as requiring the CPH exam.
5. Provide ongoing training and assistance on systematic assessment to program directors and faculty.
6. Develop process for distributing indirect assessment results on a regular basis to program directors.

2.8 Other Graduate Professional Degrees. If the school offers curricula for graduate professional degrees other than the MPH or equivalent public health degrees, students pursing them must be grounded in basic public health knowledge.

2.8.a. Identification of professional degree curricula offered by the school, other than those preparing primarily for public health careers, and a description of the requirements for each.

The school offers a Master of Business Administration (MBA) degree in healthcare administration which prepares future healthcare leaders with a unique influence of public health. The MBA program provides students a broad understanding of healthcare management in line with relevant industry-leading competencies. Each class in the curriculum is taught from a healthcare perspective with current issues and research woven into the theoretical discussions. The program includes an 800 hour practicum where students learn and apply their knowledge in the healthcare setting. Below is a table that shows the units required by year for the three self-study years and the curriculum for 2015-2016. Admission requirements for the MBA program is a bachelor's degree from an accredited school, 3.0 GPA or greater, three letters of recommendation, GRE test scores, and interview. Beginning in 2016 incoming students are also required to have taken an undergraduate course in Accounting and Micro-Economics.

Table 41 MBA Required Units			
	2013-2014	**2014-2015**	**2015-2016**
Total Qtr. Credit Hours	66	57*	60
Practicum Hours Req.	800	800	800

*The total units dropped due to combining Stats and Epi and adjusting the curriculum the following year to include an IT Management course.

Table 42 Sample MBA Cohort Schedule; Full Time; 2015-2016 Catalog			
Fall			**Units**
	HADM 507	Principles of Financial Accounting	3
	HADM 555	Healthcare Delivery System	4
	PHCJ 605	Overview of Public Health	1
Winter			**Units**
	HADM 542	Managerial Accounting for Healthcare	3
	HADM 505	Statistics and Epidemiology for Management	4
	HADM 604	Health Systems Strategic Planning	3
	HADM 724B	Practicum (200 hours)	
Spring			**Units**
	HADM 506	Principles of HealthCare Finance	3
	HADM 559	Healthcare Marketing	3
	RELE 535	Ethical Issues of Healthcare Management	3
	HADM 724B	Practicum (200 hours)	
Summer			**Units**
	HADM 605	Healthcare Quality Management	3
	HADM 564	Healthcare Finance	3
	HADM 514	Healthcare Economics	3
	HADM 724B	Practicum (200 hours)	

Table 42 Sample MBA Cohort Schedule; Full Time; 2015-2016 Catalog			
Fall			**Units**
	HADM 528	Organizational Behavior in Healthcare	3
	HADM 534	Healthcare Law	3
	Elective	Elective	3
	HADM 724B	Practicum (200 hours)	
Winter			**Units**
	HADM 529	Healthcare Negotiation and Conflict Resolution	3
	HADM 574	Managing Human Resources in Health Care	3
	HADM 575	Management of Health Informatics in Healthcare	3
Spring			**Units**
	HADM 601	Operations Management	3
	HADM 690	Integrated Healthcare Capstone	3
		Total Units:	**60**
		Practicum Hours:	**800**

Table 43 MBA Health Care Administration Graduation Rates					
Total Graduates to Date (200602 – 201502)			312		
Graduation Rate			87.88%*		
	Initially Enrolled	% Graduated in One Year**	% Graduated in Two Years	% Graduated in Three Years	% Graduated in More than Three Years
Number of Students in Entering Cohort (2008-2009)	33	21.21%	54.55*	9.09%	3.03%

* To calculate the graduation rate, the starting cohort is from the 2008-2009 academic year (i.e. students who started their MBA program in 200901 through 200904) which reflects the 'Maximum Time to Graduate' of five years.

** The rate of graduating within one year is an unusual situation allowed for students who are in a clinical program such as medicine and choose to do the MBA program in one year between the third and fourth year of medical school or between the fourth year and residency. The practicum requirement is reduced to 400 hours due to their clinical experience.

Ninety-two percent of the graduates of 2014 were employed within three months of graduation [NOTE: this number is based on tracking employment of 27 graduates. Three are unknown. Of the 24 known, two were not hired within three months (22/24 = 92%)].

The requirements for graduation beyond completing the courses are:

- **Professional Membership.** During the first quarter, students are required to secure and maintain membership in an approved professional society, such as the American College of Healthcare Executives (ACHE).

- **Healthcare Administration Colloquia.** Students must attend non-course required seminars, educational events, or professional growth events equivalent to ten (10) hours throughout the program.
- **Culminating Activity.** Each student meets this requirement by the following: 1) presenting the final report for the practicum, 2) completing a professional portfolio, and 3) submitting an exit interview during their last quarter of the program.

The required practicum during the MBA program is completed throughout the program totaling 900 hours. This requirement gives students the opportunity to experience hands-on, practical training in leadership and administrative duties. Sites are selected and partnered with that deal directly with healthcare and are primarily acute care hospitals, nursing homes, large physician practices, health insurance plans, and other similar entities. The practicum experience is coordinated by the SPH Practicum office lead by Marci Andersen (see Criterion 2.4 for a full explanation). Students are required to complete a self-directed pre-course (no credit) during the first quarter of the program and matched to a practicum site starting the second quarter of the program. Students are matched to a site by reviewing the SPH Field Practicum database online and working the practicum office to find the best fit or their area of interest and future goals. Students can request to use their current employment as practicum if it meets the requirements of a site and the proposed work is beyond their normal scope of duties.

Evaluations of the student's work is completed quarterly by their site supervisor using electronic reporting in LiveText. Students are also asked to evaluate their site quarterly and all feedback is used to deal with issues as they arise and continually improve the experience of the students and the practicum site. Various assignments are required during the practicum including a poster presentation after 400 hours and a professional 10 minute presentation at the end of their practicum. Faculty, supervisors, and student peers are invited to give feedback to the students.

Waivers of the practicum hours for the MBA program are done only for five years or more of healthcare management experience or if the student is in a clinical program (such as medicine). The number of hours that may be waived is done on a case by case basis and is rarely the entire 800 hours. Guidelines for any waivers is outlined in the MBA Practicum Handbook (found in 2.8 of the ERF). Below is a breakdown of waivers given in the MBA program the last three years.

Table 44 MBA Academic Variance Waivers by Year

	2013-2014		2014-2015		2015-2016		Total	
Type of Waiver	Full	Partial	Full	Partial	Full	Partial	Full	Partial
	0	1	0	2	0	1	0	4

The MBA Program has gone through a candidacy, self-study and site visit for CAHME accreditation which is a competency-based model (see 2.6 in the ERF for the competency outline and curriculum maps by year). The site visit occurred in December 2015 and this initial accreditation was denied. The MBA program director and LLUSPH plan to address the deficiencies and pursue accreditation in the next 18-24 months. The CAHME report on the criteria is also included in the ERF for a more detailed explanation of the deficiencies. In 2015-2016 the MBA program faculty have been working to develop updated competencies/program learning outcomes and incorporating the institutional learning outcomes in order to better align the MBA program the healthcare industry and the mission of LLUH and LLUSPH.

The Program Learning Outcomes for 2016-2017 for the MBA Program are listed in 2.6.b but expanded below. In addition to these, the Program also assesses the standardized LLU Institutional Learning Outcomes (found in 2.6 of the ERF).

1 Understand the Healthcare Environment[1]

1.A **.**Demonstrate knowledge of structures/functions and evolving issues in health care, and the ability to apply this knowledge to diverse health care organizations.

1.B**.** understand the process of decision-making in the healthcare sector.

2 Demonstrate Leadership Skills & Accountability Aptitude

2.A**.** Articulate and evaluate professional values and ethics, demonstrating an understanding of healthcare administration from a faith-based perspective.

2.B**.** Demonstrate the ability to work as a team member and to support and value diverse opinions and perspectives.

3 Integrate Strategic Awareness & Innovative Thinking

3.A**.** Understand and demonstrate how the organizational vision and goals influence operations and how to strategically develop these guiding principles.

3.B**.** Apply complex concepts, develop creative and innovative solutions, or adapt previous solutions in new ways.

4 Demonstrate Business Mgmt. Skills & Stewardship Principles

4.A. Understand and explain financial and accounting information, and apply financial techniques to set goals and measure organizational performance.

4.B. Demonstrate the ability to persuade others to support a point of view, position, or recommendation, while assessing and responding to the feelings and concerns of others.

5 Demonstrate Public Health, Policy & Global Awareness

5.A. Understand the legislative environment and how health policy at the local, state, and federal levels impact organizations.

5.B. Understand and articulate how patterns of disease affect populations at the local as well as at the global levels.

[1] In the 2017-2018 catalog the wording of the PLO's will be refined to ensure the proper level of verb usage according to Bloom's Taxonomy.

2.8.b. Identification of the manner in which these curricula assure that students acquire a public health orientation. If this means is common across these other professional degree programs, it need be described only once. If it varies by program, sufficient information must be provided to assess compliance by each program.

In 2014-2015 two separate courses (six units total) of Statistics and Epidemiology were combined into one, four-unit course (HADM 505 Statistics and Epidemiology for Management) to enable the course to focus on healthcare administration as well as align with the curriculum changes throughout LLUSPH. Additionally students took PHCJ 605 Overview of Public Health (one unit) to gain exposure to the other core areas of public health. During the 2015-2016 academic year it was noted that PHCJ 605 was not sufficiently covering the areas of environmental health, social and behavioral change, and health policy. A new three-unit course (PHCJ 606 Public Health Fundamentals) was approved by the LLUSPH Academic Council on February 6, 2016 that will cover the three core areas in more depth, replacing PHCJ 605. Starting with 2016-2017 and going forward, this additional course will increase the MBA curriculum to 62 quarter units. PHCJ 606 will be required for the MBA (and other professional non-MPH programs). PHCJ 606 and HADM 505 will adequately cover the core public health concepts for the MBA degree program with seven quarter units required at the beginning of the program.

2.8.c. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary

Strengths:

1. As the only MBA program in healthcare administration residing within a School of Public Health brings opportunities to focus on population health management and systems integration for future healthcare leaders.
2. Going through the self-study process for CAHME accreditation has strengthened the program.
3. The program has a strong practicum program (800 hours). Students regularly cite that experience as invaluable and a main reason they selected LLU's MBA program.

Weaknesses:

1. As noted by the CAHME review team there is need for the MBA program to be able have input and guidance over resources for the program. These issues are being addressed by SPH administration for the 2016-2017 fiscal year. The program director does have selected foundation accounts to use strategically for the benefit of the program and students in the program.
2. There is an open position for a full time faculty who will serve the needs of the MBA program as well as the MPH and DrPH programs in Health Policy and Leadership. In the interim, the program has relied on contract instructors to cover the classes. The search committee is in process; however, in the interim the lack of core faculty is a weakness.

Plans for Improvement:

1. The assessment process continues to expand and develop with the implementation of LiveText to capture the data. Further development of the program learning outcomes and assessing them within the program will continue to strengthen the curriculum and program in general. This process is ongoing.
2. Filling the vacant faculty position during the 2016-17 academic year.
3. Hiring a part-time graduate assistant to provide administrative support to the program.
4. Attention to student experience and continuing strength of the program will be pursued in order to achieve CAHME accreditation in the next 18-24 months.

2.9 Bachelor's Degrees in Public Health. If the school offers baccalaureate public health degrees, they should include the following elements:

The school does not offer baccalaureate public health degrees.

2.10 Other Bachelor's Degrees. If the school offers baccalaureate degrees in fields other than public health, students pursing them must be grounded in basic public health knowledge.

The school does not offer baccalaureate degrees.

2.11 Academic Degrees. If the school also offers curricula for graduate academic degrees, students pursuing them shall obtain a broad introduction to public health, as well as an understanding about how their discipline-based specialization contributes to achieving the goals of public health.

2.11.a. Identification of all academic degree programs, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

The academic degrees include an MS in Nutrition, an MS in Biostatistics (closed to enrollment) and a PhD in Epidemiology. Although the MS in Biostatistics is currently closed to enrollment, active recruitment of at least one faculty in this discipline is under way. Upon filling this position, the program will undergo review to determine if the MS will be re-opened or permanently closed

2.11.b. Identification of the means by which the school assures that students in academic curricula acquire a public health orientation. If this means is common across the school, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each.

Students pursuing a PhD in Epidemiology are required to have a Doctoral level professional degree or Master's degree in a related field as a prerequisite to the program. Commonly, applicants enter with an MPH degree and specifically, an MPH in Epidemiology. Depending on the student's dissertation project, recommendations for additional coursework may be made to insure the student possesses the breadth of knowledge needed to address his or her project.

The academic degree curricular requirements provide students with an essential public health orientation given their inclusion of core public health courses as part of their degree requirement (see Table 46 below).

Master of Science
Currently we have two MS programs in LLUSPH: an MS in Biostatistics, and an MS in Nutrition. Enrollment has been very low in both degree programs over the past few years, with most students opting to pursue the MPH degree in these disciplines. The MS in Biostatistics program is closed to new admissions, and currently has one student who will complete the program by fall 2016.

Newly entering MS students complete the public health core curriculum shown in Table 46. A review of the curriculum revealed insufficient coursework in environmental health sciences, social and behavioral sciences, and health sciences administration. Beginning in 2016-2017, a new course has been developed to meet the areas of environmental health sciences, social and behavioral sciences, and health sciences administration for students entering the MS programs. This course will include the equivalent of one unit in each for these three areas.

Table 45 Core Public Health Knowledge MS		
Core Knowledge Area	**Course Number & Title**	**Total Credit towards Core Knowledge Area**
Biostatistics	STAT 509 General Statistics OR STAT 521 Biostatistics I	4
Epidemiology	EPDM 509 Principles of Epidemiology	3
Environmental Health Sciences	No class currently meets this requirement*	0
Social and Behavioral Sciences	No class currently meets this requirement*	0
Health Sciences Administration	No class currently meets this requirement*	0

*Beginning in 2016-2017, this requirement will be met with PHCJ 606 Public Health Fundamentals. PHCJ 606 will have the equivalent of one credit in Environmental Health Sciences, one credit in Social & Behavioral Sciences, and one credit in Public Health Policy.

Table 46 Required Public Health Courses for Academic Degree Programs	
Program	**Required Courses**
MS in Nutrition	Principles of Epidemiology (EPDM 509; 3 units) General Statistics (STAT 509) or Biostatistics I (STAT 521; 4 units) Advanced Public Health Nutrition (NUTR 510; 3 units) Ethical Issues in Public Health (RELE 534; 3 units) Fundamentals of Public Health (PHCJ 606; 3 units) [planned 2016-17]
MS in Biostatistics	Principles of Epidemiology (EPDM 509; 3 units) Biostatistics I (STAT 521; 4 units) Ethical Issues in Public Health (RELE 534; 3 units) Fundamentals of Public Health (PHCJ 606; 3 units) [planned 2016-17]
PhD in Epidemiology	Prerequisites*: Principles of Epidemiology (EPDM 509; 3 units) Biostatistics I (STAT 521; 4 units) Analytical Applications of SAS (STAT 548; 2 units) Ethical Issues in Public Health (RELE 534; 3 units) Six units of cognates, recommended to be within a Public Health discipline other than EPDM (STAT, NUTR, HADM, GLBH, HPRO, ENVH or GIS) and chosen in consultation with advisor.

*As a prerequisite for admission, students are required to have a doctoral-level health degree or master's degree in a related field, commonly Public Health and more specifically, Epidemiology, which provides the PhD student with background in the five core areas of public health.

MS in Nutrition – the M.S. degree requires a minimum of 48 units. Specific nutritional biochemistry and clinical nutrition courses are required to fulfill Major requirements in addition to core public health courses "Principles of Epidemiology" and either "General Statistics" or "Biostatistics". "Ethical Issues in Public Health" is required as is the successful completion of a comprehensive examination. Either a thesis and publishable paper or coursework are required, depending on the track, to complete the degree. Starting the 2016-17 school year, an additional course, "Fundamentals of Public Health" will be

required and which covers three areas of public health: health behavior, environmental health and health policy.

MS in Biostatistics – the M.S. degree requires 51 units. Specific coursework in biostatistics, and research data management and methods are required to fulfill the Major requirements in addition to core public health courses "Principles of Epidemiology" and "Biostatistics." "Ethical Issues in Public Health" is required as is attendance at a minimum of 15 forums in Epidemiology, Biostatistics, and/or in the Adventist Health Study. The culminating activity includes a research thesis, with a written publishable paper and oral presentation; and a professional portfolio. The M.S. in Biostatistics is currently closed to enrollment.

PhD in Epidemiology – the PhD degree requires a minimum of 83-87 units. Specific epidemiologic methods, biostatistics and grant and contract writing are required for the degree. Twelve units of descriptive epidemiology, and six units of cognates are required. Students must successfully pass a comprehensive examination which assesses their analytic and conceptual skills in epidemiology. PhD students are required to attend a minimum of ten Epidemiology, Biostatistics and/or Adventist Health Study seminars each year during their program. Three publishable manuscripts written for submission to peer reviewed journals are required as part of the dissertation; one of the papers must be accepted for publication as part of the culminating experience.

2.11.c. Identification of the culminating experience required for each academic degree program. If this is common across the school's academic degree programs, it need be described only once. If it varies by degree or program area, sufficient information must be provided to assess compliance by each.

MS in Nutrition Degree: Two options, a thesis (research track) and a non-thesis (course work track), are available. Regardless of track, MS in Nutrition students complete a written comprehensive examination. Students in the research track complete a research project that culminates in either a publishable manuscript or a thesis prior. Students in the coursework track complete courses in nutrition and participate in an ongoing research project.

MS in Biostatistics: The culminating activity includes a research thesis, with a written publishable paper and oral presentation; and a professional portfolio.

PhD in Epidemiology Degree: PhD in Epidemiology students must successfully pass a comprehensive examination which assesses their analytic and conceptual skills in epidemiology. Students write and defend a dissertation proposal and write and defend a dissertation that addresses relevant issues specific to their discipline. Only quantitative research is acceptable for the PhD dissertation. The written dissertation consists of the following chapters: an introduction, review of literature, methods, three publishable manuscripts written for submission to peer reviewed journals followed by summary and conclusions. One of the papers must be accepted for publication in a peer-reviewed scientific journal as part of the culminating experience. An oral defense of the dissertation is required and occurs in the presence of guests, student peers, faculty from other disciplines and the dissertation guidance committee.

2.11.d. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. Students in academic curricula have numerous and various resources available within the school which contribute to their acquiring a public health orientation.
2. Seminar requirements for the PhD degree ensure that students are exposed to topical public health issues.

Weaknesses:

1. It is currently incumbent on students in the PhD program to seek out many of the available resources within the school.
2. The PhD program has not historically included ample content in the areas of Environmental Health Sciences, and Social and Behavioral Sciences.
3. The MS programs have not explicitly included content in the areas of Environmental Health Sciences, Social and Behavioral Sciences, and Health Sciences Administration. The MS programs have had very low to no enrollment over the last few years. The MS in Biostatistics is currently closed to new enrollment.

Plans for Improvement:

1. Additional doctoral level courses are being planned for the PhD program, which may be an opportunity to include content important to acquiring a public health orientation.
2. As noted above, starting the 2016-17 school year, an additional course, "Fundamentals of Public Health" (PHCJ 606) will be required of Nutrition MS degree students which covers three areas of public health; health behavior, environmental health and health policy.

2.12 Doctoral Degrees. The school shall offer at least three doctoral degree programs that are relevant to three of the five areas of basic public health knowledge.

2.12.a. Identification of all doctoral programs offered by the school, by degree and area of specialization. The instructional matrix in Criterion 2.1.a may be referenced for this purpose. If the school is a new applicant and has graduates from only one doctoral program, a description of plans and a timetable for graduating students from the other two doctoral programs must be presented, with university documentation supporting the school's projections.

LLUSPH offers DrPH degrees in the following five areas: Epidemiology, Health Education, Health Policy and Leadership, Nutrition and Preventive Care. Three of the five programs are core to public health. LLUSPH also offers a PhD in Epidemiology. The PhD in Epidemiology and DrPH in Health Policy and Leadership are relatively new and opened for enrollment immediately following the last CEPH site visit. See Table 21 Instructional Matrix in criterion 2.1.

The DrPH programs are designed to prepare students for professional careers in leadership, public health practice, academia and research. The PhD is distinguished from the DrPH in that it has a more rigorous research component and prepares students for careers mainly in academia and research. The PhD in epidemiology is housed in LLUSPH and Faculty of Graduate Studies. Each doctoral program has a program director, who along with their program (Epidemiology, Health Education, Health Policy and Leadership, Nutrition and Preventive Care) doctoral subcommittee (PDSC), administers the program. The program director serves as the chairman of each PDSC. All doctoral program directors serve on the school-wide Doctoral Programs Committee (DPC) which provides oversight to the doctoral programs in the SPH.

2.12.b. Description of specific support and resources available to doctoral students including traineeships, mentorship opportunities, etc.

Academic advisors, program directors and Dissertation Guidance Committee (DGC) chairs serve as mentors to students and guide them successfully through the program. Academic advisors provide counsel on curriculum mapping and monitor the students' progression through the program. Program directors ensure that the students advance successfully, meeting the program milestones and expectations. Upon completion of select didactic course work, students are required to take the written comprehensive examination which covers both research methods and core areas of their discipline. Passing the comprehensive examination is followed by the development and approval of the dissertation concept paper and Dissertation Guidance Committee (DGC). From here forward the DGC chair provides mentorship to the student starting with the written dissertation proposal and oral defense of the same. Upon successful completion of the dissertation proposal defense, students are advanced to candidacy. The DGC chair will continue to mentor the student through the research process until successful completion of the dissertation defense and submission of two manuscripts for peer reviewed publication. Details of the various steps from curriculum mapping to graduation is described in the doctoral student handbook that is available in 2.12 of the ERF.

Research support is provided through the Center for Health Research especially for the purpose of statistical consulting. A monetary support of $1000 for basic expenses related to dissertation is available for all doctoral students through the Office of the Executive Associate Dean. Students also have support from LLUSPH office of Digital Education and Computer Services. Travel to scientific conferences to

present dissertation research is encouraged and in some programs required and is supported by endowment funds.

Availability of financial support for doctoral students varies by doctoral program. A majority of the students procure federal loans but a few funded opportunities are available in LLUSPH to support doctoral students. Some doctoral students who work with faculty that are externally funded receive graduate assistantships. Few scholarships are offered that are funded from endowments. These support meritorious students pursuing research in the area for which the fund was originally established. For example, the McLean Endowment Fund supports vegetarian nutrition research. Students are selected on merit and must be engaged in research that advances knowledge in the area of vegetarian nutrition. Some doctoral students receive support as teaching assistants for one to two quarters. Students are encouraged to apply for pre-doctoral fellowships or submit grants to public health organizations or external funding agencies. A few international students are supported through scholarships from their government or International organizations that support doctoral research. One of the goals of LLUSPH is to increase the number of external grants submitted by faculty that can support graduate assistantships.

2.12.c. Data on student progression through each of the school's doctoral programs, to include the total number of students enrolled, number of students completing coursework and number of students in candidacy for each doctoral program. See CEPH Template 2.10.1.

Table 47 Doctoral Student Data for Year 2016							
	DrPH Epidemiology	**DrPH Health Education (on-campus)**	**DrPH Health Education (Online)**	**DrPH Health Policy and Leadership**	**DrPH Nutrition**	**DrPH Preventive Care**	**PhD Epidemiology**
# newly admitted in 2016 (201701-201702)	1	2	4	4	2	1	1
# currently enrolled (total) in 2016 (201702)	9	11	24	21	16	13	8
# completed coursework during 2015 (201601-201604)	2	1	2	0	2	3	2
# advanced to candidacy (cumulative) during 2015 (201601-201604)	0	5	6	1	6	3	2
# graduated in 2015-16 (201601-201604)	1	3	6	2	4	4	1

2.12.d. Identification of specific coursework, for each degree, that is aimed at doctoral-level education.

The required courses for all of the doctoral programs are listed in Tables 48 through 53 in 2.12 of the ERF. For all of the programs, didactic courses, seminars, dissertation and non-course related activities that are advanced (doctoral level) are indicated with a symbol (D). For most programs, doctoral level didactic courses include some discipline specific courses and others related to statistics, advance research methods, seminar, preliminary research experience, proposal and dissertation.

As outlined in Criterion 2.6.d, the LLUSPH DPC held a workshop this summer and developed the doctoral foundational core competencies for the DrPH programs. This is provided in 2.6 of the ERF. Some of the core competencies are in the areas of communication, leadership, governance, educational pedagogy, critical thinking, policy and research. Having common foundational learning outcomes for the DrPH programs will ensure higher and more standardized level of academic rigor and unification of policies and procedures across all doctoral programs (examples: assessment of dissertation, format of comprehensive examinations, etc.). As described in criterion 2.6.d, the DrPH foundational learning outcomes will be attained through coursework and non-course activities that will be at the doctoral level. Doctoral seminars offer a variety of learning experiences including journal clubs in which cutting edge research and practice in the specific discipline are discussed. These seminars provide a platform for students to develop communication and critical thinking skills. Students learn to integrate and apply advance knowledge in public health and their discipline when taking the comprehensive examination. The dissertation process is advanced level training and requires students to apply critical thinking, demonstrate effective written and oral communication and leadership skills.

2.12.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. LLUSPH offers five DrPH degrees and one PhD of which at least three are in the core public health disciplines (Epidemiology, Health Education, Health Policy and Leadership).
2. LLUSPH also offers two additional DrPH degrees in Nutrition and Preventive Care.
3. Doctoral students have diverse research opportunities within the LLUSPH.
4. Having a school-wide Doctoral Programs Committee that provides oversight to the doctoral programs in the school allows for standardization of doctoral core competencies, policies, and processes so that all doctoral programs are held to the same level of academic rigor.

Weaknesses:

At present there are a limited number of didactic units offered at the doctoral level especially in some programs. LLUSPH Doctoral Programs Committee and the program doctoral subcommittees are committed to increasing the number of didactic courses that will be offered at the advanced level.

Plans for Improvement:

1. Increase the number of externally funded research grants by faculty that can support doctoral student assistantships.
2. Standardize the DrPH foundational core competencies across the doctoral programs in the school and offer doctoral level courses to attain these competencies.

2.13 Joint Degrees. If the school offers joint degree programs, the required curriculum for the professional public health degree shall be equivalent to that required for a separate public health degree.

The school does not offer joint degree programs.

2.14 Distance Education or Executive Degree Programs. If the school offers degree programs using formats or methods other than students attending regular on-site course sessions spread over a standard term, these programs must a) be consistent with the mission of the school and within the school's established areas of expertise; b) be guided by clearly articulated student learning outcomes that are rigorously evaluated; c) be subject to the same quality control processes that other degree programs in the school and university are; and d) provide planned and evaluated learning experiences that take into consideration and are responsive to the characteristics and needs of adult learners. If the school offers distance education or executive degree programs, it must provide needed support for these programs, including administrative, travel, communication, and student services. The school must have an ongoing program to evaluate the academic information to stimulate program improvements. The school must have processes in place through which it establishes that the student who registers in a distance education course or degree is the same student who participates in and completes the course or degree and receives the academic credit.

2.14.a. Identification of all degree programs that are offered in a format other than regular, on-site course sessions spread over a standard term, including those offered in full or in part through distance education in which the instructor and student are separated in time or place or both. The instructional matrix in Criterion 2.1.a may be referenced for this purpose.

LLUSPH offers four programs in two distance education formats, online and technology-mediated, through a dynamic cooperative effort between the program directors and LLUSPH Office of Digital Education.

1. MPH in Health Education, Online
2. MPH in Public Health Practice (2005-2010) -> MPH in Population Medicine, Online
3. MPH in Lifestyle Medicine -> MPH in Lifestyle Management (effective September 2016, Catalog year 2016-17) Online only
4. DrPH in Health Education (2012) Online, Technology-mediated.

2.14.b. Description of the distance education or executive degree programs, including an explanation of the model or methods used, the school's rationale for offering these programs, the manner in which it provides necessary administrative and student support services, the manner in which it monitors the academic rigor of the programs and their equivalence (or comparability) to other degree programs offered by the school, and the manner in which it evaluates the educational outcomes, as well as the format and methods.

The online programs were developed in order to service students who due to work, family situation, or other reasons are unable to come on-campus but are still interested in completing our educational programs. While providing additional flexibility to the students, these programs maintain the rigor and quality of education that LLUSPH is committed to. The online degree programs provide the students with the same level of interaction with faculty and staff that is afforded to the on-campus students.

Administrative and Support Services

The online programs are supported by SPH-centralized student services from Academic Programs Office, SPH Office of Academic Records, who provide Academic Success oversight to all enrolled students, writing center, town hall (combined meetings with on-campus students), digital learning and computing support. Student services at the university level include university records, library, technical support, chaplain/spiritual services, and financial aid.

At the start of the program, students accepted are assigned a faculty advisor at the start of their program, who maintains regular communication with them. Throughout the term of study in their online program students have direct access to their advisors for guidance and counsel via Zoom technology, e-mail, or telephone. An additional resource available to the online students is a recently developed Academic Programs Office, whose coordinators work to provide all students (which includes the online students) with the registration support as well as assist with other non-academic requirements of their program (forms, etc.). This office works with the students in developing their program maps and assisting them with the non-academic requirements of the program. The coordinators from the Academic Programs Office are available to the online students by e-mail, telephone, or in person (for those students wishing to come on-campus).

LLUSPH Office of Academic Records has been tasked with the additional responsibility of monitoring students' academic success. When the student fails to achieve satisfactory academic progress, this office will initiate communication with the student, faculty advisor and program director to identify interventions necessary to improve the student's performance.

The school has developed the online orientation webpage https://llusph.community/mph-orientation-summer/) for the new online students. This site includes the information that a new student needs to become aware of the school/program resources and procedures prior to starting classes. The orientation was piloted with one online program in the spring, 2016, and we are looking forward to expanding it to the rest of the online degree programs at SPH in fall, 2016

Methods of Delivery

Canvas Learning Management System. The online programs and their corresponding courses are designed and delivered through the learning management system (Canvas) selected by the university in 2012. In all courses, the instruction is presented in the form of modules (most courses follow one module per week) where a typical module follows a weekly cycle that starts on Monday at 12:00 AM and ends on Sunday 11:59 PM (Pacific Standard Time). In order to guarantee meaningful interaction among students, and between students and teaching assistant(s)/ instructor(s), courses include discussion board activities. These discussion boards allow for active academic learning, sharing of knowledge, and conversations about past and present professional experiences. Assignments include papers, reports, oral presentations, and reflections which are uploaded through the same learning management system. Plagiarism is held in check and detected by using Turnitin software which is activated in the grading system of Canvas.

Technology Mediated Courses. For the doctoral program, there are seven courses which are primarily delivered in a blend of synchronous, on-campus face-to-face meeting with video-conference live sessions (Zoom). These class sessions promote active student participation allowing for meaningful face-to-face interactions (via Zoom technology), student presentations and in-class discussions. Additionally, these courses include asynchronous Canvas-based learning activities and submission of assignments. Both the synchronous and asynchronous aspects of these blended courses allow for active student engagement and additional in-depth asynchronous interactions inside Canvas.

Zoom is a video conferencing application to which the university subscribes. Academic meetings and course sessions can be joined by invitation to specific attendees. This application also interfaces with the LMS, Canvas, and documents student attendance via Zoom.

Programs directors are expected to review the course syllabi, observe the course sites on Canvas, provide peer-review, and ensure that the course meets the school and program learning outcomes.

Practicum Experience. The Practicum office works individually with each online student in organizing and planning their practicum experience during their second year of studies. Online students have access to the same resources as the on-campus students and communicate directly with the practicum office faculty and staff. At the completion of their practicum, online students present poster presentations via Zoom technology during the poster sessions along with the on-campus students. The poster presentation set-up includes several desktop stations to allow the online students to be a part of this academic experience. On-campus faculty and students are free to go to these stations during the poster session and listen to the presentation as well as ask questions and provide feedback.

Evaluation

Course Evaluation. Students have two opportunities per academic term to participate in evaluating the learning environment, teaching experiences, course design, quality and applicability to their communities. The midterm course evaluation is facilitated in the fourth week and responses help the instructors to improve the learning experience for the remainder of the academic term. The end of term course evaluation covers the full learning experience. These evaluation surveys are anonymous and facilitated by a secure server-based specialized software accessible only to students with valid login credentials.

Program Outcomes Evaluation. The programs are in the process of developing a formalized assessment of the institutional and program learning outcomes. Each online program has outlined a curriculum map and developed rubrics to assess each of the institutional or program learning outcomes. More detailed information on this process will be included in each individual program report.

Online Course Audit. During March, 2016 SPH has conducted a formal audit of all online courses as a part of a larger LLUH Office of Digital Education effort to determine compliance with the federal requirements, which match with the standards of LLUSPH. Strengths and weaknesses were identified and measures for correction were communicated to the course instructors and the program directors. In addition, LLU offered training to online course instructors during the summer 2016 quarter with each training session recorded and available for viewing at a future time by those who were unable to attend. See: https://llu.instructure.com/courses/1110674/pages/workshops

2.14.c. Description of the processes that the school uses to verify that the student who registers in a distance education course or degree is the same student who participates in and completes the course or degree and receives the academic credit.

The university central Student Services provides to confirmed students a set of login credentials (username and password), personal identification number (PIN), email address, and student identification number. Students are required to go through a verification process from the time they apply, have their admissions interview (either by phone, video- conference, or in person), and access the electronic services—student portal, learning management system, registration system, and library. Students are informed they need to be ready to identify themselves and verify their contact information and student ID number to instructors and administrative personnel.

Effective Summer 2016, students are required to verify their identity by showing their LLU student ID badge, government-issued photo ID and live video-conference with either administrative personnel or course instructors. Randomly, the Office of Digital Education may contact any LLUSPH online student to verify their identity.

2.14.d. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. As of 2016, LLU has established a centralized Office of Extended Education which will provide the oversight of all institutional online programs.
2. As of 2013, programs are managed directly by discipline/program-based directors, who now meet regularly under the supervision of the Assistant Dean for Academic Administration.
3. Educational technology has been available and supported at LLU for over a decade, with experienced instructors and support system for digital education.
4. Smart classrooms are designed to accommodate blended online courses. All LLUSPH classrooms now provide this technology.
5. The Academic Programs Office provides all online students with the necessary administrative support to easily navigate the system while off-site.
6. LLUSPH Office of Academic Records closely monitors students' academic progress and success.
7. Practicum office has integrated online students into the combined poster presentation sessions where online students feel a part of LLUSPH.
8. SPH has its own dedicated Office of Digital Education whose role is to guide and support both students and faculty involved in online courses.
9. We are institutional members of national and international professional organizations in the areas of Distance Education and Online Learning: Online Learning Consortium (OLC, USA and International), Inter-American Consortium of Distance Education (CREAD, Americas: North, Central and South).
    a. Professional Development Series: Tutorials, Webinars, Summer Institute, Atomic Learning Training System.
    b. Interdisciplinary Innovate/Digital Education/Canvas groups (brainstorming opportunities for improving course delivery).
    c. Biannual Faculty Development Showcase Conference (LLU central level).
    d. Faculty tuition benefit: faculty are able to enroll in courses. There is a number of instructional design courses available and faculty have been using this opportunity.
    e. Faculty Incentives (funding for faculty to attend professional conferences).
    f. Apple course development project (will prepare 6 faculty members to train SPH faculty to develop course resources using Apple technology). Start in fall 2016.

Weaknesses:

1. The standard response time of 48 hours by the faculty member may dictate the need for a teaching assistant (TA), depending on the number of students in the course.
2. Lack of a strong online marketing program (Youtube, Facebook, LinkedIn, search engines etc.) limits the reach of our online programs.
3. There are times when communication with the online students does fail, and thus organized efforts are needed in developing advisor/student communication and relationship. The Office of Academic Records along with the Academic Programs Office is committed to monitoring and student success.

Plans for Improvement:

1. Expand the quality assurance efforts to elevate and standardize the quality of all online courses.
2. Develop an electronic student guidebook.
3. Expansion of the online orientation to all online programs.

4. Develop a systematic plan for faculty advisors' communication with the online students requiring quarterly meetings (Zoom) between the student and the advisor. This will help to identify and address concerns and questions in a timely manner.

3.1 Research. The school shall pursue an active research program, consistent with its mission, through which its faculty and students contribute to the knowledge base of the public health disciplines, including research directed at improving the practice of public health.

LLUSPH pursues active, interdisciplinary research through which our faculty and students advance new knowledge, policy, and practices that improve population health in communities across inland southern California and beyond. Our research reflects our values while fostering our dedication to advancing whole health and well-being for all. The research at LLUSPH is at the heart of the mission of LLUH and seeks to find answers to better health through innovative and collaborative research on wellness and medicine by world renowned scientists.

Basic, translational and practice-based research by LLUSPH has been and continues to be essential for creating sustainable, evidence-based public health programs and agendas to support the overall goals of the organization and fulfill its mission as a school "to bring hope, health, and healing to communities throughout the world from a faith-based perspective." The school's research program accomplishes this mission through the discovery and dissemination of knowledge while integrating the values of diversity, wholeness and engagement. A core feature of the federally funded school research program includes the continuation of a 55-year NIH-funded research program to study the diet, lifestyle, and environmental determinants of health in a multi-ethnic population of long lived Seventh-day Adventists. Plant-based diet findings from this research have spawned decades of innovative dietary intervention trials on foods such as nuts, soy, and avocados, and most recently a new research program on environmental nutrition. We also seek to diversify our research portfolio and improve the practice of public health globally and locally as evidenced by its highly successful Global Tobacco Control Research Capacity building in the Western Pacific Region that was cited in a program report to Congress; and innovative local programs investigating and targeting the effects of goods movement railyard pollution in vulnerable communities; educational theatre; or the school's participation in the local arm of the National Children's Study. To sum up, we are committed to excel in the conduct, translation, and dissemination of top-quality research addressing the health of populations and the community.

3.1.a. Description of the school's research activities, including policies, procedures and practices that support research and scholarly activities.

From 2010 (our last accreditation) through the present, LLUSPH, along with all other SPHs, has had to adjust to a changing environment for sponsored Public Health research that includes a more competitive, and at times more limited, federal funding of research and public health practice and an increase in the number of accredited schools and programs applying for funding. We have responded to this rapidly changing environment for research by having our top LLUSPH leadership at the school (dean, and associate or assistant deans) work closely with the LLUH President, Vice President for Research Affairs, and Board of Trustees to implement a series of landmark changes to the School of Public Health:

- We created the Associate Dean for Research position (first ever at LLUSPH) for better alignment with other SPHs nationally and to work closely with the school's leadership, faculty, and students to guide and implement the overall mission of school's research program.
- We expanded the Center for Health Research to include a Center Director and Center Coordinator to handle all applications for sponsored research, look for funding opportunities (federal, state, private), fund seed grants, and provide Health Research Consulting to faculty at LLUSPH and throughout the university.

- We created three new interdisciplinary Collaborative Centers that closely link with our core mission and three core values (Diversity-Global Health; Wholeness-Faith Based; Engagement-Health Equity) as the only accredited faith-based SPH in California. They are envisioned as fulcra to foster and support team-based activities and deepen interactions among both aspiring and experienced innovators and researchers across LLUSPH and even across all LLU schools. The goal of the Centers is to drive innovation by connecting teams within and across the Centers and across campus in an interdisciplinary approach to creating viable research focus areas and initiatives. In this type of environment, researchers and students do not respect academic silos, and such structure promotes ways to facilitate interactions, bringing students and faculty together in an environment that stimulates the sharing of ingenuity, knowledge and skills, then innovation and creativity could flourish (see graphic in 3.1 in the ERF).

University Policies, Procedures and Practices. Since 1905, LLUH has been present in Southern California as a premier, anchor health sciences institution, meeting educational and healthcare challenges and solving problems through discovery, innovation and application (http://researchaffairs.llu.edu/about-us/history). LLU has played a pivotal role in the history of health research and it is world-renowned for its pioneer pediatric transplantation and proton radiation cancer therapy programs and the Adventist Health Studies (http://researchaffairs.llu.edu/about-us/featured-research). Improving health and wellness is LLUH's fundamental area of distinction and thus LLU scientists and clinicians continue to advance the understanding and care of human health in order to fulfill the institution's motto "to make man whole." It builds on the university's core teaching and research strengths, the skills and capacity of its diverse faculty, and also on its multiple established local and international partnerships and network of collaborating institutions.

SPH closely collaborates with the university on research policy and procedures. The university's research, policies, procedures, and practices are overseen by the Office of the Vice President for Research Affairs (http://researchaffairs.llu.edu/about-us). Currently, the Office is led by three Associate Vice Presidents who spearhead research administration, integration, and development in all entities and affiliates of the university (http://researchaffairs.llu.edu/about-us/meet-the-associate-vice-presidents). A number of entities within the LLU Research Office support and guide research administration, including, but not limited to, the following:

- Sponsored Research, which has central responsibility for proposal submission for sponsored research, as well as for pre- and post-award administration. The university has specific policies and practices in place for the administration of the awards. Post-award administration provides efficient accounting, reporting, and compliance services to support the LLU-wide research specific information about the proposal submission and award administration processes is provided in its web site (http://researchaffairs.llu.edu/award-administration).
- Research Integrity, which ensures compliance with federal, state and LLU regulations and policies (http://researchaffairs.llu.edu/responsible-research). Included in this section are also the university's Conflict of Interest Program; Institutional Review Board; Animal Welfare Protections; and other research compliance areas; and so faculty members of SPH regularly served as members of the university's IRB.
- Research Development and Technology Transfer, which focuses on industry and governmental relations as those related to innovation, entrepreneurship, and company formation (http://researchaffairs.llu.edu/technology-transfer).

- Incentive Programs, which provide internal funding for seed programs, time releases, student involvement, and capital equipment (http://researchaffairs.llu.edu/project-development/find-funding/grants-for-research-and-school-partnerships-grasp).
- Research Oversight Committee (ROC), chaired by the university's President, which oversees, coordinates, and integrates research affairs and activities across the LLUH enterprise.
- Council of Associate Deans for Research (CADRE), chaired by the Associate Vice President for Research Administration and Integration, which is in charge of harmonizing research policies, procedures and practices across all of the schools on the LLU campus.

School Policies and Practices Regarding Faculty Research. Discovery is not only consistent with our mission, but also a fundamental dimension of public health scholarship. LLUSPH policies, procedures, and practices related to faculty research are guided by the university policies. The Rank, Promotion and Tenure Committee engages senior members from other LLU schools to align the LLUSPH vision and practices with the institution. The policy on appointment, promotion, and tenure of faculty emphasizes research and scholarly work. Accordingly, LLUSPH has guidelines for faculty assignments that specifies expectations of faculty including research and scholarship, as well as school's guidelines regarding external funding and release time ("buying out" of teaching duties in consonance with externally procured funding). In addition, faculty position descriptions and annual performance plans of work include research and scholarship expectations. LLUSPH reviews and revises its policies, procedures, and practices in response to changes in university policies. The school's Research Oversight Committee reviews policies and guidelines and then any proposed revisions are sent to the school's Faculty Council for review and to the Administrative Committee for final executive approval.

As described in the Faculty Workload Document (4.2 in the ERF), all faculty members are expected to conduct rigorous, high-quality research that falls on the spectrum of the scholarship of discovery, integration, application, translation, and dissemination. A specific segment of emphasis across the scholarship spectrum is recommended. According to current recommendations in the faculty development document, faculty who emphasize teaching (i.e., .60-.80 FTE), .15-.30 FTE should be allocated to scholarship in research and/or academic public health practice and .05-.10 FTE assigned to service. In the case of faculty with declared research/practice portfolios, > .60 FTE is allocated to research and scholarship, .05-.10 is assigned to service, and < .20 FTE should be allocated to teaching. Some of these allocations can vary if a faculty member is also assigned by the school to fulfill selected activities or administrative assignments.

Historically not well defined, the school is moving towards the institution and implementation of a system whereby faculty can increase their research and scholarship FTE by buying out teaching (and/or administrative) responsibilities with external funding. The scheme works as follows: 9% of faculty salary and benefits secured through external funding reduces the annual teaching load by one three-unit quarter course (or 12% of external support reduces the teaching load of one four-unit quarter course). Because of the importance the school places on the scholarship of teaching, full-time faculty can only in rare exceptions reduce their teaching loads below a minimum of two courses per school year.

Expectations for faculty with a research scholarship assignment include key performance outputs such as:

- Obtain and manage external funding for research.
- Consistently publish in peer-reviewed, high impact journal articles with a significant authorship role on a minimum of two peer-reviewed articles per year, and co-authorships in additional articles.
- Include graduate students in sponsored research and in publications.

Specific expectations for individual faculty members are usually negotiated by center or sectional directors and the faculty members and are noted in the annual plan of work. The school has been also making an effort to contribute to a culture of research by assessing research capacity and needs as part of the faculty recruitment/hiring process. Start-up, modest packages include resources faculty need for initial research support (e.g., lab space and/or equipment) and, as negotiated, reduced teaching loads during their first 2-3 years. The school has also established a framework in order to pair new faculty with more seasoned faculty mentors based on interests.

School Support of Research and Scholarly Activities. The LLUSPH Associate Dean for Research oversees operations and policies and the Center for Health Research provides services related to research and practice activities by faculty seeking extramural funding. This system supports the conduct, dissemination, and translation of high-quality research in public health.

- **Associate Dean for Research (ADR)** oversees all aspects of SPH faculty research activities and serves as the school's designated officer responsible for ensuring research compliance with federal regulations regarding human subjects and animal research and conflict of interest. For these activities, he reports directly to the Dean and also works closely with CHR's Director and with the school's academic affairs leadership. The ADR also identifies the need for shared services, informs faculty about research policies, and organizes and coordinates programs and activities that serve to promote faculty and student research. For example, the ADR organizes seminars and research involving faculty and students and he works with his counterparts to promote intellectual integration and research collaboration across entities campus wide. He also designs strategies for the dissemination of research findings. The ADR is member and SPH representative in the university's ROC and CADRE. In summary, the ADR provides leadership and strategic direction to conduct high quality public health research and scholarship, with the mission to engage the LLUSPH faculty and other partners to advance the school's public health research agendas.
- **The Center for Health Research (CHR)** The CHR at LLUSPH was initially established in 1990 to provide research and evaluation services for clinical, public health, and community-based entities at the university and in the local and global community. Since its inception, the Center has completed more than 1,300 local, national, and international health research and evaluation projects ranging from small pilot projects to multi-million dollar federally-funded research projects. In 2012, under the direction of Dr. Pramil Singh, the Center was organized into the CHR Administrative Core (Coordinator: Lap T Le, MPH, DrPH(c)) and the CHR Research & Evaluation Methods Core (Coordinator: David Juma, MPH). The functions of each core are summarized in the CHR Flow Chart (3.1 in the ERF) and described below. Infrastructure for faculty is provided through:

  CHR Administrative Core. This core is the sponsored projects administration office tasked with providing LLUSPH high-quality support of research and scholarly activities at the school. In a national context, CHR largely corresponds to what most SPHs designate as the "Office of Research Administration" or "Office of Research Support Services."
  1. Administrative Support Grant Proposal Preparation. CHR Employs a 0.75 FTE CHR Coordinator to guide SPH faculty through the entire process of preparing, processing, getting administrative approvals, and submitting research grants. Sponsored research grants and contracts are submitted centrally by the LLUH Research Affairs office and CHR provides a critical liaison role in helping the faculty get all necessary documents electronically uploaded and/or processed for final submission by the LLUH Research Affairs office.

  2. Administering the Grants for Research by Interdisciplinary Partnerships (GRIP) Program. CHR runs a seed grant program where SPH faculty can submit a proposal (in NIH R03 format) for up to

$20,000 to support a pilot project that will lead to the submission of a larger proposal for external research funds. During the past 3 years we have funded more than $110,000 worth of seed projects and these projects and their outcomes are summarized in Table 54.

Table 54 GRIP Program

GRIP Proposal	PI, Year	Amount Funded	Outcome
Tobacco Use among the Homeless	Gleason, 2012	$8,000	Data collected and report written
Adventist Multiethnic Nutrition Study	Jaceldo-Siegl, 2013	$17,500	Data collection ongoing, PI submitted a successful $75,000 proposal to the LLUH GRASP program
Medical Linkage to the AHS-2 Cohort	Charlemagne, 2013	$9,000	PI submitted a successful $1M proposal for managed care analysis
Diet and Congestive Heart Failure	Knutsen, 2013	$8,000 plus $30,000 match from LLU Cardiology	PI submitted a $5M proposal to NIH and is currently submitting a revised proposal
Epigenetics Physical Genesis Study	Rizzo, 2014	$22,000	Data collection ongoing.
Plant-based Diet and Gut Microbiome	Orlich, 2015	$15,000	PI submitted a successful $75,000 proposal to the LLUH GRASP program and has a collaboration with the NIH Intramural Program in Nutritional Epidemiology

3. Travel and Publication Awards. CHR awards $500 to faculty without external grant awards for travel to scientific conferences and for publication costs on journal articles that are contributing to their development as an investigator.

4. Finding Grant Opportunities. Each month, CHR sends grant opportunities found from federal, non-federal, and foundation websites and *listservs* on topics and search words provided by the three Collaborative Center Directors based on the themes and research missions of their centers. Center Directors disseminate these opportunities to the faculty. CHR collaborates with Philanthropy on a subscription to foundationcenter.org to find foundation grants that can support SPH research.

The CHR administrative core supports research development infrastructure for students through the following principal mechanisms:

1) Dissertation Support Stipends. During 2012-2015 we administered a $1000 per student stipend program to help doctoral students during their dissertation phase. This could be used for expenses such as binding or publishing the dissertation, travel to meetings, or statistical consulting. As of 2016, this function has been taken over by the Executive Associate Dean for Student Services and Administration Office.
2) Creating Research Analyst Positions. Through CHR and the Consulting Group at CHR, we have created research analyst positions for SPH students in Epidemiology, Biostatistics, and Nutrition to work on sponsored research projects within LLUSPH and throughout the university.

*Research and Evaluation Methods Core***.** The Research Consulting Group at the Center for Health Research (CHR) was established in 1990 to provide research and evaluation services for clinical,

public health, and community-based entities at the university and in the local and global community. Since its inception, the Research Consulting Group (CHR-RCG) has completed more than 1,300 local, national, and international health research projects ranging from small pilot projects to serving as the coordinating center for large, federally-funded research projects. The CHR-RCG provides expert assistance in all aspects of health research (biostatistics, epidemiology, health geo-informatics, program evaluation). CHR-RCG personnel include senior research faculty from the School of Public Health, a full-time RCG Coordinator and senior analyst, and a staff of experienced research analysts. Research analysts are typically drawn from our biostatistics second-year students and recent graduates.

The scope of our consulting work is global, national, and in our local community; research and public health practice projects are completed on a consulting basis. Major recent consulting projects include:

- Serving as the LLUH data coordinating and health geo-informatics support services center for the San Bernardino County federal contract on the NIH-funded National Children's' Study
- Serving as the data coordinating center for a state-funded Perinatal Telemedicine grant for pre- and perinatal follow-up of women in San Bernardino County
- Serving as the coordinating center for an NIH-funded Research and Capacity building grant to work with Ministries of Health in SE Asia to create lifestyles surveys of tobacco and diet
- Providing program evaluation of a USAID funded project for adolescent HIV prevention in Kenya and Tanzania where the deliverable included writing a scientific paper
- Serving as the data coordinating center for the transdisciplinary Phentermine Weight Loss trial by LLUH entities (Pharmacy, Medicine, Behavioral, Public Health)
- Providing analytics and reporting for the LLUH Employee Wellness survey

Some of our recent reports from this consulting work can be accessed on our website (http://llurcg.org/rcg/our-experience/).

Core SPH Research Centers. The major focal points of the LLUSPH research agenda consist of three newly created, interdisciplinary Collaborative Research Centers that house all LLUSPH faculty and their research portfolios. CHR provides school-wide technical research services to the academic research centers and is described above. The Center for Health Promotion has long served in the role of translating LLUSPH research into clinical practice in the community. These centers are envisioned to capitalize on natural clusters of expertise, interest, and prominence across faculty, disciplines, and sections of LLUSPH and are described in this section.

The three centers serve the purpose of the strategic advancement of specific domains as well as of our three pervasive themes (global health, health equity, and faith-based learning), while providing faculty with the opportunity for professional and technical development in their area of expertise. The activities of each center are ultimately aimed at promoting collaborative research, training, and even inter-professional education in order to accomplish their objectives and enhance their signature themes. At the same time, by design, the scope of each center has been designed to nurture synergy with the other 2 centers, thus prompting collaborative initiatives. Each center holds meetings with faculty, students, and other partners. The centers are envisioned to serve as incubators of focalized research areas and as catalyzers for interdisciplinary, collaborative scholarship that will buttress the LLUSPH prominence in the LLUH enterprise, region, and denomination in advancing science and practice, and serving the needs of the public. Below, we briefly describe each of these centers and associated groups.

- **Collaborative Center for Nutrition, Healthy Lifestyle and Disease Prevention (CNHLDP).** Cardiovascular disease, diabetes, chronic respiratory disease, and cancers account for 60% of all

deaths worldwide, with an estimated 80% of these deaths occurring in low and middle income countries. These conditions are largely preventable through the adoption of healthy diets, physical activity, and avoidance of smoking. The Center focuses on elucidating the key dietary and other behavioral factors for the prevention of chronic diseases worldwide. Also, the Center is compelled to focus effort on effective health education programs to improve diet quality and recover a healthy lifestyle in the US and globally. Researchers in the Center are leaders in the study of health effects of plant foods, and the home of the world-renowned Adventist Health Study, providing the global community with strong evidence for healthy outcomes, and the prevention of chronic diseases when adopting a plant-based diet. Building on the Adventist Health Study's unique 50 plus years of research in lifestyle and plant-based diets, the Center will pioneer new knowledge and develop innovative, interdisciplinary, translational and interventional research aimed at reducing the risk, morbidity and mortality of unhealthy diets, lack of adequate physical activity and tobacco use related chronic diseases in the US and globally.

- **Collaborative Center for Leadership in Health Systems (CLHS)**. A health system consists of all organizations, people, and actions whose primary intent is to promote, restore or maintain health. Without strong and integrated systems, effective implementation and overall performance is hindered. CLHS is committed to promoting health improvement and a culture of health through health systems. Despite many accomplishments in curing disease and extending life, health for many remains out of reach because our capabilities do not match individual and community needs, provide good access and high quality services regardless of where you live, or can be delivered to scale. The CLHS is envisioned as a prominent, faith-based Center that demonstrates leadership in health systems research and policy — whose analyses, practice, education, and high-impact interventions improve health outcomes, strengthen, and transform the health systems of the world. Some of the Center's initiatives include increasing access to health care and reducing burden on public health systems (*San Bernardino County MediCal Outreach, Retention, and Enrollment P*rogram), strengthening high quality laboratory services for HIV diagnosis, care, and treatment and monitoring in Malawi, examining cross-cultural leadership practices, and understanding the relationship between mental health and comorbid conditions on delivery systems.
- **Collaborative Center for Community Resilience (CCR)** was envisioned as a venue for engagement in creative, collaborative inter-disciplinary dialog aimed at designing solutions to pressing public health, community-rooted challenges. "Resilience" was seen as a unifying concept and policy instrument that uses community transformation and development approaches to address the chronic vulnerability of populations exposed to recurrent shocks and stressors, whether they are physical, such as natural disasters or pollution, or social, such as poverty. Building resilience involves multidimensional action that strengthens the absorptive, adaptive and transformative capacities of vulnerable populations to cope with and/or recover from specific and stressors. The CCR's motto, *Whole Persons in Whole Communities*, points towards the notion of transformative action that enhances community health and resilience. The Center's declared mission to understand and identify vulnerabilities rooted in health behaviors, socioeconomic, environmental, preparedness, and care delivery factors, defines its operational field. The scholarly, translational work within the Center is aimed at developing and supporting multifactorial, wholistic interventions that reduce community vulnerabilities and ensure opportunities for residents to make healthy choices. During the initial discussions, it was concluded that through the CCR, LLUSPH has a unique opportunity to enhance resilience and community wellness in the most deprived, vulnerable regions surrounding LLU. Since its inception in later 2014, thematic working groups have engaged in developing seminal initiatives, some of which are in a preparatory phase, whereas others have been already launched and are underway as research groups.
- **Center for Health Promotion (CHP)** was born more than two decades ago within the LLUSPH and has grown into a full-fledged preventive specialty care and primary medical services unit serving the

LLUH and Southern California communities. The Center is associated with the LLU-SPH and LLU School of Medicine and has been chosen to offer the highest level of ambulatory care to our university student body through Student Health Service. The Center has recently expanded its scope of service as we now offer wholistic care options to both pediatric and adult patients. Innovative research-based initiatives, such as the "Wellness Map" (http://lluh.maps.arcgis.com/apps/LocalPerspective/index.html?appid=2419a1e1fb024a0b9831dbdd63a9fe47) represent exciting and innovative collaboration areas with LLUSPH.

- **Center for Health Research (CHR)** has been an entity of the LLUSPH since 1990 and provides both research administration and health research consulting services to the school and, for this latter function, to the university at large. The LLUH Office of Research Affairs provides seed money to CHR to conduct statistical analyses for unfunded research projects in all health science schools of the university. To date, 1300 projects have been completed by this Center and the analyses has led to hundreds of publications in peer reviewed scientific journals.

Key LLUSPH Research Groups and Laboratories in the Centers

Several research groups and laboratories have emerged within the Centers pointing to the key role of the centers as platforms for fostering interdisciplinary activities.

- **The Adventist Health Studies (AHS)** are long running longitudinal studies of lifestyle and health that have been ongoing since 1960 and undoubtedly represent a landmark contribution of LLUSPH and LLU at large to public health and health research in general (http://publichealth.llu.edu/adventist-health-studies). With sustained NIH funding, AHS investigators have produced findings, which have provided critical insight about the links between lifestyle, diet, and disease (http://publichealth.llu.edu/adventist-health-studies/findings). Under the leadership of Dr. Gary Fraser, the AHS is the research flagship of LLUSPH (http://publichealth.llu.edu/adventist-health-studies/scientific-publications) and its footprint spreads widely across LLUH. AHS has been, and continues to be, home to dozens of fellows and visiting scientists. More than 20 non-AHS SPH faculty have published papers as first authors or co-authors using data from the study, extending its utility and applicability. AHS has also attracted researchers and faculty from other universities (e.g., UCLA, USC, University of Texas, University of Hawaii, or University of Tromso, Norway). Numerous SPH doctoral students continue to conduct research and publish using AHS data. In addition to the traditional lines of inquiry, the AHS also serves as a platform for diversified areas of research emphasis that represent promising lines such as diet-gene interactions; dental health in relation to diet; air pollution and health; environmental nutrition; the relation of religious practice and belief to mental and physical health; or the exploration of lifestyle in its geographic context using geospatial approaches. AHS has several NIH U01 and R01 funded grants and several R01 applications are underway or have been recently submitted.
- **Loma Linda University Healthy Communities By Design (HCBD) Research Group** (http://hcbdlluh.org/) has emerged within CCR as an interdisciplinary initiative whose mission is to build a culture of whole health in every neighborhood. The HCBD group focuses on translational research in order to design and deliver multidimensional, cross-sector activities aimed at transforming vulnerable communities into healthier, more resilient communities. Building on over 5 years of community engagement work, the HCBD group emphasizes whole health approaches to promote "therapeutic landscapes" or place-based communities where the conducive convergence of improved physical, social, behavioral, and clinical care environments occurs.
- **Educational Theater Group (ETG)** has emerged as an interdisciplinary research-practice initiative within the CCR (http://educationaltheatre.org/). Its signature theme is the use of art and theatre to engage and encourage a culture of whole health for children and adults. This innovative approach is

used with the goal to improve the health of underserved and minority populations living with chronic diseases, ultimately creating and promoting resilient communities. The ETG's team is made up of pediatricians, psychologists, health educators, epidemiologists and trained actors. The EGT has already received praise for its work in inland southern California, funded by the Riverside County Children & Families Commission (First 5 Riverside), which uses plays and puppet shows to teach young children about asthma and air pollution. The EGT has delivered asthma screening, education and follow-up medical referrals to thousands of Riverside County children, teachers and their families (http://www.pe.com/articles/asthma-675134-health-children.html).

- **Environmental Nutrition Research Group (ENRG)** is an interdisciplinary collaborative between the CNHLDP and CCR (http://environmentalnutrition.org/). Environmental Nutrition considers simultaneously the complex interactions within the food system related to health and environment. The team combines a range of disciplines including epidemiology, nutrition, environmental health, biology, and environmental science. The ENRG has already produced several grant submissions and a growing number of peer-reviewed publications. In a groundbreaking paper, the ENRG proposes Environmental Nutrition to be adopted as a formal discipline with public health science (http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.2016.303046). The ENRG is currently pursuing the environmental and health assessment of dietary patterns within the Adventist Health Study population. The group is also conducting trailblazing research on the environmental impacts and nutritional assessment of plant-based meat alternatives.
- **Research Consulting Group (RCG).** The Research Consulting Group at the Center for Health Research was established in 1990 to provide research and evaluation services for clinical, public health, and community-based entities at the university and in the local and global community. Since its inception, the CHR-RCG has completed more than 1,300 local, national, and international health research projects ranging from small pilot projects to serving as the coordinating center for large, federally-funded research projects. The CHR-RCG provides expert assistance in all aspects of health research (biostatistics, epidemiology, health geo-informatics, program evaluation). CHR-RCG personnel include senior research faculty from LLUSPH, a full-time RCG Coordinator and senior analyst, and a staff of experienced research analysts. Several research laboratories are associated with LLUSPH research and scholarship activities. The research labs facilitate ongoing research efforts or represent specific focal areas and allow cross collaborations and sharing facilities and equipment for a variety of projects in LLUSPH.
- The **Environmental Microbiology Research Laboratory** was recently established with the mission to discover, describe and mitigate microbial health risks unique to underserved populations. The ERML projects address infrastructure failures that introduce environmental pathogens into drinking water, wastewater and the home environment. The ERML is directed by Dr. Ryan Sinclair and is located in Evans Hall on the main campus of Loma Linda University. There is a BSL2 laboratory set up to process water, food, wastewater, surfaces and other samples for pathogens and environmental microbes. The ERML is set up for cultivatable and molecular microbiology methods. There is a student workspace, faculty office, a "maker- space" for fabricating sensors, an outdoor air-quality sensor hub and a BSL2 laboratory. The laboratory is set up for research with students and teaching small laboratory classes. A variety of research projects, including student participation, some of which have even captured the attention of the media, such as the contamination of reusable grocery bags. Active research includes heavy presence in the Coachella Valley, an underserved region of Southern California. With incipient funding from the Metropolitan Water District of Southern California, the California Institute of Rural Studies, and the U.S. EPA National Exposure Research Laboratory, the EMRL represents one of the areas of SPH research with potential for growth.
- **Geo-exposomics, Geo-medicine and Healthographics (Geo2Health) Laboratory.** The LLUSPH has a long history as a premiere provider of health geoinformatics training and education

(http://www.esri.com/library/brochures/pdfs/health-education.pdf) for the public health workforce in the United States (http://videocast.nih.gov/summary.asp?Live=298&bhcp=1). LLUSPH offered the first graduate-level "GIS and Health" course offered at a U.S. School of Public Health in 1996. Underpinning the GIS capacity of the LLUSPH is its geoinformatics laboratory, a state-of-the-art training and research facility fully equipped with an impressive array of geospatial tools, including professional-grade GIS software applications, Global Positioning Systems (GPS) and remote sensing technologies. In addition, the Lab is equipped with computer workstations supported by other peripherals such as a professional plotter, GPS devices, color printers, scanner, etc. The lab manages the ESRI GIS campus software site license and maintains the ERDAS Imagine software for Remote Sensing, as well as other spatial analytic and visualization software packages. The lab also stores and manages a substantial amount of national and global spatial data, including demographic, population, satellite imagery, and aerial photographs. An increasingly larger number of doctoral projects and faculty-led research have been and are currently being supported by the lab. The school is re-envisioning the direction and focus of the lab and its geospatial portfolio. The paradigm shift which is transforming GIS from systems of record (GISr) into systems of engagement (GISe), together with key emerging trends such as healthographic synthesis and geomedicine, or the rise of big data, underpin the new and reinvigorated approaches. The new designation of the Lab, *Geo-exposomics, Geo-medicine, and Healthographics*, or Geo2Health, reflects the redesign and new direction of the Lab.

- **Nutritional Assessment Laboratory**: Located in Nichol Hall A100 and A101 in the Center of Nutrition, Lifestyle and Disease Prevention. This lab is designed for blood drawing and anthropometric measurements. These labs have space for 25 to 30 subjects at a given time. These rooms can handle multiple functions simultaneously for blood drawing, anthropometrics measurements, and these activities can be conducted in privacy. Men's and women's restrooms are conveniently located in the next room over. These rooms also have convenient storage cupboards for adequate storage of supplies. Room A101 is also equipped with 4 computer terminals which can operate separately or combined as a network that can be controlled by password access.
- **Biochemical Laboratory**: Labs for blood processing are located in Nichol Hall Rooms 1111 and 1112 in the Center of Nutrition, Lifestyle and Disease Prevention, adjacent to the research kitchen facility and the office of the PI. Much of the equipment is state-of-the-art and include: Large -80ºC freezer for storage of biological samples; Large -20ºC freezer, surplus storage; Beckman allegra 6R centrifuge; Triac centrifuge; Several small centrifuges; Elix 3 Millipore RO ion exchange laboratory water system. Miscellaneous analytical glassware and a variety of automatic pipettors and storage vials are also available for aliquoting and storing serum and plasma samples.
- **Wet Laboratories**: The School of Public Health has wet lab facilities for up to 9 IMV liquid nitrogen refrigerators, each 50" in diameter, these can be used for our blood samples. The floor space is 700 square feet.

LLUH Research Centers. In addition to the above research activities, basic and applied research efforts at LLU aimed at solving and addressing complex health problems occur across 12 research centers and 10 institutes (http://researchaffairs.llu.edu/about-us/research-centers-institutes), such as the Center for Perinatal Biology (http://medicine.llu.edu/research/centers/center-perinatal-biology) or the Transplantation Institute (http://medical-center.lomalindahealth.org/about-us/institutes/transplantation).

LLUSPH has close ties with several of those entities. Specifically, several LLUSPH faculty are funded investigators on the NIMHD grants at the Center for Health Disparities and Molecular Medicine (http://medicine.llu.edu/chdmm/) and our students are completing masters and doctoral community-based research projects in this Center, and at the Institute for Community Partnerships

(http://lluhcommunityengagement.org/). At the Center for Spiritual Life and Wholeness (http://religion.llu.edu/wholeness/) LLUSPH faculty in preventive medicine and health promotion are engaged in research on religiosity and health. At the Behavioral Health Institute (http://medical-center.lomalindahealth.org/about-us/institutes/behavioral-health-institute-bhi), Institute for Health Policy and Leadership (http://ihpl.llu.edu/); Global Health Institute (http://www.lluglobal.com/site/c.msKRL6PNLrF/b.5550847/k.BEEA/Home.htm) several faculty have appointments that are shared with LLUSPH demonstrating trans-disciplinary approaches to public health.

Strategic Research Agenda

Immediately after LLUSPH reorganization, the ADR was charged with the task of strengthening the research fabric of the school across the entire public health scholarship spectrum. Emphasis was to be placed on the notion that public health scholarship is a "right" and a "requirement" for everyone and on the need to articulate a strategy to consolidate existing systems and practices while aiming at expanding the school's funded research portfolio. The identified strategy includes the following elements: philosophy, the human factor, systems, infrastructure, organizational structure, and a basic plan.

- **Philosophy**: school-wide engagement by promoting an academic culture where research, practice, and teaching are all highly valued and are all required areas of professional advancement.
- The **Human Factor** consists of the faculty who are dedicated to both winning grants and training students, as well as to serve as mentors of junior faculty, together with a dedicated and talented workforce of graduate students who support the research efforts.
- **Systems** include (1) a clear framework of incentives and accountability; (2) mechanisms for engaging senior and junior faculty in order to develop a robust mentorship system that supports the growth of externally funded projects; (3) templates for establishing interdisciplinary research groups/units pursuing the identified areas of focus within the three Centers; and (4) mechanisms for fostering partnerships with LLUH entities and outside organizations to provide cooperative and translational research that embraces community needs/interests.
- A solid **Grant Management Infrastructure** is necessary to support and facilitate research activities, including pre- and post-award, financial administration and streamlining of business processes, dissemination of funding opportunities, documentation and reporting. CHR is the research services backbone and the school has made further efforts by adding a .5 FTE in support of grant financial management.
- An efficient **Organizational Structure** is required to provide leadership and establish coordinated strategies and direction to purposefully promote research which is multidisciplinary, translational and integrated, and equally importantly, to lead to the maturation of our three Centers into full-fledged research hubs. The basic organizational structure includes the Associate Dean for Research receiving advisory input from a Research Affairs Committee (RAC) and the Center for Health Research. The Research Affairs committee provides strategic direction to ensure alignment of the school's portfolio with external trends and is responsible for establishing shared vision, setting direction, integration and coordination of efforts across the spectrum from basic research, through translation, to practice. Members of LLUSPH RAC are the ADR, the CHR Director, and the Executive Directors of the school's 3 main Centers, the SPH's Director of doctoral programs, as well as additional selected leaders of research groups/units. The Center for Health Research provides strategic direction on research administration and technical research services of the school.

  In sum, these entities achieve the following in the area of research: Strategic Innovation, Management and Administration, Growth and Development, and Cooperative and Translational Research. Section coordinators are members of the SPH RAC. This fundamental structure serves to manage, coordinate and deliver centrally services across LLUSPH. Assistance is provided not only to

established agendas but also to "new and startup and early-stage" initiatives by providing assistance and services such as award support, mentoring and other resources.

- The **Plan** captures the vision and mission of the research organization, sets goals and prioritizes the axes of action moving forward:
  - Vision: To provide the direction, systems and infrastructure needed to conduct high quality research across the full spectrum of public health scholarship.
  - Mission: To engage LLUSPH Faculty and other partners to advance the research and scholarship practice agendas of LLUSPH.

Table 55 Research Goals and Objectives
Goal 1: To increase the externally funded support for the research portfolio of the school through implementing Center-based research initiatives and school-wide policies.
Objective 1.1: To develop at least one interdisciplinary research group within each Center by the end of 2017. Objective 1.2: To have each interdisciplinary research group at the Centers submit at least two grant applications per year seeking extramural funding by the end of 2018. Objective 1.3: To have all full-time faculty have at least 20% of their LLUSPH workload covered by extramural funding by the end of 2019. Objective 1.4: To reduce "hard funded" protected time for research for all faculty by 25% by the end of 2018.
Goal 2: To improve the integration of doctoral students into the research conducted by the Centers.
Objective 2.1: To achieve by the end of 2017, the integration of 50% of all LLUSPH doctoral into research initiatives in the Centers. Objective 2.2: To further increase this portion to 90% by the end of 2018.
Goal 3: To set up formal practices for mentoring faculty in research scholarship.
Objective 3.1: To develop a mentoring program to match junior faculty with PI-level mentors within the SPH and LLUH research environment. Objective 3.2: To implement an organized school activity (i.e. panel discussions, mentor/mentee lunches, workshops, peer circles, mentee online forums) that promotes mentor/mentee interaction and enrichment.

  - Axes of Action Moving Forward:
    1. **Creativity**—Opportunities to explore new ideas and expand existing ones.
    2. **Productivity**—Increased output of publications and externally funded projects.
    3. **Excellence**—Ensure quality of output.
    4. **Scholarship**—Emphasis on discovery, translation, and rigor.
    5. **Coordination**—Common directions and strategies.
    6. **Integration**—Research needs to include faculty development, the teaching experience, and students.
    7. **Expanded Scope**—Public health research—we are a school of public health: Basic Research→ applied research→ Translation (T1 to T4) →Practice-based.
    8. **Engagement**—all willing faculty can have a chance to participate and be involved in externally funded projects across the spectrum of public health research.

3.1.b. Description of current research undertaken in collaboration with local, state, national or international health agencies and community-based organizations. Formal research agreements with such agencies should be identified.

Local and international community engagement is at the core of LLU Health's mission: "To continue the teaching and healing ministry of Jesus Christ." The school's commitment to research that engages communities is rooted in our institutional mission and also as the only longstanding school of public health serving the vast region of inland southern California and border counties in Nevada and Arizona as well as by virtue of LLU being affiliated with the Seventh-Day Adventist Church's worldwide network of health centers. Our values—health equity, diversity, service, mission and compassion, among others—spur our partnerships with the communities of our region, State, and abroad. Building on its tradition, the school is committed to maintaining and extending community-based and community-engaged scholarship and collaborations with local health departments, cities, state, national, and international agencies and community health organizations.

The institutional emphasis and tradition on local and global community engagement has stimulated effort and investment in support of community-based center structures, such as LLU's *Institute for Community Partnerships*, directed by Dr. Juan Carlos Belliard, a faculty at LLUSPH. The school has promoted community-based research through several strategies, including organizing training sessions for faculty and for community groups; working with partnering organizations to guide their research administration support; and establishing the Center for Community Resilience.

- Our school's current research portfolio includes a number of projects involving collaboration with local, national, and international agencies and community-based organizations. According to designations by faculty, the proportion of SPH grants that are community-based now represents a half of the school's portfolio: 40% in FY 2013/14 and FY 2014/2015, and 60% in FY 2015/16. These projects are identified in Table 3.1.c.1. These research projects include intervention, observation, and mixed methods approaches to various health issues in a range of populations. Selected examples include: **Tobacco Control: A Portfolio of Research, Capacity Building, and Practice Initiatives:** During the past decade, tobacco control has rapidly developed into one of the core focus areas of LLUSPH. The school is engaging in tobacco control at a time when the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) are describing such efforts as the "end game," insisting that eradication – rather than control – should be the conceptual basis. Since 2002, our work on a global and local scale has focused on three areas:
    - Controlling the devastating consequences of mothers who smoke during pregnancy
    - Monitoring marketing of low-cost tobacco products to the poorest rural adults
    - Working with local policy makers to increase prices of tobacco products being sold to the poorest in developing countries.

  The funding for this work has come from R01/R03 grants from the "TOBAC" funding mechanism of the Fogarty International Center of the NIH, ASPPH grant for Tobacco Curriculum Development, Gates Foundation, and the Georgetown Global Health Initiative. PI's on this work include Dr. Pramil N. Singh and Dr. Linda Ferry. This work resulted in landmark discoveries including:
    - We discovered that women in Southeast Asia are chewing smokeless tobacco during pregnancy to relieve morning sickness. Smokeless tobacco use as betel quid is occurring in 600 million people worldwide.
    - We discovered higher rates of infant mortality among those mothers who chew tobacco during pregnancy.
    - We discovered high rates of HIV among women and men who are chewing tobacco. Bleeding gums and immunosuppression are likely causes.
    - Our work in Southeast Asia was described in a report to Congress. Specifically, we trained 16 professionals in Cambodia and Lao PDR, and, under Chan Shun Foundation funding, extended the training to health professionals in Russia, Ukraine, and Kazakhstan. We also collaborated with Fogarty/NIH tobacco trainees from Egypt and their US-based Pis (Drs. Ebenezer Israel, Christopher Loffredo). The success of our trainees in leading tobacco

control efforts in their nation was described in the NIH report on progress on the 10 years in the "TOBAC" granting program.

- **National Childrens' Study funding leading to local research on Maternal Tobacco Use.** Our SPH shared a $10.8 million dollar award (PI: Dr. Jayakaran S. Job) with Cal State San Bernardino to work on the San Bernardino arm of the National Children's Study. During this award we analyzed the State birth files as part of sampling and survey design efforts. Although this federal study was discontinued at the national level, our research into maternal exposures continued under First 5 San Bernardino funding and resulted in projects in Telemedicine surveillance of pregnant women and findings on the impact of smoking during pregnancy. Our research has revealed that, for every 35 women who quit smoking, one pre-term birth is prevented. The cost of 35 women enrolling in a smoking cessation program is $3,500; the cost of one pre-term birth in the NICU can be more than $1,000,000. We are disseminating these findings through our faculty's service on the March of Dimes Advisory Board (Maternal Tobacco Use Working Group) and through an infographic campaign that partners with LLU Children's hospital.
- **Project 21** is a community health project which is aimed at creating lasting changes in the communities around Béré Adventist Hospital in Béré (http://ahiglobal.org/Bere/), Chad, Africa, and it involves SPH students and CCR faculty members who are collecting data on community conditions and needs. The project has four components: a mobile dental clinic, community health education, midwife training, and community health workers (CHW) training.
- **The Los Angeles County Community Disaster Resilience Project (LACCDR)**: Based on a LLU existing model and using a CBPR approach, the Los Angeles County Department of Public Health, in partnership with LLUSPH, RAND, UCLA, Emergency Network of Los Angeles have developed, tested, and implemented a community resilience toolkit in 8 community coalitions across Los Angeles County.
- **The First 5 Riverside County Asthma Management Program**: The goal of this initiative is to reduce the negative impact of asthma and asthma-like conditions on children and increase their ability to be successful in school. LLUSPH and the Riverside County Department of Public Health provide education, assessments, management and referral for treatment related to asthma, and asthma–like conditions among children 0 through age 5 years. The LLUSPH has pioneered in the use of educational theater as part of this initiative (http://educationaltheatre.org/).
- The **Eastern Coachella Valley Environmental Health Assessments** is the school's most recent effort towards public health action in one of the most underserved areas of Southern California, located in Riverside County. With incipient funding from the California Endowment and the Metropolitan Water District of Southern California, Dr. Ryan Sinclair is conducting participatory research on community-identified environmental contamination and potential human health effects. Concentrated research details exposure to pathogens from water and soil in disadvantaged communities. Another key component of this initiative is the work with high school age community members to address the regional widespread problem of failing on-site wastewater systems (https://blackwater.crowdmap.com/). The project has been featured nationally on Latino USA, which has boosted momentum for later projects in the Coachella Valley.
- The **Environmental Railyard Research Impacting Community Health (ENRRICH) Project** which focuses on the adverse health effects associated with residential proximity to goods movement rail yards. Adopting a full Community-Based-Participatory-Research approach, CCR researchers have conducted a public health assessment in neighborhoods and schools near one of the busiest nation's inland ports, the BNSF San Bernardino Railyard, a major local source of diesel emissions. This is the first study to assess environmental exposures and conditions of life near a major rail hub. ENRRICH has highlighted the extreme vulnerabilities of low-income, minority populations who reside near such freight facilities (http://www.ncbi.nlm.nih.gov/pubmed/25226779). It has also pushed the

envelope in community-based research with respect to the implementation approaches to lower the barriers typically encountered by community members who are fully participant in research teams and who need to be certified and trained in human subject research protection through community-unfriendly systems (http://www.ncbi.nlm.nih.gov/pubmed/25152103). ENRRICH is also serving as a platform for additional community-based and research initiatives by CCR investigators.

- **The San Bernardino County MediCal Outreach, Retention, and Enrollment (SBC-MORE) Program** is to improve health equity in the region by increasing access to health care among underserved and low-enrollment populations. The project involves a partnership with several community-based organizations and it also includes a research component aimed at developing predictive modeling of enrollment outcomes and the development of a geographic dashboard of indicators of low enrollment.
- **The *Ventanillas de Salud* (Health Windows) Program** was established by Mexico's Departments of Health and of Foreign Affairs and is implemented through 50 consulates in the United States. The goal is to improve the physical and mental health of Mexican nationals living in the United States by increasing access to primary and preventive health insurance coverage and ensure culturally sensitive services in order to reduce the use of emergency services. Through an agreement with the Mexican government, the LLUSPH manages the Ventanilla de Salud (VDS) Program at Mexico's Consulate in San Bernardino. The VDS provides reliable information on health topics, counseling and referrals to health services available and accessible in San Bernardino and Riverside Counties.
- **The San Bernardino Community Transformation Assessment Project**: A nascent partnership between LLU ICP, SPH CCR, Dr. David Williams (Harvard University), San Bernardino Department of Public Health, San Bernardino City Unified School District aimed at documenting prospectively the health impacts of school-based as well as city-level educational interventions (e.g., LLUH's San Manuel Gateway College in San Bernardino: http://lomalindauniversityhealth.org/sanbernardino/).

Our school establishes in some cases formal research agreements with agencies to meet specific needs. Centers or individual faculty members develop agreements with agencies for specific research projects and maintain those records. As appropriate, a formal memorandum of understanding can be established between SPH and agencies or community organizations.

3.1.c. A list of current research activity of all primary faculty identified in Criterion 4.1.a., including amount and source of funds for each of the last three years.

In Table 56, Research Activity of Primary Faculty FY2013/14-FY2015/16, we list the funded research activity for primary faculty. At the time of this report, a number of previously awarded major UO1 and RO1 grants are under re-submission and/or renewal submission. These include the Adventist Health Study-2 cohort (> 25 million in 2016 grant submissions) and NIH/Fogarty awards for tobacco control (>5 million in 2015-2016 submissions). Table 56 on current awards is located in 3.1 of the ERF.

A research activity summary, including number of proposals submitted for the past three fiscal years is included in Table 57 below. The majority of awards, 70%, include students and 47% are community-based. A significant portion, 70%, of the funding for the school's research awards comes from extramural sponsors, including federal and state agencies, foundations, universities and other funders. Over the period 2010/11-2012/13, the school submitted an average of 31 grant proposals annually, requesting an average of $0.3M per proposal, and received on average 17 awards per year. During the last three fiscal years, 2013/14-2015/16, the average number of submissions was 27 per year, requesting $0.9M per proposal, and received an average of 8 awards annually.

Although during the last three Fiscal Years the school has received only a small federal grant, 70% of the requested funds that are pending of a sponsor decision, amounting to $13.06M, correspond to federal agencies, with 96% of the $13.06 being requested from the National Institutes of Health. Over the three fiscal years immediately after the previous accreditation, FY2010/11-FY 2012/13, the school received on average 27.3% of its funding from federal sources. This was related to a great extent to one award ($7.3M+) from NIH obtained by AHS investigators.

Since LLUSPH operates with the LLU campus, it is appropriate to contextualize these data. During the 2010-2015 period, annual expenditures from extramural awards across the LLUH enterprise averaged $31.2 million/yr. Close to 73% was earned through federal funding, about 10% through State/County sources, 11% corresponded to industry sponsorships, while the rest came from foundations/non-profits and other sources. During the same 6-year period, the lion's share (89%) of federal funding corresponded to NIH awards. LLUH requested annually $122.2 million from NIH during 2010-2015 and received $28.4 million/yr. in research funding. The amount of annual extramural awards in 2015 was slightly below $15M, the lowest level in 15 years, while 2013 and 2014 were, the second and third lowest, respectively. According to the LLU's office of sponsored research, this indicator is expected to bounce back up in 2016.

Table 57 Research Activity Summary of Faculty Funded Research for Last 3 years

	FY13/14	FY14/15	FY15/16	Pending
Proposals Submitted (#)	24	31	27	21
Requested ($ in millions)	3.0	34.6	37.0	18.6
Awards (#)	10	10	5	
Total Awards ($ in millions)	0.7	2.4	0.3	
Community-based Projects (#/%)	4; 40%	4; 40%	3; 60%	3; 14.3%
Student Involved Projects (#/%)	7; 70%	6; 60%	4; 80%	5; 21.7%
Extramural Sponsors as Percent of Categories for all Awards (%)	80%	60%	80%	91.3%

3.1.d. Identification of measures by which the school may evaluate the success of its research activities, along with data regarding the school's performance against those measures for each of the last three years. For example, schools may track dollar amounts of research funding, significance of findings (eg, citation references), extent of research translation (eg, adoption by policy or statue), dissemination (eg, publications in peer-reviewed publications, presentations at professional meetings) and other indicators. See CEPH Outcome Measures Template.

Table 58 Outcome Measures for Research Activities, we present the measures by which LLUSPH evaluates the success of our research activities. The school is intently strengthening its research reporting mechanisms. Assessment of progress toward goal and objectives takes place at the Center, unit and school levels. Unit and Center Directors provide the Dean with research updates as part of their performance reviews, and reflect on the progress and contributions of their faculty. The ADR has been charged with providing the Dean with an annual performance review report that includes overall proposals submitted, awards received, status of the capacity to provide research infrastructure, pre-award support and oversight for monitoring post-award management, and documentation of specific events that highlighted and facilitated research.

The LLUSPH research culture is evolving with increased emphasis on the expansion of research activities including external support. After, the LLU SM, LLUSPH ranks second on the LLU campus in terms of funded research activities and productivity. One of our goals over time has been to increase both the number of grant submissions as well as the success rate. If we considered together years 2014/15 and

2015/16, on average, the total funds received by LLUSPH from grants and contracts has grown over the last three years. FY2015/16 represents a drop compared to the base year, FY2013/14, but over $18 million in requested funding are still pending from sponsor decision.

We want to redouble our efforts to facilitate and sustain a growing trajectory. To move in a positive direction, we are developing a culture that strongly values rigorous, high-quality research and scholarship; hiring new tenure/tenure-track faculty with strong research qualifications and records; and providing opportunities and infrastructure to assist faculty. As shown in the table, we have a target of increasing research dollars awarded to primary faculty 10% per year. We want to increase the number of research grants that are community-based. Our strategies for achieving this objective include building and maintaining community collaborations and building strengths and opportunities for applied community-based research. Another important outcome measure we want to sustain and expand is the percent of research grants awarded to primary faculty that involve students. Students in LLUSPH are involved in research in multiple ways. Involving students in the funded research of faculty provides our students with both research experience and financial support. As external funding increases, opportunities for student involvement in funded grants also increase. Our target is to increase their involvement further by increasing the percent of research grants that involve students to 80% by 2015/16. As part of our evolving research culture, we expect primary faculty to increase the number of articles they publish in peer-reviewed journals. Even though the number of publications will increase by the end of 2016, that number will be lower than that achieved in the base year. To reverse the downward trend in this indicator since 2013 will require concerted action across Centers.

Table 58 Outcome Measures for Research Activities

Outcome Measure	Target	FY2013/14 Base Year	FY2014/15	FY2015/16	
Research dollars awarded to primary faculty	10% increase/year	$0.68M	$2.38M	$0.35M	
Percent of grants awarded to primary faculty that are community-based	Increase number of research grants that are community-based	40%	40%	60%	
Percent of grants awarded to primary faculty that involve students	80% by 2015/16	70%	60%	80%	
Average number of publications in peer-reviewed journals per primary faculty (average/# of publications)	5% increase in average number of publications/year through 2015/16.	**2013**	**2014**	**2015**	**2016***
		2.5 (160)	2.6 (165)	1.8 (115)	0.5 (33)

*2016 data are for 6 months (January 1, 2016 – June 30, 2016)

3.1.e. Description of student involvement in research.

Student involvement in research is of fundamental importance to complete and complement academic training. Students who are involved in research tend to devote more time and energy to academics, spend more time on campus, while having more positive interactions with faculty and staff. Participation in faculty research offers students additional targeted training relevant to unique aspects of their research projects. However, students are not the only ones to benefit from an environment where student research engagement occurs. As presented in Section 3.1.a, a dedicated and talented

workforce of graduate students is an indispensable pillar of the school's research efforts. In fact, student involvement is often the catalyst for other institutional, research-related improvements. Faculty, staff, and the entire school community, all benefit from student involvement in research. In essence, the school recognizes that student involvement in research not only enriches the overall academic experience but leads to a more productive educational environment that benefits every part of the institution. When students are involved in research, they develop a sense of belonging that fosters loyalty and pride in their institution, as well as academic achievement. However, meaningful and worthwhile student involvement in research does not just happen overnight, it's an investment process that takes time, effort, and also money. Because student involvement is so important, it is vital for the school to have a "culture" of student engagement in research. Recognizing the need for more student involvement in research, the school has been purposefully and intently building and nurturing a culture of student involvement on three key dimensions:

- **Encouraging Faculty to Involve Students**. The Dean and ADR have strongly encouraged new grant applications to include funded research positions for students. Virtually all of the showcases in Section 3.1.b are examples of this practice. Further growth is needed in this area and all faculty members must be encouraged to include students in their research projects including manuscript preparation and publication as well as participation at professional meetings. Center Directors are now evaluating student involvement in research and publications positively during annual reviews of faculty. The new rank and tenure policy for faculty promotion will explicitly evaluate the practice of student co-authorships, hence associating faculty advancement with student advancement. The school has also established the practice of providing with graduate research assistant support as part of their start-up packages.
- **Encouraging Students to Become Involved**. New graduate students are provided with an overview of their academic program, advising and mentoring support and related school and university resources at quarterly orientations where selected faculty briefly share their interests and invite students to get involved in research. Faculty also share their research interests in their classes (using teaching cases or examples from real-world examples from their own research). The PCOR is also a vehicle where students learn about research projects conducted by school faculty. Faculty profiles on the school website include research interests and publications. Faculty also share research opportunities for students to become involved in funded research opportunities through face-to-face meetings and announcements distributed through school bulletins. The students who participate in faculty research participate in a broad range of activities, dealing with virtually every aspect of real-world scholarship, from research planning and design and developing research tools to contributing to research conduct, analysis, and dissemination.
- **Creating Mechanisms for Student Involvement**. Faculty include graduate student positions in the budgets of their grant applications and hire students to fill position when grants are funded. Section 3.1.c includes information on grants that involve students. Students also become involved in unfunded research projects on a volunteer basis. Some students have research project requirements as part of their degree requirements. Doctoral students are required to complete research projects and research manuscripts of publishable quality or even have such manuscripts accepted for publication prior to graduation. MPH students have the opportunity to conduct research and evaluation during their internships. A quarterly school-wide interaction day features internship-based student and faculty research posters. The ADR also sponsors quarterly faculty-student research forums. Each quarter, one of the three collaborative Centers is featured and affiliated faculty members share their research with students and research opportunities are presented through one-on-one interactions. CHR administers subsidies given to doctoral students for their research projects. Several other mechanism exist which provide funding for Master's and doctoral level student projects in public health research. The size of these awards ranges from

$1,000 to $3,000. In addition, RCG engages students routinely in paid positions in support of its research and consulting portfolio. The school also encourages students to present their research and participate in school, university, and professional organization meetings, such as APHA and specific disciplinary societies.

The school's strategic research agenda identifies as a priority the expansion of the number of doctoral and MPH students integrated in faculty-led research, Center-endorsed research projects. The school has also declared a priority the promotion and establishment of funded assistantships and doctoral fellowships that involve basic, applied, and community-based research.

3.1.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. The school and the university unambiguously support a culture of research.
2. We have 3 interdisciplinary collaborative Centers, which were built to create clusters of expertise and interdisciplinary research teams with faculty who have similar interests, facilitating and spurring research activities.
3. Our work in community-based research is expanding and attracting extramural funding.
4. The school continues to develop relationships with local and state public health and non-public health agencies, as well as community-based organizations which leads to research agendas of common interest.
5. We continue to be committed to dedicate resources to support and promote research.
6. We have hired faculty since 2009 for whom research is a high priority.
7. We are embracing a more systematic and strategic approach to research than ever before, including the consolidation, improvement and expansion of its fiscal and research administration infrastructure.
8. Faculty and academic program directors promote student involvement in research through courses (e.g., the new PCOR) and in school and university research functions.

Weaknesses:

1. Although our research portfolio is growing, we are not where we want to be in terms of external grant funding for our school's research activities. Our potential has not been realized. We do not have as much external funding, including NIH or other Federal grants, as we aspire to have.
2. While the school-level research administrative infrastructure has improved, pre- and post-award management support is not always sufficient.
3. As external funding, particularly from federal agencies, continues to be constrained, there are challenges to maintain current funding supporting faculty-led and doctoral research.
4. The recent, sudden loss of our Associate Dean for Research, Dr. Sam Soret, presents a challenge in the overall direction of the research efforts for the school.

Plans for Improvement:

1. The school's RAC, which includes the Center Directors, is engaged in the development and implementation of a school-wide research strategy to set direction and increase coordination in order to grow our overall research portfolio through innovation that leverages cooperative and translational research.

2. The ADR and Manager of Administrative Operations have initiated a plan to closely assess and monitor the effort towards the continued enhancement of the research infrastructure, especially as it relates to pre- and post-award support.
3. We will expand our pursuit of training grants and community-based research;
4. We will encourage and facilitate the pursuit of NIH grants and other extramural, non-traditional funding from foundations, industry, and non-profit organizations.
5. Identifying a replacement for the ADR and reassessing the research infrastructure of the school as part of the strategic management process and system.
6. The school will continue to explore ways to expand interdisciplinary and collaborative research initiatives and attract external funds. Interdisciplinary research will be stimulated by:
    a. Fostering inter-center research collaborations that focus and build on specific areas related to our school's mission
    b. Facilitating cross-disciplinary research with other LLU schools, including Behavioral Health, Medicine, Dentistry, or Pharmacy, and external regional, national, and international groups.

3.2 Service. The school shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.

3.2.a. Description of the school's service activities, including policies, procedures and practices that support service. If the school has formal contracts or agreements with external agencies, these should be noted.

Within the culture of LLUSPH service has always been integral. Service ties in naturally to the philosophy we hold behind our mission, vision, and values. SPH explicitly supports service through the policies and procedures that are outlined in the Faculty Handbook and Annual Faculty Evaluations. The Office of Public Health Practice which helps to coordinate these efforts amongst faculty. These policies and procedures ensure that service is an essential part of the work of LLUSPH.

LLUSPH has institutionally struggled with the operational definition of service relative to the Christian orientation of the campus. Faculty, staff and students are generally involved in a plethora of faith-based volunteer activities, some explicitly health-related, some marginally health related, and some unrelated to health. This has created confusion about service and how to measure it. The complexity of this issue is compounded by the spirit of the activity. Many faculty members are anchored in the opinion that claiming credit (i.e., measuring and reporting) for service, is by its very nature, antithetical to the spirit of the activity.

To address the challenges noted above, LLUSPH recently adopted the definition of service consistent with the CEPH definition.

Service is an explicit activity undertaken for the benefit of the greater society, over and beyond what is accomplished through teaching and research.

Service refers to contributions of professional expertise to the public, including professional practice.

The faculty list of service activities for the years 2013-2016 are presented in Table 59 (3.2 of the ERF). While the list documents extensive service to many different organizations, settings, and communities, we believe that service is significantly under-reported. A new method of gathering data is currently under development and will be integrated into the Annual Faculty Reports and reflected in the Faculty Profile. This process will be completely online and will include a more thorough listing of service activities. This report will help identify service activities by centers and faculty in order to see how service activities are distributed throughout the school.

Faculty and students currently are very engaged in service, contributing thousands of hours each year to local, state, national and international communities and organizations. A special component of service for Loma Linda is the engagement with faith-based organizations. Because of our connection with our sponsoring church organization, we have service opportunities with the extensive world-wide health system of the Seventh-day Adventist Church. Faculty members serve on county governing boards, volunteer to help design and implement community development projects, as well as capacity building in developing countries.

Locally, students and faculty help implement community service support to provide better access to health services, day care for children, mentoring programs for youth and health education for all ages. Faculty members serve on boards for local community based organizations and provide technical assistance to help improve the quality of services. Much of this service is provided for little or no cost to the organizations.

The Office of Public Health Practice (OPHP) was created in 2003, and has matured from a purely federally funded workforce capacity building operation into one more inculcated into the fabric of local society. For example, OPHP provides support to local churches as they strive to impact the community surrounding them. The OPHP embodies the spirit of service while at the same time embraces our official definition of professional service.

3.2.b. Description of the emphasis given to community and professional service activities in the promotion and tenure process.

Service activities play a vital role within the process of promotion at LLUSPH. Within the Faculty Rank, Promotion and Tenure Policy, there is clear criteria for community and professional service activities. It is one of seven areas required for promotion. Faculty who wish to succeed in promotion place emphasis on having a balanced academic portfolio.

Service activities are considered expressions of citizenship in an academic institution. All faculty members must share in the work necessary to maintain the operation of the institution. They are encouraged to serve the community at large in a professional capacity. Each faculty member is expected to participate in service that is based in their discipline.

3.2.c. A list of the school's current service activities, including identification of the community, organization, agency or body for which the service was provided and the nature of the activity, over the last three years. See CEPH Data Template 3.2.1. Projects presented in Criterion 3.1 should not be replicated here without distinction. Funded service activities may be reported in a separate table; see CEPH Data Template 3.2.2. Extramural funding for research or training/continuing education grants should be reported in Templates 3.1.1 (research) and 3.3.1 (funded workforce development), respectively.

Currently OPHP is engaged in a number of service activities. The office has partnered with a number of local non-governmental organizations (NGO's) to address homelessness within both Riverside and San Bernardino counties. Faculty sit on a boards of multiple organizations, in addition to working closely with the Sheriff's departments. One service activity of note is our partnership with the Mexican Consulate. Our Health Window or *Ventanilla de Salud* program has impacted a large portion of the community. In 2015 alone we engaged with 152,874 community members through this program. This is just one example of the variety of service activities conducted out of OPHP.

A second example is that of the LLUSPH Asthma Program. This Asthma program provides asthma screening through the use of a survey screening tool as well as through collection of a non-invasive breath test utilizing a peak flow meter device. Respiratory screening is provided for all children with parental consent at each of the participating child care sites. After receiving parental consent, our research assistant collects three samples of the peak flow test (children blow three times into the device) and records the results. Children with poorly managed asthma or with symptoms potentially indicating respiratory problems, are referred for follow-up medical care, thus reducing ER visits. Parent and teacher training is also a major component of this service.

Table 59 detailing service activity of primary faculty for the last three years can be found in 3.2 of the ERF.

Funded service activities are found in Table 60 below.

Table 60 Funded Service Activity from 2013 to 2016									
Project Name	**Principal Investigator & Department (for schools) or Concentration (for programs)**	**Funding Source**	**Funding Period Start/End**	**Amount Total Award**	**Amount 2013-14**	**Amount 2014-15**	**Amount 2015-16**	**Community-Based Y/N**	**Student Participation Y/N**
Loma Linda University Asthma Program	Rhonda Spencer-Hwang	First 5 Riverside	2012-2017	$1,521,267.00	$521,145	$414,084	$420,456	Y	Y
Preparedness and Emergency Response Research Center (PERRC)	Susanne Montgomery David Dyjack Jesse Bliss	CDC	2009-2013	Core-$118,652 CBO/FBO-$27,803 Schools-$39,364 Resiliency-$524,861 Total: $524,861	0	0	0	Y	Y
California Nevada Public Health Training Center	Jesse Bliss (sub-contract UC San Diego)	HRSA	2010-2014	$606,897	$14,904	0	0	N	Y
Los Angeles County Community Disaster Resilience (LACCDR) Project	Jesse Bliss (sub-contract LAC DPH)	CDC	2013-2015	$500,000	$300,000	$200,000	0	Y	Y
CBPR Training	OPHP	unknown						Y	Y
Childhood Wellness Program	Gatto/Baum	private donor		$50,000				Y	Y
Community research on HPV	Naomi Modeste	CARPHA	2013-2014	$18,000	$18,000			Y	N

3.2.d. Identification of the measures by which the school may evaluate the success of its service efforts, along with data regarding the school's performance against those measures for each of the last three years. See CEPH Outcome Measures Template.

At LLUSPH service and practice have always had a historically role within the culture of the school. These activities fit naturally into the philosophy of our mission and values. The school explicitly supports these activities through the policies and procedures of the organization which are outlined in the Faculty Handbook and annual faculty evaluation and promotion criteria. These policies and procedures have helped to establish service as an essential part of the work of LLUSPH.

Currently there is a shift in applications occurring within the Office of Public Health Practice (OPHP). Service and practice have been a part of the culture of the school, but have unfortunately often been tasked to specific faculty who express interest in these areas. OPHP became, in many cases, the home for all practice. This lead to many faculty not participating in service if they were not a direct part of the office, and is reflected in the lower numbers shown in the data tables. Under the guidance of the new Assistant Dean for Public Health Practice, the school is shifting to have a deep focus on practice within the portfolio of all faculty. OPHP will serve as a gateway to enable and assist both students and faculty who wish to engage in service efforts.

Table 61 presents the measures by which our school evaluates the success of our service efforts. Reflecting our institutional and school mission, service, outreach, and engagement are essential components of SPH. Faculty are expected to pursue and perform service activities consistent with our institutional mission. These services may be provided by individual faculty as well as led by the school's Collaborative Centers, programs and partnerships. Service is an integral part of each faculty member's responsibilities. Most primary faculty already provide service to the profession, and we want to increase the number. As noted earlier, fewer primary faculty provide service to communities and the public. By collaborating more effectively with other entities on our LLUH campus, such as the Global Health Institute and the Institute for Community Partnerships, we expect that primary faculty will, over time, become more involved in providing services to the community. Our school currently reaches over 100,000 Californians and residents from neighboring States annually, through outreach and engagement programs, in which OPHP plays a key role. In addition, through SPH-led programs and initiatives individuals are impacted in numerous countries across the world (e.g. Chad, Malawi, Philippines, Haiti, Peru, etc.). We expect that the number of individuals impacted by SPH will only increase. As shown in Table 61, we have a target of increasing this number by 5% annually.

Table 61 Outcome Measures – Service

Outcome Measure	Target	Year 1	Year 2	Year 3
Number of primary faculty providing service to the profession.	Increase the number of primary faculty providing service to the profession	7 (10%)	11 (15%)	14 (20%)
Number of primary faculty providing service to	Increase the number of primary faculty providing service to	7 (10%)	11 (15%)	14 (20%)

Table 61 Outcome Measures – Service				
Outcome Measure	**Target**	**Year 1**	**Year 2**	**Year 3**
communities and the public.	communities and the public			
School and school-wide center service activities that include student, staff, and faculty participation	A minimum of 10 service events annually	10	15	20
Number of Californians and Other Individuals Abroad participating or benefiting in outreach and engagement programs of LLUSPH	**5**% annual increase through 2016	100,000	105,000	110,250

In order to better measure service activity in the future, OPHP has established the following objectives:

Table 62 Service Goals and Objectives	
Strategy	**Goal**
STRATEGY SERVICE	Goal 1: To identify and clearly describe the school's areas of public health practice.
	Objective 1.1: By June 2017, The Office of Public Health Practice (OPHP) will have implemented work within all five of the clearly defined the areas of focus. These five areas will be reviewed annually to ensure practice stays relevant with the community's needs. Objective 1.2: By November 2016, update the OPHP website to reflect our areas of emphases and will be maintained continuously. Objective 1.3 By November 2016, establish a standing committee of external advisers. Membership will be evaluated quarterly to ensure effective community involvement. The committee will meet quarterly.
	Goal 2: To promote faculty engagement in at least one designated emphasis area of public health practice.
	Objective 2.1: By June 2017, at least 50% of faculty will have engaged in at least three community practice activities.
	Goal 3: To increase student involvement in public health practice through opportunities outside the required field practicum experience.
	Objective 3.1: By June 2017, OPHP will conduct a minimum of 4 school-wide meetings, discussing potential opportunities for students to become involved. The meetings will continue quarterly.

	Objective 3.2: By June 2017, at least 50% of the graduating class will have engaged in at least three community practice activities. This rate will continue into the future.

3.2.e. Description of student involvement in service, outside of those activities associated with the required practice experience and previously described in Criterion 2.4.

Each academic program is involved in varying degrees of service while students regularly participate in service both as support for faculty, and also as part of academic activities. This includes health fairs, activities sponsored through the LLUH Institute for Community Partnerships (ICP), the Preventive Care Office housed in Drayson Center (the LLUH activities center), Center for Health Promotion clinic activities which include student health service, the Healthy People in Healthy Communities annual conference, the LLUH San Manual Gateway College, which provides education and health care services, local schools including the Loma Linda Academy, and requests to the OPHP for public health presentation and seminars. Many of the projects identified under the Research criteria (3.1) contain opportunities for student involvement in service, beyond the research opportunities provided. This includes but is not limited to:

- **Project 21** is a community health project which is aimed at creating lasting changes in the communities around Béré Adventist Hospital in Béré (http://ahiglobal.org/bere/), Chad, Africa, and it involves SPH students and CCR faculty members who are collecting data on community conditions and needs. The project has four components: a mobile dental clinic, community health education, midwife training, and community health workers (CHW) training. This provides opportunities for our students in global service.
- **The First 5 Riverside County Asthma Management Program**: The goal of this initiative is to reduce the negative impact of asthma and asthma-like conditions on children and increase their ability to be successful in school. LLUSPH and the Riverside County Department of Public Health provide education, assessments, management and referral for treatment related to asthma, and asthma-like conditions among children 0 through age 5 years. The LLUSPH has pioneered in the use of educational theater as part of this initiative (http://educationaltheatre.org/). This is a unique opportunity for service by students to engage with the community as part of a funded research and practice program.
- The **Eastern Coachella Valley Environmental Health Assessments** is the school's most recent effort towards public health action in one of the most underserved areas of Southern California, located in the desert areas of Riverside County. With incipient funding from the California Endowment and the Metropolitan Water District of Southern California, Dr. Ryan Sinclair conducts participatory research on community-identified environmental contamination and potential human health effects. Concentrated research details exposure to pathogens from water and soil in disadvantaged communities. Another key component of this initiative is the work with high school age community members to address the regional widespread problem of failing on-site wastewater systems (https://blackwater.crowdmap.com/). The project has been featured nationally on Latino USA, which has boosted momentum for later projects in the Coachella Valley. Students are regularly invited to be involved in these assessments and education related to the assessments as a service project.
- The **Environmental Railyard Research Impacting Community Health (ENRRICH) Project** which focuses on the adverse health effects associated with residential proximity to goods movement rail yards. Adopting a full Community-Based-Participatory-Research approach, CCR researchers have conducted a public health assessment in neighborhoods and schools near one of the busiest nation's inland ports, the BNSF San Bernardino Railyard, a major local source of diesel

emissions. While primarily a participatory research project, it includes opportunities for student service as part of its activities.

- **The San Bernardino County MediCal Outreach, Retention, and Enrollment (SBC-MORE) Program** is to improve health equity in the region by increasing access to health care among underserved and low-enrollment populations. The project involves a partnership with several community-based organizations and it also includes a research component aimed at developing predictive modeling of enrollment outcomes and the development of a geographic dashboard of indicators of low enrollment. Students have the opportunity to engage in service through this program.
- **The *Ventanillas de Salud* (Health Windows) Program** was established by Mexico's Departments of Health and of Foreign Affairs and is implemented through 50 consulates in the United States. The goal is to improve the physical and mental health of Mexican nationals living in the United States by increasing access to primary and preventive health insurance coverage and ensure culturally sensitive services in order to reduce the use of emergency services. Through an agreement with the Mexican government, the LLUSPH manages the Ventanilla de Salud (VDS) Program at Mexico's Consulate in San Bernardino. The VDS provides reliable information on health topics, counseling and referrals to health services available and accessible in San Bernardino and Riverside Counties (http://ventanillas.org/index.php/en/component/services/?view=description&id=58). Students engage in service efforts for Mexican nationals in the Inland Empire, but at the consulate in San Bernardino and in the surrounding areas through the mobile consulate initiative. **The Intentional Outreach (IOI)** provides an opportunity for interdisciplinary collaboration and coordination in action as well as an opportunity for students to be engaged as part of or in addition to their practicum requirements. The IOI is an ongoing research project based on a partnership between LLUSPH, Azusa Pacific University nursing program, and CrossWalk Church, a local Seventh-day Adventist congregation with strong community outreach efforts and planning. IOI engages local residents in the neighborhoods in the one-mile radius around CrossWalk Church, an area that is the intersection of three diverse cities: Loma Linda, San Bernardino, and Redlands. The project seeks to develop and pilot a model of public health from community- and faith-based perspectives in an interdisciplinary manner – ultimately developing a neighborhood-level health "hub" that addresses health holistically. This provides a unique opportunity for students to engage in service that is faith-based.
- **The Institute for Community Partnerships (ICP)**, under the direction of an SPH faculty member, Dr. Juan Carlos Belliard, provides an additional opportunity for students to be involved in service. The LLUH ICP promotes community engagement through service-learning, research, and programming to improve the quality of life in local communities. ICP is committed to creating sustainable community partnerships in which mutual learning and empowerment improve the health and well-being of our diverse community. ICP serves as the primary portal for connecting resources to needs and people to services between LLUH and the local community. ICP and its programs (Community Benefits, Community Academics Partners in Service, and the *Promotor* Training Academy), have benefited from the work of faculty and students from the LLUSPH. Students have worked, volunteered, and completed field practica and service learning projects through ICP (http://lluhcommunityengagement.org/).
- **The new San Manuel Gateway College (SMGC)** in the community next door in San Bernardino provides a unique opportunity for service by faculty and students. The SMGC shares a building with an LLU-affiliated federally qualified health center known as the SACHS clinic. This clinic system expanded and moved into the new building in July 2016. The SMGC provides certificate training programs that will last six to 12 months and will allow recent high school graduates from low income neighborhoods in San Bernardino and the surrounding region to find gainful

employment in health care. This initiative is being lauded as perhaps the most impactful project that the City of San Bernardino has seen in recent history. This is a possible "gateway" or pipeline that will enable residents of the Inland Empire to acquire higher education in the health sciences, including but not limited to public health. This provides an opportunity for our students to be engaged in student involvement in service to a local population in need.

- Through the **Students for International Mission Service (SIMS)**, students volunteer during their academic breaks to go to foreign countries to help run health fairs, provide health education services and work with local health care providers to improve access and change harmful health behaviors. SIMS is an LLU program that exemplifies the University's commitment to global service, incorporating international service opportunities into academic curriculum in order to a) prepare health professions students for a career of effective global service and b) promote the health of global communities. SIMS' mission is to provide LLU students with high-quality service-learning opportunities that empower them to become caring, competent, and socially responsible health professionals who value service as a lifelong process. Participants work in underdeveloped areas around the globe in communities with limited or no access to health care and health education. Students for International Mission Service (SIMS) began on February 8, 1975. Initially it was called Students for International Medical Service with the original intent to provide a forum for senior medical students at Loma Linda University to share clinical experience they had in foreign settings. However, ten years later in 1985 the University reorganized SIMS with a change of name to provide mission opportunities for students in all schools of the University. Students from all schools at LLU can participate in SIMS. Several students from LLUSPH participate in SIMS trips each year http://www.lluglobal.com/site/c.msKRL6PNLrF/b.5551113/k.BCBE/SIMS.htm

3.2.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

The criterion is met with commentary.

Strengths:

1. The school possesses a strong service culture and enabling mechanisms.
2. LLUSPH is committed to a mission of service driven by themes of community partnership and social justice.
3. Faculty and students are actively involved in the community-at-large and service learning is an integral part of LLUSPH.
4. Students have a multitude of opportunities to provide service and learn through service.
5. The mission and values of the school strongly support service and the policies are in line with this mission.

Weaknesses:

1. The data collection system to monitor service can be improved to more fully capture all service activities of faculty, staff and students.
2. The operational definition of professional service has been confused primarily because of the LLUSPH Christian orientation, compounded to some degree by the reluctance of some to report service activities because claiming credit for such activities may be perceived as violating the spirit of giving on a Christian campus.

Plans for Improvement:

1. The school is considering institutionalizing organized service learning throughout the school which will be addressed as part of the strategic management planning process.
2. Provide a clear, nationally recognized definition of professional service, continuing to encourage, recognize, and celebrate service in all of its various manifestations.

3.3. Workforce Development. The school shall engage in activities other than its offering of degree programs that support the professional development of the public health workforce.

The SPH is committed to providing high quality, targeted continuing professional education to help enhance and further build the capacity of the current public health workforce including local, regional, state, and multi-state regional partners; as well as provide guidance and awareness through educational ladders and pipeline initiatives to help encourage and better prepare both current practitioners without formal education or training and the up and coming public health workforce of tomorrow. Through the office of the dean along with its various centers, offices, grants, contracts and programs, the SPH offers a variety of continuing and professional educational resources; including training programs, workshops, seminars, weekly webcasts, annual conferences and annual trainings. Target audiences include public health professionals from local, state, and regional public health agencies, community-based organizations, faith-based organizations, tribal nations, environmental health agencies and offices of public health preparedness and response.

3.3.a. Description of the ways in which the school periodically assesses the continuing education needs of the community or communities it intends to serve. The assessment may include primary or secondary data collection or data sources.

Mission

The mission of the LLUSPH Continuing Professional Education program is to provide our alumni, public health practitioners, and other health-care professionals, with a source of reliable, timely, and pertinent information to ensure they are aware and can implement the latest findings, hypotheses, and approaches to improving health and preventing disease in their professional field.

There are a wide variety of workforce training that the LLUSPH offers. Information about each training listed below is advertised via fliers and emails. We work closely with local agencies to plan events that would benefit them, as well as other entities on campus, such as the medical center.

The training needs of the partnered organizations, communities, and individuals are determined through the engagement of key informants and representatives in a variety of ways. These include face-to-face meetings with department and organizational leadership, polls and surveys, direct partner requested trainings, and finally from LLUSPH itself as research findings and new knowledge are disseminated through conferences, programs and other forums.

SPH-CPE Sponsored Trainings:

Dietary Recommendations for Mothers At-Risk for Premature Birth

- # of participants: 39
- Date: 2/21/13
- Training Hours: 4
- Location: SBC Dept of PH 6th Floor Conference Room
- Attendees: San Bernardino County Department of Public Health Nutrition Services
- Requesting Organization: San Bernardino County Department of Public Health Nutrition Services

Training Description: This course will guide WIC dieticians through the process of counseling pregnant mothers or mothers with premature infants on dietary recommendations for the premature infant. To promote prevention, the training will first discuss the risk factors for premature birth, the potential health outcomes of premature infants, and counseling recommendations for high risk individuals. Next, participants will learn common feeding complications that can occur with premature infants, recommended therapies, and potential management and treatment plans. Participants will learn about the use of therapeutic formulas and the important role of breastfeeding. With an emphasis on the role of the public health nutritionist and the WIC RD, participants will learn how to help the high risk expecting mother through community-medical referrals and counseling.

6th International Congress on Vegetarian Nutrition

- # of participants: 788
- Date: 2/22/13 – 2/15/13
- Training Hours: 19
- Location: Drayson Center, Loma Linda
- Attendees: Health Care Professionals, Researchers, Educators, Nutrition Enthusiasts
- Requesting Organization: School of Public Health, Loma Linda University

Training Description: Every five years this scientific conference on the health effects of plant based diets offers an opportunity for health professionals and researchers to learn from each other in plenary sessions, workshops, poster presentations and social gatherings. Professional interest in vegetarian nutrition has now reached unprecedented levels; however, scientific knowledge regarding vegetarian diets and their effects on human health is far from complete. The International Congress on Vegetarian Nutrition is designed to provide a review of the accumulated findings, and introduce theoretical concepts, practical applications, and implications of vegetarian dietary practices for both the prevention of disease and the promotion of health, as well as for the furthering of research endeavors. Program Content includes:

Plant based diet patterns & healthy aging
Epidemiological studies of vegetarians
Role of nuts in disease prevention
Vegetarian diet patterns & obesity
Vegetarian diet and prevention of cancer
Role of soy in health and disease
Vegetarian studies: A global perspective
Are all n-3 fatty acids created equal?
Vegetarian diet patterns & cardio metabolic syndrome
Efficiency & environmental aspects of meatless diets
Foods & nutrients of interest to vegetarians: The science & application
Classification of vegetarian dietary patterns

Demystifying Micronutrients and Vitamin D

- # of participants: 42
- Date: 3/7/13
- Training Hours: 6
- Location: Breckenridge and Jenner Conference Rooms, 3900 Sherman Drive, Riverside, CA 92503
- Attendees: Riverside County Department of Public Health: Nutrition- Women Infant and Children

- Requesting Organization: Riverside County Department of Public Health: Nutrition- Women Infant and Children

Training Description: Micronutrients and vitamins can be mystifying, as their functions can be seen in many complicated bodily systems. Furthermore, the internet and other "health" sources are littered with contradicting and inaccurate information. This course aims to demystify the roles of micronutrients and vitamin D in the body. Micronutrients, such as dietary minerals, zinc, and iodine are different from macronutrients (like carbohydrates, protein and fat) because they are necessary only in very tiny amounts. Nevertheless, micronutrients are essential for healthy body systems, and their deficiencies can cause serious health problems. The World Health Organization feels that micronutrient deficiency presents a huge threat to the health of the world's population, specifically from iodine, vitamin A and iron deficiency. Vitamin D, which can be obtained from sun exposure, food, and supplements, is also a highly significant player in the world of health, whose reputation is marked by contradiction and ever evolving research. Understanding the roles both of these nutrients play, and being able to identify deficiencies is crucial for the adept health practitioner.

Community-Based Participatory Approaches for Inyo County

- # of participants: 11
- Date: 4/30/13
- Training Hours: 4
- Location: Inyo County Department of Public Health
- Attendees: Inyo County Department of Public Health
- Requesting Organization: Inyo County Department of Public Health

Training Description: Community Based Participatory Research (CBPR) is a collaborative research approach that engages researchers, community members, and organizations in research. This training helps interested public health professionals understand the basics of CBPR, its five phases, and how to work as a group. Topics in this training include partnership formation and maintenance, community assessment and diagnosis, issue identification, documentation and evaluation, and the interpretation, dissemination, and application of research results. The learners will be taught how to use both qualitative and quantitative research methods and data collection tools within the CBPR approach. Some of the data collection methods discussed will include semi-structured key informant interviews, focus group discussions, geographic information systems, and surveys.

Social Marketing in Public Health

- # of participants: 12
- Date: 5/1/13
- Training Hours: 4
- Location: UD Register Research Kitchen, Nichol Hall
- Attendees: Health Care Professionals, Students
- Requesting Organization: 2010-2011 CE Survey Request

Training Description:
Social media is an effective tool for meaningful change. Its impact can be seen in public health campaigns to raise awareness and motivate positive social and behavior change. This training will introduce social media and online tools for public health professionals to use for health advocacy, collaboration, community outreach, and program promotion. Online tools will focus on use between people and organizations to aid in collaborative materials and communication. Public Health professionals will leave understanding the importance and impact social media can have within their communities, and gain knowledge on the best practices of social media to enhance the reach of their message, and have learned how to use online tools to enhance their day-to-day work on collaborative projects.

Grant Writing Workshop: Concepts and Approaches 2013

- # of participants: 78
- Date: 10/21/13
- Training Hours: 16.5
- Location: Centennial Complex, 4th Floor
- Attendees: NPO representatives, Health Care Workers, interested public
- Requesting Organization: Annual SPH Event

Training Description: This 3-day course will lead participants in developing fundamental skills required to research potential funding sources, communicate with them, and write proposals requesting grants. This workshop removes the mystery around successful grant submissions. Participants will be provided with time proven strategies, tactics, practical skills and tools necessary to craft wining applications. Both novice and experienced grant writers will find this program thought provoking and brimming with tips that will give your proposal an edge in today's increasingly competitive funding environment.

Community Based Participatory Research

- # of Participants: 10
- Date: 5/2/13
- Training Hours: 4
- Location: Mono County Department of Public Health
- Attendees: Public Health Professionals
- Requesting Organization: Mono County Department of Public Health

Training Description: Community Based Participatory Research (CBPR) is a collaborative research approach that engages researchers, community members, and organizations in research. This training helps interested public health professionals understand the basics of CBPR, its five phases, and how to work as a group. Topics in this training include partnership formation and maintenance, community assessment and diagnosis, issue identification, documentation and evaluation, and the interpretation, dissemination, and application of research results. The learners will be taught how to use both qualitative and quantitative research methods and data collection tools within the CBPR approach. Some of the data collection methods discussed will include semi-structured key informant interviews, focus group discussions, geographic information systems, and surveys.

GIS for Healthy Communities Workshop

- # of Participants: 37
- Date: 10/24/13 – 10/25/13
- Training Hours: 14
- Location: GIS Lab, Loma Linda University
- Attendees: Public Health Professionals
- Requesting Organization: School of Public Health

Training Description:
Module 1: Exploring your Community with GIS
Module 2: Introduction to GIS for a Healthy Community – Discussion
Module 3: Understanding Geospatial Data
Module 4: Performing Common Spatial Analysis
Module 5: Creating Maps for Presentation and Sharing
Grant Writing Workshop: Concepts and Approaches

- # of Participants: 24
- Date: 11/20/13

- Training Hours: 14
- Location: Drayson Center, Loma Linda University
- Attendees: Public Health Professionals Not for profit organizations, students
- Requesting Organization: School of Public Health

Training Description: This three-day course will lead participants to develop the fundamental skills required to research potential funding sources, communicate with them, and write proposals requesting grants. The Grant Writing Workshop removes the mystery around successful grant submissions. Participants will be provided with time-proven strategies, tactics, practical skills, and tools necessary to craft winning applications. Novice and experienced grant writers will find this program thought-provoking and brimming with tips that will give your proposal an edge in today's increasingly competitive funding environment. All researchers, including health care professionals, will benefit from these skills.

Healthy People in Healthy Communities 2014

- # of Participants: 415
- Date: 3/3/14 – 3/5/14
- Training Hours: 14
- Location: Drayson Center, Loma Linda University
- Attendees: Public Health Professionals, Healthcare Professionals, students
- Requesting Organization: School of Public Health

Training Description: Healthy People in Healthy Communities brings people together to share information and develop strategies for achieving a new level of success in creating healthy communities by design. We convene a high quality conference on health, the built environment and geographic information systems (GIS) that generates energy for change. We provide access to strong leaders and public advocates to stimulate relevant dialogue in an environment of honest inquiry. This facilitates interdisciplinary efforts by people of diverse backgrounds and interests, to reframe the conversations around health and the built environment. This year's conference spotlight's children's health in the community as we aim to foster the development of collaborative strategies for building vibrant communities in which our kids can thrive. Looking to the interrelated web of factors that shape development from the pre-natal period and throughout the life course, our program highlights a number of key topics at the intersection of health and environment, including epigenetics, nutrition, air quality, community design, the media, and family situation.

Grant Writing Workshop: Concepts and Approaches

- # of Participants: 57
- Date: 9/17/14
- Training Hours: 16
- Location: Drayson Center, Loma Linda University
- Attendees: Public Health Professionals, Not for profit organizations, students
- Requesting Organization: School of Public Health

Training Description: This three-day course will lead participants to develop the fundamental skills required to research potential funding sources, communicate with them, and write proposals requesting grants. The Grant Writing Workshop removes the mystery around successful grant submissions. Participants will be provided with time-proven strategies, tactics, practical skills, and tools necessary to craft winning applications. Novice and experienced grant writers will find this program thought-provoking and brimming with tips that will give your proposal an edge in today's increasingly competitive funding environment. All researchers, including health care professionals, will benefit from these skills.

Healthy People in Health Communities 2015

- # of Participants: 431
- Date: 3/9/15 – 3/11/15
- Training Hours: 12
- Location: Drayson Center, Loma Linda University
- Attendees: Public Health Professionals, Healthcare Professionals, students
- Requesting Organization: School of Public Health

Training Description: The School of Public Health is excited to announce "Actively Live Your Best Life" as the theme for the 49th Annual Healthy People in Healthy Communities Conference. Held on the beautiful campuses of ESRI and Loma Linda University March 9-11, 2015, participants will engage in a dynamic and motivating conference. We are encouraging participants to Live it. Active, by taking action to activate their life for good, and Live It. Happy, by taking advantage of the powerful neuro-behavior strategies for boosting happiness. Together, we'll explore how Active Technology seamlessly integrates fitness into our daily life, and ways geospatial information systems can connect us with our community. We'll also discover the key differences in motivation, participation and health outcomes for Active Men and Active Women. Research has proven that both men and women are more likely to reach their goals, have strong relationships and live longer if they "Live It". Happy. Applying these lessons, we'll focus on how to spare ourselves and our communities from the workplace inactivity crisis, and explore solutions for change to create Active Workplace Happiness.

Using Smartphones for GIS Data Collection

- # of Participants: 12
- Date: 5/14/15
- Training Hours: 4
- Location: GIS Lab, Loma Linda University Health
- Attendees: Public Health Educators and GIS professionals
- Requesting Organization: School of Public Health

Training Description: The talk will walk researchers and faculty through the setup process for educators. In groups we will build real world apps using their laptops, deploy their forms/surveys/apps to their personal mobile devices, and then collect field data around campus. Once sample data has been collected, primary speaker will demonstrate how data can be exported for analysis and shared.

Overview of Genetically Modified Foods and Human Health

- # of Participants: 65
- Date: 5/14/15
- Training Hours: 1
- Location: Loma Linda University Medical Center
- Attendees: University and Medical Center Employees and Students
- Requesting Organization: Loma Linda University Medical Center

Training Description: Present the background and current understanding of GMOs including potential uses and safety concerns. Presentation using lecture and power point slides with current references.

Healthy People in Healthy Communities 2016

- # of Participants: 315
- Date: 3/8/16 – 3/9/16

- Training Hours: 11
- Location: Drayson Center, Loma Linda University Health
- Attendees: Public Health Professionals, Healthcare professionals, students
- Requesting Organization: School of Public Health, Loma Linda University Health

Training Description: At the Loma Linda University School of Public Health we believe that wholeness is the harmonious relationship that exists when healthy individuals thrive in resilient communities supported by sustainable systems of health. We are renowned for working to cultivate cultures of health and wholeness as demonstrated by our research on what makes individuals healthy, our engagement and action in our communities, and our focus on the systems of health that sustain all of us. The 2016 Healthy People in Healthy Communities Conference is our concerted effort to connect and engage with people to embark on innovative pathways for improving the population's health, enhance overall well-being, and foster greater equity in our society. We want to join the national shift toward building a culture of health in America and across our global communities. Hosted on the beautiful Loma Linda University campus, the conference follows the university's legacy of promoting health, wholeness and longevity – universal values rooted in our belief in the teaching and healing ministry of Jesus Christ. Join us as we discover the interconnected landscape of our systems of health. Together, we will explore making health a shared value, foster cross-sector collaboration to improve well-being, create healthier and more equitable communities, and strengthen integration of health services and systems.

Office of Public Health Practice
The OPHP is the formal practice arm of LLUSPH and functions to provide education and training on a wide variety of topics to partners throughout the Southwest region of the U.S., Hawaii, and the Pacific Rim.

The Healthy People Conference
The Healthy People Conference is an annual SPH conference which provides public health practitioners from local health departments as well as those from around the globe, an opportunity to focus on key public health issues and concerns and to hear from renowned practitioners, researchers and organizations who actively work to seek, find, and implement solutions to counter these issues.

The Health Geoinformatics Program
LLUSPH is a premier provider of health geoinformatics training and education for the current and future public health workforce in the United States. The Geographic Information Systems (GIS) program continues efforts to enhance geoinformatics capacity in organizations, agencies, and countries in order to advance fully capable and interoperable information systems in the many organizations that participate in public health with judicious use of geoinformatics technology. The geoinformatics program, in collaboration with OPHP and CPHP has provided training in GIS applications, methods, and planning for a variety of partners including tribal nations, public health preparedness managers, and law enforcement agencies. It continues to serve as a valuable regional resource for public health applications related to this highly sophisticated information technology. For more information visit www.llugis.org

3.3.b. A list of the continuing education programs, other than certificate programs, offered by the school, including number of participants served, for each of the last three years. Those programs offered in a distance-learning format should be identified. Funded training/continuing education activities may be reported in a separate table. See CEPH Template 3.3.1 (Optional template for funded workforce development activities). Only funded training/continuing education should be

reported in Template 3.3.1. Extramural funding for research or service education grants should be reported in Templates 3.1.1 (research) or 3.2.2 (funded service), respectively.

Participants of LLUSPH continuing education programs generally fall into one of three categories or affiliations. Public health and other health care professionals who are constituents of the current workforce. This includes state and local health departments, tribal nations, and various professional organizations working in public health. The next category includes faith-based and community organizations (FBCOs). These organizations have great impact on and relationships with their local communities and through collaborations with FBCOs LLUSPH is able to bring education and training to a wide variety of community constituents. The final category includes alumni and recent graduates. Within this group LLUSPH provides training to the entire workforce spectrum, from the emerging workforce to those who are entering retirement.

The training needs of the aforementioned organizations, communities, and individuals are determined through the engagement of key informants and representatives in a variety of ways. These include face-to-face meetings with department and organizational leadership, polls and surveys, direct partner requested trainings, and finally from LLUSPH itself as research findings and new knowledge are disseminated through conferences, programs and other forums

3.3.c. Description of certificate programs or other non-degree offerings of the school, including enrollment data for each of the last three years.

Due to changes in federal aid eligibility effective summer 2014, all existing Post Baccalaureate (PB) Certificate programs were closed to new enrollment to allow time to consider whether the programs should be permanently closed or modified. The certificate programs have the potential to address workforce development issues, so those in critical areas were retained and modified. Currently, they are not eligible for federal aid given changes in federal aid policy.

The following changes are effective for the 2016-2017 academic year:

- Modified requirements for the PB Certificate will be a minimum of 12 units of required coursework plus 1 unit of Religion (required by the University).
- The following existing certificate programs (under the 27 unit requirement) were modified according to the new LLU policy requirements:
    - PB Certificate in Health Geoinformatics
    - PB Certificate in Lifestyle Intervention
    - PB Certificate in Maternal Child Health
    - PB Certificate in Emergency Preparedness and Response
- One new certificate program, developed according to the new requirements, has been added:
    - PB Certificate in Health Administration
- Two new Professional Certification (PC) certificate programs are being developed for 2017-2018:
    - PC Certificate in Non-Profit Management
    - PC Certificate in Health Communications

Each certificate program has learning outcomes linked to the required coursework. Certificate program maps can be found in 3.3 of the ERF. The certificate programs are intended to be used for workforce development, and to attract potential applicants to the degree programs. The programs will be offered entirely online and marketed to professionals who wish to gain expertise and skills in these areas. During the 2016-2017 academic year, marketing will focus on the LLUSPH website and local workforce

contact, in addition to the investigation of reduced per unit tuition cost. There are no enrollment data for the past three years, because of the hiatus in enrollment for certificate programs.

3.3.d. Description of the school's practices, policies, procedures and evaluation that support continuing education and workforce development strategies.

LLUSPH supports workforce development and Continuing Professional Education (CPE) through the Office of Public Health Practice (OPHP). In partnership with LLUH Staff Development, the CPE office offers targeted continuing education to public health and other health-related professionals both inside and outside the school. While faculty are not required to complete a specific number of CPE credits unless as required to keep relevant licensing, they are encouraged to pursue professional continuing education both through the CPE office and external opportunities such as trainings and conferences. Supervisors have opportunity to encourage, empower, and ensure employees make and meet professional development goals in annual evaluation reviews. OPHP has also offered classes to various external audiences, including public health department staff, nurses, environmental health professionals, home health and skilled nursing staff, and community health workers.
One of the continuing education and workforce development highlights of OPHP is the Healthy People in Healthy Communities conference. This two-day annual conference is hosted by the school both as an annual scientific meeting and as also a venue to actively connect and engage with researchers, students, and community members around public health. The conference is a strategic way of involving SPH faculty and students in both sharing and learning of the various areas of public health expertise within the school. Past conference themes have included Building a Culture of Health (2016), Healthy Kids in Healthy Communities (2014), Healthy Aging and Living Whole (2012). Next year, 2017, will be the first International Symposium on Blue Zone Science. LLUSPH is in one of the five demographically and epidemiologically confirmed "blue zone" zone regions in the world, and this conference will provide the opportunity for research teams from the five areas to share their findings, and draw present day application for modern communities. While attendance to the conference is not mandatory for faculty or students, SPH faculty are strongly encouraged to provide students with opportunities to attend, present, or volunteer for the conference.

3.3.e. A list of other educational institutions or public health practice organizations, if any, with which the school collaborates to offer continuing education.

- Adventist Health Ministries
- American Lung Association
- California Nevada Public Health Training Center
- Environmental Systems Research Institute (ESRI)
- Loma Linda University Children's Hospital
- Loma Linda University Health
- Loma Linda University Medical Center
- Morongo Band of Mission Indians
- Riverside Community Health Foundation
- San Bernardino County Department of Public Health

3.3.f. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

The criterion is met.

Strengths:

The OPHP has built effective partnerships and collaborations which enhance the effectiveness of the public health workforce. We have recently enhanced systems to manage, track, and report training initiatives. The school as a whole has committed to improving the workforce within our local public health community.

Weaknesses:

1. Successful advertisement of continuing education and workforce development opportunities.
2. Closure of university certificate programs, due to changes in federal aid regulations, halted these continuing education course offerings. These have been restructured and are now offered in a streamlined and online format of a minimum of 13 units. Given the recent change, the extent to which these newly redesigned certificate programs attract participants and result in improved workforce capacity.

Plans for Improvement:

1. Continue to develop a sustainable business model for online continuing education.
2. Continue to develop sustainable new non-governmental partnerships to assist in funding continuing education and workforce development.
3. Encourage local stakeholders to develop a regional strategic plan for continuing education and workforce development. This strategic planning will focus on needed areas of workforce development and will take the form of a yearly needs assessment done jointly by the school and local stakeholders.
4. Develop a new fee structure for new LLUSPH certificates and market these revised online certificate programs to community partners, alumni and global Seventh-day Adventist healthcare and pastoral community for workforce development.

4.1 Faculty Qualifications. The school shall have a clearly defined faculty which, by virtue of its distribution, multidisciplinary nature, educational preparation, practice experience and research and instructional competence, is able to fully support the school's mission, goals and objectives.

4.1.a. A table showing primary faculty who support the degree programs offered by the school. It should present data effective at the beginning of the academic year in which the self-study is submitted to CEPH and should be updated at the beginning of the site visit. This information must be presented in table format, organized by department, specialty area or other organizational unit as appropriate to the school and must include at least the following: a) name, b) title/academic rank, c) FTE or % time, d) tenure status or classification*, e) graduate degrees earned, f) discipline in which degrees were earned, g) institutions from which degrees were earned, h) current instructional areas and i) current research interests. See CEPH Data Template 4.1.1.

***Note: classification refers to alternative appointment categories that may be used at the institution.**

Table 63 Primary Faculty Supporting Degree Programs can be found in 4.1 in the ERF.

Table 64 below provides a summary of the information found in Table 63 in the ERF.

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Biostatistics	Oda, Keiji	Assistant Professor	MS MPH	Concordia LLU SPH	Experimental Psychology Biostatistics	Biostatistics
Biostatistics	Shavlik, David	Assistant Professor	MSPH PhD	LLU SPH LLU SPH	Biostatistics Epidemiology	Teaching areas Epidemiologic methods Applied statistical analysis
Biostatistics	Wilber, Loretta Joy	Assistant Professor	MPH MD	LLU SPH LLU	Biostatistics	PCOR 501/502/503 Public health core Biostatistics content
Environmental Health Sciences	Santos, Edirlei	Instructor	BS	Sao Paulo Adventist University	Math	GIS
Environmental Health Sciences	Sinclair, Ryan	Assistant Professor	PhD Post Doc MPH	Tulane National Research Council LLU SPH	Environmental Engineering and Environmental Health Environmental Microbiology International Health	Environmental Microbiology / Quantitative Microbial Risk Assessment / Wastewater Management / Water Recycling and Reuse / Environmental Field Epidemiology / Environmental Health Sampling / Data Management for Environmental Health Sensors / Household Hygiene / Water Quality / Environmental Justice / Citizen Science
Environmental Health Sciences	Smith, Robin	Assistant Professor	B.S. B.S. Ph.D.	University of Oregon University of Oregon University of Texas at Austin	Biology/Evolutionary Ecology Psychology Toxicology and Pharmacology	Toxicology / Environmental Risk Assessment / Environmental Health / Outdoor Air Quality
Environmental Health Sciences	Spencer-Hwang, Rhonda	Assistant Professor	DrPH MPH	LLU SPH LLU SPH	Epidemiology Epidemiology	ENVH 605 Environmental Health Seminar; ENVH 589 Risk Assessment; and ENVH 566 Outdoor Air Quality and Human Health

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Epidemiology	Beeson, W Lawrence	Professor	MSPH DrPH	LLU SPH LLU SPH	Biostatistics Epidemiology	Epidemiology
Epidemiology	Job, Jayakaran	Professor	MPH DrPH MBBS MD	LLU SPH The Johns Hopkins University SPH CMC Vellore, India	International Health International Health	Global health, Tobacco prevention and control, Infectious disease epidemiology, Grant/contract proposal writing
Epidemiology	Knutsen, Raymond	Associate Professor	MPH MD	LLU SPH Univ of Oslo, Norway	Nutrition	EPDM 509 online: Principles of Epidemiology / EPDM 566: Epidemiology of Cardiovascular Diseases / EPDM 567 online: Epidemiology of Aging / EPDM 694: Research / EPDM 699: Applied Research / EPDM 698: Dissertation
Epidemiology	Knutsen, Synnove	Professor	MPH PhD MD	LLU SPH University of Tromso, Norway Univ. of Oslo, Norway	Epidemiology Epidemiology/Prev. Med	Epidemiology of Adventist Studies / Mentoring doctoral students (DrPH and PhD)(chair and committee member) / Funded (NCI) and unfunded research using data from the Adventist Health Study
Epidemiology	Morgan, John	Professor	DrPH MPH	LLU SPH LLU SPH	Epidemiology Epidemiology	Epidemiology principles and practice
Epidemiology	Singh, Pramil	Associate Professor	MPH DrPH	LLU SPH LLU SPH	Epidemiology Epidemiology	Two epidemiology methods courses: EPDM 511 and EPDM 512. Mentor MPH students in epidemiology and biostatistics: STAT 694 and EPDM 699 Mentor DrPH and PhD students in epidemiology and in preventive care

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Global Health	Andersen, Sharilyn	Assistant Professor	MPH	LLU SPH	Global	Practicum. PHCJ 798 (A.B,C and D) and HADM 724 (A.B,C and D) Public Health Practicum and Internships
Global Health	Gaede, Donn	Assistant Professor	MPH DrPH	LLU SPH LLU SPH	Health Administration Global Health	Global health Integrated community health
Global Health	Mataya, Ronald	Professor	Specialty Training MD	Taiwan Adventist Hospital, Taipei, Taiwan West Visayas State University, Iloilo City, Philippines	Obstetrics and Gynecology	Global Health / Maternal and Child Health / HIV/AIDS / Reproductive Health and Family Planning
Global Health	Schuh, Holly	Instructor	MPH PhD	LLU SPH Johns Hopkins SPH	Global Health International Health	Global health systems Global health community health and development
Health Services Administration	Banta, Jimmie	Associate Professor	PhD MPH	UCLA LLU	Health Services Biostatistics	Health Policy / Research / Statistics / Epidemiology
Health Services Administration	Blethen, Elisa	Assistant Professor	MBA	University of Central Florida	Business	Healthcare Management Capstone
Health Services Administration	Gashugi, Leonard	Professor	PhD	Boston University	Economics	MBA, Global Health Systems
Health Services Administration	Gurule, Donna	Assistant Dean	MPH DrPH	LLU SPH LLU SPH	Environmental Health Health Policy and Leadership	Public Health Core (health policy and leadership component)

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Health Services Administration	McCleary, Karl	Professor	MPH PhD	Emory University, Rollins School of Public Health University of Alabama at Birmingham	Health Policy and Management; Administration-Health Services (Cognate Areas: Organizational Studies & Health Services)	Systems thinking; organizational behavior, organizational theory, organizational development; strategic management; human resources management; health services administration; health policy; health equity
Health Services Administration	McField Morgan, Edward	Associate Professor	MSA PhD	Andrews LLU	Social Policy Masters: Community Development PhD: Social Policy and Social Research	Current Topics in Health Policy and Leadership (1); Policy Development for a Twenty-First Century Health System (3); Leadership, Policy, and Environmental Change (3); Health Policy Theory and Concepts (4); Policy Advocacy and Civic Engagement (4); Building Healthy Communities: Integrative Health Policy (3); Preliminary Research Experience (3); Applied Research (3)
Health Services Administration	Oh, Jisoo	Assistant Professor	DrPH MPH	LLU SPH LLU SPH	Epidemiology Epidemiology	Survey research methods. Qualitative research methods. Mixed research methods.
Nutrition	Gheen, Krystal	Instructor	MPH RD	LLU SPH	Nutrition	Community nutrition
Nutrition	Haddad, Ella	Associate Professor	MS DrPH	LLU LLU SPH	Biochemistry Preventive Care	Public Health Nutrition / Nutritional Science / Nutrition Seminar
Nutrition	Heskey, Celine	Assistant Professor	MS DrPH	Andrews University LLU SPH	Human Nutrition Nutrition	Nutrition assessment, medical nutrition therapy, education, and counseling; Vegetarian nutrition

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Nutrition	Jaceldo-Siegl, Karen	Associate Professor	DrPH MS	LLU SPH University of the Incarnate Word	Nutrition Nutrition	Nutritional Epidemiology
Nutrition	Rajaram, Sujatha	Associate Professor	MS PhD	AHS College, India Purdue, West Lafayette, IN, USA	Nutrition Nutrition	NUTR 504, NUTR 517, NUTR 519 / / Metabolism, Macronutrients, Phytochemicals
Nutrition	Rizzo, Nicolino	Assistant Professor	PhD M.Sc.	Karolinska Institute, Sweden Justus Liebig University, Germany	Ph.D. Epidemiology, Medicine M.Sc.: Nutrition Science Minor: Nutritional Psychology	Nutrition and Epidemiology
Nutrition	Sabaté, Joan	Professor	MPH DrPH MPH Doctor of Medicine	LLU SPH LLU SPH LLU SPH Autonomous University of Barcelona	Health Education Nutrition Epidemiology Medicine	Research Methods / Nutritional Epidemiology / Vegetarian Nutrition / Clinical Trials
Nutrition	Siapco, Gina	Associate Professor	Doctor of Public Health (DrPH) Master of Public Health	LLU SPH Adventist International Inst of Advanced Studies (AIIAS)	Nutrition Health Education	Nutrition / Public Health Nutrition

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Social and Behavioral Science	Dos Santos, Hildemar	Assistant Professor	MPH DrPH MD	LLU SPH LLU SPH Federal University of Rio Grande, Brazil	Health Promotion and Nutrition Preventive Care	Stress management / Smoking Cessation / Addiction Prevention / Lifestyle Disease Reduction
Social and Behavioral Science	Gleason, Peter	Assistant Professor	PhD MA	LLU LLU	Psychology Psychology	Health behavior; behavior principles; leadership; research methods; qualitative research methods; behavior theory
Social and Behavioral Science	Handysides, Daniel	Assistant Professor	MPH DrPH	LLU SPH LLU SPH	ENVH Health Education	Public Health for Dentistry / HPRO 509 / HPRO 536 / HPRO 539 / HPRO 544 / PCOR - guest lecture
Social and Behavioral Science	Handysides, Sandra	Instructor	MSN	California State Univ Long Beach	Nursing	Assistant for PCOR 501 (Fall 2015) PCOR 502 (Winter 2016) PCOR 503 (Spring, 2016) /
Social and Behavioral Science	Herring, R Patricia	Professor	MA PhD	University of Texas, Dallas Texas Woman's University	Interdisciplinary corporate Health Education	Health Ed Maternal & Child Health
Social and Behavioral Science	Lee, Jerry	Professor	MA PhD	U of NC, Chapel Hill U of NC, Chapel Hill	Experimental Social Psychology Experimental Social Psychology	Health Behavior Theory and Research / Research Methods / Development of a Dissertation Proposal
Social and Behavioral Science	Medina, Ernesto	Assistant Professor	MPH DrPH	LLU SPH LLU SPH	Health Ed Preventive Care	Exercise Physiology / Obesity / Nutrition / Stress Management / Behavior Change / Lifestyle Management

Table 64 Primary Faculty Supporting Degree Programs Summary						
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Graduate Degrees Earned**	**Institution where degrees were earned**	**Discipline in which degrees were earned**	**Teaching Area**
Social and Behavioral Science	Nelson, Anna	Assistant Professor	DrPH MPH	LLU SPH AIIAS	Health Education Health Promotion	Health Education / Qualitative Research / Program Planning / Seminars in PH
Social and Behavioral Science	Wiafe, Seth	Assistant Professor	MPH PhD(c)	LLU SPH University of Southampton	Environmental and occupational health Health sciences	Health geoinformatics

4.1.b If the school uses other faculty (adjunct, part-time, secondary appointments, etc.), summary data on their qualifications should be provided in table format, organized by department, specialty area or other organizational unit as appropriate to the school and must include at least the following: a) name, b) title/academic rank, c) title and current employment, d) FTE or % time allocated to the school, e) highest degree earned (optional: schools may also list all graduate degrees earned to more accurately reflect faculty expertise), f) disciplines in which listed degrees were earned and g) contributions to the school. See CEPH Data Template 4.1.2.

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Biostatistics	Bahjri, Khaled	Adjunct Instructor		0.75	MD MPH DrPH	Medicine Biostatistics Epidemiology	Biostatistics
Environmental Health Sciences	Fahnestock, Lindsay	Contract Instructor	LLU Graduate Student	0.25	MPH DrPH(c)	Environmental & Occupational Health Nutrition	Environmental Health
Environmental Health Sciences[2]	Martinez, James	Adjunct Instructor	Program Manager San Bernardino County Super-intendent of Schools	0.5	EdD MPH	Health Education Epidemiology	GIS
Environmental Health Sciences[2]	Nimako, Solomon		Fire Analyst at City of Rancho Cucamonga	0.5	M.Sc	Geographic Information Systems	GIS – Integration of geospatial data
Environmental Health Sciences	Riegel, Kristen	Contract Instructor	Supervising Hazmat Specialist, San Bernardino County Fire Dept.	0.25	MPH	Environmental and Occupational Health	Hazardous Materials/Environmental Health
Environmental Health Sciences	Uhlman, Steve	Contract Instructor	Senior Industrial Hygienist, Riverside County	0.25	BS JD	Biology Law	Industrial Hygiene Indoor Air Quality

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Epidemiology	Fraser, Gary	Professor	Loma Linda University	0.5	MBChB Dip Stats PhD MPH	Medicine Math Statistics Epidemiology Physiological Hygiene	Teach post-doctoral fellows informally
Epidemiology	Kiani, Fatemeh			0.25	DrPH	Epidemiology	EPDM method in outcome research
Epidemiology[2]	Napier, Rachaline	Adjunct Instructor	LLU	0.5	MPH	Epidemiology	Overview / Capstone
Epidemiology	Orlich, Michael	Assistant Professor	Loma Linda University	0.5	MD PhD	Epidemiology	
Global Health	Belliard, Juan Carlos	Associate Professor	Loma Linda University	0.5	PhD MPH	Higher Education Global Health/Environmental Health	GLBH 517 Cultural Issues in Health Care / GLBH 545 Integrated Community Development
Global Health	Gamboa-Maldonado, Thelma	Assistant Professor Contract	LLU ICP	0.25	MPH DrPH	Health Promotion and Education Health Promotion and Education	Community Health and Development
Global Health	Jones Debay, Katherine	Assistant Professor	Loma Linda University	0.5	MSPH	Public Health	Global Health / Reproductive Health / Maternal and Child Health / Women in Development
Global Health	Lawrence, Rachel	Assistant Professor	SPH	0.5	MPH	Global Health	Community Health and Development Interventions

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Global Health[3]	Manning, Brenden	Contract Instructor	Senior Associate, Jurisdictional Coordinator BioWatch Program; Contractor to the Department of Homeland Security, Office of Health Affairs	0.25	MPH	Global Health, with Certificate in Emergency Preparedness and Response	Emergency Preparedness & Response
Global Health[3]	Miller, Ryan	Adjunct	Director of Emergency Management Howard County Fire and Rescue	0.25	MS	Crisis, Emergency, and Risk Management	Emergency and Preparedness and Response
Health Services Administration	Abreu, Shaunielle	Contract Instructor	LLUH, Human Resources	0.25	MA	Communications	HADM 574 Human Resource Management
Health Services Administration	Campbell, Kirk	Director of Educational Technology	Loma Linda University	0.5	Ed.S MEd	Administration and Leadership Education	Foundations of Leadership and Management Information Systems
Health Services Administration	Chinnock, Richard Edwin	Professor (Secondary)	LLUH	0.5	MD MS	Medicine Health Administration	Leadership, Health systems

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Health Services Administration	Duncan, Lesford			0.25	MPH	Health Policy and Leadership	Health Policy and Management
Health Services Administration	Grohar, Albin	Associate Professor	Loma Linda University	0.25	MAT PhD	Biology Educational Administration	Doctoral Program in Leadership and Policy, Nonprofit Management Cognate
Health Services Administration	Hibbert, Andrew	Contract Instructor, Manager	LLUH, Business Development Department	0.25	MBA	Management	HADM 507 Foundations of Accounting (co-teaching)
Health Services Administration	Johnston, Christian	Assistant Professor	LLUAHSC	0.25	JD	Law	Healthcare Law
Health Services Administration	Murdoch, Patricia	Contract Instructor	LLU	0.25	MPH	Public Health	Health Policy Communication
Health Services Administration	Perryman, Scott	Contract Instructor, Sr. Executive VP	LLU Children's Hospital	0.25	MBA	Finance	HADM 555 Healthcare Delivery Systems
Health Services Administration	Purkeypile, Austin	Contract Instructor	LLUMC, International Heart Institute	0.75	MBA	Management	Fundamentals of Accounting & Managerial Accounting & Organizational Behavior

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Health Services Administration	Rielo, Mark	Contract Instructor	VA Loma Linda Health Care System: Operation Officer for Chief of Staff	0.25	MA MPH	Health Administration	HADM 605 Healthcare Quality Management
Health Services Administration	Shah, Huma	Adjunct Assistant Professor	Loma Linda University	0.5	MPH DrPH	Health Administration Health Promotion and Education	HADM 604 Strategic Planning in Health Care; HADM 528 Organizational Behavior
Health Services Administration	Thomsen, Calvin	Assistant Professor	Loma Linda University	0.5	Doctor of Ministry PhD Master of Divinity	Practical Theology Social Neuroscience Family Therapy Pastoral Ministry	HADM 529 Conflict Management and Negotiation in Health Care; Organizational Behavior
Health Services Administration	Valentine, Heather	Contract Instructor	LLUH, Department of Marketing	0.25	MBA	Management	HADM 559 Health-care marketing
Nutrition	Cordero-MacIntyre, Zaida	Associate Research Professor	Loma Linda University	0.15	Pharm.D MPH MS Ph.D	Pharmacy Environmental and Tropical Health Nutrition	Research in Diabetes in the Hispanic community
Nutrition	Westerberg, Maryellen	Associate Clinical Professor	Loma Linda University	1	DrPH MPH, RD	Public Health Nutrition	Community Nutrition / Health education
Social and Behavioral Sciences	Arechiga, Adam	Adjunct Associate Professor	LLU SBH	0.25	PsyD DrPH	Psychology Public Health	Motivational Interviewing HPRO 606
Social and Behavioral Sciences	Berk, Lee	Professor	LLU	0.25	DrPH MPH	Preventive Care	Mind-body interaction Health outcomes

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Social and Behavioral Sciences	Ford, Patricia	Clinical Dietitian	LLUMC	0.25	MPH, RD DrPH	Nutrition Preventive Care	Obesity and Disordered Eating; Exercise Nutrition
Social and Behavioral Sciences	Hopkins, Gary	Adjunct Assistant Professor	Andrews University	0.25	MD MPH DrPH	Medicine Public Health Public Health	Child and Adolescent Health - HPRO 524
Social and Behavioral Sciences	Hopp, Joyce	Emeritus Distinguished Professor	Loma Linda University	0.25	MPH PhD	Health Education Health Education	Writing for Health Professions
Social and Behavioral Sciences	Marshak, Helen	Dean	Loma Linda University	0.5	M.S. Ph.D.	Social Psychology Social Psychology	Previously (up to 15-16 academic year): HPRO 588. And HPRO 694/698 (Research/Dissertation), HADM 694/698 (Research/Dissertation)
Social and Behavioral Sciences	Martin, Leslie	Adjunct Professor of Health and Social Behavior	LLU	0.5	PhD MA	Psychology Psychology	DISSERTATION
Social and Behavioral Sciences	Modeste, Naomi	Emeritus Professor	Loma Linda University	0.5	MPH DrPH	Community Health Health Education	Health Education
Social and Behavioral Sciences	Molina, Graciela	Instructor	Loma Linda University	0.5	MFR	Family Relations	Previously (up to 2008-2015) Field Practicum for Online MPH. HPRO 798
Social and Behavioral Sciences	Molina, Rafael[2]	Assistant Professor	SPH	0.25	M.ED	Curriculum and Instruction: Distance Education	Digital Education

Table 65 Other Faculty Used to Support Teaching Programs							
Disciplinary Unit	**Name**	**Title/Academic Rank**	**Title & Current Employer**	**FTE or % Time[1]**	**Graduate Degrees Earned**	**Discipline for earned graduate degrees**	**Teaching Areas**
Social and Behavioral Sciences	Paalani, Michael	Contract Instructor	Loma Linda University School of Public Health	0.25	Master of Science Doctor of Public Health	Biology Preventive Care	Tobacco Control
Social and Behavioral Sciences	Randhawa, Manjit	Adjunct	Clinical Research Informatics Manager, Inland Empire Health Plan	0.5	MPH MD	Public Health Practice Medicine	Population Medicine
Social and Behavioral Sciences	Studer, Karen	Assistant Professor	LLU Faculty Medical Group	0.25	MD MPH	Health Education and Promotion	Population Medicine
Social and Behavioral Sciences	Tonstad, Serena	Professor	LLU	0.25	MD PhD MPH	Preventive Care	Preventive Care Obesity Management Lifestyle Diseases and Risk Reduction

[1] Contract Instructor FTE was calculated by taking number of courses taught during the academic year and multiplying by .25. Co-taught courses were rounded to whole numbers.
[2] Some faculty serve more than one area and have been categorized under the Disciplinary Unit that reflects the area in which they teach most, or their area of training.
[3] Emergency Preparedness is included in GLBLHLTH.

Notes: Contract Instructor FTE was calculated by taking number of courses taught during the academic year and multiplying by .25.

4.1.c. Description of the manner in which the faculty complement integrates perspectives from the field of practice, including information on appointment tracks for practitioners, if used by the school. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

See "OPHP Story of Impact of Trainings Given" and "2013-2016 OPHP Trainings CEPH" in 4.1 of the ERF.

LLUSPH intentionally integrates perspectives from education, research, service and public health practice, as articulated in the mission and vision statements. The school actively seeks to assemble a highly diverse adjunct and clinical faculty who by virtue of their primary employment bring a wealth of understanding of public health practice to students in a variety of ways. These experts are local, regional, and even international practitioners who are invited to participate in the classroom as teachers or guest lecturers to explore areas of interest in greater depth. In the field, their most important roles are to precept and interact with students at practice sites, immersing them in public health experiences, and to serve as mentors to students during their practica, internships, residencies, service learning activities and research projects.

Our mission and vision are explicitly aligned with the promotion and tenure application process as practice-based scholarship (or research-related scholarship for faculty rooted in the basic sciences) is one of the three central areas of emphasis in which faculty demonstrate professional competence. In this manner, faculty are recognized and rewarded for excellence in public health practice. At the same time, the school enjoys the contributions of approximately 14 adjunct faculty and contract instructors who share the practice perspective of public health with students, and ensure that LLUSPH academic activities are relevant to society's needs.

In addition to the human resources which enrich traditional classroom environments, LLUSPH systematically promotes community engagement through its Office of Public Health Practice (OPHP). The OPHP, through grants and contracts, conducts training needs assessments of local health departments, builds capacity of underserved populations and local agencies, and provides abundant student practice opportunities. The OPHP is also active on a statewide level at promoting the public health profession to high school and undergraduate under-represented minorities. Lessons learned from OPHP activities are incorporated back in the classroom through PHCJ 606 (Public Health Fundamentals).

4.1.d. Identification of measurable objectives by which the school assesses the qualifications of its faculty complement, along with data regarding the performance of the school against those measures for each of the last three years. See CEPH Outcome Measures Template.

While the School of Public Health gauges faculty qualifications in traditional ways – including educational background, teaching capability, scholarship, research accomplishments, and extent of public health practice, it also places great emphasis on qualitative attributes, including compassion and a vocation for social justice, coupled with undeterred passion and commitment to improving public health. Although perhaps less tangible and therefore more difficult to present as formal outcome measures, these are nonetheless fundamental to assess faculty performance as they are directly aligned with our core values.

The outcome measures selected for faculty qualifications, especially those with primary appointments, relate to the level of academic preparation and congruency to instructional responsibilities, distribution across the core public health domains, multidisciplinary nature, and scholarly productivity of primary

faculty. Scholarly productivity includes the usual activities, but also public health practice activities and service. Outcome measures relating to research competence can be found in Criterion 3.1.

Table 66 Outcome Measures: Qualifications of Faculty, 2014-2016				
Outcome Measure	**Target**	**Year 1 (2014-2015)**	**Year 2 (2015-2016)**	**Year 3 (2016-2017)**
Academic Preparation				
Percentage of FT primary faculty with a doctoral degree (includes MD or equivalent)	85%	75%	83%	78%
Distribution and Multidisciplinary Background				
Percentage of FT primary faculty with at least one graduate degree in a public health discipline	60%	85%	90%	88%
Teaching competence				
Teaching evaluations	School-wide course evaluation mean score >3.80	4.4	4.0	In progress
Service Engagement				
Percentage of FT primary faculty participating in professional service.	50%	29%	33%	In progress
Percentage of FT primary faculty involved in community service.	50%	15%	23%	In progress

The number of primary faculty as defined by CEPH has decreased from 61 in the fall of 2014 to 41 in the fall of 2016. Part of this reduction is due to a transition in some faculty who were classified as administrative or "other" faculty in the fall of 2015. There were also several faculty who resigned. Of the 41 faculty members with primary appointments, 32 (78%) have doctoral degrees, an increase from 75%. Of those with doctoral degrees, 21 are in public health, 14 have a PhD degree, seven hold medical doctoral degrees, and five who hold both a PhD/DrPH and a medical degree. The percentage of primary faculty with at least one graduate degree in a public health discipline has increased from 85% to 88%. Four primary faculty with master's preparation only are currently pursuing doctoral degrees. LLUSPH is partially, and in some cases, fully sponsoring individuals who desire to earn a doctoral degree or to enhance existing professional credentials by pursuing formal public health training. The current administration has strongly encouraged individuals to seek terminal and other degrees outside of the LLU system.

Faculty diversity, which translates into the range of teaching, research, and service activities in which faculty members are engaged – is crucial to the school's capacity to offer a solid and timely curriculum within an excellent instructional environment for students to engage in research and practice activities outside the classroom. Our faculty is relatively diverse as the term is traditionally understood in the United States, i.e., including individuals from minority ethnic or other under-represented groups. By virtue of being part of a University affiliated with a world church, our faculty also exhibits great international diversity. Our faculty includes individuals from virtually every continent, representing many national origins and languages.

4.1.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Drawn from a variety of public health and related disciplines, the core primary faculty fulfills the stated goals and mission of the school. In addition to the appropriate education preparation needed in the discipline, the faculty also have the competence and experience as demonstrated in research, practice and professional contributions to support the goals of the school.

Strengths:

1. The school provides a robust teaching program and is anchored by a diverse, well-qualified, experienced and competent faculty representing a broad spectrum of public health and other health-related fields who share a passion to inspire and educate the next generations of public health professionals.
2. We retain a highly motivated faculty with a mission-driven commitment and loyalty to support institutional goals.
3. Offers secondary or adjunct faculty appointments drawing from rich resources available in the other schools within the Loma Linda University Health system.
4. Our school is endowed with many faculty who are actively engaged in public health practice locally and globally thereby enriching the educational experience offered to the student.
5. We balance faculty resources in a given program (such as Biostatistics) with experienced faculty with broad research skills so that the academic quality and rigor of the program is not compromised. Faculty from other schools at LLU (e.g., the School of Allied Health Professions) also provide faculty resources when needed.

Weaknesses:

1. A few programs can benefit from the presence of more mid- to senior level researchers and teaching faculty who could provide mentorship to junior faculty.
2. Given the recent change in the faculty numbers in Biostatistics, the school is actively recruiting appropriate faculty to support this core program.

Plans for Improvement:

1. Continue to recruit and retain faculty with proven successful research experience.
2. Seek to enhance faculty and staff remuneration.
3. Identify resources to improve and support the quality of teaching and research particularly among the younger faculty.
4. Periodically engage external experts to evaluate discipline-specific programs and curricula.

4.2 Faculty Policies and Procedures. The school shall have well-defined policies and procedures to recruit, appoint and promote qualified faculty, to evaluate competence and performance of faculty, and to support the professional development and advancement of faculty.

4.2.a. A faculty handbook or other written document that outlines faculty rules and regulations.
Here is the link to the 2015 Faculty Handbook for the university: http://www.llu.edu/pages/handbook/facultyhandbook/index.php. Within this document is the 2007 School–specific policies for School of Public Health.

4.2.b. Description of provisions for faculty development, including identification of support for faculty categories other than regular full-time appointments.

Support for faculty is provided by both the university as well as by the school.

The university demonstrates its commitment to faculty development in many ways.

New faculty – The University holds quarterly orientation sessions for new faculty to learn about the University-at-Large academic issues, benefits, safety, resources and other issues. Faculty are required to take refresher courses for this on an annual basis.
Workshops and colloquia – LLU provides in-service workshops designed to improve teaching and to address the concerns of the faculty at large. The annual education "fairs" provide faculty members with ideas and resources. These include activities to increase student collaboration/networking, and a variety of workshops and seminars for faculty development in the areas of teaching and learning, peer coaching, distance learning issues, putting a course on-line and other topics.

The university-wide faculty colloquia held at the beginning of each school year include speakers from various backgrounds dealing with pertinent topics and addressing issues that affect faculty development. Adjunct and clinical faculty are also invited to these events. There is a technical training series, EXSEED, offered each June where faculty and staff can be trained on several research, technical and teaching skills.
Intranet Resources – The university subscribes to the Atomic Learning portal where faculty can enroll in online short professional courses on topics such as distance education training, online teaching, and research productivity and student engagement. The university also uses an Organization Wide Learning (OWL) portal where online training is customized for campus specific topics.
Internet subscriptions – The university maintains several licenses to professional software that faculty use for productive teaching, research and presentation. The University subscribes to: Instructure Canvas for a learning management system, Qualtrics for a comprehensive survey and research suite, Reference managers, ESRI mapping software, google drive for collaborative shared space and several research databases through the University Library.
Library support – In order to give maximum flexibility, faculty can access the library and its services through the internet Virtual Private Network. This is very useful as faculty travel to international commitments or work from home.
Governance – The Inter-School Faculty Advisement Council (IFAC) meets monthly and oversees the interests of faculty at LLU. These faculty university resources are listed on the LLU webpage http://myllu.llu.edu/home/. Each school is represented with at least one representative on IFAC and this person brings school specific issues to IFAC and reports back to their school.

Physical activity and wellness – In line with its motto "to make man whole", the university has an up-to-date wellness center, The Drayson Center is available, free of charge, to full-time faculty and at a reduced rate to part-time and adjunct faculty www.llu.edu/centralldrayson/about.
Wholeness health plan options – The University's health plan offers health savings by providing an optional wholeness plan for faculty and staff that maintain a healthy lifestyle.
Office of sponsored research – maintains the integrity and sustainability of research in the institution by hosting several important functions. http://researchaffairs.llu.edu/
Investigator Searches – The LLU supports faculty searches for extramural funding by subscribing to the SPIN search through the University's LleRA system

a. (Loma Linda electronic Research Administration). The LLU website maintains several other research guides.
b. **Award Administration –** For faculty who receive grants, the LLU supports grant project and financial management.
c. **Human Studies lifecycle** – LLU offers support for the process of initiating, submitting, and conducting Human Studies Research. There is a university wide human subject's review board.

The school demonstrates its commitment to faculty through various means.

1. **Faculty enrichment** – The school sponsors faculty enrichment through several formal methods and encourages faculty to request informal methods for enrichment.
    a. The school sponsors formal faculty enrichment by co-organizing with LLU's School of Allied Health in organizing the Formative Peer Dialogue review program. This is an active faculty teaching review where participating faculty visit a classroom with active teaching and evaluate the on-site class. The review is only available to the faculty and an excellent method for feedback on teaching styles.
    b. LLUSPH is piloting a training session on enhancing the classroom through the use of Apple technology applications and hardware.
    c. The school administration support faculty enrichment requests if it can benefit multiple individuals. One example of this is the school's recent support for several faculty to attend the Lily conference on teaching methods. Another example is LLUSPH's willingness to purchase new cost-efficient technology (e.g. 3d printer, audio visual equipment) if it used to benefit faculty teaching and development.
    d. An annual faculty retreat provides an off-campus setting in which faculty members may interact with each other in various informal and formal ways, particularly in team building activities, and develop collaborative relationships.
2. **Educational and continuing education support** –
    a. Continuing education and other courses within the school are provided to faculty at no cost.
    b. Courses outside the system are usually covered by the tuition benefit where full-time employees may take up to eight (8) units of course work per year at no cost.
    c. Faculty can use their continuing education course benefit to attend the annual Healthy People convention.
    d. The tuition benefit for faculty is enhanced for those with additional years of service. The tuition benefit will extend to cover an entire complete professional program within the participating Schools of Allied Health, Behavioral Health or Pharmacy.
3. **Annual incentive** – Each full-time faculty member is provided $500 per year from the annual budget for his or her professional development. Typical uses of the funds are to attend professional meetings, and to purchase books and computer hardware or software.

4. **Orientation and Governance** – Each September, the school conducts an annual faculty meeting during which academic programs, services, research, and administrative issues are discussed. The three academic centers also conduct an annual all day faculty meeting which serves as a focus for growth as well as a forum for discussing concerns and issues identified by the faculty. The three centers actively discuss their mission, goals and objectives and formulate new plans as necessary. These meetings provide opportunity for the faculty within the centers to set individual goals and yet identify the common objectives towards which they will be working as a team.
5. **Faculty organization** – The Faculty Council is made up of full time faculty with no membership by LLUSPH administration. This council meets to address faculty specific issues and ensure faculty representation in SPH committees.
6. **Research support** – LLUSPH Center for Health Research (CHR) and other research support services serve to improve the quality of the research proposals submitted and funded, and to aid faculty development. CHR supports all phases of the research process as a tailored approach to LLUSPH:
    a. **Grant writing mentoring groups** – under the leadership of the director of the center, faculty can join groups who work throughout the year on developing research proposals and giving constructive feedback on proposals and papers. This system is especially useful for faculty needing assistance in developing and refining specific aims, choosing appropriate study designs and statistical analyses for their research proposals.
    b. **Seed Money** – The CHR coordinates the distribution of seed money to faculty members who submit research proposals. This program is called Grants for Research by Interdisciplinary Partners (GRIP).
    c. **Grant writing support** – the CHR employs a full-time person who assists with administrative aspects of the grant writing process including assembling needed documents, meeting deadlines, obtaining appropriate signatures, obtaining quotes, helping with the wording of certain sections, the actual electronic submission, etc. This office distributes regular grant opportunity announcements.
    d. **Research forums** – the CHR, in cooperation with the large ongoing research studies, arranges forums where current research findings are being presented and discussed by faculty.
7. **Statistical support** – the Research Consulting Group in the Center for Health Research is available for statistical consultation for faculty. This center helps with power and sample size, data entry, questionnaire design, analyses, and poster development. These services are used both by faculty and by doctoral students at no cost.

4.2.c. Description of formal procedures for evaluating faculty competence and performance.

Evaluation practices to be adopted:

1. The evaluation of faculty competence and performance is based on general criteria outlined in the school's Rank, Promotion and Tenure policies which describe the level of accomplishment and expertise expected at each faculty rank in the areas of research, teaching, and service in the faculty member's field. Within these guidelines, academic centers may also employ a more specific set of criteria to evaluate performance within particular fields. The relative emphasis given to the various criteria depends in part on the goals and responsibilities of the position in which the faculty member serves; for example, some faculty members may engage in collaborative research to a greater degree than others. It is expected that at a minimum Program directors and Center directors will annually review the performance of each faculty member in their program or center; and will meet with each faculty member for a discussion of his or her teaching and research activities.

2. Evaluation for promotion by the Rank, Promotion and Tenure Committee. A revised set of policies and procedures (2016) has just received input in October 2016 from LLUSPH Faculty Council and will go for final approval by LLUSPH Administrative Committee. The revised policy can be found in the 4.2 of the ERF.
3. Faculty workload document. In addition to the Faculty workload policy as described in LLUSPH Faculty Handbook, there are specific effort percentages assigned to a given academic activity (such as teaching a course, advisement, serving in a committee etc.) prepared by the Center Directors in conjunction with the faculty. This document quantifies and captures the distribution of various activities that contribute to the faculty's workload. The faculty workload document can be found in 4.2 of the ERF.

Since 2013, four faculty members have sought promotion from assistant to associate professor and two were awarded promotion. During this same period, two of three faculty who sought promotion from associate professors to full professor were awarded promotion. We anticipate that the proportion of doctoral trained and senior trained faculty will continue to increase as the school has strategically prioritized faculty recruitment efforts toward identifying individuals who are public health researchers, and is aligning financial incentives for existing faculty who show noticeable scholarly productivity. We expect that this strategy will potentiate faster academic promotion of junior faculty.

4.2.d. Description of the processes used for student course evaluation and evaluation of instructional effectiveness.

The school has an established system to manage electronic course evaluations. We use a web-based system called CoursEval. There are two evaluations each turn. First, there is one during the 4th week of the course (seven days), this is a midterm course evaluation where we collect information about students experience and their suggestions to improve the quality of the learning experience. Instructors receive access to the results by the 5th week and they have the opportunity to consider the suggestions made by students in the areas of communication, feedback, and teaching style, among others.

The second course evaluation is conducted between the 9th and 11th week of the course which is the end of the term. During this experience, students evaluate both the learning and teaching experience including: 1) Course (organization, readings, course requirements, grading system, level of teaching, course rigor and knowledge gained), 2) Instructor (availability, responsiveness, mastery of knowledge, as well as the instructor's sensitivity to diversity issues.

In both cases, the midterm and end of term evaluations are performed electronically through an anonymous survey. Students receive one invitation and daily reminders during the period the surveys are open.

In the years preceding 2013, the school was organized by academic departments. During that period, the evaluation report was available to both the instructor and department chair. These results were intended to be used by the department chair in the annual performance evaluation of each faculty member, though in many instances such evaluations did not regularly take place. Effective January 2014 the school was re-organized into academic centers and the reports have been made directly available to the instructor by using their personal access code to the CoursEval system. Faculty members are now members of the new academic centers and the executive director use the results for the same process as 2009-2013, the annual performance evaluation of each faculty member.

The office of assessment sends invitations to the students to complete surveys using the Qualtrics system. Students reflect on their educational experience and offer suggestions to improve the learning experience.

In 2015, the school designated a faculty member as peer reviewer and liaison for digital teaching. This new peer-review process looks to assist the faculty member to improve the course design and delivery.

Teaching competence is highly valued at LLUSPH. Instructional excellence is a goal throughout all programs. Questions in the course evaluation are intended to capture information relative to the instructor's performance, organization of the material, and delivery. Each of the multiple questions gauging the instructor's competence is scored on a scale from 1 ("strongly disagree") to 5 ("strongly agree"). We believe that receiving a course evaluation score of 3.80 is a reasonable benchmark to judge teaching competence. Although there is always room for improvement, we are reasonably satisfied with the mean scores. The school-wide mean score ranged from 3.5 to 4.9 (4.4 overall) based on a total of 1629 responses during the years 2013-2016.

Each Faculty member receives a compilation of their course evaluations at midterm and again at the completion of the academic quarter. This allows instructors to adjust their course delivery if needed.

4.2.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met with commentary.

Strengths:

1. The university and school publish appropriate, detailed policies which define clear expectations as they relate to faculty roles and responsibilities. Policies are updated periodically and are communicated to all faculty during orientations, regular faculty meetings and are also available electronically.
2. School polices are consistently applied in the Rank, Promotion and Tenure Committee which is composed of faculty from LLUSPH and the university.
3. There are many opportunities and resources available in SPH and within the university to faculty to continue their professional (teaching, research and practice) and personal growth. Incentives are offered through waiver of registration fees, ability to enroll in up to 8 credit units per year at no cost etc.
4. Procedures are in place to evaluate faculty performance and productivity on a regular basis.

Weaknesses:

Given the transition from a department-based administrative structure to a Center-based model, further refinement is needed in the faculty evaluation process. It is apparent faculty were not always reviewed on a regular basis in the department structure, so procedures and systems are being put in place to ensure that is done now.

Plans for Improvement:

SPH recognizes the need for and value of improved, standardized assessment methodologies for teaching/learning (e.g., course evaluations, faculty peer reviews), research outputs and practice activities and is in the process of developing specific plans.

4.3 Student Recruitment and Admissions. The school shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the school's various learning activities, which will enable each of them to develop competence for a career in public health.

4.3.a. Description of the school's recruitment policies and procedures. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each.

LLUSPH recruitment policies and procedures aim to connect LLUSPH mission and values with like individuals who are interested in integrating health and community with Christian values. LLUSPH intends to attract:

- Students who support the faith-based mission of the campus;
- Students with stellar qualifications as scholars and with the capabilities to excel in their chosen field;
- Graduate and undergraduate students with a background in epidemiology, biostatistics, behavioral science, health education, environmental health, health administration, health policy or similar field;
- Health practitioners who choose to enhance their careers with an added public health degree;
- Students who represent a diverse population and culture.

SPH faculty, staff, students, alumni, and LLU administration share the responsibility for recruitment. The Director of Enrollment Management is tasked with the primary recruitment responsibilities with secondary responsibilities falling to the admission's staff. The school reaches out to prospective students through off-campus promotions, on-campus events, printed and web promotion, direct email communication, and surveys in an effort to build a positive and lasting relationship with qualified potential applicants.

Graduate Fairs and Presentations

LLUSPH is an active participant on college and university campuses through graduate and professional school events, campus presentations, advising sessions, college and graduate fairs, job fairs, and information sessions. Recruitment emphasis is given to Christian schools, ASPPH events, APHA events, and California institutions. Increased interest and resources is paid to colleges and universities who have historically produced large numbers of leads and qualified candidates. During the recent recruitment period, SPH was represented by the Director of Enrollment Management, admissions staff, administration, faculty, and others members of staff. The following is a list of colleges and universities for graduate events and campus presentations:

Table 67 Colleges and Universities for Graduate Fairs and Presentations	
Community Colleges	Union College
Cerritos Community College	Cal Poly Pomona
Moreno Valley College	Andrews University
Crafton Hills Community College	Atlantic Union College
Norco Community College	Azusa Pacific University
Pasadena City College	Biola University
Chaffey Community College	California Baptist University
San Bernardino Valley College	La Sierra University
Citrus College	Oakwood University,
Riverside City College	Pepperdine University
Mount San Antonio College	Southern Adventist University
Universities	Pacific Union College
Walla Walla University	Southwestern Adventist University
Southern Caribbean University	Kettering College
UC Davis	Westmont College

Future recruitment plans include additional west coast colleges and universities, out of state institutions, increased presence in local community colleges, and increased presence at other Christian schools.

Conference and Organization Representation

LLUSPH reaches out to prospective students and the community at a variety of conferences and annual meetings. Some of these conferences include the American Public Health Association Annual Meeting, Idealist Annual Meetings, APHA, This is Public Health Annual Meetings, California Registered Dietitian Conference, Consortium of Southern California Colleges and University quarterly event, Preventive Medicine Conference, and Southern California Public Health Association. Future conference participation will include organizations that focus on under-represented recruitment and international students.

Loma Linda University Open House

LLU hosts an annual Open House event to acquaint prospective students with campus programs. The 2016 event included about 1,000 students at the general LLU event, with a portion of those attending LLUSPH session. Prospective students received information about the school and programs. Students were invited to speak with faculty, staff, current students, and alumni. Next year's open house date has been set and additional outreach will take place before the event via email and web advertisement.

Pre-Professional Advisor Workshops

LLUSPH hosts two on-campus pre-professional workshops for advisors from fellow Adventist universities as well as other California Christian schools. Attendees are treated to presentations from SPH faculty and students as well as a question and answer session. LLUSPH also send faculty members to other schools for presentations and advising. Next year's goal is to get more faculty members involved and plan for more presentations on other campuses.

Website Promotion
A new website (both content and design) was recently launched. LLUSPH has added to the functionality of its webpage by expanding on the content, increasing information about programs and requirements, responding to the analytics of the webpage traffic, expanding on the faculty directed blog, synchronizing with our social media, and making web pages more user friendly. Additional information concerning the university, such as housing opportunities, map of area and campus, student life, student activities, financial aid, and spiritual life is housed on the main LLU webpage. Links have been created on our webpage to connect to the information on the main webpage. Additional features will allow students to ask admissions representatives a question via email using the "AskLLU" feature, schedule a campus tour, and view the recruitment calendar for upcoming events. Our goal is to increase web traffic, keep up with demand, and be able to adapt to the change in technology and potential applicant's needs.

Printed Materials
LLUSPH utilizes handouts reflecting program requirements, program description, objectives, and courses required for program. There is also an overview of public health describing the field of public health, programs offered, features of LLUSPH, cost, and academic centers information. In fall of 2015, a travel piece was created to enhance the information already provided. The travel piece included further information on the programs and school.

Content Management System
LLU is currently implementing a content management system called Talisma. The capabilities of the Talisma Multi-channel CRM for Higher Education includes the ability to have a global view of contacts and communication, conduct coordinated email and SMS campaigns, streamline the event management process, provide personalization and accountability for prospective students communication, and the utility and software to track and report recruitment efforts. Future Talisma communications will be scheduled for prospective, accepted, and admitted students on a schedule that will reach them during targeted moments during the admissions cycle.

The Talisma system will enable participants in the recruitment process to log and track phone, print, and email communications with individual students. By coordinating recruitment efforts, faculty and staff will work more effectively as a team in student recruitment.
LLUSPH implements a well-developed communication plan that includes emails, printed, materials, and phone calls to perspective students at targeted times in the admissions process.

Public Health Employee Development
MOU – Educational Partnership with County of Riverside Public Health Office: The agreement between LLUSPH and the County of Riverside Human Resources Department provides any employee of the County of Riverside a 30% discount on current graduate, online and certificate programs. The discount applies to tuition rates only.

4.3.b. Statement of admissions policies and procedures. If these differ by degree (eg, bachelor's vs. graduate degrees), a description should be provided for each.

Admissions policies and procedures are stated in the yearly LLU Catalog, the LLU Student Handbook, and in the LLUSPH Academic Policy Handbook. Part of the policy and procedures is that accepted students are expected to comply with the lifestyle which is consistent with the belief system of the Seventh-day Adventist Church while in the program and on campus. Students indicate acceptance of this policy by their signature of acknowledgement. Each student receives a copy of the LLU Student Handbook and receipt of this is acknowledged by the student's signature. See:
https://home.llu.edu/sites/home.llu.edu/files/docs/student-handbook.pdf

LLUSPH encourages an educational environment supportive of diverse population groups. While the school has the right to give preferences to accepting SDA students, students from any belief system may apply and accepted students are granted equal respect and rights and privileges, regardless of gender, race, ethnicity, economic status, and political or religious belief.

Applications are submitted through a centralized application system (CAS) utilized by many schools of public health, SOPHAS. Application and supporting documentation is submitted to SOPHAS for review and verification. Once this process is completed, the information is available to LLU. This download promotes a secondary application to be emailed to application for completion. Once the secondary application is submitted, the applicant's information is fully uploaded into the LLU system.

For all master's programs, applications are processed through the office of admissions and forwarded to the appropriate program director for review and final decision. Applicant is notified of final decision shortly after. Letters are sent stating the decision and if accepted, any conditions of the acceptance. Students are also informed of their advisor.

For the doctoral program, applicants must have all application documents into LLU by February 15th. All applications are processed through the admissions office. Completed applications are forwarded to program director after the deadline has passed. The top applicants are asked to come in for an interview with the doctoral committee. Applicant is notified of final decision shortly after. Letters are sent stating the decision and if accepted, any conditions of the acceptance. Students are also informed of their advisor.

The school has a year round admissions for all MPH and MS programs. The MBA, DrPH, and PhD programs only accept once a year during the fall term. Acceptance into the graduate degree programs is based on a completed application (see above two paragraphs), official transcripts from all schools attended, official scores from the following graduate entry examination: Graduate Records Examination (GRE), Graduate Management Admissions Test (GMAT), Medical College Admissions Test (MCAT), Law School Assessment Test (LSAT), or Dental Aptitude Test (DAT), a personal statement, and three letters of recommendation. A personal interview is optional at the discretion of the program director. For international students, an English Proficiency TOEFL (or equivalent accepted examination) is also required with a satisfactory passing score. Each of these items serve as indicators of the student's potential for success in graduate education. Admission requirements include a US Baccalaureate degree from a regionally accredited institution and a GPA of 3.0 or higher for all master's level programs. A GPA of 3.5 or higher and M.P.H. degree or master's degree in a related field from a regionally accredited institution is required for all doctoral programs.

4.3.c. Examples of recruitment materials and other publications and advertising that describe, at a minimum, academic calendars, grading and the academic offerings of the school. If a school does not have a printed bulletin/catalog, it must provide a printed web page that indicates the degree requirements as the official representation of the school. In addition, references to website addresses may be included.

Please find these examples in 4.3 of the ERF.

4.3.d. Quantitative information on the number of applicants, acceptances and enrollment, by concentration, for each degree, for each of the last three years. Data must be presented in table format. See CEPH Data Template 4.3.1.

Table 68 describes the number of students who have applied, been accepted, and enrolled by concentration, for each degree, for the last three academic years.

4.3.e. Quantitative information on the number of students enrolled in each specialty area identified in the instructional matrix, including headcounts of full- and part-time students and a full-time-equivalent conversion, by concentration, for each degree, for each of the last three years. Non-degree students, such as those enrolled in continuing education or certificate programs, should not be included. Explain any important trends or patterns, including a persistent absence of students in any degree or specialization. Data must be presented in table format. See CEPH Data Template 4.3.2.

Table 68 describes the number of students enrolled in each specialty area identified in the instructional matrix for the last three years.

Table 68 Quantitative Information on Applicants, Acceptances, and Enrollment				
Degrees and Specializations		**2014-15**	**2015-16**	**2016-17**
Master of Public Health (MPH)				
MPH Biostatistics	Applied	13	14	9
	Accepted	4	9	5
	Enrolled	4	0	3
MPH Environmental and Occupational Health	Applied	12	14	14
	Accepted	9	5	6
	Enrolled	6	2	1
MPH Epidemiology (Medical Epidemiology)	Applied	19	24	8
	Accepted	8	11	2
	Enrolled	3	0	1
MPH Epidemiology (Research Epidemiology)	Applied	23	37	34
	Accepted	10	33	27
	Enrolled	8	11	11
MPH Global Health	Applied	49	47	38
	Accepted	32	39	32
	Enrolled	24	18	14
MPH Health Education (on-campus)	Applied	24	22	13
	Accepted	14	17	7
	Enrolled	10	8	2
MPH Health Education (online)	Applied	10	11	5
	Accepted	8	7	3
	Enrolled	5	3	2
MPH Health Policy and Leadership	Applied	21	36	18
	Accepted	13	24	13
	Enrolled	5	10	1
MPH Lifestyle Management (online)[1]	Applied	2	6	2
	Accepted	2	3	2
	Enrolled	1	2	1
MPH Nutrition	Applied	6	3	10

Table 68 Quantitative Information on Applicants, Acceptances, and Enrollment				
Degrees and Specializations		**2014-15**	**2015-16**	**2016-17**
	Accepted	2	2	5
	Enrolled	1	2	5
MPH Nutrition (Coordinated Program with Dietetics	Applied	36	36	38
	Accepted	24	27	28
	Enrolled	16	23	21
MPH Population Medicine (on-campus)	Applied	2	4	2
	Accepted	2	3	2
	Enrolled	1	1	4 [2]
MPH Population Medicine (online)	Applied	11	10	8
	Accepted	5	9	7
	Enrolled	5	8	4
MS Biostatistics	Applied	1	0	0
	Accepted	0	0	0
	Enrolled	0	0	0
MS Nutrition (Coursework Track)	Applied	3	3	4
	Accepted	1	1	2
	Enrolled	1	1	0
MS Nutrition (Research Track)	Applied	1	2	1
	Accepted	0	2	1
	Enrolled	0	0	1
MBA Health Care Administration	Applied	51	29	28
	Accepted	35	21	19
	Enrolled	27	13	11
PhD Epidemiology	Applied	24	8	8
	Accepted	5	1	1
	Enrolled	3	0	1
DrPH Epidemiology	Applied	11	7	2
	Accepted	2	0	1
	Enrolled	2	0	1
DrPH Health Policy and Leadership	Applied	9	16	11
	Accepted	5	9	5
	Enrolled	5	5	4
DrPH Health Education (on-campus)	Applied	15	11	8
	Accepted	3	2	3
	Enrolled	0	2	2
DrPH Health Education (online)	Applied	27	17	18
	Accepted	7	4	4
	Enrolled	6	2	4
DrPH Nutrition	Applied	16	5	6

Table 68 Quantitative Information on Applicants, Acceptances, and Enrollment				
Degrees and Specializations		**2014-15**	**2015-16**	**2016-17**
	Accepted	6	4	4
	Enrolled	2	2	2
DrPH Preventive Care	Applied	1	2	1
	Accepted	1	2	1
	Enrolled	0	2	1

[1] Program name was MPH Lifestyle Medicine prior to 2016-17 Academic Year

[2]Two of the newly enrolled on-campus MPH Population Medicine students originally applied for online and are part of the 8 online applicants.

Table 69 Student Enrollment Data from 2014-15 to 2016-17						
	2016-17 (201702)		**2015-16 (201602)**		**2014-15 (201502)**	
	HC	FTE	HC	FTE	HC	FTE
Degree & Specialization						
MPH Biostatistics	10	10	12	11	11	9
MPH Environmental and Occupational Health	4	3.5	8	7.5	9	7.5
MPH Epidemiology (Medical Epidemiology)	2	1.5	4	3.5	9	8
MPH Epidemiology (Research Epidemiology)	25	22	18	16.5	20	18
MPH Global Health	28	27	41	36.5	48	41
MPH Health Education (on-campus)	16	14.5	17	16.5	14	11.5
MPH Health Education (online)	10	8	19	13	31	19
MPH Health Policy and Leadership	13	13	12	11	11	9
MPH Lifestyle Medicine		0		0	2	1
MPH Lifestyle Management (online)[1]	3	1.5	6	3	1	0.5
MPH Nutrition	7	6.5	3	2.5	3	3
MPH Nutrition (Coordinated Program with Dietetics)	49	47	51	49.5	45	40.5
MPH Population Medicine (on-campus)	6	5	2	1.5	2	1.5
MPH Population Medicine (online)	16	10.5	20	12.5	23	12
MS Biostatistics		0	1	0.5	2	2
MS Nutrition (Coursework Track)		0	1	1	1	1
MS Nutrition (Research Track)	1	1		0		0
MBA Health Care Administration	21	20	51	42	51	43.5
PhD Epidemiology	8	5.5	10	7.5	12	6
DrPH Epidemiology	9	7.5	9	7	12	9

Table 69 Student Enrollment Data from 2014-15 to 2016-17						
	2016-17 (201702)		2015-16 (201602)		2014-15 (201502)	
	HC	FTE	HC	FTE	HC	FTE
DrPH Health Policy and Leadership	21	18	22	16	15	10.5
DrPH Health Education (on-campus)	11	7	14	9.5	18	13.5
DrPH Health Education (online)	24	16.5	26	17.5	27	16
DrPH Nutrition	16	12.5	17	14	17	13
DrPH Preventive Care	13	8	13	10.5	21	17

[1] Program name was MPH Lifestyle Medicine prior to 2016-2017 Academic Year
Student FTE is determined by full-time or part-time status in Student Information System. FTE: Full-time = 1.0; Part-time = .5
Headcount represented as whole numbers and does not take into account dual programs. Other variations between this table and ASPPH reports are due to data representations within University data system and automated report generation.

4.3.f. Identification of measurable objectives by which the school may evaluate its success in enrolling a qualified student body, along with data regarding the performance of the school against those measures for each of the last three years. See CEPH Outcome Measures Template.

The admissions process is geared towards admitting students who are not only academically qualified but who also share our mission, vision, and values. For this reason, program directors and the admissions office thoroughly screen application and their responses regarding applicant's mission, values, and professional goals as they are considered just as important as GPA and GRE scores.

Table 70 below shows the targeted and average GPA and GRE scores for accepted students for each of the three years.

Table 70 Student GPA and GRE Scores							
GPA of Accepted Students							
Level	***Target***	***2015***		***2016***		***2017***	
Doctorate	3.5	3.66		3.71		3.82	
Masters	3	3.10		3.21		3.85	
GRE scores of Accepted Students							
Level	***Target***	***2015***		***2016***		***2017***	
Doctorate		Old Format	New Format	Old Format	New Format	Old Format	New Format
Quantitative	30^{th} – 50^{th} Percentile	54.88	39.55	53.80	25.33	30.00	29.40
Verbal	30^{th} – 50^{th} Percentile	37.42	41.70	77.60	42.47	25.00	66.60
Analytical Writing	30^{th} – 50^{th} Percentile	34.98	38.75	69.00	40.40	58.00	66.80
Masters							
Quantitative	20^{th} – 30^{th} Percentile	36.27	28.31	33.75	36.07	N/A	41.70

Verbal	20th – 30th Percentile	41.36	38.20	62.88	37.99	N/A	47.78
Analytical Writing	20th – 30th Percentile	54.55	36.97	45.63	41.49	N/A	53.96

4.3.g. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

This criterion is met.

Strengths:

1. Recruitment efforts are school-wide and include faculty, staff, students, and administration.
2. SPH has a full-time professional team dedicated to marketing and the recruitment of students in national and international circles.
3. Our faith-based education and religious affiliation is attractive to students who value this perspective.

Weakness:

1. Lack of more online course and program offerings, as requested by applicants and those inquiring about our offerings.
2. Lack of sufficient scholarship opportunities.

Plans for Improvement:

1. Streamline admission process to improve student satisfaction.
2. Investigate offering more courses and programs online.
3. Identify scholarship opportunities for students (endowment funds, work study, teaching assistant and other LLUSPH student jobs, externally funded fellowships and scholarships) and incorporate these into our website for prospective students.

4.4 Advising and Career Counseling. There shall be available a clearly explained and accessible academic advising system for students, as well as readily available career and placement advice.

4.4.a. Description of the school's advising services for students in all degree programs, including sample materials such as student handbooks. Include an explanation of how faculty are selected for and oriented to their advising responsibilities.

Prior to the reorganization of the school, departments scheduled courses and advised students for their respective programs, including curriculum planning and career advice. After the reorganization, gaps in these services became apparent and transparent, and a more centralized approach was undertaken with regards to course scheduling, curriculum planning and career counseling. The main resources for students include the faculty advisor (identified in the acceptance letter), the program director, and LLUSPH offices for Academic Programs (APO), Records and Student Success, and Career Services.

The first step after the student is accepted is to meet with the APO staff (master's) or the program director (doctoral) to plan a curriculum map by quarter for their entire program. Because APO schedules the quarter and location for SPH courses, the program maps are drafted in this office and sent to the program directors for approval prior to distribution. Information about registration and deadlines are communicated through email and Canvas to students to minimize errors and late registration fees.

Student orientation is held the first day of classes each quarter for the new students. The faculty advisor and/or program director meets with the student at the beginning of their degree program to discuss curriculum, academic expectations and career opportunities, including field practicum.

Student academic progress (SAP) is closely monitored between APO, Records and Student Success and the faculty and program director to identify issues before they become academic problems. Meetings occur with student and Records and Student Success to plan an update to the curriculum map, if necessary.

4.4.b. Description of the school's career counseling services for students in all degree programs. Include an explanation of efforts to tailor services to specific needs in the school's student population.

LLUSPH established the Career Services Office (CSO) in January, 2014, the result of an assessment and visioning effort the school completed in December 2013. This included a focus group in which students expressed a need for guidance in crafting resumes and cover letters, appropriate interview attire and etiquette, conducting internet job searches, and other career-related skills that are needed across all disciplines. Previously, students relied primarily on their faculty advisors and mentors for assistance with these needs. While faculty advisors and mentors remain an important part of a student's experience, additional services to enhance career counseling and opportunities was considered vital to the success of students and their post-graduate employment. In addition, students regularly contacted the school's Writing Center staff for help with resumes, cover letters, and personal statements for medical school and fellowship applications.

The Career Services Office (CSO) shares workspace with The Writing Center, and is staffed by the Writing Center editor and one part-time graduate student assistant. Hour-long workshops on resume building

and cover letters, are scheduled during the noon hour and in the evening to maximize accessibility. In addition, individual appointments are provided to focus on students' particular needs and career goals.

In April, 2014, CSO held its first Career Fair designed especially for SPH students, featuring an exhibit area for employers such as government agencies, non-profits, and health care organizations interested in hiring public health professionals. The Fair included workshops on subjects such as appropriate interview attire, networking, portfolio building, social media and branding, and one-on-one interview practice and resume reviews. The Fair was well-attended by SPH students, and received a great deal of positive feedback.

Since 2014, the Career Fair has been an annual feature for LLU-SPH students, with our third event held in February, 2016. Attendance averages about 75 students per event. In 2016, organizations taking part in our Employer Expo included representatives from national organizations such as the American Cancer Society, the Arthritis Foundation, Kaiser Permanente, and the U.S. Public Health Service, as well as public health departments from surrounding counties, the San Manuel Indian Health Service, and others. Faculty, staff, SPH administration and alumni attended the 2016 Career Fair, reviewing resumes, helping students practice interviewing, and presenting content at workshops. Exhibitors participated in an Employers' Panel on workplace and interviewing tips. Student survey data for their satisfaction with the event for 2014 and 2015 is found in 4.4 of the ERF. Students in 2014 rated the Career Fair as Good (56%) or Excellent (39%), compared to 2015 where students rated the event as Good (55%) or Excellent (28%). Evaluation for 2016 occurred in a small focus group. These data is found in 4.4 of the ERF.

CSO continues to offer regular workshops throughout the year, often live-streaming the session for online students and recording for later viewing. These videos are then posted on the Career Services YouTube channel for students' viewing. To extend its reach, CSO began its own Facebook page in February 2014, which regularly posts up-to-date information from a variety of reputable sources on career trends, job search and networking strategies, and tips for ensuring that resumes are effective and compelling. In addition to skills and career information, CSO recently began publishing a blog with listings for public health jobs, which are updated weekly.

4.4.c. Information about student satisfaction with advising and career counseling services.

Feedback from students on academic advisement and career services comes from an annual survey that occurs in February for Student Satisfaction and in June for the graduating students. Data from the Student Satisfaction survey is given below for 2014 to 2016 is found in 4.4 of the ERF and includes data on importance to students of academic advisement, career services and the writing center services. A review of this data on the students perception of importance of these services shows that academic advisement is viewed as Very Important (range of 59% to 63%) or Important (range of 21% to 26%) to students. Career services were viewed by students as Very Important (range of 38% to 50%) or Important (range of 27% to 29%). The writing services had mixed results with Very Important (range of 24% to 30%), Important (range of 22% to 30%) and Somewhat Important (range of 16% to 23%).

Also from the Student Satisfaction Survey, data were collected on how satisfied the students are with these services (found in 4.4 of the ERF). From 2014 to 2016, students' satisfaction with academic advisement and the career services is improved. This is attributed to the efforts of APO and Student Success for better coordination of course schedules and curriculum mapping for advisement. The career fairs have improved over the past two years and are improving in student satisfaction, as well. The writing center services are typically utilized by students with English as a second language and for those who are writing specialized documents such as dissertations and manuscripts.

4.3.d. Description of the procedures by which students may communicate their concerns to school officials, including information about how these procedures are publicized and about the aggregate number of complaints and/or student grievances submitted for each of the last three years.

Upon acceptance and registration, students receive a link to the Student Handbook, which details the complaint and grievance processes. During Student Orientation, it is communicated to students by Administration that concerns and complaints are taken seriously and can be communicated to (chain of command) the instructor, advisor, program director, Executive Associate Dean, the Assistant Dean for Academics, and LLUSPH Dean. Complaints are reported to the Executive Associate Dean of Student Services and Administration or the Dean's Office.

At mid-term, each student receives an invitation and a link to complete an evaluation for the course(s) he or she is registered. These are compiled and sent to the faculty instructor for their review and feedback. For example, during the PCOR 501 course, information from the students were reviewed by the faculty instructors. In addition, a session was scheduled with the students for their input about the course, since it was the first time it was taught. At the end of the session, the students collectively voiced that they appreciated the opportunity to be heard. Then, during the remainder of the course and the following quarter, changes were put into place based on this feedback from students. Mid-term course evaluations were also monitored during PCOR 502 and 503 to determine the types of concerns to see if additional changes needed to me made to the structure of the course.

Quarterly Town Hall meetings are scheduled with SPH administration, the Student Association and LLUSPH students. Both on campus and online students are invited to attend with a Zoom link provided to online students.

Finally, an electronic Student Satisfaction survey is conducted by SPH annually with results compiled and reviewed by Administration. In addition, exit interviews are conducted by each program to determine strengths and areas for improvement. The Assistant Dean of Academic Administration has also started to conduct focus groups during the MBA's capstone course to determine the students' perceived strengths and areas for improvement for the program with a summary of the qualitative focus group data submitted to the program director and faculty.

When students file a grievance, it is either resolved by administration after considering all facts from both student and faculty involved or if it is of a more serious nature, the administration sets up a grievance committee to deliberate and come up with a set of recommendations. In 2013 there were no grievances filed. In 2014 there were 4 student grievances in the Epidemiology doctoral programs on the grading practices of the comprehensive examination. There was also one grievance on grading policy in a Nutrition course. In 2015 there were 4 grievances in Epidemiology doctoral program related to comprehensive examination grading practices. There was one course-specific grievance in Global Health. There have been no grievances filed thus far in 2016.

For the grievance related to specific course (Nutrition, Global Health), administration provided feedback to the instructor on modifications to the course outline to clarify the expectations regarding grading for the nutrition course (this course syllabus has been updated to clarify grading method) and no substantial evidence was found to support grievance on the global health course.

For the grievances filed in the Epidemiology program related to the grading practices of comprehensive examination, according to school policy, recommendations were made by the Grievance Committee as part of their Report, and those recommendations were provided to the appropriate person and/or supervisor for addressing in the future. The Epidemiology doctoral programs subcommittee has since

established grading protocols and methods and address comprehensive examination preparation and what to expect in their doctoral seminars. These forums are also used to inform the doctoral students of expected passing grade, conditional pass and fail and the process for each of these outcomes. They also address overall grading method and protocols with the students. These procedures are a direct result of the recommendations made by the grievance committee to the program. The comprehensive exam was administered in August of 2016, with no complaints or concerns expressed by students, indicating that this process has been successfully addressed.

4.4.e. Assessment of the extent to which this criterion is met and an analysis of the school's strengths, weaknesses and plans relating to this criterion.

The criterion is met.

Strengths:

1. The streamlined approach to curriculum planning has improved efficiency in offering courses in all programs. Since the school's reorganization, better management and oversight of students' matriculation and success has occurred. Staff of the Academic Programs Office (APO) meets with students to plan their curricula based on scheduled course offerings. The Records Office carefully monitors students' academic progress and contacts students to assist with modifying their curriculum plan to ensure success and on-time degree completion. Overall, students report satisfaction with the school structure, program curriculum mapping and advisement.
2. LLUSPH has received a low number of student complaints and grievances. However, each one is investigated with information reported back to the student.

Weaknesses:

Despite repeated communication, faculty still seem to be unsure of their role in the student's academic plan after the reorganization. Better detailed communication must be implemented for faculty to better understand their role as a faculty advisor and mentor that is distinct from APO and Student Success.

Plans for Improvement:

SPH Academics offices have started to flow-chart the student process, from application to alumni, and communicate this to students, faculty and staff. This will be communicated with faculty and staff and included in the orientation, starting fall onward, for LLUSPH students.

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School of Public Health