SELF-STUDY REPORT

SUBMITTED TO THE COUNCIL ON EDUCATION FOR PUBLIC HEALTH

October 13, 2017

MASTER OF PUBLIC HEALTH PROGRAM UNIVERSITY OF CALIFORNIA, DAVIS



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List of Acronyms

APM Academic Personnel Manual

ASPPH Association for Schools and Programs of Public Health

AY Academic Year

CDPH California Department of Public Health
CEPH Council on Education in Public Health

CPH Certified in Public Health

CR&D Community Relations & Development Committee

CV Curriculum vita
CY Calendar year

DrPH Doctor of Public Health

DVM Doctor of Veterinary Medicine

EPI UCD registrar's course code for Epidemiology courses

ERF Electronic Resource File FTE Full-time equivalent

GMAT Graduate Management Admissions Test

GPA Grade Point Average

GRE Graduate Record Examination
GSA Graduate Student Association
GSR Graduate Student Researcher

HRSA Health Research and Services Administration

JD Juris Doctor

MCAT Medical College Admissions Test

MD/MPH Combined degrees in both medicine and public health

MPH Master in Public Health

MPVM Master in Preventive Veterinary Medicine
OVCR Office of the Vice Chancellor for Research

PI Principle Investigator SAO Student Affairs Officer

SAS Name of a statistical software package

SFR Student Faculty Ratio SOM School of Medicine

SOVM School of Veterinary Medicine

SPH UCD registrar's course code for Public Health courses

SSII Summer session 2
TA Teaching Assistant

TOEFL Test of English as a Foreign Language

UC University of California

UCOP University of California Office of the President

URM Underrepresented minorities

USDA United States Department of Agriculture

VCF Volunteer Clinical Faculty

Executive Summary MPH Program Overview

The MPH program at the University of California, Davis (U.C. Davis) was established in 2002 with a class of 5 students and one specialty in General Public Health. Since then, the program has grown to a class of 35 students and offers specialties in General Public Health, Epidemiology, and Biostatistics. CEPH re-accreditation is sought for the full-time, in-person MPH degree only.

The 56-unit MPH program assigns 40 units to required courses, including the five core public health courses, an informatics course, a four-quarter seminar featuring guest speakers from the public health practice community, and a practicum course. Sixteen units are allotted for electives and/or one of the specialties. The program has several unique features that appeal to prospective students and employers.

- A close relationship with the California Department of Public Health means that
 practicing public health officials regularly lecture in MPH classes and serve as preceptors
 for practicum placements. This provides students regular contact with working
 professionals from a wide variety of public health disciplines.
- The interdisciplinary nature of graduate education at UC Davis allows MPH students to take elective courses outside of the MPH program in subjects such as toxicology, epidemiology, health services research, health communications, and nutrition.
- This academically accelerated program can be completed in 12 months, although students may stay for as long as two years if they choose to take more electives or pursue a part-time degree. Approximately 85% of the MPH students are full-time, and about the same proportion of students complete the degree within 14 months.
- Within six months of graduation approximately 80% of students find career positions in public health, and a handful go on to medical, nursing, or law school or pursue a PhD degree. This indicates a high degree of success in preparing students for public health practice.

Diversity

Since the last accreditation review when reviewers determined the criterion for student diversity was "partially met," we have made progress toward a more diverse MPH class. First, we have a clearly articulated goal for diversity: The program strives to recruit and enroll a student body that reflects the racial and ethnic diversity of the state of California. For purposes of evaluation, the MPH program uses the diversity of the University of California students receiving a bachelors' degree as a benchmark because our program requires a bachelors'

degree for admission. In 2015-16, 21% of the graduating class across all ten U.C. campuses were Latino/Chicano, 4% were African American, and 1% were American Indian; among all graduates, 42% were the first generation in their family to attend college.

Starting in 2011, the MPH program adopted several changes to improve diversity among students: formally adopted a holistic review process that emphasizes many qualities, not solely G.P.A. and GRE scores; recruited more diverse members for the Admissions Committee; and, provided an orientation to Admissions Committee members on diversity policies in the UC system and on unconscious bias. As a result, in the last three years the proportion of American Indian students consistently met our benchmark of 1% of the class; for two of the three years, close to 4% of the class was African American and 21% were Hispanic/Latino students.

Governance

The MPH program is based in the Public Health Sciences Department in the School of Medicine at UC Davis. The chair of the Department is ultimately responsible for the program. Day-to-day operations are managed by the MPH leadership team consisting of an appointed Director who works closely with two Student Affairs Officers. The MPH leadership team meets weekly to address issues as they arise and to ensure that recruitment activities, course teaching coverage, graduation, and other MPH program responsibilities are met. Admissions, Curriculum, and Development Committees meet regularly and make recommendations to the Executive Committee, which in turn makes recommendations to the MPH program Director. All of the committees include members from the MPH faculty, alumni, practicing public health community, and current students.

The MPH program policies and governance are shaped by the policies of the larger UC Davis campus and the 10-campus University of California system. For instance, the Office of Graduate Studies for UC Davis defines minimum admission requirements and graduation requirements. The UC Davis campus's Principles of Community govern diversity and inclusion for students, staff, and faculty. The University of California system sets policy for staff and faculty recruitment and hiring; expectations for faculty research, service, and teaching; and has an established policy and legal guidance to ensure that the racial and ethnic profile of the UC system represent the diverse demographics of the state of California.

Teaching

The MPH required courses are taught by faculty in the Graduate Group in Public Health Sciences. Co-instructors are volunteer clinical faculty from the practicing public health community or faculty from other graduate programs, such as the School of Veterinary Medicine. Interdisciplinary collaboration is fundamental to graduate education at Davis.

In contrast to undergraduate education, which is organized along the lines of departments offering disciplinary majors, graduate education is organized within interdisciplinary Graduate Groups offering masters and doctoral degrees. Graduate Groups draw faculty from a variety of

departments and units with an interest in the particular focus of the Graduate Group. Like the other 98 graduate programs at UC Davis, the MPH program draws its faculty from a variety of schools and departments the Schools of Medicine, Veterinary Medicine, Nursing, Law, Management, and Education and the Colleges of Agriculture and Environmental Sciences, Biological Sciences, Engineering, and Letters & Sciences. Added to this mix are the Volunteer Clinical Faculty among the community practicing public health professionals.

Research and Service

The MPH program faculty are actively engaged in research and service, consistent with the policies and values of the University of California. For instance, the MPH program faculty meet and exceed the goal of three peer-reviewed publications each year, and receive millions of dollars annually in research grants and contracts from the National Institutes of Health and other national and state funders. MPH students sometimes participate in research as Graduate Student Researchers and as co-authors on conference presentations and publications.

Meeting New CEPH Accreditation Criteria

CEPH finalized new accreditation criteria in October 2016. However, our program is in a cohort for which the new criteria do not apply for our upcoming reaccreditation. Accordingly, this Self Study report reflects the older version of CEPH accreditation requirements and program competencies. CEPH requires that programs in our cohort transition to the new requirements within two years of reaccreditation. To meet this transition requirement, the MPH program leadership began working with faculty in January 2017 to incorporate the new competencies into our curriculum.

Criteria, Interpretations and Documentation

1.0. The Public Health Program

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

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

"Our mission is to develop the public health leaders of the future by providing a high-quality Masters degree curriculum in partnership with the public health community. We accomplish this through the collaborative efforts of the UC Davis community, including the Schools of Medicine, Veterinary Medicine, Management, Law, Education, and Nursing and the Colleges of Agricultural and Environmental Sciences, Biological Sciences, Engineering, and Letters & Science. These collaborations offer students content expertise in general public health and health disparities, agricultural and rural health, nutrition, reproductive and women's health, chronic diseases, epidemiologic and biostatistical methodology, informatics, infectious and zoonotic diseases, health economics, health-care quality and outcomes, and others.

We promote a practical public health focus through our historically strong partnership with the public health community, including the California Department of Public Health, local county health departments, and non-profit agencies. These partnerships comprise teaching, student mentorship and field placements, research, service, direction, and support for the UC Davis MPH Program."

b. A statement of values that guides the program.

The UC Davis MPH Program commits itself to public health values, concepts, and ethics underlying our mission to educate the public health leaders of tomorrow. Chief among these values are:

Health: The paramount public health value is health itself. Good health contributes to a happy and productive life. Public health practitioners have responsibility to promote conditions and make evidence-based recommendations conducive to good health in the population.

Community: The community is the fundamental unit in which public health is practiced. Interventions designed to improve health, while ultimately affecting individuals, are nevertheless focused on populations and communities.

Respect for individuals: While focusing on the community as a whole, conflicts may arise in which the freedom of individuals is affected. Public health practitioners must carefully consider the dignity of individuals and work with communities to minimize deleterious effects for individuals.

Professionalism: Public health practitioners must maintain high professional standards in education, research, and application. This includes the necessity of remaining up-to-date regarding important developments in the field and abiding by generally recognized ethical standards. The effectiveness of the public health workforce is closely associated with its public standing and reputation.

We operationalize our public health values through a constant interweaving of these values into the culture of the MPH program, including instructional and practicum placement settings. All core-course faculty and student advisors are given informational material regarding these values and describing their roles in the program. Finally, our evaluation forms (both those completed by faculty advisors on student practicum placements and by students on course evaluations) address these values.

The values cited above comport well with the goals of UC Davis Health, which includes the School of Medicine where the MPH Program is situated. <u>UC Davis Health's new strategic plan</u> identifies five goals and 32 objectives including improved population health, removing barriers to diversity and inclusion, and fostering mutual respect, integrity, and accountability for all.

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

1. Instructional Goals:

- Goal 1.1: Recruit a highly qualified student body representing the racial and ethnic diversity of California.
- Goal 1.2: Offer a high-quality, accelerated program that emphasizes public health practice.
- Goal 1.3: Maintain a highly qualified faculty, including faculty from the public health practice community.
- Goal 1.4: Prepare students for a career in public health.

2. Research Goals:

- Goal 2.1: Acquire external funding to support a productive public health research agenda among the faculty.
- Goal 2.2: Disseminate research findings through peer-reviewed publications.
- Goal 2.3: Involve students in public health research.

3. Service Goals:

- Goal 3.1: Primary MPH faculty members provide service to the MPH Program, School of Medicine, or wider UC Davis campus.
- Goal 3.2: Primary faculty engage in leadership roles in professional and community organizations relevant to public health at the local, state and national level.
- Goal 3.3: Promote public health service opportunities to students.
- 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.

1. Instructional Goals and Objectives:

- **Goal 1.1**: Recruit a highly qualified student body representing the racial and ethnic diversity of California
 - **Objective 1.1.a**: The average GPA of each entering class is 3.4.
- **Objective 1.1.b**: Each MPH class is similar to the characteristics of the University of California bachelor's graduates regarding the distribution of race/ethnicity, gender, and first generation college students.
- **Goal 1.2**: Offer a high quality, accelerated program that emphasizes public health practice.
- **Objective 1.2.a**: 90% of students complete all core courses with a grade of B- or better on their first attempt and have an overall core course GPA of 3.0.
 - **Objective 1.2.b**: 70% of students graduate within 14 months of starting the program.
- **Objective 1.2.c**: Four MPH core courses are co-taught by a practicing public health professional.
- **Goal 1.3**: Maintain a highly qualified faculty, including faculty from the public health practice community.
 - **Objective 1.3.a**: 90% of MPH primary faculty have a PhD or combined MD/MPH degree.
- **Objective 1.3.b**: 30% of MPH faculty are from the practicing public health community (VCF).
- **Goal 1.4**: Prepare students for a career in public health.
- **Objective 1.4.a**: 90% of students are employed or furthering their education within year of graduation.

2. Research Goals and Objectives:

Goal 2.1: Acquire external funding to support a productive public health research agenda among the faculty.

Objective 2.1.a: Maintain level research funding each year due to the competitive funding environment.

Goal 2.2: Disseminate research findings through peer- reviewed publications.

Objective 2.2.a: Primary faculty publish an average of 3 peer-reviewed manuscripts each year.

Goal 2.3: Involve students in public health research.

Objective 2.3.a: 2-3 MH students per year are involved in a research project.

3. Service Goals and Objectives:

Goal 3.1: Primary MPH faculty members provide service to the MPH Program, School of Medicine, or wider UC Davis campus.

Objective 3.1.a: >60% of primary faculty are involved in service to UC Davis.

Goal 3.2: Primary faculty engage in leadership roles in professional and community organizations relevant to public health at the local, state and national level.

Objective 3.2.a: <u>></u>40% of primary faculty hold leadership positions in local, state, and national public health organizations.

Goal 3.3: Promote public health service opportunities to students.

Objective 3.3.a: The MPH program will announce 5-7 service opportunities each year.

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.

The UC Davis MPH Program refined its mission statement, values, goals, and objectives as part of the self-study completed in 2010. The goals and objectives were modified in 2016-2017 to reflect new CEPH instructions for the CEPH Self Study report. The MPH program's mission, values, goals and objectives were reviewed by program faculty, MPH alumni, Deans of the Office of Graduate Studies and School of Medicine, preceptors, program administrative staff, and MPH Program Executive and Curriculum committees. The process for our current revision, reflected in this self-study document, is illustrated in bulleted format below.

- The MPH Executive Committee reviewed and discussed the mission, values, goals, and objectives at their fall, 2016, meeting. The committee agreed that a major revision may be necessary in the near future when the program fully implements the new CEPH accreditation criteria released in October, 2016.
- Prior to the MPH General Faculty Meeting in May 2016, Dr. Cassady and the Program Director provided background material (e.g., current mission, goals, and objectives) to all faculty by email to prepare for discussion at the MPH General Faculty meeting.

- Following the MPH General Faculty Meeting in May, 2017, Dr. Cassady solicited by email input from all faculty to enfranchise those who were unable to attend the MPH General Faculty meeting or had no comments at that time. (Note that the faculty includes Volunteer Clinical Faculty, i.e., practicing public health professionals from state and local health departments.) We also solicited input from current students and alumni via email, and requested that the program administrative staff review and comment. The Program Director sought input from his fellow Program Directors at professional meetings, e.g., Association for Prevention Teaching and Research. Dr. Cassady sent a personalized e-mail to the Deans of the Office of Graduate Studies and the School of Medicine requesting that they review and comment on the self-study document, including the goals and objectives.
- Input from faculty and other constituents confirmed the utility of the current mission, values, goals, and objectives of the program. Dr. Cassady revised some objectives based on the input received.
- The mission is posted on the MPH Program website (mph.ucdavis.edu) and is included in other material as appropriate.
- 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.

MPH students are aware of the MPH Program's mission, values, goals and objectives because these topics are an important part of the Student Handbook, which is distributed to all new students and is the basis of a mandatory, one-day orientation session for new students. In addition, MPH students and faculty advisors use the Student Handbook as a reference on policies and expectations, and so they are routinely reminded of the program's mission, etc. Finally, the general public is informed of the MPH Program's mission on our website (mph.ucdavis.edu), which prominently features the mission and objectives on the "About Us" tab. At public events, such as the annual National Public Health Week Symposium, the Department Chair's welcome and report by the MPH Director includes a reference to the program's mission and values.

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.

We assess Criterion 1.1 as met.

Strengths: The UC Davis MPH Program has a clear and publicly presented mission statement with attendant goals and objectives. They are aligned with the goals and objectives of the School of Medicine.

Weaknesses: None.

Plans: We anticipate changes as the faculty review the goals and objectives to come into compliance with the new CEPH accreditation requirements.

- 1.2. Evaluation. The program shall have an explicit process for monitoring and evaluating its overall efforts against its mission, goals and objectives; for assessing the program'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 program must conduct an analytical self-study that analyzes performance against the accreditation criteria defined in this document.
- 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.

The MPH program uses data from a variety of sources to evaluate the program objectives and to make program improvements. Some of the data is collected by the MPH program from the campus admissions system and from surveys with students and alumni. Students provide feedback on courses through formal course evaluations conducted at the end of every course. They also provide feedback through monthly meetings of the Graduate Student Association (GSA) Representatives for the class and the MPH program Director; as members of the MPH program committees; and, in conversations with their advisors.

Data on faculty qualifications, research, and service is collected by an administrator in the MPH faculty member's home department. This data is used for the faculty merit and promotions review process which is handled at the department level (not in the MPH Program). Most, but not all, of the MPH faculty are members of the Public Health Sciences Department and so this data is available to the MPH program. The Department Chair and Chief Administrative Officer share this information with the MPH leadership team during monthly Administration meetings.

Measure	Data Source, Frequency, and Use
Objective 1.1.a : The average GPA of each entering class is ≥3.4.	 The MPH program annually downloads data from the campus graduate school applications system. This data is shared annually with the Executive Committee and Operations Committee for
Objective 1.1.b : Each MPH class is similar to the characteristics of the University of California bachelor's graduates regarding the distribution of race/ethnicity, gender, and first generation college students.	recommendations to modify recruitment strategies for the next academic year.

Measure	Data Source, Frequency, and Use
Objective 1.2.a: 90% of students complete all core courses with a grade of B- or better on their first attempt and have an overall core course GPA of 3.0.	The MPH program monitors student performance in required courses midway through each quarter and at the end of each quarter to identify students in academic difficulty. Monitoring identifies courses that may have a structural problem (e.g., insufficient teaching assistants or tutors) and barriers to on-time graduation.
Objective 1.2.b : 70% of students graduate within 14 months of starting the program.	 The Curriculum Committee uses quarterly course evaluations to identify problems in required courses, barriers to graduation, and potential solutions.
Objective 1.2.c: Four MPH core courses are co-taught by a practicing public health professional.	 Annually, the MPH program office reviews teaching assignments for the next academic year. As instructors leave a course, the Director invites new instructors to join the faculty and teach.
Objective 1.3.b : 30% of MPH faculty are from the practicing public health community (VCF).	
Objective 1.4.a : 90% of students are employed within 1 year of graduation.	The MPH program issues an annual survey to graduating students collecting employment data.
Objective 2.3.a : 2-3 MPH students per year are involved in a research project.	The MPH program office requests information annually from the Public Health Sciences Grants Administrator, who tracks the Graduate Student Researcher positions on faculty grants.
Objective 3.3.a: The MPH program will announce 5-7 service opportunities each year.	 Annually, MPH staff record postings regularly on social media and in other communications to students. The posts are reviewed throughout the year by the MPH program staff to determine whether the objective is being met.

Measure	Data Source, Frequency, and Use
Objective 1.3.a : 90% of MPH primary faculty have a PhD or combined MD/MPH degree.	The Academic Personnel Coordinator in the Public Health Sciences Department monitors this information for MPH faculty in the Department. The MPH program requests this information annually to determine whether objectives are being met.
Objective 2.1.a : Maintain level research funding each year due to the competitive funding environment.	The PHS Grants Administrator tracks data on faculty memberships and service for faculty in the department.
Objective 2.2.a : Primary faculty publish an average of 3 peer-reviewed manuscripts each year.	
Objective 3.1.a : 60% of primary faculty are involved in service to UC Davis.	
Objective 3.2.a : 40% of primary faculty hold leadership positions in local, state, and national public health organizations.	

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

Evaluation of objectives related to instructional goals occurs primarily within the MPH program leadership and the Curriculum Committee. The MPH program director and associate director have direct contact with students through teaching in the MPH program, attending MPH program events like the quarterly socials, and by advising 2-4 students each year. The MPH program staff regularly speaks with students as they drop in to ask questions or during formal student advising appointments. The MPH program leadership meets weekly to discuss day-to-day operations of the program, including student difficulties and requests, teaching coverage for core courses, and integrating new faculty into the program. These meetings also include discussions of progress toward program objectives, where we review data from student evaluation of courses, admissions and recruitment data, employment data, and the alumni survey. These meetings are a source of continuous quality improvement where new ideas or modifications are proposed. Some changes are implemented immediately, while others must be discussed and approved by the Curriculum Committee.

The Curriculum Committee meets quarterly and reviews student course evaluations, teaching assignments, and new course proposals. The Committee members include all faculty who teach core MPH courses, the MPH leadership, and student representatives, and so provide an important, complementary perspective on the evaluation process. Assessment of this evaluation data sometimes results in recommendations to core course instructors or the MPH program leadership that can be implemented immediately. At other times, the Committee may

need to make a more substantive change requiring a vote among the membership with final approval by the MPH Executive Committee.

There are numerous examples, both large and small, of changes in recruitment and admissions, course offerings, and other activities related to instructional objectives. Here are two examples.

- To better meet **Objective 1.4.a**: **90% of students are employed or furthering their education within 1 year of graduation,** the MPH program acted to ensure that students acquired basic statistical programming skills to better prepare them for careers in public health. Formal comments from students on the Curriculum Committee and informal feedback from students and alumni to the MPH leadership confirmed that employment for some new graduates depended upon mastery of basic statistical program skills in SAS or a similar program. This was accomplished by offering a new elective SAS course (in 2014), and incorporating SAS and R into the biostatistics series course homework (beginning in 2015). The Curriculum Committee approved an additional new elective SAS course (beginning in 2015). Also, the MPH Director met with the instructors of the biostatistics series to encourage them to use SAS or R in lectures and to require that homework be submitted as results from a programming package (beginning in 2016).
- To better achieve **Objective 1.2.b: 70% of students graduate within 14 months of starting the program,** changes were made to ensure that students were able to secure and complete a practicum placement by the June graduation date. Students spoke with the Associate Director to request more guidance on résumé writing and informational interviews to help them identify an appropriate practicum placement earlier in the academic year. These skills are taught in SPH 297: Public Health Practicum, which was offered in winter and spring quarter. The instructor of SPH 297, who is also the program Director, was willing to modify the class to accommodate student requests. In 2016, SPH 297 began in fall quarter and continued through winter and spring. The MPH program faculty and staff will continue to monitor this change to determine if it meets student needs regarding the timing of practicum placements.
- c. Data regarding the program's performance on each measurable objective described in Criterion 1.1.d must be provided for each of the last three years. To the extent that these data duplicate those required under other criteria (e.g., 1.6, 2.7, 3.1, 3.2, 3.3, 4.1, 4.3, or 4.4), the program should parenthetically identify the criteria where the data also appear.

Goals	Objectives		Outcome for academic year	*
		2014-2015	2015-2016	2016-2017
Instructional Goal 1.1: Recruit a highly qualified student body which represents the racial and ethnic diversity of California	Objective 1.1.a: The average GPA of each entering class is 3.4.	3.42	3.50	3.45
	Objective 1.1.b: Each MPH class is similar to the characteristics of the University of California bachelors' graduates regarding the distribution of race/ethnicity, gender, and first generation college students.	29.6% self-identify as Hispanic/Latino/Mexican American/Chicano compared to 21% benchmark; 3.7% self-identify as Black/African American compared to 4% benchmark; 3.7% self-identify as American Indian compared to 1% benchmark. 28% were male compared to a 45% benchmark. 0.7% were first generation college graduates compared to a 42% benchmark.	8.6% self-identify as Hispanic/Latino/Mexican American/Chicano compared to 21% benchmark; 0% self-identify as Black/African American compared to 4% benchmark; 2.8% self-identify as American Indian compared to 1% benchmark. 22% were male compared to a 45% benchmark. 14% were first generation college graduates compared to a 42% benchmark.	18.9% self-identify as Hispanic/Latino/Mexican American/Chicano compared to 21% benchmark; 5.4% self-identify as Black/African American compared to 4% benchmark; 2.7% self-identify as American Indian compared to 1% benchmark. 29% were male compared to a 45% benchmark. 24% were first generation college graduates compared to a 42% benchmark.
Instructional Goal 1.2: Offer a high quality, accelerated program that emphasizes public health practice.	 Objective 1.2.a: 90% of students complete all core courses with a grade of B- or better on their first attempt and have an overall GPA of 3.0. 	77.7%	94.5%	97.3%
	Objective 1.2.b: 70% of students graduate within 14 months of starting the program.	70%	77%	84.4%

	Objective 1.2.c: Four MPH core courses are co-taught by a practicing public health professional.	4	4	4
Instructional Goal 1.3: Maintain a highly qualified faculty, including faculty from the public health practice community.	Objective 1.3.a: 90% of MPH primary faculty have a PhD or combined MD/MPH degree.	93%	95%	100%
	 Objective 1.3.b: 30% of MPH faculty are from the practicing public health community (VCF). 	29%	18%	20%
Instructional Goal 1.4: Prepare students for a career in public health.	Objective 1.4.a: 90% of students are employed or furthering their education within 1 year of graduation.	100%	90.6%	Not Available ¹
Research Goal 2.1: Acquire external funding to support a productive public health research agenda among the faculty.	Objective 2.1a: Maintain level research funding each year due to the competitive funding environment.	\$ 9,060,011	\$ 10,011,136	\$ 13,795,619
Research Goal 2.2: Disseminate research findings through peer-reviewed publications.	 Objective 2.2.a: Primary faculty publish an average of 3 peer- reviewed manuscripts each year. 	CY 2014 7.64	CY 2015 6.88	CY 2016 8
Research Goal 2.3: Involve students in public health research.	 Objective 2.3.a: 2-3 MPH students per year are involved in a research project. 	2	4	3
Service Goal 3.1: Primary MPH faculty members provide service to the MPH Program, School of Medicine, or wider UC Davis campus.	Objective 3.1.a: 60% of primary faculty are involved in service to UC Davis.	70.5%	76.4%	76.4%

¹ Data will be available June 2018

Service Goal 3.2: Primary faculty in leadership roles in professional and community organizations relevant to public health at the local, state and national level.	Objective 3.2.a: 40% of primary faculty hold leadership positions in local, state, and national public health organizations.	88.2%	88.2%	88.2%
Service Goal 3.3: Publicize public health service opportunities to students.	Objective 3.3.a: The MPH program will announce 5-7 service opportunities each year.	2	3	3

The MPH program met 11 of the 14 objectives for at least two of the last three years. Performance on Objective 1.2.a: Student GPA requirements – improved after the "Introduction to Health Science Statistics" was moved from the 6 week, intensive summer session to the 10 week fall quarter which covered the same amount of material but over a longer time period.

The MPH program plans to address consistently unmet targets in the following ways.

- 1.1.b: Recruiting efforts will continue to focus on admitting a racially and ethnically diverse student body, and to improve recruiting and admissions of men and first generation college graduates.
 - 1.3.b: The MPH program director will recruit more Volunteer Clinical Faculty during the 2017-18 academic year to meet the 30% target.
- 3.3.a: The MPH program office will improve tracking of public service opportunities for students, and will generate a report each year.

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

The MPH Associate Director, Dr. Cassady, created the first draft of the 2017 self-study document by updating the successful 2010 self-study document. MPH program staff collected information for tables and composed text for relevant sections of the self-study document. We distributed a draft self-study report via e-mail to approximately 200 individuals among our various constituencies, including Deans, faculty, volunteer clinical faculty, alumni, and preceptors. Key sections of the document were discussed in spring meetings of the Curriculum Committee, Executive Committee, and at the annual MPH Faculty Meeting. The self-study process included participation in a CEPH accreditation workshop in Washington DC (August 2016) and a Skype consultation with CEPH staff in March, 2017.

Substantive discussion and comments centered on a diversity objective and so the following changes were made: 1) gender and first generation college student were added to diversity goals; and, 2) the benchmark for diversity was changed from the California state demographics to demographics of bachelor's degree graduates of the ten campuses in the University of California. Additional discussion and comments confirmed the value of the MPH program, including the practicum project and the current list of MPH competencies. For instance, an alumna wrote to endorse the use of the practicum project to teach cultural competence and to tailor educational opportunities to students' unique interests.

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

We assess Criterion 1.2 as met.

Strengths: Eleven of the 14 objectives were met, indicating a high level of success. The MPH program has clearly established data systems in place and a process to review evaluation data. In addition, a variety of constituencies are involved in data review and recommendations for improvement, including faculty, staff, students, and members of the practicing public health community.

Weaknesses: Data systems for tracking public service opportunities for students is lacking, although announcements for these opportunities are shared routinely over e-mail and Facebook.

Plans related to this criterion: The MPH program will institute a new, internal annual report on progress on each of the 14 objectives to share with Committees and stakeholders. As explained in section 1.2.c., the MPH program will improve recruiting for diverse students and for Volunteer Clinical Faculty, and will improve tracking of public service announcements to students.

- 1.3. Institutional Environment. The program shall be an integral part of an accredited institution of higher education.
- a. A brief description of the institution in which the program is located, and the names of accrediting bodies (other than CEPH) to which the institution responds.

The University of California was established in the mid-1860s as a federal land-grant institution. Originally with only one campus (in Berkeley, CA), the University grew with the state ultimately to comprise ten campuses. The first seeds for the future University of California, Davis campus were sown in 1906, when the California state legislature approved the establishment of a state agricultural school in Davisville. Construction began the next year, and in 1908 the University Farm offered agricultural courses to its charter class. The facility grew in size and stature as an extension of the University of California, Berkeley through the first half of the 20th century. By 1948 the campus opened a School of Veterinary Medicine, and in 1959 UC Davis was recognized as a full-fledged campus of the University of California system. In 1966 the Regents of the University of California authorized the establishment of a School of Medicine at UC Davis. The new UC Davis School of Medicine included the Department of Community Medicine, forerunner to the current Department of Public Health Sciences (administrative home to the UC Davis MPH Program). The medical and veterinary schools are now joined by professional schools of management, law, education, and nursing.

UC Davis is one of the most outstanding campuses in the University of California system. Our campus is the largest in area of the 10 University of California campuses with 5,300 acres. UC Davis stands 26th in research funding (over \$721,000,000 in 2015-2016) among ranked public universities in the U.S., according to the most recent information from the National Science Foundation. According to an annual survey published by the US News & World Report, UC Davis has repeatedly ranked among the top public universities nationally (ranked 10th in 2017; https://www.ucdavis.edu/about/rankings). In 2015, <u>U.S. News & World Report</u> ranks UC Davis School of Medicine among the top 20 schools for primary care training and the top 50 schools for research. The school is affiliated with <u>UC Davis Medical Center</u>, one of the nation's best teaching hospitals. In addition, the university is ranked first in the world for campus sustainability practices by the 2016 UI GreenMetric World University Rankings. UC Davis is one of only 62 universities admitted to the prestigious Association of American Universities.

The campus's reputation has attracted a distinguished faculty of scholars and scientists in all fields. Its 37,000 students come from all across California and the U.S. and from over 120 foreign countries, creating a rich and diverse intellectual community. The campus currently boasts over 4,700 full-time academic personnel (with an additional 3,700 part-time personnel), including over 1,100 in the School of Medicine (with an additional 1,000 volunteer clinical faculty) and 300 faculty in the School of Veterinary Medicine.

UC Davis has nurtured and developed programs in many disciplines relevant to public health. The School of Veterinary Medicine established a Masters in Preventive Veterinary Medicine (MPVM) degree over two decades ago. (Further details are available in the General Catalog, p.

419, or at http://www.vetmed.ucdavis.edu/mpvm/). In 2016, QS World University Rankings recognizes UC Davis as being 1st in veterinary medicine in the world. This program is designed for persons interested in veterinary public health and includes courses also required for the MPH degree—specifically, Epidemiology and Biostatistics. The Epidemiology course is cotaught by faculty from the School of Medicine and School of Veterinary Medicine.

The campus offers 99 graduate and professional degrees. Half of the degree programs are organized as Graduate Groups, which are interdepartmental teaching and research programs under the Dean of Graduate Studies (see Figure 2, below) designed to bring together faculty from various disciplines. Graduate Groups offer masters and doctoral degrees. Many of the faculty involved in the UC Davis MPH Program also are involved in the Graduate Group of Epidemiology. MPH students participate with students from the Graduate Group in Epidemiology and from the campus at large in core courses for the MPH curriculum. (Further details are available in the General Catalog, p. 334 or at http://www.epi.ucdavis.edu). Other relevant Graduate Groups include Nutrition (p. 492 of General Catalog; http://nutrition.ucdavis.edu) and Biostatistics (p. 196 of General Catalog; http://nutrition.ucdavis.edu).

The UC Davis MPH Program is administratively housed within the School of Medicine's Department of Public Health Sciences. Accordingly, the MPH degree is conferred by the Office of Graduate Studies. The School of Medicine coordinates financial aid for students, contributes to the program's overall funding, and influences MPH program priorities through its strategic plan.

The University of California, Davis is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges, an institutional accrediting body recognized by the Council for Higher Education and the U.S. Department of Education.

UC Davis is also accredited by the following bodies:

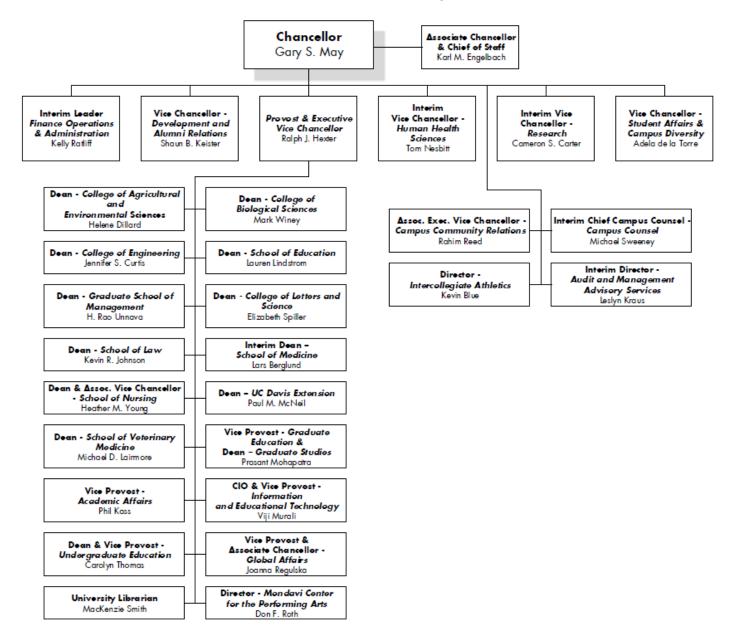
- Accreditation Board for Engineering and Technology
- Accreditation Council for Graduate Medical Education
- Accreditation Review Commission on Education for the Physician Assistant
- Association to Advance Collegiate Schools of Business
- American Association for Accreditation of Laboratory Animal Care
- American Bar Association
- American Chemical Society
- American Dietetic Association
- American Psychological Association
- American Society of Crime Lab Directors Laboratory Accreditation Board
- American Society of Landscape Architects
- Association of American Law Schools

- Association of American Medical Colleges
- Commission on Collegiate Nursing Education
- Commission on Teacher Credentialing
- Computer Science Accreditation Commission
- Council on Education and Public Health
- Council on Education of the American Veterinary Medical Association
- Intersocietal Commission for the Accreditation of Vascular Laboratories
- Liaison Committee on Medical Education
- b. One or more organizational charts of the university indicating the program's relationship to the other components of the institution, including reporting lines and clearly depicting how the program reports to or is supervised by other components of the institution.
- Figure 1. UC Organization Chart [see ERF 1.3.1 and self-study p. 32]
- Figure 2. UC Davis Administrative Organization Chart [see ERF 1.3.2 and self-study p. 33]
- Figure 3. Department of Public Health Sciences Organization Chart [see ERF 1.3.3 and self-study p. 34]
- Figure 4. UC Davis MPH Program Organizational Chart [see ERF 1.4.1 and self-study p. 38]

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Figure 2. UC Davis Administrative Organization Chart

UNIVERSITY OF CALIFORNIA, DAVIS



August 4, 2017

DEPARTMENT OF PUBLIC HEALTH SCIENCES ORGANIZATIONAL CHART

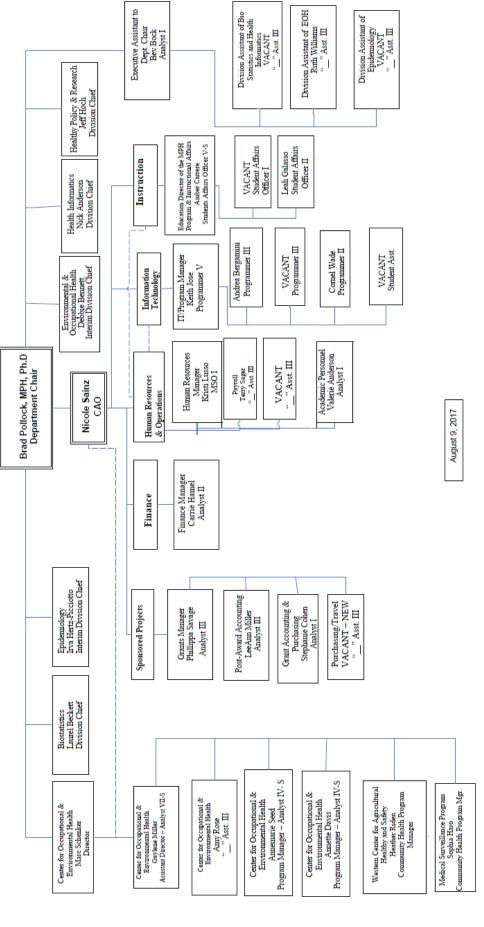


Figure 3. Department of Public Health Sciences Organization Chart

*All "vacant" positions anticipated to be filled by January 2018

- c. Description of the program's involvement and role in the following:
- budgeting and resource allocation, including budget negotiations, indirect cost recoveries, distribution of tuition and fees and support for fund-raising: Funds come from different sources (see section 1.6 Fiscal Resources) and flow from the Public Health Sciences Department to the MPH program. These sources include tuition and fees and contributions from the School of Medicine. The MPH director negotiates with the Department Chair and Chief Administrative office regarding operational support (travel, teaching support, hiring teaching assistants, etc.). The MPH program Student Affairs Officer coordinates with the School of Medicine's Financial Aid Office regarding financial add offers and ongoing student grants and loans. There is no support for fund raising.
- personnel recruitment, selection and advancement, including faculty and staff:
 Recruitment, selection, and advancement of staff and faculty are governed by university-wide policies (see section 1.8 Diversity) and by the Department of Public Health Sciences, the administrative home to the MPH Program. The Department approves the rationale and budget for new staff and faculty and has a Human Resource Analyst and Academic Personnel Coordinator who provide guidance to the MPH program and work with campus-level units to post job openings and recruit for new positions. The MPH Program can directly hire staff, as was the case in 2015 when we hired a new Student Affairs Officer. The Graduate Group recruits 2-5 new faculty each year from the Public Health Sciences department and other departments across campus to join the membership. For instance, two new Graduate Group faculty include Dr. Beatriz Martinez-Lopez from the School of Veterinary Medicine and Dr. Rachel Scherr from the Nutrition Department.
- academic standards and policies, including establishment and oversight of curriculum: The MPH Curriculum Committee approves new electives and reviews student course evaluations to make suggestions to instructors on course improvement. They established and provide ongoing oversight of the MPH curriculum. However, the Office of Graduate Studies at UC Davis is ultimately responsible for admissions, review of degree requirements, and certification that degree candidates have met requirements. This is true of all graduate programs at UC Davis. Any changes to the required curriculum, for instance, requires approval of the Office of Graduate Studies. The MPH Program, with input from all committees including the Executive Committee, makes recommendations on admissions, curriculum, etc. to the Office of Graduate Studies for their approval.

d. If a collaborative program, descriptions of all participating institutions and delineation of their relationships to the program.

Not applicable.

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

Not applicable.

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

We assess Criterion 1.3 as met. The MPH program is embedded in a larger institutional environment with the following strengths:

Strengths:

- UC Davis is a well-established, fully accredited university with robust offerings in graduate education. It holds accreditations in 20 specialty areas, including accreditation in public health by the Council on Education in Public Health.
- The Office of Graduate Studies at UC Davis confers the MPH degree and oversees graduate education, including the curriculum and degree requirements of the MPH program.
- The School of Medicine is an important source of policy, goals, and funding.

Weaknesses: None.

Plans: The MPH program plans to continue operating in a successful and supportive institutional environment.

- 1.4. Organization and Administration. The program 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 program's public health mission. The organizational structure shall effectively support the work of the program's constituents.
- a. One or more organizational charts delineating the administrative organization of the program, indicating relationships among its internal components.

Figure 4. UC Davis MPH Program Organizational Chart [see ERF 1.4.1 and self-study p. 38]

UC Davis Campus Chancellor Gary S. May, PhD School of Medicine Graduate Studies Dean Interim Dean Prasant Mohapatra, PhD Lars F. Burglund, MD, PhD (Admissions, review of degree requirements, confirmation of completion of degree requirements) Dept. of Public Health Sciences Chair Bradley H. Pollock, PhD MPH MPH Program Director **Dept. of Public Health Sciences** Diana Cassady, DrPH **Teaching Faculty** Chief Administrative Officer (CAO) Nicole Sainz, MHA (Members of the School of Medicine, School of Veterinary Medicine, and other campus academic units) **Education Director** Amber Carrere, M.Ed.

Figure 4. UC Davis MPH Program Organizational Chart

Graduate Coordinator Leah M. Galasso, MA b. Description of the manner in which interdisciplinary coordination, cooperation and collaboration occur and support public health learning, research and service.

Interdisciplinary collaboration is fundamental to graduate education at Davis and on other University of California campuses. In contrast to undergraduate education, which is organized along the lines of departments offering disciplinary majors, graduate education is organized within interdisciplinary <u>Graduate Groups</u> offering masters and doctoral degrees. Graduate Groups draw faculty from a variety of departments and units with an interest in the particular focus of the Graduate Group. Students then affiliate with the Graduate Group rather than with a specific department. UC Davis has 99 graduate and professional degree programs, with about half organized as a Graduate Group. Examples of Graduate Groups with significant public health ramifications include Biostatistics, Epidemiology, Food Science, Health Informatics, Microbiology, and Nutritional Biology. Graduate Groups are under the administrative supervision of the Dean of Graduate Studies.

Interdisciplinary coordination, cooperation, and collaboration for the MPH program are supported by the intrinsically interdisciplinary organization of the program. Like other graduate programs, the MPH program draws its faculty from a variety of academic groups on campus: the Schools of Medicine, Veterinary Medicine, Nursing, Law, Management, and Education and the Colleges of Agriculture and Environmental Sciences, Biological Sciences, Engineering, and Letters & Sciences. Added to this mix are the Volunteer Clinical Faculty among the community practicing public health professionals.

Here are some examples of interdisciplinary teaching, advising, and service opportunities.

Teaching: Dr. Keegan (School of Medicine) and Dr. Smith (School of Veterinary Medicine) coteach the core epidemiology course. The required seminar, SPH 290: Topics in Public Health, features speakers from the practicing public health community with a wide range of expertise. MPH electives are offered by the School of Veterinary Medicine, School of Law, and School of Nursing, and College of Letters and Sciences.

Advising: MPH academic advisors are experts in Informatics, One Health, Law, Health Policy and Economics, Environmental Health, Nutrition, Maternal and Child Health, and Occupational Health. New students can request an advisor with an area of expertise that matches his/her interests.

с.	Assessment of the extent to which this criterion is met and an analysis of the
program's str	engths, weaknesses and plans relating to this criterion.

V	۷e	255655	Criterio	n 1.4 as	met.

Strengths:

- The MPH program is in an organizational structure that is clearly defined and promotes interdisciplinary research and teaching.
- The MPH faculty is interdisciplinary, as is the tradition in graduate education at UC Davis. Faculty from the schools of medicine, veterinary medicine, law, agriculture, and letters and sciences conduct a wide range of public health research and contribute their expertise in the classroom.

Weaknesses: None.

Plans: The MPH program will continue to build upon and to seek new interdisciplinary research and teaching opportunities.

- 1.5. Governance. The program administration and faculty shall have clearly defined rights and responsibilities concerning program governance and academic policies. Students shall, where appropriate, have participatory roles in the conduct of program evaluation procedures, policy setting and decision making.
- a. A list of standing and important ad hoc committees, with a statement of charge, composition and current membership for each.

<u>UC Davis MPH Executive Committee</u>: This is the main deliberative and decision-making body for the program. The Executive Committee has overall responsibility for academic, administrative, and budgetary policy for the MPH Program. The Executive Committee is chaired by the Program Director and meets quarterly. Representation includes the School of Medicine and Veterinary Medicine, the California Department of Public Health, core-course faculty, and MPH students. The committee receives reports and recommendations from the working committees described below. Members of the Executive Committee are appointed by the Chair of the Department of Public Health Sciences for three-year terms, which may be renewed. The Program Director serves as *ex officio* chair of the committee [see ERF 1.5 Governance, Committee Meeting Minutes, Executive Committee]. It meets once each quarter.

The Executive committee appoints two current MPH students at the start of each academic year in August. During Orientation, incoming MPH students learn about and identify committees in which they are interested in serving on a survey [see ERF 1.5.a.1]. The MPH Program Director and Student Affairs Officer then review student committee interest forms and student backgrounds to select students for the various committees. This information is then shared with the Faculty Chair who will review the appointments and suggest changes as applicable. Once committee assignments are finalized, students are notified of their committee appointment via email.

Each year, an inquiry is sent to the faculty to identify those interested in renewing or becoming members of the Executive Committee. In a communication with the members of the Executive Committee and based on faculty and student responses, the Program Director proposes for membership those who express interest in joining this committee.

Bradley H. Pollock, PhD, MPH (SOM) Department Chair, ex officio Stephen A. McCurdy, MD, MPH (SOM) Graduate Program Chair, ex officio Diana L. Cassady, DrPH (SOM), Associate Director Bruno Chomel, PhD, DVM (SOVM) Lisa Ikemoto, JD, LLM (SOL) Philip Kass, DVM, MPVM, PhD (SOVM)

Gerhard Bauer, MD (SOM)
Debbie Bennett, PhD (SOM)

MPH Executive Committee Members:

M. Jane Heinig, PhD (Nutrition)
Caroline Peck, MD (CDPH), ex officio
George Ugartemendía, MPH GSA Representative
Bhaani Singh, MPH GSA Representative
Sevana Manukian, MPH Student Representative

<u>UC Davis MPH Curriculum Committee</u>: This committee reviews and promotes development of curriculum for the MPH program. The committee recommends policy regarding issues such as transferability of credits and graduation requirements and reviews course evaluations. Representation includes core-course faculty and students from the MPH program. Instructors of record (IOR's) and the Graduate Program Chair are *ex officio* members of the committee, and the committee meets quarterly [see ERF 1.5 Governance, Committee Meeting Minutes, Curriculum Committee]. It meets once each quarter.

Each year, an inquiry is sent to the faculty to identify those interested in renewing or becoming members of the Curriculum Committee. At the beginning of each year, students are given the opportunity to request membership on the Curriculum Committee. Students and faculty who express interest may then be appointed by the Program Director. A final list of committee members is then sent to the Executive Committee to approve. Committee terms for both students and faculty are for three years and may be renewed.

MPH Curriculum Committee Members: Stephen McCurdy, MD, MPH (SOM), Graduate Program Chair, ex officio Debbie Bennett, PhD, Chair (SOM) Laurel Beckett, PhD (SOM) Kyoungmi Kim, PhD (SOM) Mike Hogarth, MD (SOM) Philip Kass, DVM, MPVM, PhD (SOVM) Marc B. Schenker, MD, MPH (SOM) J. Paul Leigh, PhD (SOM) Roberto De Vogli, PhD, MPH (SOM) Lorena Garcia, DrPH (SOM) Woutrina Smith, DVM, MPVM, PhD (SOVM) Theresa H. M. Keegan, MS, PhD (SOM) Stella Morris, MPH Student Representative Kristen Goh, MPH Student Representative Justin Tonooka, MPH Student Representative

<u>UC Davis MPH Admissions and Advancement Committee</u>: This committee develops and implements student-recruitment strategies, reviews applications, interviews applicants, develops a list of applicants recommended for admission, and reviews progress of admitted students. Representation includes MPH faculty and students, and meets weekly during Winter quarter. (Consistent with University policy, student members do not participate in discussions

regarding progress of current students.) [see ERF 1.5 Governance, Committee Meeting Minutes, Admissions and Advancement Committee].

Each year, an inquiry is sent to the faculty to identify those interested in renewing or becoming members of the Admissions and Advancement Committee. At the beginning of each year, students are given the opportunity to request membership on the Committee. Students and faculty who express interest may then be appointed by the Program Director. A final list of committee members is then sent to the Executive Committee to approve. Committee terms for both students and faculty are one year and may be renewed.

MPH Admissions and Advancement Committee Members: Stephen A. McCurdy, MD, MPH, Chair (SOM)
Diana Cassady, DrPH (SOM)
Shannon Conroy, PhD, MPH (VCF)
BK Yoo, MD, PhD (SOM)
Beatriz Martinez Lopez, DVM, PhD, MPVM (SOVM)
Julia Logan, MD, MPH, MPH Alumni
Benjamin Hicks, MPH, MPH Alumni
Katrina Wyatt, MPH, MPH Alumni
Miriam Odurukwe, MPH Student Representative
Amy Hang, MPH Student Representative
Kristina Sayler, MPH Student Representative
Michelle Rodriguez, MPH Student Representative

<u>Community Relations & Development Committee</u>: This committee meets quarterly, and addresses community relations (including communication and input regarding MPH program priorities vis-à-vis the community) and program development [see ERF 1.5 Governance, Committee Meeting Minutes, Community Relations and Development Committee]. It meets once each quarter.

Each year, an inquiry is sent to the faculty to identify those interested in renewing or becoming members of the Community Development Committee. In a communication to the Executive Committee and based on faculty and student responses, the Program Director proposes for membership those who express interest in joining this committee.

Community Development Committee Members:
Diana Cassady, DrPH, Chair (SOM)
Donald Lyman, MD, DTPH (VCF)
Mark Starr, DVM, MPVM (VCF)
Gerhard Bauer, MD (SOM)
Dennis Pocekay, MD, MPH (VCF)
Christopher (CJ) Calabrese, MPH, MPH Alumni Board
Elizabeth Dingbaum, MPH, MPH Alumni Board
Matthew Mayeda, MPH Student Representative
Sarah Khishen, MPH Student Representative

Melissa Bardo, MPH Student Representative
Lillian Clements, MPH Student Representative
Laura Farnsworth, MPH Student Representative
Sarah Krycia, MPH Student Representative
Caroline King, MPH Student Representative
Behroz Chhor, MPH Student Representative
Rajni Sohal, MPH Student Representative
Jennifer Graham, MPH Student Representative

<u>Ad hoc committees</u>: The Program Director meets periodically with various *ad hoc* committees to address specific issues. Examples include instructors for the SPH 290: Topics in Public Health course to plan seminars for the coming year and instructors of record of core courses to improve integration and minimize scheduling conflicts (ad hoc committee meeting minutes are unavailable for ERF).

<u>SPH 290 Seminar Committee (ad hoc)</u>: This ad hoc committee meets as needed to plan and discuss speakers for the SPH 290 seminar. The last meeting was in the summer of 2014. Members of the SPH 290 Seminar Committee are appointed when they begin teaching the seminar course and remain on the committee for the duration of their service as instructor for the seminar.

SPH 290 Seminar Committee members:
Stephen A. McCurdy, MD, MPH (SSII)
Jessica Nunez de Ybarra, MD (SSII)
Roberto De Vogli, PhD (Fall)
Michael O'Malley, MD (Fall)
Mark Starr, DVM, MPVM, Dipl. ACVPM (Winter)
Marc B. Schenker, MD, MPH (Winter)
Philip Kass, DVM, MPVM, PhD (Spring)
Caroline Kurtz, PhD (Spring)

<u>Instructor of Record Committee (ad hoc)</u>: This committee meets on an as-needed basis to improve course integration and minimize scheduling conflicts. Members are appointed to the Instructor of Record Committee by being appointed as instructor (or co-instructor) of record for a core course or seminar course. They remain on the committee for as long as they remain an instructor of a core course.

Instructor of Record Committee members: Lorena Garcia, DrPH (SPH 201) Michael Hogarth, MD (SPH 210) Debbie Bennett, PhD (SPH 262) Stephen McCurdy, MD, MPH (SPH 290, 297) Theresa H. M. Keegan, MS, PhD (EPI 205) Woutrina Smith, DVM, MPVM, PhD (EPI 205) Roberto De Vogli, PhD, MPH (SPH 222, 290) Laurel Beckett, PhD (SPH 244) Kyoungmi Kim, PhD (SPH 245) J. Paul Leigh, PhD (SPH 273) Marc B. Schenker, MD, MPH (SPH 290) Philip Kass, DVM, MPVM, PhD (SPH 290)

Operations Committee

The Operations committee is comprised of the Department of Public Health Sciences Chair, Chief Administrative Officer, Director, and Student Affairs Officer II. The committee meets monthly to share upcoming educational and programmatic opportunities, and to review feedback received from students, faculty, preceptors, and/or community members.

Operations Committee Members:

Bradley H. Pollock, PhD, MPH (Chair, Department of Public Health Sciences)
Diana L. Cassady, DrPH, MPH (Director, MPH Program)
Nicole Sainz, MHA (Chief Administrative Officer, Department of Public Health Sciences)
Amber Carrere, M.Ed. (Education Director, Department of Public Health Sciences)
Leah Galasso, MA (Student Affairs Officer, MPH Program)

Alumni Board

The mission of the MPH Alumni Board is to unite alumni, students, and faculty to support the UC Davis MPH program in developing public health leaders. The Board's goals are to provide resources and networking opportunities for students and alumni; promote participation in continuing education and professional development activities; support efforts to develop a School of Public Health; and maintain presence in the Public Health Community through service and partnerships.

The Alumni Board is comprised of 5 membership levels: members, which consist of all UC Davis MPH graduates; Board Members, the governing body of the association with voting power; Associate Members, made up by Faculty and Public Health Professionals; community members, any other professional or stakeholder; and honorary members, or those whom achieve a public health accomplishment or is a notable supporter for public health.

The Board is comprised of 1 Chair, 1 co-Chair and a minimum of 5 board members (members should not exceed 17). The Chair is the primary point of contact for the Organization. With the assistance of the Co-Chair, the Chair leads all meetings of the committee; makes committee appointments and is an ex-officio of all committees; appoints committees and advises other officers and committee chairs; and collaborates with the Board of Directors to develop and achieve goals of the Alumni Organization.

The Alumni Board meets quarterly, unless specified otherwise. For general meetings, a notice is distributed to members at least 30 days prior to the meeting date. Board meetings are held every other month, unless otherwise scheduled. Additional and/or special meetings can be

requested by members. Notification of additional meetings requested will be provided two weeks in advance.

Alumni Board Members:

CJ Calabrese, MPH (2016), Co-Chair Kayon Jabbari, MPH (2017), Co-Chair

Catherine Dizon, MPH (2012), Board Member

Laura Farnsworth, MPH (2017), Board Member: Outreach/Communications
Jessica Hwang, MPH (2014), Board Member: Outreach/Communications
Hanna Kim, MPH (2016), Board Member: Mentorship Program Coordinator
Daniel Woo, MPH, MS, BS (2014), Board Member: Events Coordinator
Jorge Andrews, MPH (2015), Board Member: Mentorship Program Coordinator

b. Identification of how the following functions are addressed within the program's committees and organizational structure:

- general program policy development
- planning and evaluation
- budget and resource allocation
- student recruitment, admission and award of degrees
- faculty recruitment, retention, promotion and tenure
- academic standards and policies, including curriculum development
- research and service expectations and policies

The program's administrative, governance, and committee structure are shown in Figure 4 below. As described elsewhere in this self-study, students are involved in all MPH program committees.

The UC Davis MPH Executive Committee is the main deliberative and executive body with respect to **program policy development**, **planning**, and **budget and resource allocation**. The Executive Committee provides general direction and oversight for these functions. The MPH Program Director, in consultation with the Chair of the Department of Public Health Sciences, is responsible for practical implementation in these areas.

Student recruitment, admission and award of degrees are the responsibility of the Admissions and Advancement Committee. The Admissions and Advancement Committee provides direction to the MPH Program Director, who is responsible for practical implementation.

Faculty recruitment, retention, promotion, and tenure are the purview of the faculty member's home department, school, and general campus. The MPH Program Director influences recruitment, retention, promotion, and tenure for MPH faculty in the Department of Public Health Sciences by virtue of the Director's faculty position. Thus, discussions of recruitment policies and voting on promotion and tenure packets for fellow Department faculty are among the Director's academic prerogatives. In addition, the MPH program provides student evaluations for the core MPH courses to the faculty (regardless of their home

department) who teach those courses, and these are included in the merit and promotion packets of those faculty.

Academic standards and policies for MPH <u>faculty</u> operate at the level of the home department (as described in the above paragraph) and at the level of the MPH program itself, which requires that faculty be engaged in research, teaching, and mentoring. Academic standards and policies for <u>students</u> reside at the level of the campus, School of Medicine, and the MPH Program.

Existing policies forbid cheating on examinations or assignments, plagiarism and other forms of academic dishonesty. A copy of the code of conduct can be found at http://sja.ucdavis.edu/scs.html. In addition, students are expected to be honest at all times, act fairly toward others, work independently unless given permission by an instructor to work with a group, and to not submit the same work in more than one class [see ERF 1.5.b 2016-2017 MPH Student Handbook].

Research and service expectations and policies are primarily in the purview of the respective faculty member's home department. However, within the MPH program, we expect that all faculty are meaningfully engaged in teaching, mentoring, or committee involvement. All MPH faculty are reviewed by the Executive Committee on an every-three-year basis to assure that they meet membership criteria.

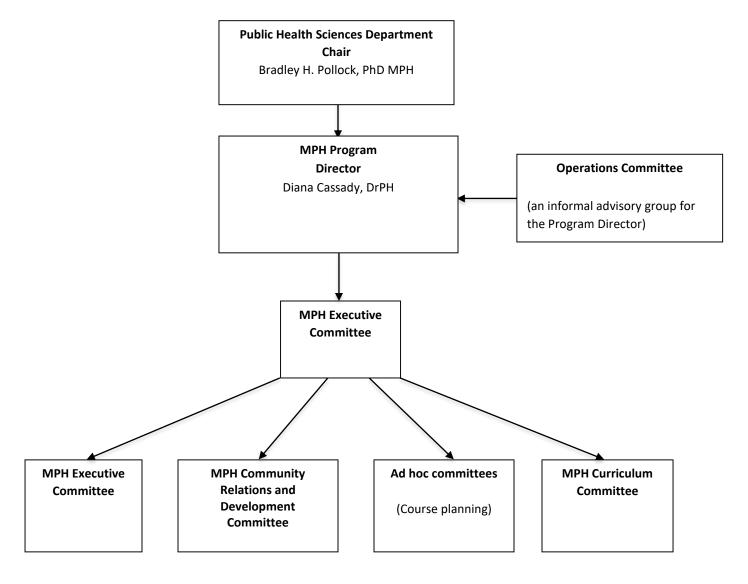


Figure 5. UC Davis MPH Program Committee Structure

c. A copy of the bylaws or other policy document that determines the rights and obligations of administrators, faculty and students in governance of the program, if applicable.

See ERF 1.5.c. Public Health Graduate Program Bylaws.

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

Table 1.5.d. Faculty Membership on University Committees					
Name	Committees				
Bang, Heejung	Member, Educational Policy Committee, Graduate				
	Group in Epidemiology				
	Member, Educational Policy Committee, Graduate				
	Group in Biostatistics				
	Chair, Graduate Group in Biostatistics				
Beckett, Laurel	Member, Executive Committee, Alzheimer's Disease				
	Center				
	Member, Scientific Advisory Committee, Cancer Center				
	Member, Graduate Council				
Cassady, Diana L.	Member, Executive Committee, Graduate Group in				
	Epidemiology				
	Search Committee Chair, Lecturer in the MPH Program				
	Vice Chair, Education Committee, Department of Public				
	Health Sciences				
Chen, Moon	Member, Scientific Review Committee, Cancer Center				
Garcia, Lorena	Admissions Committee, Graduate Group in				
	Epidemiology				
	Member, Compensation Advisory Committee, School of				
	Medicine				
	Member, Advisory Committee on UGBMS				
	(underrepresented groups in medicine and biomedical				
	science) Faculty				
	Member, Public Health Sciences Task Force on				
	Harmonizing Review Criteria for Merit/Promotion				
	Member, CONACYT-UC MEXUS Review Committee				
	Faculty Advisor, Undergraduate Interclinic Consortium				
	Faculty Advisor, Undergraduate Public Health Club				
Kass, Philip H.	Member, West Village Faculty/Staff Housing Policy				
	Workgroup				
	Ad Hoc Member, Program Review of the Graduate				
	Program in Nursing Science and Health Care Leadership				
	Member, Working group from Human Resources to				
	develop guidelines on students bringing children to				
	campus				
	Chair, Executive Committee, Graduate Group in				
	Epidemiology				
	Member, Chancellor's Strategic Planning Committee on				
	Diversity and Inclusion				
	Associate Vice Provost for Faculty Equity and Inclusion,				
V TI II	UC Davis				
Keegan, Theresa H.	Member, Conflict of Interest Administrative Advisory				
	Committee				
	Member, Center for Healthcare Policy and Research				

Table 1.5.d. Faculty Membership on University Committees						
Name	Committees					
	Co-leader, Center for Hematology Oncology Outcomes Research and Training (COHORT)					
Kim, Kyoungmi	Member, Membership Committee, Graduate Group in Biostatistics					
	Member, Admissions Committee, Graduate Group in Biostatistics					
	Member, Executive Committee, Graduate Group in Biostatistics					
McCurdy, Stephen A.	Chair, Master of Public Health Program					
	Associate Director for Outreach, Western Center for Agricultural Health and Safety, UC Davis					
Pollock, Bradley H.	Co-Leader, Population Sciences and Health Disparities Research Program, UC Davis Comprehensive Cancer Center					
	Member, Genomics Working Group					
	Board Member, University of California Global Health Initiative					
Qi, Lihong	Member, Seminar and Group Activities Committee, Graduate Group in Biostatistics					
	Member, Quality Assurance Committee, UC Davis Cancer Center					
	Statistical Reviewer, Scientific Review Committee, UC Davis Cancer Center					
	Member, Committee on Rules, Jurisdiction and Organization of the University, University of California					
Rocke, David	Chair, Educational Policy Committee, Graduate Group in Biostatistics					
	Chair, Graduate Group in Clinical Research					
	Member, School of Medicine Committee on Rules, Jurisdiction and Organization					
	Chair, Biomedical Engineering Academic Merits and Promotions Committee					
Schenker, Marc	Member, UC-Mexico Initiative					
	Member, Community-Engaged Scholarship Advisory Committee					
	Member, Agriculture and Natural Resources Search Committee					
	Member, Epidemiology Committee on Occupational Health (EPICOH) 2016 Scientific Committee					
	Member, Feminist Research Institute					
	Member, Faculty Advisory Committee on Global Centers-Latin America					
Smith, Woutrina A.	Member, School of Veterinary Medicine Faculty Search Committee					
	Member, Curriculum Committee, Preventive Veterinary Medicine Program					
	Member, Scholarship Committee, Graduate Group in Integrative Pathobiology					

Table 1.5.d. Faculty Membership on University Committees						
Name	Committees					
	Member, Written Exam Committee, Graduate Group in					
	Epidemiology					
	Block Leader, Population Health Block, Professional					
	DVM Curriculum					
	Member, Global Centers Africa Committee, UC Davis					
	Member, International Programs Committee, School of					
	Veterinary Medicine					
	Member, Task Force on SVM Undergraduate Curricula,					
	School of Veterinary Medicine					
Yoo, Byung-Kwang	Member, Center for Healthcare Policy and Research					

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

Students participate in nearly all of the MPH Committees as can be seen on the list of committee members in section 1.5.a. At orientation at the start of the program they are asked to volunteer for these committees; every committee agenda includes a standing item for a student report. In addition, students are welcome to comment on other agenda items.

There is no formal MPH student organization, but students do organize informally (e.g., establish a class Facebook page for communications). Each class votes to select a representative to the <u>Graduate Student Association</u>, a campus-wide organization, which provides access to a network of news and services for graduate students, as well as funds for class activities (e.g., bowling night, pizza for a study group, etc.). The MPH program representative to the Graduate Student Association meets monthly with the program director to hear about student concerns and ideas for program improvement.

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

We assess Criterion 1.5 as met.

Strengths: There is a clearly defined structure for governance within the MPH program that includes representation from faculty and students.

Weaknesses: None.

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

Legislative appropriations: The California state Legislature provides funds to the University. These are distributed to the ten UC campuses and directed to the various academic units on each campus.

Formula for funds distribution: UC Davis MPH students pay a Professional Fee, of which 33% is retained by the MPH program and distributed back to students as financial aid. The balance is forwarded to the program for operational support. The School of Medicine receives an allocation from the educational and registration fees, and 33% of this amount is returned to students as financial aid.

The Provosts Office receives indirect cost recovery (ICR) and allocates 33% to the School of Medicine Dean's office. The School of Medicine Dean's office allocates the ICR funds to 35 departments and centers. The funds allocated to the Department of Public Health Sciences are used to cover general operating costs and any short falls. The methodology for how the funds are allocated to departments/centers is determined by the School of Medicine leadership.

Tuition generation and retention: Our students pay the campus in-state fees for graduate students, which is set by the campus and approved by the University of California Office of the President (UCOP). There is an educational/registration fee portion, which is retained by the campus and shared with the School of Medicine. Some portion may be returned to the program by the School of Medicine Dean's office.

Gifts, grants and contracts: The MPH program is not currently receiving funding from gifts, grants, or contracts.

Indirect cost recovery: The department receives an allocation from School of Medicines Dean's office for a portion of the total indirect cost return funds they received. They distribute our portion of the funds to us based on the total department research expense from the prior fiscal year. The Department applies retains these funds toward Department needs, such as technical and computing support and administrative staff support.

Taxes or levies imposed by the university or other entity within the university, and other policies that impact on the resources available to the program: In the past year the campus instituted a tax (1.61%) on entertainment and travel expenses as a way to offset state budget

reductions. This has an adverse impact on our budget and reduces our social event budget. Outreach programs and travel to promote the program are also adversely affected.

b. A clearly formulated program 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. If the program does not have a separate budget, it must present an estimate of available funds and expenditures by major category and explain the basis of the estimate. This information must be presented in a table format as appropriate to the program.

The MPH program has several sources of funds, including tuition and fees, professional fees, and fellowships. The School of Medicine is the source of "University Funds" in Table 1.6.1, and is an important source of revenue in deficit years. The largest program costs include Faculty and staff salaries and benefits and student support (i.e., financial aid and fellowships).

Table 1.6.b. Sources of Fu	able 1.6.b. Sources of Funds and Expenditures by Major Category, 2010 to 2017										
	2010-	2011-	2012-	2013-	2014-	2015-	2016-				
	2011	2012	2013	2014	2015	2016	2017				
Source of Funds											
Tuition & Fees		\$ 49,205	\$ 45,742	\$ 16,125	\$ 60,142	\$ 71,400	\$115,243				
University Funds	\$ 101,710	\$ 135,978	\$ 162,331	\$ 150,054	\$ 128,158	\$ 14,672	\$ 15,000				
Other - Fellowship	\$ 20,000	\$ 79,475	\$ 109,136	\$ 61,101	\$ 73,000						
Other - Professional Fees	\$ 97,048	\$ 202,030	\$ 192,912	\$ 173,712	\$ 202,824	\$ 267,916	\$282,606				
Other - External Fees ¹		\$ 12,481	\$ -	\$ -							
TOTALS	\$ 218,758	\$ 479,169	\$ 510,121	\$ 400,992	\$ 464,124	\$ 353,988	\$412,849				
Expenditures											
Faculty Salaries & Benefits	\$ 100,790	\$ 133,604	\$ 147,815	\$ 173,442	\$ 154,915	\$ 65,185	\$ 70,000				
Staff Salaries & Benefits	\$ 27,267	\$ 85,638	\$ 75,500	\$ 127,254	\$ 146,911	\$ 83,289	\$ 85,000				
Operations	\$ 11,796	\$ 12,344	\$ 14,542	\$ 16,608	\$ 12,271	\$ 13,516	\$ 14,000				
Travel	\$ 2,965	\$ 3,228	\$ 5,813	\$ 67	\$ 5,859	\$ 2,079	\$ 5,000				
Student Support	\$ 28,174	\$ 62,626	\$ 60,617	\$ 54,117	\$ 67,608	\$ 89,305	\$ 94,108				
Other – Accreditation ²	\$ 3,047	\$ 3,108	\$ 3,108	\$ 3,175	\$ 3,275	\$ 3,275	\$ 3,275				
Other – Fellowship ³	\$ 20,000	\$ 109,475	\$ 125,802	\$ 70,000	\$ 73,000						
Other - TA Support ⁴	\$ 26,298	\$ 20,095	\$ 38,574	\$ 34,277	\$ 29,968	\$ 26,482	\$ 20,000				
TOTALS	\$ 220,338	\$ 430,118	\$ 471,771	\$ 478,940	\$ 493,807	\$ 283,130	\$291,383				

- 1. External fees 2008-2011 Graduate School of Management fees for enrollment in MPH Coursework
- 2. Accreditation expenses associated with accreditation
- 3. Fellowships –MPH supported student fellowships
- 4. TA support TAs supported by the MPH program

c. If the program 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 program budget. This should be accompanied by a description of how tuition and other income is shared, including indirect cost returns for research generated by public health program faculty who may have their primary appointment elsewhere.

Not applicable.

d. Identification of measurable objectives by which the program assesses the adequacy of its fiscal resources, along with data regarding the program's performance against those measures for each of the last three years.

Table 1.6.d. Outcome Measures for Fiscal Resources									
Outcome Measure	2014-2015	2015-2016	2016-2017						
For each year of operation, the sources of funds consistently exceed program expenditures [Table 1.6.d].	(\$29,683)	\$70,858	\$121,466						
90% of the eligible entering class received at least \$6,000 in grant aid.	100%	100%	100%						

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

We assess Criterion 1.6 as met with commentary. Although the program has demonstrated success with obtaining resources to fulfill its stated mission, goals, and objectives, we remain in a challenging fiscal situation with respect to state funding.

Strengths:

- As the class size has grown, revenue from professional fees has increased nearly 40% percent in the last three years, from \$202,824 to \$282,606.
- The addition of new undergraduate courses sponsored by the Public Health Sciences department benefits the MPH program by hiring MPH students as teaching assistants for these classes. These positions pay tuition and a salary, and so serve as fellowships for students.

Weaknesses:

- University support for the MPH program has fluctuated, as can be seen in Table 1.6.1. The
 program has identified additional sources of revenue, and so has been able to meet its
 mission.
- There is no endowment or other source of funds for student fellowships.

Plans related to this criterion: The MPH program will continue to work with the Chief Administrative Officer and Chair of the Public Health Sciences Department to achieve fiscal solvency each year, and to identify new resources for the program and for student support.

- 1.7. Faculty and Other Resources. The program shall have personnel and other resources adequate to fulfill its stated mission and goals, and its instructional, research and service objectives.
- a. A concise statement or chart defining the number (headcount) of primary faculty employed by the program for each of the last three years, organized by concentration.

Table 1.7.a. Headcount of Primary Faculty									
AY 2014-15 AY 2015-16 AY 2016-17									
General Public Health	9	9	9						
Epidemiology	5	8	5						
Biostatistics	3	3	3						

b. A table delineating the number of faculty, students and SFRs, organized by concentration, 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, b) FTE conversion of faculty based on % time devoted to public health instruction, research and service, c) headcount of other faculty involved in the program (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 9 other faculty. All programs must provide data for a), b) and i) and may provide data for c), d) and j) depending on whether the program intends to include the contributions of other faculty in its FTE calculations.

Table 1.7.b. F	Table 1.7.b. Faculty, Students and Student/Faculty Ratios by Specialty Area (AY 2014-15)											
	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	SFR by Total Faculty		
									FTE	FTE		
General Public Health	9	6.45	25	3.9	34	10.35	29	25	3.87	2.41		
Epidemiology	5	3.85	6	1.5	11	5.35	4	4	1.03	0.74		
Biostatistics	3	2.05	5	1.75	8	3.80	0	0	0	0		

	HC Primary	FTE Primary	HC Other	FTE Other	HC Total	FTE Total	HC Students	FTE Students	SFR by Primary	SFR by Total
	Faculty	Faculty	Faculty	Faculty	Faculty	Faculty			Faculty	Faculty
									FTE	FTE
General Public Health	9	6.3	21	4.6	30	10.9	34	31	4.92	2.84
Epidemiology	8	5.5	3	.55	11	6.05	6	5	0.90	0.82
Biostatistics	3	1.90	5	1.25	8	3.15	0	0	0	0

Table 1.7.b. F	Table 1.7.b. Faculty, Students and Student/Faculty Ratios by Specialty Area (AY 2016-17)											
	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		
General Public Health	9	6.13	21	4.85	30	10.30	37	33.5	6.14	3.25		
Epidemiology	5	4.35	7	1.95	14	6.30	8	7.5	1.72	1.19		
Biostatistics	3	1.65	4	1.10	7	2.75	0	0	0	0		

Faculty FTE calculation:

25% Teaching = 1 public health course

50% Teaching >= 2 public health courses

10% Committee Service

15% Research

10% Student Advising

% of time does not include community preceptorship for our public health practicum, which can involve significant time.

For students, 1 FTE = 1 student taking 13.5 or more quarter credits per quarter.

c. A concise statement or chart concerning the headcount and FTE of non-faculty, non-student personnel (administration and staff) who support the program.

Leah Galasso, MA, is a full-time Student Affairs Officer who provides direct support for the MPH Program. Her supervisor, Amber Carrere, MEd., provides 10-20% of her time to the MPH program, including organizing weekly MPH leadership meetings, course scheduling, reporting to the School of Medicine, campus, and UC Office of the President. Nicole Sainz, MHA, Chief Administrative Officer of the Public Health Sciences Department, and Carrie Hamel, Finance Officer, devote 5-10% of their time providing fiscal support to the MPH program. Finally, Lauren Snow, Director of the Health System Financial Aid Team, allocates 10-15% of her time determining MPH student eligibility for grants and loans and advising students on financial aid options.

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

Offices: The Department of Public Health Sciences, the administrative home for the UC Davis MPH Program, has 4,000 square feet of office space on the main UC Davis campus for faculty and core administrative staff, in excess of 1,800 square feet of space at the Center for Health and the Environment (CHE), and 6,000 square feet of space located off-campus. An additional 300 square feet of office space is available at the UC Davis Health system in Sacramento. The Division of Biostatistics has 1200 square feet of office space and houses the departmental information technology services. The MPH program space includes two private offices, three cubicles, and a meeting space for 3-5 people.

Classrooms:

Classrooms for the core courses are listed below:

SPH 210 Public Health Informatics: 24 Carlson Health Sciences Library

SPH 290 Topics in Public Health: 2020 Valley Hall

SPH 244 Introduction to Health Science Statistics: 24 Carlson Health Sciences Library

SPH 245 Biostatistics for the Health Sciences: 24 Carlson Health Sciences Library

EPI 205A Principles of Epidemiology: 1102 Gourley Hall

SPH 222 Social and Behavioral Aspects of Public Health: 24 Carlson Health Sciences

Library

SPH 262 Principles of Environmental Health Science: 24 Carlson Health Sciences Library

SPH 273 Health Services Administration: 24 Carlson Health Sciences Library

SPH 297 Public Health Practicum: 24 Carlson Health Sciences Library

Common Space:

Student study space is provided through the Carlson Health Sciences Library which is located close to most MPH core courses and the MPH office. The library has 24 private study rooms available for individual and group study and one conference room available for classes and meetings. Students may reserve these rooms online or use the cubicles in open areas on the first

floor and basement. The library also provides free lockers that students can reserve each quarter. During the academic year, the library's long hours provide easy access to students. It is open from 8am to 10pm Monday through Thursday, 8am- 6pm on Friday, noon-6pm on weekends. A more lenient policy allowing some foods and covered drinks makes this space more welcoming and less like the traditional library where only silent, individual study was allowed.

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

The main laboratory space within the Department of Public Health Sciences, the administrative home of the UC Davis MPH Program, is the epidemiology and industrial hygiene laboratory and equipment located within the Center for Health and the Environment (CHE) complex. The industrial hygiene laboratory has 1 UV spectrophotometer, 1 FTIR gas analyzer, 1 Aerodynamic particle sizer, 1 Indoor air quality monitor, 1 Cahn microbalance, 20 Gilian and 5 Dupont personal sampling pumps, 3 battery chargers, 2 flow calibrator, 20 inhalable sampling heads (IOM), 20 respirable sampling heads (cyclone), 4 personal environmental monitor for PM_{2.5} and PM₁₀, 2 cascade impactors, 1 camera, 2 work benches and miscellaneous material such as assorted filters, belts, tubing, sprays. Additional field equipment is available from the Center for Occupational and Environmental Health and by cooperative agreement from NIOSH. Other laboratory space, including animal and wet laboratories, is available within the School of Medicine and the School of Veterinary Medicine.

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

The Department of Public Health Sciences, the administrative home of the UC Davis MPH Program, has a core computing facility consisting of 35 servers in a mixed environment of Windows 2003/2008 server, Sparc Solaris, Redhat Linux, FreeBSD, and Macintosh OS, housed in a dedicated restricted-access building. The user network spans across six core Department buildings and supports over 130 users and over 20 network printers. The Department offers a centralized, secure backup system that offers desktop/laptop backup as well as server facility backup and performs secure offsite tape rotation on a regular basis. A core storage server allows network users to store files securely in a central location on one of the three main file sharers. Microsoft Exchange powers the email and calendaring services and allows users to harness these services with their mobile devices, such as Blackberries and Windows Mobile devices. A security firewall and intrusion-detection system protects the users, serves, and data from attacks. A wireless network is available in the core Medical Sciences building, offering secure wireless access for users of the Public Health Sciences network. The network allows guest users to participate, albeit from a zone providing protection our core network, in case of an infected or vulnerable guest. A remote access VPN system allows users to securely access their work network from home or while traveling.

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

The UC Davis General Library is one of the premier research libraries in North America and comprises six library facilities: the Peter J. Shields Library, the Physical Sciences and Engineering Library, the Loren D. Carlson Health Sciences Library, the Agricultural and Resource Economics Library, the Mabie Law Library, and the William Blaisdell Medical Library. The combined collections of the various General Library facilities total more than 4 million volumes, and more than 32,000 periodical and journal titles are received annually. The collection also comprises an extensive variety of government documents, maps, microfilms and CD-ROMs. The libraries at UC Davis offer a variety of public health resources to MPH students via books, print and online journals, access to resources from the US National Library of Medicine, library courses, and free software. Resources pertinent to public health include those in general public health, medical and veterinary health, epidemiology and statistics, toxicology, social sciences, news, legal, and business. Journal article databases for public health include GIDEON and Global Health.

Both the main Shields Library and The Carlson Health Sciences Library offer valuable workshops to assist students in using the library, searching and obtaining materials, and composing research documents. The library also offers free software for students to use, including EndNote reference management software and Geographic Information Systems (GIS), as well as provides courses for using the software.

Many library holdings can be accessed through terminals at the library or from a distance through a secure virtual private network (VPN). Students can search the Harvest Library Catalog for materials held by the UC Davis libraries, the Melvyl database for materials held by all UC campuses, WorldCat for holdings from libraries around the world, and the California Digital Library for resources. Many of the articles found in PubMed, a commonly used electronic database of journal articles in medicine and public health, can be downloaded immediately because UC Davis has subscriptions to these journals. Students also have free access to materials at all UC campus libraries and can place a request for the item with the library and pick it up at the library of their choice or have journal articles scanned and e-mailed to them.

The Carlson Health Sciences Library, managed by the School of Medicine, works closely with the MPH Program to ensure that MPH students have access to public health reference materials and adequate research support. For instance, one of the three reference librarians has been designated as the Public Health Sciences Department Liaison. Students can arrange for one-on-one meetings, group sessions, and ask questions relating to how to use the library, using software, searching for information on a specific topic, writing, and technical assistance. The Carlson library staff created two comprehensive subject guides, one on public health and another on health statistics, to introduce MPH students to the topic and to provide links to relevant references and searches.

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

An important teaching resource for the UC Davis MPH program is the staff of the California Department of Public Health (CDPH) and local county health departments. For instance, CDPH leaders regularly guest lecture in SPH 290 Topics in Public Health, join us at MPH socials to network with faculty and students, and host 20 to 40 percent of each MPH class in practicum placements. Interagency Agreements with CDPH fund faculty research and are an important source of Graduate Student Researcher positions for MPH students. Staff from the nearby county health departments in Yolo, Solano, and Sacramento also guest lecture and supervise student practicum placements.

i. Identification of measurable objectives through which the program assesses the adequacy of its resources, along with data regarding the program's performance against those measures for each of the last three years.

Table 1.7.i. Outcome Measures for Adequacy of Resources												
Outcome Measure	Target 2014-2015		2015-2016	2016-2017								
The program will maintain at least a 1:6 ratio of primary faculty to students.	1:6 ratio of primary faculty to students.	1:1.9	1:2	1:2.6								
Students will have adequate library support and study space.	≥90% of students' report library and space resources as adequate.	60%	64%	Not Available								
The program will have adequate classroom space to teach required and elective classes.	MPH administrative staff reports no problems scheduling classes.	1-2 MPH courses scheduled get relocated each year to alternative classroom space. ¹	1-2 MPH courses scheduled get relocated each year to alternative classroom space. ¹	1-2 MPH courses scheduled get relocated each year to alternative classroom space. ¹								

^{1:} UC Davis University Registrar 25/75% and 30/70% scheduling guidelines: programs are required to schedule **25%** of undergraduate courses in non-prime time hours (prime time is 9:00 a.m. to 4:00 p.m.). For courses with projected enrollments of 150 or above, **30%** of total class hours must be scheduled in non-prime time hours. Courses must be evenly distributed between the standard time patterns on MW(F) and TR. Programs not adhering to these guidelines risk having course schedules returned to be reworked due to unplaced classes.

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

We assess Criterion 1.7 as met with commentary. Although the program has demonstrated success with obtaining resources to fulfill its stated mission, goals, and objectives, we remain challenged for classroom space.

Strengths:

- Faculty to student ratios remain strong despite the increase in the class size each year.
- The campus provides extensive office and lab space for faculty and staff, in addition to excellent IT services.
- The program enjoys very strong administrative support in a highly qualified, full-time Student Affairs Officer, in addition to contributions from other highly experienced and knowledgeable staff in the areas of educational administration, finance, and financial aid.

Weaknesses:

• Scheduling classroom space is becoming more challenging as the number of students grows each year.

Plans related to this criterion: The MPH program will continue to work with the Education Director, Chief Administrative Officer and Chair of the Public Health Sciences Department to secure adequate classroom space. This involves regular meetings with the leadership of the School of Medicine which still controls some space on the Davis campus. For now, the MPH class size will not grow beyond 40 students. The program director in a member of the Library Committee which is advising the university on a new plan to renovate a nearby library building, including the addition of classroom space. The renovation is still in the planning stages and has not yet been approved at the campus level. In 5-7 years, the plan may be implemented, allowing access to more classroom space.

- 1.8. Diversity. The program shall demonstrate a commitment to diversity and shall evidence an ongoing practice of cultural competence in learning, research and service practices.
- a. A written plan and/or policies demonstrating systematic incorporation of diversity within the program. Required elements include the following:
- i. Description of the program's under-represented populations, including a rationale for the designation.

Since the last accreditation review when reviewers determined the criterion for student diversity was "partially met," we have made progress toward a more diverse MPH class. The MPH Program works toward diversity by following the written policies and plans of the wider University of California System and of UC Davis, in particular the Office of Graduate Studies and the School of Medicine. For instance, the Regents released the *University of California Diversity Statement* in 2006 and updated it in 2010 [see ERF 1.8.a.1]. The *Diversity Statement* says, in part,

"Because the core mission of the University of California is to serve the interests of the State of California, it must seek to achieve diversity among its student bodies and among its employees. The State of California has a compelling interest in making sure that people from all backgrounds perceive that access to the University is possible for talented students, staff, and faculty from all groups. The knowledge that the University of California is open to qualified students from all groups, and thus serves all parts of the community equitably, helps sustain the social fabric of the State. All of these entities have a strong and clearly articulated commitment to diversity for faculty, staff, and students."

More recently, the University of California Office of the President reaffirmed a commitment to equity and inclusion in releasing the report, *Guidelines for Addressing Race and Gender Equity in Academic Programs in Compliance with Proposition 209* [see ERF 1.8.a.2]. This document explains a variety of legal tools that can be used to recruit and retain excellent, diverse students, staff, and faculty into the University of California system. The Guidelines are a key reference for the Office of Graduate Studies on the UC Davis campus, as well as the MPH program.

The program strives to recruit and enroll a student body that reflects the cultural and ethnic diversity of the state of California. One of the most diverse populations in the nation, California had no majority ethnic group in 2010. According to California Department of Finance demographic projections for 2020, of 41 million Californians, 40% will be Hispanic; 38% White non-Hispanic; 13% Asian; 6% Black; 3% Multiracial; and less than 1% American Indian, Alaska Native, Native Hawaiian, or Pacific Islander. [Source:

http://www.dof.ca.gov/Forecasting/Demographics/Projections/]

The MPH program defines the following groups as underrepresented: Hispanic, Black, and American Indian students; first generation college students; and men (who are traditionally underrepresented in public health). For purposes of evaluation, the MPH program uses the diversity of the University of California students receiving a bachelors' degree as a benchmark because our program requires a bachelors' degree for admission. In 2015-16, 21% of the graduating class across all ten U.C. campuses were Latino/Chicano, 4% were African American, 1% were American Indian, 42% were first generation college students, and 45% were male [see ERF 1.8.a.3]. A second benchmark for diversity is graduate admissions for the entire UC Davis campus; in 2014-2015, 8% of graduate students were Hispanic and 3% Black, while about 1% of students were American Indian or Pacific Islander. [Source: https://gradstudies.ucdavis.edu/diversity/uc-and-ucd]

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

Consistent with the *University of California Diversity Statement*, the MPH Program's primary goal for achieving diversity and cultural competence among students is to have the MPH student body reflect the racial and ethnic diversity of California.

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

The UC Davis MPH Program is an integral part of the University of California, Davis campus and subscribes to the campus-wide Principles of Community (http://principles.ucdavis.edu/). The Student Handbook includes the Principles of Community, and they are reviewed in the MPH Student Orientation. The Principles read as follows:

"The University of California, Davis, is first and foremost an institution of learning and teaching, committed to serving the needs of society. Our campus community reflects and is a part of a society comprising all races, creeds and social circumstances. The successful conduct of the university's affairs requires that every member of the university community acknowledge and practice the following basic principles:

We affirm the inherent dignity in all of us, and we strive to maintain a climate of justice marked by respect for each other. We acknowledge that our society carries within it historical and deeprooted misunderstandings and biases, and therefore we will endeavor to foster mutual understanding among the many parts of our whole.

We affirm the right of freedom of expression within our community and affirm our commitment to the highest standards of civility and decency towards all. We recognize the right of every individual to think and speak as dictated by personal belief, to express any idea, and to disagree with or counter another's point of view, limited only by university regulations governing time,

place and manner. We promote open expression of our individuality and our diversity within the bounds of courtesy, sensitivity and respect.

We confront and reject all manifestations of discrimination, including those based on race, ethnicity, gender, age, disability, sexual orientation, religious or political beliefs, status within or outside the university, or any of the other differences among people which have been excuses for misunderstanding, dissension or hatred. We recognize and cherish the richness contributed to our lives by our diversity. We take pride in our various achievements, and we celebrate our differences.

We recognize that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of spirit and purpose based on mutual respect and caring."

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

The Principles of Community apply to both working and learning in the MPH program and on the at UC Davis.

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.

The Curriculum Committee routinely reviews core course evaluations to continuously improve the curriculum. As part of this process the Committee has recommended changes to some courses, such as a reduction in the number of guest speakers, or changes to the homework or required reading. Several elective courses cover competency in diversity and cultural considerations, such as SPH 205 Health Disparities and SPH 295 International Health. The MPH core courses weave in these issues, depending upon the interest and expertise of the faculty. In addition, the practicum placements offer mentoring by preceptors on issues of diversity and cultural considerations.

The Curriculum Committee has not explicitly reviewed core courses for instruction in cultural competency or diversity issues. This review will occur as part of the MPH's effort to comply with new CEPH competencies which address diversity and inclusion (e.g., competency 8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs).

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

The UC Davis MPH Program, as well as all other entities of the University of California system, remains dedicated to building a more diverse faculty, particularly those from under-represented racial and ethnic populations in the U.S. We believe a more diverse faculty is an increasingly important measure of a great university. Strategies for obtaining a diverse applicant pool are

outlined in <u>APM 500</u> (pdf) and <u>UCD 500</u> (http://www.ucop.edu/academic-personnel-programs/files/apm/apm-500.pdf). MPH faculty have been recruited in adherence with the aforementioned polices.

When recruiting new faculty, it is important that both the search committee and the applicant pool are diverse, with respect to women and underrepresented groups. At UC Davis, all search committee members are required to attend training in how to manage biases in hiring decisions. Additionally, in the interest of greater transparency, all search Committee Chairs are required to disclose any potential conflicts of interest at the time final candidate lists are submitted.

The MPH program adheres to University policies related to Academic Personnel. These Policies govern faculty appointment and promotion processes and are used to guide equitable and attainable opportunity for all. Faculty members are expected to contribute to diversity efforts, and these contributions are recognized and rewarded via the academic personnel review process. By including diversity efforts in the review process, the University rewards faculty efforts and fosters a collegial environment. The Academic Personnel Manual (APM) provides clear guidance for both review and appointment of faculty that are dedicated to the diversity goals of our program and the University of California as a whole. The APM can be found here: http://academicaffairs.ucdavis.edu/policies/acad-per-man/index.html

"UC Davis is a diverse community comprised of individuals having many perspectives and identities. We come from a multitude of backgrounds and experiences, with distinct needs and goals. We recognize that to create an inclusive and intellectually vibrant community, we must understand and value both our individual differences and our common ground. The UC Davis Principles of Community is an aspirational statement that embodies this commitment, and reflects the ideals we seek to uphold." For more information: http://occr.ucdavis.edu/poc/

Faculty development and success is a coordinated and centralized effort administered through the Office of Academic Personnel. We at the department of Public Health Sciences support the programs to serve the professional and career development needs of faculty at all levels of the academician lifecycle (new recruit, early career, mid-career, senior and emeritus). Faculty Development resources are readily available to all UC Davis faculty. The University offers many programs, including the following:

- Early/Mid-Career Leadership (ECLP/MCLP)
- Inter-professional Teaching Scholars Program (ITSP)
- Schools of Health Mentoring Academy
- Women in Medicine and Health Science (WIMHS)
- Work/Life Balance Programs

In addition, workshops related to merits, promotions, tenure, and compensation are provided regularly throughout the year. Further information can be found here: http://www.ucdmc.ucdavis.edu/facultydev/

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

UC Davis views diversity as integral to the achievement of excellence. We strive to foster an inclusive and respectful environment that honors diverse perspectives and identities and seeks to operationalize the Principles of Community, the University's aspirational statement that embodies this commitment and reflects the deals to uphold. In recognition of this aspiration, UC Davis Health has created the Office of Equity, Diversity, and Inclusion to manage and direct diversity and inclusion programs across the UC Davis Health system, with the goal of developing a comprehensive approach to optimizing opportunities for increasing diversity and fostering a strong culture of inclusion.

The University is committed to maintaining an atmosphere that is free from all forms of discrimination, harassment, exploitation, and intimidation. The staff recruitment process is designed to comply with all relevant federal, state, and local labor laws. In conformance with applicable laws and university policy, the University of California is an affirmative action/equal opportunity employer which undertakes affirmative action for under-represented minorities and women, for persons with disabilities, and for Vietnam-era and special disabled veterans. Staff recruitments are collaborative efforts comprised of team members at both the central Human Resources unit and department levels. This structure ensures that affirmative action goals are monitored and that the process is not unfairly biased. Prior to initiating a recruitment, the central compensation unit reviews all position descriptions to ensure proper classification.

Department screening criteria and interview questions must be reviewed and approved in advance of the interview process. Interview committees must be comprised of gender, race, and ethnically diverse team members. In addition, at least one member of the committee is required to complete training in Unconscious Bias. All members of the committee must review Unconscious Bias information prior to participation on a particular interview committee. All salary offers must be approved by both the department and central HR unit to ensure fairness and equity for the new hire, employees within the hiring department, and similar employees across the UC Davis system.

Employee development is taken seriously at UC Davis. Professional development and enrichment opportunities are designed and implemented by the UC Davis Health System, Training and Development Unit. This unit provides tools for continuing education, career planning and development, and professional growth for all UC Davis employees. In addition to internal training resources, a variety of programs, including the following, provide tuition and fee assistance to employees:

- Health Professions MBA Scholarship Program
- Education Reimbursement Program
- UC Employee-Student Reduced Fee Program
- UC Davis Extension
- UC Davis career Staff Development Fee Assistance Program

UC Davis staff employees are encouraged to continue their career growth by increasing their skills through formal or on the job training. Staff employees have the opportunity to advance to higher level positions through the processes of either open recruitments or reclassification request. Supervisors receive training in how to develop and support the career goals of their direct reports. UC Davis has expanded and enhanced supervisory and leadership training to include high-quality education and experiences on diversity, equity and inclusion for managers, supervisors and directors.

UC Davis invests heavily in employees and works hard to retain them. In addition to fair and equitable salaries, the University of California system offers an exceptional benefits package that includes medical, dental, vision, legal, disability, life insurance, mental health, and retirement benefits to eligible employees. Generous vacation, paid time off, and sick leave programs allow employees time off to for vacation, medical appointments, or to address other personal needs. For areas not covered by health and welfare benefits, there are a variety of work/life balance programs to help employees maintain healthy, active, and balanced lifestyles. These programs are provided for little or no cost to all employees and encompass areas such as dependent care and family services, health and wellness, breastfeeding support and community involvement. Further information about the Work-life and Wellness program can be found here: http://www.ucdmc.ucdavis.edu/hr/wellness/. The goal of each program is to enable employees to be effective at work, school, and home, thus creating employees who feel valued and supported by their workplace.

Here is a link to additional information about each program: http://www.ucdmc.ucdavis.edu/hr/training/tuition.html

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

We make use of the programs offered by the Office of Graduate Studies to admit and retain a diverse student body. Here are some examples:

- Consultation with Steven Lee, PhD, Diversity Officer for the STEM disciplines at UC Davis. Dr. Lee consulted with the MPH leadership in 2014 to bring recruiting and admissions processes more in line with proven methods to improve diversity in graduate education.
- Modified the admissions process by including an orientation on diversity policies in the UC system and on unconscious bias. Recruited more diverse members for the Admissions Committee.

Independent of the Office of Graduate Studies, the MPH program secured a scholarship program, funded by The California Wellness Foundation. The three-year scholarship funding was found to be ineffective in recruiting highly qualified, ethnically and racially diverse students. Most prospective students turned down the \$10,000 scholarship because they were offered more funding from more prestigious institutions. The Foundation was unwilling to allow \$20,000 scholarships and so the MPH program decided not to reapply for the grant. As an alternative,

the MPH program is working closely with the new Public Health minor to secure teaching assistantships as a means to recruit students.

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

The MPH program reviews admissions results each summer to review progress toward diversity goals and to make adjustments in recruitment efforts. The University of California system posts progress toward diversity goals for students, staff and faculty on their diversity website, which is updated annually: http://diversity.universityofcalifornia.edu/. The UC Davis Office of Graduate Studies also updates their graduate student admissions demographic annually: https://gradstudies.ucdavis.edu/diversity/uc-and-ucd.

b. Evidence that shows that 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.

Considerable progress has been made in diversifying the MPH student class (See table 1.8.e below). The proportion of American Indian students approximates target levels based on the benchmark from University of California graduates. The program has been less consistent in meeting benchmarks for Hispanic/Latino and African American students, with the class of students, with class percentages varying widely from 8.6% to 29.6%. The program has been less successful in diversifying the faculty owing to the slower pace and numbers involved in faculty hiring compared with student admissions.

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

The *University of California Diversity Statement* was an initiative of the Academic Senate, a body of faculty from across the ten UC campuses. Planning for UC Davis Health's *Strategic Plan 2017-2020* began in 2016 and included "hundreds of members of the UC Davis Health family, as well as external friends and partners...." The MPH program diversity goals were adopted from these sources, and approved by the department chair and Dean in 2011.

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

As stated above, The MPH program reviews admissions results each summer to review progress toward diversity goals and to make adjustments in recruitment efforts.

e. Identification of measurable objectives by which the program 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. At a minimum, the program 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. Measurable objectives must align with the program's definition of under-represented populations in Criterion 1.8.a.

Table 1.8.e. Summary Data for Faculty, Students and/or Staff							
Category/Definition	Method of	Data	Target ¹	AY 2014-	AY 2015-	AY 2016-	
	Collection	Source		2015	2016	2017	
% MPH class who self-	Self-reported	Graduate	21%	29.6%	8.6%	18.9%	
identify as		school					
Hispanic/Latino/Mexican		application					
American/Chicano							
% MPH class who self-	Self-reported	Graduate	4%	3.7%	0%	5.4%	
identify as Black/African		school					
American		application					
% MPH class who self-	Self-reported	Graduate	1%	3.7%	2.8%	2.7%	
identify as American Indian		school					
		application					
% Faculty hired who are	Self-reported	Job	7%	0%	0%	33%	
Hispanic		application					
% Faculty hired who are	Self-reported	Job	2%	0%	0%	0%	
African American		application					
% Faculty hired who are	Self-reported	Job	1%	0%	0%	0%	
American Indian		application					

^{1.} Source of targets: https://www.universityofcalifornia.edu/infocenter/degrees-awarded-data. See also ERF 1.8.

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

We assess Criterion 1.8 as partially met. Since the last accreditation report, the UC Davis MPH Program has in place new policies and procedures designed to recruit and admit a diverse student body. This includes clearly stated goals for recruitment; active recruitment at UC Merced and UC Riverside, two designated Hispanic Serving Institutions; and, the implementation of new admissions review procedures. The result has been an improvement in student diversity compared to the last accreditation review: The program is meeting goals for admitting American Indian students and, except for 2015-16, is close to meeting goals for African American and Hispanic/Latino students. Notably, the MPH class is more diverse that the graduate admissions for the campus overall. For instance, campus-wide the graduate admissions rate is 8% for Hispanic/Latino students.

The MPH program has made more progress in diversifying the student body than the staff or faculty. This is due, in part, to the fact that we recruit 35 or more new students each year, and only 1-2 new faculty members and even fewer staff.

Strengths: Strong policies in place at all levels to support diversity. Training and resources to implement policies to promote diversity and inclusion.

Weaknesses: Difficulty recruiting a sufficiently diverse pool of students and faculty; a lack of financial aid to recruit highly qualified students.

Plans: Plans to improve recruitment of a more diverse faculty, staff, and student body include continually improving recruitment strategies. This will involve advertising in a wider variety of publications and making better use of personal networks to announce jobs/admissions. Support to recruit more diverse MPH students may improve with the addition of new undergraduate courses and the need for teaching assistants for those courses. Finally, the MPH program will continue to monitor progress toward diversity goals and make improvements each year.

2.0. Instructional Programs

2.1. Degree Offerings. The program shall offer instructional programs reflecting its stated mission and goals, leading to the Master of Public Health (MPH) or equivalent professional master's degree. The program may offer a generalist MPH degree and/or an MPH with areas of specialization. The program, depending on how it defines the unit of accreditation, may offer other degrees, if consistent with its mission and resources.

For a list of degree dates and course offerings [see ERF 2.1 Degree Offerings, 2.1.a Course Schedule for Last Three Years]

a. An instructional matrix presenting all of the program's degree programs and areas of specialization, including bachelor's, master's and doctoral degrees, as appropriate. If multiple areas of specialization are available, these should be included. The matrix should distinguish between professional and academic degrees for all graduate degrees offered and should 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.

Table 2.1.a. Instructional Matrix – Degrees & Specializations					
	Academic	Professional			
Master's Degrees					
General Public Health		MPH			
Epidemiology		MPH			
Biostatistics		MPH			

b. The bulletin or other official publication, which describes all curricula offered by the program. If the university does not publish a bulletin or other official publication, the program must provide for each degree and area of specialization identified in the instructional matrix a printed description of the curriculum, including a list of required courses and their course descriptions.

An instructional matrix and a list of required courses with a brief description are listed below in Table 2.1.b [see ERF 2.1.b MPH Degree Requirements]. Additional information can be found on the program website at: http://mph.ucdavis.edu/core curriculum.html.

Elective requirements vary based on the competencies required for each specialty track. For instance, the Biostatistics Specialty Track requires 16 units of electives to assure that students graduate with all 10 competencies (see Table 2.6.b for a list of competencies for each specialty track). In contrast, the General Public Health Specialty Track requires 6 units of electives because

it has two competencies. The General Track also allows students to tailor their elective course work to fit their interests, whether it be maternal and child health, health policy, or health communications.

Discipline	Course	Instructor	Quarter	Units
	Core Courses (40 units)			
Biostatistics	SPH 244: Introduction to Health Science Statistics	Dr. Beckett	Fall	4
	SPH 245: Biostatistics for the Health Sciences	Dr. Kim	Winter	4
Epidemiology	EPI 205: Principles of Epidemiology	Dr. Smith and Dr. Keegan	Fall	4
Environmental Health Science	SPH 262: Principles of Environmental Health Science	Dr. Bennett	Summer	3
Health Services Administration	SPH 273: Health Services Administration	Dr. Leigh	Winter	3
General Public Health	SPH 201: Introduction to Public Health	Dr. Garcia	Summer	3
Social and Behavioral Sciences	SPH 222: Social and Behavioral Aspects of Public Health	Dr. De Vogli	Fall	3
Informatics	SPH 210: Introduction to Public Health Informatics	Dr. Hogarth	Summer	2
General Public Health	SPH 290: Seminar in Public Health	Dr. McCurdy and Staff	Summer, Fall, Winter, Spring	1/qtr, 4 total
	SPH 297: Public Health Practicum	Dr. McCurdy	Fall, Winter, Spring, Summer	10
	Non-Core Electives (16-19 ur	nits)		
Added-Competence Electives	Added-Competence electives coursework (General Public Health, Epidemiology, Biostatistics)			6-16
Electives	Elective coursework			5-10
TOTAL				56-59 ¹

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Summary of UC Davis MPH Specialty Areas and Unit Requirements

Specialty Area	Core Units	Added-Competence Electives	Electives	Total units
Generalist	40	<u>></u> 6	Variable ¹	56
Epidemiology	40	≥11	Variable ¹	56
Biostatistics	40	<u>≥</u> 16	Optional	59

¹The number of elective units required is the number necessary to bring the total number of units up to the 56 quarter units required for the MPH degree. (Exception: Biostatistics specialty area requires a total of 59 units.) For example, students taking the minimum number of Added-Competence Electives for the Generalist Specialty Area (i.e., 6 units) will need to take at least 10 units of electives. Students taking more than the minimum number of Added-Competence Electives will need to take correspondingly fewer elective units, such that the total quarter units sum to 56 (or 59 for the Biostatistics specialty area).

REQUIRED COURSEWORK (40 units):

Biostatistics

SPH 244: Introduction to Health Science Statistics (4 units) – Lecture – 3 hours, Lecture/discussion—6 hours; laboratory/discussion—3 hours. Introduction to statistical methods and software in clinical, laboratory and population medicine. Graphical and tabular presentation of data, probability, binomial, Poisson, normal, t-, F-, and Chi-square distributions, elementary nonparametric methods, simple linear regression and correlation, life tables. Only one unit of credit for students who have completed Statistics 100 or Preventive Veterinary Medicine 402.

SPH 245: Biostatistics for the Health Sciences (4 units) – Lecture—4 hours. Prerequisite: Clinical Research 244 or course 244 or the equivalent; consent of instructor. Analysis of data and design of experiments for laboratory data.

Epidemiology

EPI 205: Principles of Epidemiology (4 units) – Lecture—4 hours. Prerequisite: Preventive Veterinary Medicine 402 or consent of instructor. Basic epidemiologic concepts and approaches to epidemiologic research, with examples from veterinary and human medicine, including outbreak investigation, infectious disease epidemiology, properties of tests, and an introduction to epidemiologic study design and surveillance.

Environmental Health Sciences

SPH 262: Principles of Environmental Health Science (3 units) – Lecture—3 hours. Prerequisite: consent of instructor required. Principles, approaches and issues related to environmental health. Recognizing, assessing, understanding and controlling the impact of people on their environment and the impact of the environment on the public.

Health Services Administration

SPH 273: Health Services Administration (3 units) – Laboratory—3 hours. Prerequisite: consent of instructor. Limited enrollment. Structure and function of public and private medical care. Topics include categories and trends in national medical spending, predictors of patient use,

causes of death, managed care, HMOs, Medicare, Medicaid, costs of technology, and medical care in other countries.

Social and Behavioral Sciences

SPH 222: Social and Behavioral Aspects of Public Health (3 units) – Lecture/discussion—3 hours. Prerequisite: consent of instructor required; graduate standing, Statistics 102 and 106. Theories and strategies of health behavior change at the individual, group, community, and environmental levels. Examples include: transtheoretical model, social networks, and social marketing. Theories are applied to solve common public health problems (cancer, obesity, smoking, and HIV/AIDS).

Informatics

SPH 210: Introduction to Public Health Informatics – Lecture—2 hours; laboratory—2 hours. Restricted to upper division or graduate standing. Collection, verification, and utilization of data related to populations; infrastructure, functions, and tools used to generate public health knowledge supporting public health practices and policy development/dissemination.

Topics in Public Health Seminar

SPH 290: Topics in Public Health (Summer, Fall, Winter, Spring; 4 units total) – Seminar. Prerequisite: consent of instructor. Open to students in Master of Public Health program, or permission of instructor. Seminar on key issues and current topics in public health. Course begins in August SSII. Students must enroll in August, then Fall and Winter. The course is a series but grades and units are given at end of each quarter. May be repeated four times for credit.

Public Health Practicum

SPH 297: Public Health Practicum (10 units) – Fieldwork 300 hours. Prerequisite: consent of instructor. Open to Master of Public Health students. Practical fieldwork experience in public health. Placement site will vary based on the interest and experience of each student. May be repeated four times for credit.

ADDED-COMPETENCE AND ELECTIVE COURSEWORK (6-19 units)

Each specialty area has added-competence courses to supplement skills in that specialty. For instance, students choose 11 units from the courses listed on the Epidemiology specialty area added-competence electives [see ERF 2.1.b Added-Competence Electives, Epidemiology Added-Competence Electives]. Examples include EPI 231/SPH 231: Infectious Disease Epidemiology; EPI 240: Injury Epidemiology; EPI 251: Environmental Epidemiology (offered every other year); EPI 272: Cancer Epidemiology; and, EPI 280: Introduction to SAS Programming.

Students in the General Public Health specialty area select six units from a wide variety of public health courses covering economics, sociology, health communications and other related fields. Examples of added-competence electives for the General Public Health Track include NAS 240: Native American Public Health: Topics and Issues; SPH 212: Migration and Health; NUT 118: Community Nutrition; and, SPH 274: Economic Evaluation in Health Care.

The list of open electives includes courses from across campus, including Education, Health Informatics, Sociology, Psychology, Communication, and Veterinary Public Health. The electives list is presented to students as a four-page list organized by academic quarter and topic area and is posted on the MPH website.

Added-competence and open elective courses are added as students and faculty identify new courses relevant to public health. Each quarter the Curriculum Committee reviews new courses to determine whether they should be added to approved lists. See ERF 2.1.b. Added-Competence and Elective coursework handouts.

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

We assess Criterion 2.1 as met.

Strengths: The MPH instructional program is very strong, based on student evaluations, their ability to find full-time career positions soon after graduation, and comments from employers of our graduates.

Weaknesses: Some weaknesses that have been identified are a lack of formal training in program planning and evaluation and insufficient SAS training. These weaknesses have been addressed to some extent; for instance, new electives in qualitative research and SAS were added in 2015-16. However, the Program plans an extensive review and revision of the curriculum in 2018 to address these weaknesses and to ensure that all aspects of the new CEPH accreditation criteria are incorporated into the instructional program.

Plans: We are planning an extensive curriculum review and revision based on new CEPH accreditation requirements.

- 2.2. Program Length. An MPH degree program or equivalent professional master's degree must be at least 42 semester-credit units in length.
 - a. Definition of a credit with regard to classroom/contact hours.

Units of credit are assigned to courses based on the "Carnegie unit," which assigns one unit of credit for three hours of work by the student per week. Usually this means one hour of lecture or discussion led by the instructor and two hours of outside preparation by the student. In laboratory courses, two or three hours of work in the laboratory are normally assigned 1 unit of credit.

b. Information about the minimum degree requirements for all professional public health master's degree curricula shown in the instructional matrix. If the program 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 degree requirements for the MPH program is 56 quarter units (equivalent to 42 semester units). All students must complete 40 quarter units of core courses (including the Practicum and seminar series) and at least 16 quarter units of added-competence and elective coursework. See 2.1.b for the Summary of UC Davis MPH Specialty Areas and Unit Requirements.

c. Information about the number of MPH degrees awarded for less than 42 semester credit units, or equivalent, over each of the last three years. A summary of the reasons should be included.

One exception to the 56-unit degree requirement was made in the 2014-15 academic year. The MPH student began in Summer Session II 2013 and experienced medical and personal reasons that required a reduced schedule. The MPH program supported the student in her academics and encouraged her to complete the program given her situation. The MPH student completed 55 units toward the MPH degree and graduated in December 2014. One open elective unit was waived.

d. Assessment of the extent to which this criterion is met.

We assess Criterion 2.2 as met.

Strengths: The UC Davis MPH Program instituted a requirement of 56 quarter units for all classes entering in 2007 and subsequently. (Exception: Biostatistics Specialty area requires 59 quarter units.) Since that time there have been no exceptions to this requirement.

Weaknesses: None.

Plans: We plan to continue offering a 56-unit degree.

- 2.3. Public Health Core Knowledge. All graduate professional public health degree students must complete sufficient coursework to attain depth and breadth in the five core areas of public health knowledge.
- a. Identification of the means by which the program assures that all graduate professional public health degree students have fundamental competence in the areas of knowledge basic to public health. If this means is common across the program, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each.

We have several means for assuring that the MPH students gain a broad understanding of the areas of knowledge basic to public health [see ERF 2.3.a for Required and Elective Course Syllabi]. First, MPH students are required to take courses in the five core public health knowledge areas (see Table 2.3.1), and must receive a grade of B- or better in order to pass these courses. The students are assessed throughout the course of instruction, and their course grade reflects their mastery of the material.

In addition, students apply and deepen their core public health knowledge in practical experience in the Practicum Placement (SPH 297). Practicum students apply their public health skills and learning in a real world public health setting. The Site Preceptor, the student's UC Davis faculty advisor, and the instructor of record evaluate the students. The culminating experience comprises a final written report, a poster, and an oral presentation at a Practicum Symposium attended by fellow students, MPH faculty, and public health colleagues. Student presentations and posters are also evaluated by SPH 297 instructor.

Table 2.3.a. Required Courses Addressing Public Health Core Areas for MPH Degree										
Core Knowledge Area	Course Number & Title	Credits*								
Biostatistics	SPH 244: Introduction to Health Science Statistics	4								
	SPH 245: Biostatistics for the Health Sciences	4								
Epidemiology	EPI 205: Principles of Epidemiology	4								
Environmental Health Sciences	SPH 262: Principles of Environmental Health Science	3								
Social & Behavioral Sciences	SPH 222: Social and Behavioral Aspects of Public Health	3								
Health Services Administration	SPH 273: Health Services Administration	3								

^{*}Units are based on in-class time; 4 unit courses require four hours per week of lecture or lab, while 3 unit courses require 3 hours of lecture or lab.

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

We assess Criterion 2.3 as met.

Strengths: The UC Davis MPH degree program has established a curriculum assuring that students demonstrate mastery of the core disciplines of public health. Students utilize and further develop their knowledge, integrating it into a real-world practice setting through a Practicum Project addressing a public health problem in their area of interest.

Weaknesses: None.

Plans: Core knowledge may change or expand with CEPH's new accreditation requirements, and core courses will be adjusted accordingly.

- 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.
- a. Description of the program's policies and procedures regarding practice placements, including the following:
- selection of sites: During the Fall Quarter of Year 1, the Student Affairs Officer (SAO) works with the Program Director to create a formal letter to prospective practicum preceptors that explains the purpose and nature of the practicum experience, including the preceptor's role. We include the Student Profiles, describing their experience and interests [ERF 2.4.a Student Profiles]. We send these materials to prospective preceptors in the fall quarter, with response deadlines for mid-November. Upon receiving the responses, the SAO creates a table that includes the names, areas of interest, job titles, department affiliation, and contact information of those interested in serving as preceptors. We then disseminate this table to students in late fall. In addition, our Fall Quarter MPH Social Event is themed as a "meet and greet" session for students and prospective practicum site preceptors. Finally, past preceptors often contact us with practice opportunities because they have supervised a student in the past and found it to be a productive experience.

Students also make helpful contacts with the practicing public health community during the SPH 290 Topics in Public Health Seminar. Students select their practicum site during Winter Quarter of Year 1 as part of the required SPH 297 Public Health Practicum Course, as described earlier [see ERF 2.4.a.1 Public Health Practicum Syllabus for additional course information].

- methods for approving preceptors: The SPH 297 instructor approves preceptors based on an assessment of the project activities and mentorship available to the student.
- opportunities for orientation and support for preceptors: The MPH website includes introductory material for new preceptors, such as the Practicum Guide [ERF 2.4.a.2]. The SPH 297 instructor may call or e-mail a new preceptor to welcome him or her to the MPH Program and answer any questions about the roles and responsibilities of being a preceptor. The SPH instructor contacts any preceptor submitting a less than satisfactory midcourse review of a student. Also, all preceptors are invited to UC Davis MPH events, including MPH socials where informal conversation can occur. In addition, site preceptors are expected to attend the MPH Symposium at which their student presents their work.

Preceptors are also encouraged to meet one-on-one with the MPH Program Director and Staff, during which preceptors are provided individualized support on the project objectives, timeline, and deliverables.

approaches for faculty supervision of students: Students are supervised by the SPH 297 instructor of record, their MPH advisor, and the site preceptor. Each of these individuals completes evaluation forms at various points in the practicum experience.

- means of evaluating student performance: Site preceptors and academic advisors are asked to complete a written evaluation of the student's practice experience midway through the project and at the end of the project. The SPH 297 instructor of record reviews the evaluations and addresses any concerns, as needed. ERF 2.4.a.1 Public Health Practicum Syllabus, outlines program deliverables used to evaluate students.
- means of evaluating practice placement sites and preceptor qualifications: Acceptable placements must offer a public health-related project for MPH students in a practicing public health setting. An identified public health professional must act as the Site Preceptor willing to supervise the student, including at least weekly meetings, periodic evaluation of the student and work product, and attendance at the end-of-quarter symposium. The SPH 297 instructor of record reviews and approves proposed practicum sites and preceptors based on these criteria. Preceptors must be practicing public health professionals able to supervise students as described above. Although we prefer preceptors with an MPH or DrPH degree, this is not a requirement, in recognition of the fact that many public health professionals lack a public health degree. Students also evaluate the practicum site and preceptor at the end of the course. The instructor of record monitors the practicum placements and experience of the student to assist in evaluation.

Some of our students have strong interest and background in research or academia, e.g., medical students, residents, or faculty physicians seeking to strengthen their research and public health skills. These students often prefer to work on an area of professional research interest for their practicum experience. We accommodate this by allowing research activities as a practicum project, but the final written report and oral presentation must emphasize the public health context and implications of their work [see ERF 2.4 Practical Skills, 2.4.a.4 Samples – Student Projects].

- --practicum deliverables: Students are expected to produce three deliverables based on their practicum project: a paper describing their project; a presentation and a PowerPoint presentation about the project; and, a poster. The 20-page paper is formatted loosely on a scientific report with the traditional four sections: introduction, methods, results, conclusions. The presentation and poster are presented during a public Practicum Symposium which is organized like a professional conference with ten minute presentations and a poster session. Depending upon the objectives for the practicum project, additional deliverables for the preceptor may include items such as a website, fact sheets, a report, or presentation to staff or an advisory committee.
- criteria for waiving, altering or reducing the experience, if applicable: There is no procedure for waiving, altering, or reducing the practice experience.
- b. Identification of agencies and preceptors used for practice experiences for students, by specialty area, for the last two academic years.

See ERF 2.4.b. for the list of practicum placements for 2015-16 and 2016-17.

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

We provided no waivers for the practicum experience.

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.

In the last three years, one MPH student in the 2016/17 academic year was an aerospace medicine resident. His practicum title was "An After-Action Report of Ebola Virus Disease Response for the California Department of Public Health – Emergency Preparedness Office."

One MPH student in the 2015/16 academic year was a surgery resident. Her practicum title was "Costs and Causes of ICU-Level Care for Pediatric Mild TBI in Northern California."

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

We assess criterion 2.4 as met.

Strengths: The UC Davis MPH Program provides a practicum experience involving state and local county health departments and non-profit entities. We have established a supervisory regimen that allows the student to develop and demonstrate their public health skills in a practical public health setting.

Weaknesses: None.

Plans: We plan to continue the emphasis on local public health opportunities.

- 2.5. Culminating Experience. All graduate professional degree programs identified in the instructional matrix shall assure that each student demonstrates skills and integration of knowledge through a culminating experience.
- a. Identification of the culminating experience required for each professional public health degree program. If this is common across the program's professional degree programs, it need be described only once. If it varies by degree or specialty area, sufficient information must be provided to assess compliance by each.

All MPH students engage in the same culminating experience, which is set within the SPH 297: Public Health Practicum course and includes a presentation and poster at a public symposium and a final paper. At the Practicum Symposium students showcase their work and skills in public health, including oral and written communication. The Practicum Symposium forum includes an oral presentation, including a question and answer period, to their fellow students, faculty and practicum site preceptors. The students also prepare a poster [see ERF 2.5.a.1-3 Culminating Experience for sample Practicum Posters, Presentations and Practicum Reports].

The culminating experience also includes a written report describing the public health background for their topic, methods employed in the project, and their results. It also includes a discussion of their project and its results, implications for the future, and recommendations for further work. The written and oral reports allow the student to synthesize and demonstrate mastery of public health principles and programmatic competencies and to communicate their work to a professional audience.

The instructor of record for SPH 297: Public Health Practicum reviews evaluative information from the site supervisor, the UC Davis faculty advisor, the instructor's own observations during the course, the poster, oral presentation, and the final written report. The SPH 297 grading rubric outlines expectations for the written report, poster, and oral presentation. Based on this information, the instructor of record assesses the student's success in completing the practicum and culminating experience.

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

We assess Criterion 2.5 as met.

Strengths: The Practicum Symposium and final paper, as the culminating experience, is an effective means for students to demonstrate their mastery of, and ability to communicate, public health principles in the context of their practicum project. Students receive sufficient coaching and time for practice in SPH 297, and so are fully prepared when they present. Furthermore, it prepares them to present a poster or talk at a professional conference.

Weaknesses: We do not see any weaknesses in this format for a culminating experience.

Plans: We plan to continue with the current format for the culminating experience.

- 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 program must identify competencies for graduate professional, academic and baccalaureate public health degree programs. Additionally, the program must identify competencies for specializations within the degree programs at all levels (bachelor's, master's and doctoral).
- 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 program (e.g., one set each for BSPH, MPH and DrPH).

Core Competencies

- 1. Describe basic concepts of probability, random variation and commonly used statistical probability distributions.
- 2. Apply common statistical methods for inference.
- 3. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.
- 4. Discuss the strengths and limitations of the main epidemiologic study designs and their utility for public health.
- 5. Apply the basic terminology and definitions of epidemiology.
- 6. Calculate basic epidemiology measures.
- 7. Draw appropriate inferences from epidemiologic data.
- 8. Describe how the tools of toxicology, epidemiology, risk assessment, risk management, and risk communication are useful in understanding environmental health problems, and the strengths and limitations of each.
- 9. Describe the human health effects of a few environmental and occupational agents and know how to obtain information on additional agents.
- 10. Describe techniques for preventing and controlling environmental hazards and regulatory approaches that may govern environmental hazards.
- 11. Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the US.
- 12. Describe the legal and ethical bases for public health and health services.
- 13. Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.
- 14. Apply evidence-based approaches in the development and evaluation of social and behavioral science interventions.

b. Identification of a set of competencies for each concentration, major or specialization (depending on the terminology used by the program) identified in the instructional matrix, including professional and academic graduate degree curricula and baccalaureate public health degree curricula.

The number of competencies for each specialty vary based on the recommendations of the primary faculty in the Specialty Track. This may change in the future as the MPH program reassesses its curriculum to meet new CEPH accreditation criteria.

General Public Health Specialty Area Competencies

- 1. Use information technology to access, evaluate, and interpret public health data.
- 2. Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities.

Epidemiology Specialty Area Competencies

- 1. Ability to evaluate the epidemiologic literature critically with regard to design, potential biases, assessment of adequacy of analytic approach, and interpretation of results given limitations
- 2. Ability to assess confounding and effect modification in epidemiologic studies
- 3. Ability to suggest appropriate analytic approaches for epidemiologic studies and communicate with biostatisticians about them
- 4. Ability to recognize potential biases when designing studies and to suggest approaches to avoid them
- 5. Ability to design data collection instruments appropriate to epidemiologic research questions
- 6. Ability to implement data collection and quality control measures in epidemiologic studies

Biostatistics Specialty Area Competencies

- 1. Describe the roles biostatistics serves in the discipline of public health.
- 2. Describe basic concepts of probability, random variation and commonly used statistical probability distributions.
- 3. Describe preferred methodological alternatives to commonly used statistical methods when assumptions are not met.
- 4. Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.
- 5. Apply descriptive techniques commonly used to summarize public health data.
- 6. Apply common statistical methods for inference.
- 7. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.
- 8. Apply basic informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation.
- 9. Interpret results of statistical analyses found in public health studies.
- 10. Develop written and oral presentations based on statistical analyses for both public health professionals and educated lay audiences.
- 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

program, a single matrix for each degree will suffice. If they vary, sufficient information must be provided to assess compliance by each degree or specialty area.

Table 2.6.c. Courses		earning exper	iences by w	hich the cor	npetencies a	re met			
(P= primary; R=Reir	forced)								
Core Competencies (All students)	SPH 201: Introduction to Public Health*	SPH 244: Introduction to Health Science Statistics	SPH 245: Biostatistics for Health Sciences	SPH 262: Principles of Environ Health Sciences	SPH 273: Health Services Administration	SPH 222: Social and Behavioral Aspects of Public Health	SPH 290: Topics in Public Health	SPH 297: Public Health Practicum	EPI 205: Principles of Epidemiology
1. Describe basic concepts of probability, random variation and commonly used statistical probability distributions.		Р	Р						
2. Apply common statistical methods for inference.		Р	Р						R
3. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.		Р	Р						R
4. Discuss the strengths and limitations of the main epidemiologic study designs and their utility for public health.									Р
5. Apply the basic terminology and definitions of epidemiology.	R						R		Р

Table 2.6.c. Courses and other learning experiences by which the competencies are met (P= primary; R=Reinforced)													
Core Competencies (All students)	SPH 201: Introduction to Public Health*	SPH 244: Introduction to Health Science Statistics	SPH 245: Biostatistics for Health Sciences	SPH 262: Principles of Environ Health Sciences	SPH 273: Health Services Administration	SPH 222: Social and Behavioral Aspects of Public Health	SPH 290: Topics in Public Health	SPH 297: Public Health Practicum	EPI 205: Principles of Epidemiology				
6. Calculate basic epidemiology measures.									Р				
7. Draw appropriate inferences from epidemiologic data.		R	R				R		Р				
8. Describe how the tools of toxicology, epidemiology, risk assessment, risk management, and risk communication are useful in understanding environmental health problems, and the strengths and limitations of each.	R			P			R						
9. Describe the human health effects of a few environmental and occupational agents and know how to obtain information on additional agents.	R			P			R						

Table 2.6.c. Courses	and other l	earning exper	iences by w	hich the cor	npetencies a	re met			
(P= primary; R=Rein	forced)								
Core Competencies				ے	_				
(All students)	SPH 201: Introduction to Public Health*	SPH 244: Introduction to Health Science Statistics	SPH 245: Biostatistics for Health Sciences	SPH 262: Principles of Environ Health Sciences	SPH 273: Health Services Administration	SPH 222: Social and Behavioral Aspects of Public Health	SPH 290: Topics in Public Health	SPH 297: Public Health Practicum	EPI 205: Principles of Epidemiology
10. Describe techniques for preventing and controlling environmental hazards and regulatory approaches that may govern environmental hazards.				P			R		
11. Identify the main components and issues of the organization, financing and delivery of health services and public health systems in the US.	R				Р		R		
12. Describe the legal and ethical bases for public health and health services.	Р				Р		R		
13. Identify basic theories, concepts and models from a range of social and behavioral disciplines that are used in public health research and practice.						Р	R		

	Table 2.6.c. Courses and other learning experiences by which the competencies are met (P= primary; R=Reinforced)													
Core Competencies (All students)	SPH 201: Introduction to Public Health*	SPH 244: Introduction to Health Science Statistics	SPH 245: Biostatistics for Health Sciences	SPH 262: Principles of Environ Health Sciences	SPH 273: Health Services Administration	SPH 222: Social and Behavioral Aspects of Public Health	SPH 290: Topics in Public Health	SPH 297: Public Health Practicum	EPI 205: Principles of Epidemiology					
14. Apply evidence- based approaches in the development and evaluation of social and behavioral science interventions.	R			R		Р	R							

General Public Health Specialty Area

Table 2.6.c. Courses	Table 2.6.c. Courses and other learning experiences by which the competencies are met												
(P=primary; R=Rein	forced)												
Core Competencies (General Public Health)	SPH 201: Introduction to Public Health	SPH 244: Introduction to Health Science Statistics	SPH 245: Biostatistics for Health Sciences.	SPH 262: Principles of Environ Health Sciences	SPH 273: Health Services Administration	SPH 222: Social and Behavioral Aspects of Public Health	SPH 210: Public Health Informatics	SPH 290: Topics in Public Health	SPH 297: Public Health Practicum	EPI 205: Principles of Epidemiology			
1. Use information technology to access, evaluate, and interpret public health data.							Р	R					
2. Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities.									Р				

Epidemiology Specialty Area

Table 2.6.c. Cours	es and other le	arning expe	riences by wh	ich the comp	etencies are	met			
(P=primary; R=Re	inforced)								
Core Competencies (Epidemiology)	EPI 205B: Integration of Basic Epidemiologic Principles	EPI 206: Epidemiologic Study Design	EPI 207: Advanced Concepts in Epidemiologic Study Design	EPI 220: Problems in Epidemiologic Study Design	EPI 251: Environmental Epidemiology	EPI 272: Cancer Epidemiology	SPH 211: Infectious Disease and Global Health	SPH 266: Applied Analytic Epidemiology	SPH 297: Public Health Practicum
1. Ability to evaluate the epidemiologic literature critically with regard to design, potential biases, assessment of adequacy of analytic approach, and interpretation of results given limitations		Р							
2. Ability to assess confounding and effect modification in epidemiologic studies		P	P					Р	
3. Ability to suggest appropriate analytic approaches for epidemiologic studies and communicate with biostatisticians about them		Р	Р					Р	

Table 2.6.c. Cours	le 2.6.c. Courses and other learning experiences by which the competencies are met												
(P=primary; R=Re	inforced)												
Core Competencies (Epidemiology)	EPI 205B: Integration of Basic Epidemiologic Principles	EPI 206: Epidemiologic Study Design	EPI 207: Advanced Concepts in Epidemiologic Study Design	EPI 220: Problems in Epidemiologic Study Design	EPI 251: Environmental Epidemiology	EPI 272: Cancer Epidemiology	SPH 211: Infectious Disease and Global Health	SPH 266: Applied Analytic Epidemiology	SPH 297: Public Health Practicum				
4. Ability to recognize potential biases when designing studies and to suggest approaches to avoid them		P											
5. Ability to design data collection instruments appropriate to epidemiologic research questions		Р											
6. Ability to implement data collection and quality control measures in epidemiologic studies				P	R	R							

Biostatistics Specialty Area

Table 2.6.c. Courses and other learning experiences by which the competencies are met																			
(P=primary, R=Reinforce	d)																		
Core Competencies (Biostatistics)	SPH 244: Introduction to Health Sciences Statistics	SPH 245: Biostatistics for the Health Sciences	MPM 404: Medical Statistics III	EPI 204A: Foundations of Statistical Methods	EPI 204B: Statistical Models, Methods, and Analysis	EPI 205B: Integration of Basic Epidemiologic Principles	EPI 206: Epidemiologic Study Design	EPI 208: Analysis & Interpretation of EPI Data	EPI 226: Methods for longitudinal & Repeated Measurement Data	SPH 280/EPI 280: Intro to SAS	PHR 202: Sampling in Health Related Research	STA 106: ANOVA	STA 108: Regression Analysis	STA 130A: Mathematical Statistics: Brief Course	STA 130B: Mathematical Statistics Brief Course	STA 138: Analysis of Categorical Data	STA 144: Sampling Theory of Surveys	STA 205: Statistical Methods for Research With SAS	SPH 297: Public Health Practicum
Describe the roles biostatistics serves in the discipline of public health.	Р	Р					R												
2. Describe basic concepts of probability, random variation and commonly used statistical probability distributions.	Р	Р																	
3. Describe preferred methodological alternatives to commonly used statistical methods when assumptions are not met.		Р																	
4. Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.		Р					Р												
5. Apply descriptive techniques commonly used to summarize public health data.	Р	Р					Р												

Table 2.6.c. Courses and	other le	earnin	g exp	perien	ces by	which	the co	mpete	ncies ar	e me	t								
(P=primary, R=Reinforce	d)				-			-											
Core Competencies (Biostatistics)	SPH 244: Introduction to Health Sciences Statistics	SPH 245: Biostatistics for the Health Sciences	MPM 404: Medical Statistics III	EPI 204A: Foundations of Statistical Methods	EPI 204B: Statistical Models, Methods, and Analysis	EPI 205B: Integration of Basic Epidemiologic Principles	EPI 206: Epidemiologic Study Design	EPI 208: Analysis & Interpretation of EPI Data	EPI 226: Methods for Iongitudinal & Repeated Measurement Data	SPH 280/EPI 280: Intro to SAS	PHR 202: Sampling in Health Related Research	STA 106: ANOVA	STA 108: Regression Analysis	STA 130A: Mathematical Statistics: Brief Course	STA 130B: Mathematical Statistics Brief Course	STA 138: Analysis of Categorical Data	STA 144: Sampling Theory of Surveys	STA 205: Statistical Methods for Research With SAS	SPH 297: Public Health Practicum
6. Apply common statistical methods for inference.		Р																	
7. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.							Р												
8. Apply basic informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation.								Р											
9. Interpret results of statistical analyses found in public health studies.	R	R					R	Р											
10. Develop written and oral presentations based on statistical analyses for both public health professionals and educated lay audiences.							Р	R											

^{1:} The competencies included for SPH 297: Public Health Practicum depend on the nature of the specific student project.

d. 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.

Based on student feedback and assessments by the Curriculum Committee and Executive Committee, the MPH program's core courses fully address the selected competencies. In fall 2016, we made a minor change to the curriculum by beginning SPH 297 Public Health Practicum in fall quarter, instead of winter, to better prepare students to identify and begin a practicum placement. This change was based on requests by students.

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

How competencies are developed: In 2009, the MPH core course faculty selected a set of 14 core competencies for all MPH students from the list developed by the Association of Schools and Programs of Public Health. The competencies were reviewed and approved by the Curriculum Committee. From the comprehensive list of competencies developed by ASPPH, MPH core course instructors selected 2-3 competencies relevant to their courses. These competencies have maintained their relevance over time, based on the opinion of the Curriculum Committee and core course instructors. Also, in anticipation of CEPH's new list of MPH competencies, the MPH faculty decided to make no major revisions until a final list was approved.

CEPH's new competencies, presented in the October 2016 revised criteria for accreditation, will guide the faculty's reassessment of the MPH competencies and coursework. This process began in January 2017 and will be completed in December, 2017.

How competencies are used: Core course instructors use the competencies to define assignments, and examination questions. That is, they develop homework, projects, papers, and exam questions that, if met with a grade of "B-" or better, will ensure that students achieve the stated competencies. The competencies also serve as a guidepost for the Curriculum Committee, which uses them to assess whether the course objectives, assignments, and reading align with the stated competencies.

Availability to students: The programmatic competencies are posted on our website and included in the Student Handbook for each entering class. In addition, beginning in the 2009-2010 academic year, students complete a self-assessment of the competencies as part of their final report for the SPH 297: Public Health Practicum [see ERF 2.4.a.1 Public Health Practicum Syllabus, Form 6 and ERF 2.6.e Required Competencies, Student Self-Assessment for 2016-17].

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

Assessment of changing practice or research needs: UC Davis MPH Program faculty are immersed in the public health world, enjoying ongoing contact with colleagues and students. For instance, several faculty have research grants and contracts with state and local public health agencies, giving them direct access to public health professionals and their skill set. Other faculty employ MPH students or alumni and so can readily assess their skills. Faculty involvement in the field makes them acute observers of changing needs, which they communicate to the MPH Program Director and/or the Curriculum Committee. The MPH program routinely interacts with alumni who are well positioned to assess current practice needs. For instance, the alumni board regularly communicates with the MPH Program on gaps in the program, ideas for programming, etc. Alumni also attend our quarterly socials, which is a time to informally assess their preparation for the workforce. Alumni are periodically surveyed to acquire input on current skills. There are eight members of the board and they are elected by the alumni. Their goals include: 1) providing resources and networking for students and alumni; 2) promote participation in continuing education and professional development activities; 3) support efforts to create a school of public health; and, 4) maintain a presence in the public health community through service and partnerships. For more information, see their website: http://mph.ucdavis.edu/alumni network.php.

Use of input for developing competencies: The information from these formal and informal sources contributes to discussion and review of our competencies by the MPH leadership team in our Curriculum and Executive Committees. In general, all parties concur that the 14 competencies remain relevant to the field and are adequately addressed in the core courses. An ongoing challenge is addressing new competencies. Feedback from alumni and employers, along with the new CEPH accreditation requirements released in October, 2016, identify several competencies that could be added to the current list of core competencies, such as competencies related to program planning and evaluation.

Several factors have hindered our ability to add new courses to address these gaps, notably a limited number of faculty and anticipation of major curriculum changes to meet new CEPH accreditation requirements. In the meantime, some of these topics are covered in depth in elective courses taken by our students, such as a new course on Qualitative Research, which has a program evaluation component. We anticipate adopting new a new set of competencies based on new CEPH requirements and a curriculum revision in 2018. Moreover, with our new Department Chair, Dr. Bradley Pollock, we are now adding new faculty and disciplinary breadth to the Department of Public Health Sciences and MPH program.

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

We assess Criterion 2.6 as met with commentary.

Strengths: The UC Davis MPH Program has selected a set of competencies based on the Association of Schools and Programs of Public Health competencies. The competencies are clearly identified within the instructional matrix and guide development of our curriculum. The ongoing addition of new faculty and disciplinary breadth will further strengthen our program.

Weaknesses: The current competencies were originally developed to meet accreditation requirements for our last self-study evaluation in 2010. While they remain appropriate and have been useful in the evolution of our curriculum, they are not consistent with the recently updated CEPH accreditation criteria.

Plans: The MPH program is in the process of reviewing competencies and curriculum based on the new CEPH accreditation requirements. We anticipate significant changes as we update our curriculum and competencies over the next two years, in accordance with CEPH requirements.

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

See ERF 2.7.1-3 Assessment Procedures for 2014-2015, 2015-2016, and 2016-2017 Graduate Exit Survey data.

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 and culminating experiences.

With respect to course work, students complete a series of examinations or projects assessing their subject mastery, leading to a final grade. Each syllabus for a required course includes a list of competencies and the ways in which the competency is assessed. To receive the MPH, students must complete 56 academic quarter units of coursework with a grade-point average of at least 3.0 and no grade in a core required course below B-. This process assures that students have mastered the underlying disciplines necessary for public health.

The practicum placement (SPH 297) is also important for assessing mastery of the competencies. Practicum experiences offer the opportunity to integrate and apply classroom learning in a real-world public health setting. Students are evaluated by their Site Preceptors, UC Davis faculty advisor, and the SPH 297 instructor of record based on their project performance and outputs.

The culminating experience—the practicum symposium attended by students, faculty, and community public health colleagues—allows the student to demonstrate mastery through a written report, poster, and oral presentation. Students also provide a self-assessment of their master of programmatic competencies as part of the SPH 297 course. Finally, we monitor degree completion rates and progress after students leave the program, looking at professional advancement and job placement.

b. Identification of outcomes that serve as measures by which the program will evaluate student achievement in each program, and presentation of data assessing the program'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 included in the unit of accreditation (including bachelor's, master's and doctoral degrees) for each of the last three years. 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 graduates at any level who can be located, an explanation must be provided.

Table 2.7.b.1 shows annual growth in enrollment of 2-5 students each year. The class of 2013 included 25 students, and 5 years later the class of 2017 the class size was 37 students. More

than 80% of students complete the program in one year, although the maximum time to graduate is two years. Part-time students are rare. Within 12 months of graduation, more than 80% of alumni go on to a career in public health or further training in graduate or professional school.

Table 2.7.b.1 Students in MPH Degree, By Cohorts Entering Between 2012-13 and 2017-18								
	Cohort of Students	2012-13	2013-14	2014-15	2015- 16**	2016-17	2017-18	
2012-2013	# Students continuing at beginning of this school year	25						
	# Students withdrew, dropped, etc.							
	# Students graduated	20						
	Cumulative graduation rate	80%						
2013-2014	# Students continuing at beginning of this school year	5	24					
	# Students withdrew, dropped, etc.		1					
	# Students graduated	4	16					
	Cumulative graduation rate	96%	66%					
2014-2015	# Students continuing at beginning of this school year	1*	7	27				
	# Students withdrew, dropped, etc.	1		3				
	# Students graduated		6	19				
	Cumulative graduation rate	96%	91.6%	70%				
2015-2016	# Students continuing at beginning of this school year		1*	5	35			
	# Students withdrew, dropped, etc.			1				
	# Students graduated			4	27			
	Cumulative graduation rate		91.6%	85.1%	77%			
2016-2017	# Students continuing at beginning of this school year		1*		8	37		
	# Students withdrew, dropped, etc.					0		
	# Students graduated				5	34		
	Cumulative graduation rate		91.6%		91.4%	91.9%		
2017-2018	# Students continuing at beginning of this school year				3	3	35	
	# Students withdrew, dropped, etc.				2	0	0	
	# Students graduated				1	TBD	TBD	

Cumulative graduation rate	96%	91.6%	85.1%	94.2%	TBD	TBD
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^{*}Current UC Davis medical student

^{**}One student who entered in 2015/16 did not register for Fall Quarter 2016 and readmitted for Winter Quarter 2017.

Table 2.7.b.2 Destination of Graduates by Employment Type in 2013 to 2016	AY 2013- 14	AY 2014- 15	AY 2015- 16
Employed	16	15	23
Continuing education/training (not employed)	4	8	6
Actively seeking employment	0	0	0
Not seeking employment (not employed and not continuing education/training, by choice)	0	0	0
Unknown	2	0	3 ¹
Total	22	23	32

^{1:} Two students graduated on the December 2016 degree list and one student graduated on the March 2017 degree list.

c. An explanation of the methods used to collect job placement data and of graduates' response rates to these data collection efforts. The program 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 results presented in Table 2.7.b.2 are from alumni surveys, follow-up email communication and LinkedIn searches. The response rate in 2013-14 was 86.9%, in 2014-15 it was 92%, and in 2015-16 it was 100%.

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 program's graduates on these national examinations for each of the last three years.

MPH students are not required to be certified for professional competence; however, some students and alumni choose to take these tests. According to the National Board of Public Health Examiners in Public Health, approximately one UC Davis MPH graduate took and passed the Certified in Public Health (CPH) Exam between 2014-2016.

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

The primary way the MPH program assesses graduates' ability to perform competencies in an employment setting is to track the hiring of new graduates. Using this measurement, the program considers the curriculum successful because within one year of graduation 90% of new graduates have full-time, career positions in public health or go on to further graduate education.

In the summer of 2017, the MPH program conducted a survey of alumni to learn more about the competencies taught in the program. The survey was sent to 245 alumni and 53 responded, for a response rate of 22%. Half (25) of the respondents answered the open-ended question: What skills did you learn during the MPH program that helped you get and keep your first job after graduation? Most listed statistical skills, such as database creation, statistical programming in SAS or R, and epidemiologic study design. Alumni also listed practical public health skills, networking, presentation skills, and project management. (See ERF 2.7.e UCD Alumni Survey Responses 2017.)

In the summer of 2017, the MPH program also attempted an unsuccessful survey of employers of alumni. The program does not keep contact information for current supervisors of alumni, and so we sent a link to a survey for employers to alumni who graduated in the last two years asking them to forward it to their supervisors. To date, there have been no responses to the online survey. A focus group with local employers or individual telephone interviews may be a more productive approach to getting employer feedback on the competencies of new graduates.

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

We assess Criterion 2.7 as met with commentary.

Strengths: The MPH Program has in place procedures for assessing and documenting the extent to which each student has demonstrated competence in the required areas of performance. These procedures are consistent with the accreditation criteria relevant for this review period. They include graduation rates, self-assessment of achieved competencies, and employment within one year of graduation.

Weaknesses: There is no formal assessment of alumni competencies from employers beyond anecdotal comments from individual employers we see in professional settings or at MPH social events.

Plans: The MPH program will coordinate with other University of California MPH programs to exchange ideas about effective and feasible assessment strategies, including assessments by employers. Given the new CEPH accreditation criteria, we anticipate significant changes in

procedures for assessing and documenting student competencies. Planning for these changes began in January 2017 and includes identifying a means of assessment for each competency on exams, papers, and homework assignments. The final plan for competency assessment is due in January 2018, and will be fully implemented in the academic year 2018-19.

2.8. Bachelor's Degrees in Public Health.

Not applicable. UC Davis does not offer a bachelor's degree in public health.

2.9. Academic Degrees.

Not applicable. UC Davis does not offer academic degrees in public health.

2.10. Doctoral Degrees.

Not applicable. UC Davis does not offer a doctoral degree in public health.

2.11. Joint Degrees.

Not applicable. UC Davis MPH Program does not offer joint degrees.

2.12. Distance Education or Executive Degree Programs.

Not applicable. UC Davis does not have a distance education program.

- 3.0. Creation, Application and Advancement of Knowledge
- 3.1. Research. The program 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.
- a. Description of the program's research activities, including policies, procedures and practices that support research and scholarly activities.

Program's research activities. UC Davis is a research university and stands 26th in research funding (over \$721,000,000 in 2015-2016) among ranked public universities in the U.S., according to the most recent information from the National Science Foundation. The MPH program faculty engage in a wide variety of research topics with funding from federal, state, and private sources. In 2015-2016, the MPH program primary and secondary faculty were involved in 59 research grants and contracts for a total of \$59,043,251. Some examples of research topics included air pollution, aging, Alzheimer's disease, cancer, mental health disparities, One Health, agricultural health and safety, and nutrition. A complete list of faculty research grants is provided in ERF 3.1.c.

MPH program faculty lead and are actively involved in research centers across the campus. The description of each Center illustrates the research strengths of the faculty members.

The **Center for Occupational and Environment Health** was established in 1978, and brings together faculty and staff on the Berkeley, Davis, and San Francisco campuses of the University of California to: educate future leaders in occupational and environmental health; develop new knowledge related to occupational and environmental health issues; and, bring the resources of the University of California to people affected by health hazards in their workplaces or communities. **Faculty:** Drs. Schenker (Director), McCurdy, Schmidt, Hertz-Picciotto, Bennett, Rocke, Leigh.

The Western Center for Agricultural Health and Safety was established in 1990 as one of the two original regional agricultural health and safety centers sponsored by the National Institute for Occupational Safety and Health (NIOSH). WCAHS focuses on agricultural health and safety in agricultural populations (farmers and family, farm workers and family) in California, Nevada, Arizona, and Hawaii. Faculty: Drs. Schenker (Director), McCurdy, Bennett, Leigh.

The **UC Davis Environmental Health Sciences Center** was launched with nearly \$8 million in funding from the National Institute of Environmental Health Sciences (NIEHS). The San Joaquin Valley is a special focus of research on toxins that affect brain, lung, immune system, reproductive and metabolic health conducted by UC Davis faculty in

medicine, veterinary medicine, engineering, and agricultural and environmental sciences. **Faculty:** Drs. Hertz-Picciotto (Director), Bennett, Schenker, Schmidt.

To advance the cognitive health and well-being of older Latinos and their families and close gaps in care, the Latino Aging Research Resource Center provides pilot funding and mentors diverse junior faculty conducting impactful and community-engaged research addressing Latino cognitive health and aging. LARRC, one of seven national NIH funded Resource Centers for Minority Aging Research (RCMAR), works closely with the UC Davis Alzheimer's Disease Center and with other regional academic institutions. Faculty: Drs. Garcia, Beckett.

UC Davis' Cancer Center is one of only 45 NCI-designated Comprehensive Cancer Centers in the country. The Cancer Center has an active and varied research agenda that includes basic sciences and the development of new medical treatments. The MPH faculty participate in the Population Sciences and Health Disparities Research Working Group. **Faculty:** Drs. Chen (Chair), Pollock, Cassady.

The Clinical and Translational Science Center offers a full-fledged toolbox of resources that faculty and staff across the spectrum of scientific research can use to improve health and health-care delivery. Their Research Education, Training, and Career Development Program offers translational research training that provides scholars with a rich array of career development opportunities through program curricula, mentored research training, and partnerships with other programs, departments, and institutions. Faculty: Drs. Bang, Pollock.

The **Center of Expertise in Planetary Health** leads UC-wide education programs, targeted multi-campus research endeavors, and sustainable international partnerships for implementing programs and interventions to improve health globally and in California. In the most vulnerable regions globally, rapid population growth and urbanization collide with climate change. Achievable responses to large scale health and environment transitions will be intrinsically integrative, multidisciplinary, multi-campus, and will involve stakeholders globally and locally. **Faculty:** Dr. Smith (Co-Director).

Policies, procedures and practices that support research and scholarly activities. Research is one of the considerations involved in evaluation and career advancement for faculty. All faculty are reviewed on an approximately biannual basis with respect to their productivity in research, teaching, and service. Specifically, official University of California policy states: "The review committee shall judge the candidate with respect to the proposed rank and duties, considering the record of the candidate's performance in (1) teaching, (2) research and other creative work, (3) professional activity, and (4) University and public service." (http://www.ucop.edu/academic-personnel-programs/ files/apm/apm-210.pdf, section d).

Research is supported with administrative resources (e.g., secretarial, financial, grants management) within the Department of Public Health Sciences (School of Medicine). The

Department employs a full-time Grants Administrator, Ms. Phillippa Savage. The coordinator provides assistance and advice throughout the life of a grant. The coordinator researches funding opportunities, reviews requirements, helps faculty develop budgets, gathers required paperwork, and submits materials for grants. She oversees administration of grants, ensuring agency and University requirements are met, coordinates progress and budget reporting, assists with Institutional Review Board submissions, oversees payroll, and recruit students and staff to assist in projects. Other department staff coordinate purchases, travel, and meetings. The School of Medicine (SOM) maintains a listsery that informs members of funding opportunities and disseminates a funding opportunities newsletter. They offer matched-funding programs to help extramurally funded investigators acquire major new research equipment on a shared-purchase basis, as well as multi-investigator program project and center grant matches.

The School of Medicine's Clinical Translational Science Center provides staff to assist in reviewing and editing research proposals to ensure that that they are clearly written and adhere to agency guidelines. Further, the campus sponsors coursework in research methods and grant writing for faculty. For example, two courses the Office of the Vice Chancellor for Research (OVCR) offers are "Proposal Processing and Submission" and "Proposal Budgeting Basics." The OVCR provides a variety of additional resources to support research and scholarly activities. They offer basic research grants supporting development of research centers, organized research units, and organized research programs; multidisciplinary proposal support that includes clerical, travel, supplies, and grant writing assistance; publication assistance funding to defray costs of publishing; and a Principal Investigator Bridge Program that offers limited, one-time funding for Principal Investigators who have lost, or will lose, primary extramural funding until they can reestablish extramural funding.

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

The MPH faculty conduct collaborative research with local, state, national, and international organizations. These include formal research agreements, typically in the form of a scope of work and contract. The California Environmental Protection Agency, the California Department of Public Health, and other state agencies are the closest research partners. UC Davis is geographically the closest research university to the state capital, and the campus has a long history of collaboration with state agencies. This research can involve competitive awards where the agency releases an RFA to conduct research on a particular topic. At other times, state agencies have a particular research agenda and PI in mind, and so arrange for a non-competitive Interagency Agreement. Table 3.1.c under the section titled "Research Contracts – Primary Faculty as UC Davis PI" in the electronic resource file lists all of the collaborative research projects. A few examples are listed here.

- "Benefits of high efficiency filtration to children with asthma." Funder: California Air Resources Board. Dr. Deborah Bennett, Principal Investigator. Total Amount: \$3,350,000. Period of Funding: 7/15/2012 06/14/2016.
- "Prevention First" program evaluation contract. Funder: California Department of Public Health. Dr. Diana Cassady, Principal Investigator. Total Amount: \$987,420. Period of Funding: 3/1/14 - 6/29/18.

Some of the MPH program faculty's grants and contracts are community-based in that they are guided by a community advisory board or collaborators in non-profit, community-based agencies; or they include a significant public outreach and education component.

c. A list of current research activity of all primary and secondary faculty identified in Criteria 4.1.a and 4.1.b., including amount and source of funds, for each of the last three years. These data must be presented in table format and include at least the following: a) principal investigator and faculty member's role (if not PI), b) project name, c) period of funding, d) source of funding, e) amount of total award, f) amount of current year's award, g) whether research is community based and h) whether research provides for student involvement. Distinguish projects attributed to primary faculty from those attributed to other faculty by using bold text, color or shading. Only research funding should be reported here; extramural 25 funding for service or training grants should be reported in Template 3.2.2 (funded service) and Template 3.3.1 (funded training/workforce development).

See ERF 3.1.c. Research Activity of Faculty

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

Table 3.1.d. Outcome Measures for Faculty Research									
Outcome Measure	AY 2014-2015	AY 2015-2016	AY 2016-2017						
Maintain level research funding each year due to the competitive funding environment.	\$9,060,011	\$10,011,136	\$13,795,619						
Primary faculty publish an average of 3 peer-reviewed manuscripts each year.	CY 2014 7.64	CY 2015 6.88	CY 2016 8.0						

e. Description of student involvement in research.

MPH students may be involved in applied research in the course of their Practicum Placements or as a continuation of interests not formally part of the MPH curriculum. Students involved in research may be employed by the investigator (as a volunteer or as a paid Graduate Student Researcher) or acquire course credit. Students sometimes seek research opportunities by contacting faculty with a shared research interest. In addition, faculty circulate research opportunities to the MPH students via e-mail and announcements on social media.

One example of an MPH student involved in research is a graduate student researcher who is working for Dr. Stephen McCurdy on his study of sexual harassment among female farmworkers. He was able to employ the student for the entire academic year, 2016-2017, to conduct and analyze qualitative interviews with women farmworkers. The student learned about the rights of human subjects participating in research; the IRB approval process; how to develop a qualitative interview protocol; and, how to collect and analyze qualitative data. She will co-author 1-2 peer-reviewed papers with Dr. McCurdy. Other examples of MPH student involvement on research include work with Dr. Irva Hertz-Picciotto on xenobiotic exposure, with Dr. Marc Schenker on agricultural health, and with Dr. Diana Cassady on tobacco policy.

Announcements for student service are distributed via e-mail and on the MPH program Facebook page. Examples include a call for volunteers at a health care conference and for student poster presentations at the California Public Health Association- North conference.

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

We assess Criterion 3.1 as met.

Strengths: UC Davis MPH program faculty has formidable strength in public health-related research, manifest by significant levels of extramural funding and active publications. There is some concern about limited funding for National Institutes of Health grants, especially for junior faculty. But most faculty have found alternative sources of research funding, and there is considerable support from the School of Medicine, the campus, and the University of California system in the form of new research grants and help finding new funding.

Weaknesses: None.

Plans: Continue to seek external funding and to publish in top-rated journals.

- 3.2. Service. The program shall pursue active service activities, consistent with its mission, through which faculty and students contribute to the advancement of public health practice.
- a. Description of the program's service activities, including policies, procedures and practices that support service. If the program has formal contracts or agreements with external agencies, these should be noted.

Examples of faculty service commitments. MPH faculty are active in service to their scholarly disciplines, the university, the state, and the nation. Table 3.2.c. provides a comprehensive list of MPH program faculty service. Here are some notable examples.

- Editorial Board members for peer-reviewed journals, including Alzheimer's and Dementia: Translational Research and Clinical Interventions; Journal of Health Care for the Poor and Underserved; Environmental Health; Autism Research; and, Preventive Veterinary Medicine.
- Grant proposal reviewers for several Institutes within the National Institutes of Health and the U.S. Department of Health and Human Services.
- State scientific advisory board members, such as the Synthetic Turf Advisory Panel, California Office of Environmental Health Hazard Assessment.
- Campus leadership positions, including a department chair, graduate group chair, and Associate Vice Provost for Faculty Equity and Inclusion
- UC Office of the President, member of the Academic Senate Coordinating Committee on Graduate Affairs.

Formal contracts or agreements with external agencies. MPH faculty have a number of Interagency Agreements (contracts) with California state agencies to provide services or to conduct applied research. The California Department of Public Health, The California Environmental Protection Agency, and CalFIRE are examples of some of these agencies. These contracts involve a unique opportunity for state staff and faculty to collaborate; provide jobs for graduate students; and, fund applied research that may not otherwise be supported by the National Institutes of Health or similar agencies. All of these contracts are listed in section 3.1 Research. There are no training grants available to MPH students.

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

Service is one of the considerations involved in evaluation and career advancement for faculty. All faculty are reviewed on an approximately biannual basis with respect to their productivity in research, teaching, and service. Specifically, official policy states: "The review committee shall judge the candidate with respect to the proposed rank and duties, considering the record of the candidate's performance in (1) teaching, (2) research and other creative work, (3) professional activity, and (4) University and public service." (http://www.ucop.edu/academic-personnel-programs/files/apm/apm-210.pdf, section d). Review committee members are given flexibility to weigh some of these considerations over others (e.g., additional service may offset a lower

number of courses taught). The emphasis on service in merit and promotion actions helps to promote a culture of service among the faculty.

c. A list of the program'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. 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 Template 3.2.2. Extramural funding for research or training/continuing education grants should be reported in Template 3.1.1 (research) or Template 3.3.1 (funded workforce development), respectively.

Table 3.2.c.1 Prin	mary Faculty Service t	to External Organizations from 2014 to 20	17
Name	Role	Community Service	Year(s)
Bang, Heejung	Associate Editor	J Statistical Theory and Practice	2010-
Beckett, Laurel	Editorial Board	Alzheimer's and Dementia: Translational Research and Clinical Interventions	2015-
	Invited Member	Trans-NIH Special Emphasis Panel on Adolescent Brain Cognitive Development	2015
	Invited Member	NIH Study Section on Biomedical Computing and Healthcare Informatics	2015
	Invited Member	Consortium Internal Advisory Committee, NeuroTherapeutics Research Institute (NTRI)	2007-
	Invited Member	NIH-NHLBI Data and Safety Monitoring Board, CHART Project	2010-
	Invited Member	NIH-Sponsored National Working Group of Biomarkers for Parkinson's Disease	2011-
Bennett, Deborah	Invited Member	Synthetic Turf Advisory Panel, California Office of Environmental Health Hazard Assessment	2016
	Invited Member	International Task Force on the UNEP/SETAC Life Cycle Initiative	2015
	Invited Member	Project TENDR	2015
	Invited Member	Advisory Panel, Healthy Zero Energy Buildings (HZEB)	2014
	Invited Member	Finance Committee, International Society of Exposure Assessment	2006-
	Chair	Awards Committee, International Society of Exposure Assessment	2010-
Cassady, Diana	Invited Member	Evaluation Workgroup, Reducing African American Child Deaths, Sierra Health Foundation	2015-
Chen, Moon	Editorial Board	Journal of Health Care for the Poor and Underserved	2003-
	Ad Hoc Reviewer	A Socioecological Approach to Tobacco Health Disparities, US Department of Health and Human Services	2015
	Ad Hoc Reviewer	National Cancer Institute Regional Centers of Research Excellence in Non-	2016

	_				
		Communicable Diseases in Low and Middle Income Countries			
	Ad Hoc Reviewer/Co-	National Institute on Minority Health &	2016		
	Chair	Health Disparities Clinical Research	2010		
	Chan	Education and Career Development R25			
De Vogli, Roberto	Referee	Economic and Social Research Council	2012-		
De Vogii, Noberto	Grant Reviewer	Medical Research Council	2012-		
	Grant Reviewer	Economic and Social Research Council	2009-		
Caraia Larana					
Garcia, Lorena	Invited Member	Mentorship and Networking Committee, ADVANCE	2012-		
	Invited Member	Psychosocial and Behavioral Health	2012-		
		Scientific Special Interest Group, Women Health Institute			
	Invited Member	Race, Ethnicity and Health Status Scientific	2012-		
		Special Interest Group, Women Health			
		Institute			
Kass, Philip	Invited Member	Council on Education, American Veterinary	2011-		
		Medical Association			
	Member ex officio	American Board of Veterinary Specialties,	2013-		
	WICHIDEL CX OTHER	American Veterinary Medical Association	2013		
	Editorial Board	Preventative Veterinary Medicine	2013-		
	Invited Member	Study Design and Data Analysis Board,	2015-		
	invited Member	, , , , ,	2015-		
	Crant Basiassan	Equine Veterinary Journal	2015-2016		
	Grant Reviewer	, , , , , , , , , , , , , , , , , , , ,			
T	1 1 100	Medicine, University of Vienna, Austria	2042 2045		
Keegan, Theresa	Invited Member	Epidemiology Working Group, Next Steps	2012-2015		
		for Adolescent and Young Adults Oncology:			
		A scientific Update, National Cancer Center			
	Chair	Cancer Survivorship Working Group, Cancer	2012-2015		
		Prevention Institute of California			
Kim, Kyoungmi	Editorial Board	Journal of the National Medical Association	2006-		
	Editor	Frontiers in Statistical Genetics and	2010-		
		Methodology			
	Reviewer	Special Emphasis Panel for National Institute of Health/National Institute of	2014-		
		Diabetes and Digestive and Kidney Diseases			
		(NIH/NIDDK)			
	Poviowor	Special Emphasis Panel (SBIB-(F59) R) for	2015-2016		
	Reviewer	Imaging and Biomarkers for Early Cancer	2013-2010		
		Detection R01 applications, National	1		
		Cancer Institute	1		
	Poviouer		2016		
	Reviewer	Special Emphasis Panel (GRB-J 02) for P20	2016		
		Centers review, National Institute of	1		
		Diabetes and Digestive and Kidney Diseases	1		
	B :	(NIDDK)	2016		
	Reviewer				
		Review, National Institute of Diabetes and			
		Digestive and Kidney Diseases			
McCurdy, Stephen	Invited Member	Preventive Health and Health Services	2009-		
		Block Grant Advisory Committee, California	1		
		Department of Public Health			

	T	1	2012
	Associate Editor	Journal of Agricultural Safety and Health	2013-
	Invited Member	Preventive Medicine Residency Admissions Committee, California Department of Public Health	2010-
	MPH Program Representative	Sierra-Sacramento Valley Medical Society & Environmental Health Committee	2000-
	Member	Board of Directors, Association for Prevention Teaching and Research	2009-2015
Pollock, Bradley	Co-Chair	National Cancer Institute Cancer Care Delivery Research Steering Committee	2014-
	Co-Leader	Methods and Processes Domain Task Force, Clinical Translational Science Award National Consortium	2014-
	President	Council of Epidemiology Chairs	2015-
	Co-Chair	PCORnet Clinical Trials Task Force, Patient- Centered Outcomes Research Institution (PCORI)	2014-2015
	Invited Member	Planning Committee, West Coast Health Systems Transformation Meeting, , May 12, 2015, American College of Preventive Medicine, Sacramento, CA	2015
	Grant Reviewer	"Planning Grants for Global Research Infrastructure in Non-Communicable Disease," Special Emphasis Panel, ZCA1 GRB-S (M2), National Institute of Health	2016
	Editorial Board	Journal of Adolescence and Young Adult Oncology	2010-
Schenker, Marc	Invited Member	Leadership Committee, U of California Global Health Institute	2009-
	Invited Member	Management Group, Occupational Epidemiology Committee, International Commission on Occupational Health	2009-
	Invited Member	AGRICOH Steering Committee (International Consortium of Agricultural Cohort Studies), International Agency for Research on Cancer, World Health Organization	2010-
	Editorial Board	Turkish Journal of Occupational Health, Safety and Environment	2014-
	Associate Editor	Special Populations, Journal of Agromedicine	2016-
	Associate Editor	Journal of Agromedicine, Practice, Policy and Research	2016
	Invited Member	APHA International Advisory Committee	2018-
	Invited Member	International Advisory Committee for 1 st World Congress on Migration, Ethnicity, Race and Health (MERH 2018)	2018
Schmidt, Rebecca	Co-Leader	New Instrument Development Group for the Environmental Epidemiology of Autism Network	2011-

	Editorial Board	The Journal of Nutritional Biochemistry	2012-
	Invited Member	CEHC Epigenetics Working Group	2012-
	Editorial Board	Environmental Epigenetics	2015-
Yoo, Byung-Kwang	Editorial Board	Journal of Preventive Medicine and Public	2010-
		Health	

Project Name	Principal	Funding	Funding	Amount	Amount	Amount	Amount	Community	Student
	Investigator	Source	Period	Total	2014-15	2015-16	2016-17	-Based Y/N	Part. Y/N
	&		Start/End	Award					
	Department								
Employee Medical	McCurdy,	CA Dept. of	1/21/15-	241,996	65,248	83,211	93,537	N	N
Questionnaire Contract	Stephen	Forestry and Fire Protection	10/31/17						
CALBRACE	Schenker, Marc	CA Dept. of Public Health (CDPH)	10/1/13- 2/28/17	735,071	237,007	249,032	249,032	N	N
Communicable Disease Emergency Response	Schenker, Marc	CDPH	3/15/12- 6/30/16	30,279,127	7,772,712	8,263,213	0	N	N
Communicable Disease Emergency Response (Renewal)	Schenker, Marc	CDPH	7/1/16- 6/30/21	48,986,167	0	0	8,823,907	N	N
Emergency Preparedness	Schenker, Marc	CDPH	1/1/11- 12/31/15	13,094,408	4,496,749	4,496,749	0	N	N
Emergency Preparedness (Renewal)	Schenker, Marc	CDPH	1/1/16- 12/31/18	12,182,371	0	1,892,170	3,928,336	N	MPH practicum stipends avai
Genetic Disease Screening Program	Schenker, Marc	CDPH	7/1/14- 6/30/17	4,814,341	1,534,987	1,606,241	1,673,113	N	N
Information Technology Services Division (ITSD)	Schenker, Marc	CDPH	7/1/16- 6/30/19	6,471,924	0	0	2,071,735	N	N
Medical Safety Contract	Schenker, Marc	CDPH	3/5/14- 12/31/15	3,659,869	1,949,646	783,216	0	N	N
Project & Change Management	Schenker, Marc	CDPH	6/1/15- 6/30/17	1,601,954	65,635	755,287	791,032	N	N
CA Health Benefits Review Program	Yoo, Byung- Kwang (Cost Team Member)	CA Health Care Benefit Fund	7/1/12- 6/30/16	122,000	30,500	30,500	0	N	N
Cardiovascular disease (CVD) in California	Yoo, Byung- Kwang and Hock, Jeffrey	CDPH	1/1/17- 6/30/18	217,066	0	0	108,533	N	N

d. Identification of the measures by which the program may evaluate the success of its service efforts, along with data regarding the program's performance against those measures for each of the last three years.

Table 3.2.d. Outcome Measures for Faculty Service Efforts								
Outcome Measure	2014-2015	2015-2016	2016-2017					
60% of primary faculty are involved in service to UC Davis.	70.5%	73.4%	76.4%					
40% of primary faculty hold leadership positions in local, state, and national public health organizations.	88.2%	88.2%	88.2%					

e. Description of student involvement in service, outside of those activities associated with the required practice experience and previously described in Criterion 2.4.

The program regularly distributes announcements for student service that we receive from professional associations, county health departments, and non-profit organizations. For instance, each year all students are invited to join the California Public Health Association-North at the MPH Orientation. A call for volunteers to help with conferences included the annual meeting of the California Public Health Association—North (2016) and the Insure the Uninsured Project (ITUP) conference (2017). These announcements are distributed via e-mail to listservs and social media sites of current students and sometimes announcements are made in required courses to draw attention to e-mail announcements.

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

We assess Criterion 3.2 as met with commentary.

Strengths: Service is clearly defined in University policy for faculty, and faculty are meeting and exceeding their service commitments to the campus and to their profession. MPH students are actively involved in service as part of their MPH degree requirements and in MPH Committees. Additional service opportunities are provided to students through announcements circulated by the MPH program.

Weaknesses: Both faculty and students are involved in community service beyond the requirements of the MPH program or campus policies, and several factors impede greater engagement. For MPH students, the high unit load each quarter leaves little extra time for service to the community. For faculty, funding pressures inevitably orient toward compensated activities such as research in lieu of *pro bono* service. Spotty record keeping on community

service also makes it difficult to document how much community service faculty and students are contributing.

Plans: Continue to provide service to the public health profession and the campus, and to announce community service opportunities as they arise. Improve tracking of community service among faculty and students in the 2017-18 academic year. For instance, the MPH program will poll faculty at the annual faculty meeting regarding their service contributions in the last year. Similarly the MPH program will work with the new instructor for SPH 297: Public Health Practicum course to better document student community service.

- 3.3. Workforce Development. The program shall engage in activities other than its offering of degree programs that support the professional development of the public health workforce
- a. Description of the ways in which the program 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.

The MPH Program leadership periodically assesses the need for continuing education among the public health workforce. For instance, in 2010 we collaborated with several universities to establish the California-Pacific Public Health Training Center. Funded by HRSA, it served the northern Bay Area, the Central Valley, and Hawaii. Conversations with the California Department of Public Health revealed training needs, and MPH program faculty delivered a series of webinars, online training modules, and in-person training sessions to Sacramento and more rural locations, including Yolo and Shasta counties.

Other ways in which the MPH program learns of workforce development needs is through the Volunteer Clinical Faculty, who are practicing public health professionals. In addition, the MPH Director is in regular contact with practicum preceptors. In their conversations, skill development needs are sometimes a topic of conversation.

The MPH program actively shares professional education events on campus with colleagues outside of the university through e-mail announcements and the Facebook page. These events include an annual Public Health Week Symposium, the annual Immigration and Health Summer Institute, and one-time speaker visits on a variety of public health topics.

b. A list of the continuing education programs, other than certificate programs, offered by the program, 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 Data Template 3.3.1 (ie, 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 Template 3.1.1 (research) or Template 3.2.2 (funded service), respectively.

At times, the practicing public health community proactively requests workforce training. For instance, the Tobacco Control Program, California Department of Public Health, identified a need for training in program evaluation for the 61 local health departments and 40-60 non-profit organizations they fund to prevent tobacco use. They fund UC Davis's Tobacco Control Evaluation Center (TCEC), a statewide technical assistance center on program evaluation. Established in 2007, TCEC delivers training activities such as a quarterly newsletter, monthly webinars, print materials, and an online repository of surveys and other data collection instruments relevant to tobacco control. A staff of six provide individual consultations by

phone and e-mail, and host regional training meetings annually. TCEC staff administer a workforce education assessment every other year and plan educational activities based on the results of the assessment. Workforce development activities will significantly expand with new funds from the passage of the \$2/pack tobacco tax (Proposition 56).

Project Name	Principal Investigator & Department	Funding Source	Funding Period Start/End	Amount Total Award	Amount 2014-15	Amount 2015-16	Amount 2016-17	Community- Based Y/N	Student Part. Y/N
Preventive Medicine Residency Program	McCurdy, Stephen (Cassady, Diana, program evaluation)	CDPH and HRSA	7/1/14- 6/30/19	1,786,937	275,930	190,866	424,183	N	Preventive medicine residents; GSR for prgm eval.
MPH Scholarship Program	Cassady, Diana	California Wellness Foundation	1/1/12- 12/31/14	150,000	50,000	0	0	N	scholarships for URM MPH students
Building Interdisciplinary Research Careers in Women's Health (BIRCWH) (K12)	Gold, Ellen (Schmidt, Rebecca, Mentored Scholar)	NIH	9/1/10- 8/31/15	506,550 (Schmidt Only)	118,350	0	0	N	Jr. faculty training program
Paul Kalabresi Career Development Award for Clinical Oncology (K12)	Lara, Primo (Qi, Lihong, Biostatistician)	NIH	8/1/11- 7/31/16	3,422,862	768,001	1,130,071	1,129,855	N	Jr. faculty training program
Advanced Training in Environmental Health Sciences (T32)	Lein, Pamela (Bennett, Deborah, Hertz- Picciotto, Irva, Schenker, Marc, Schmidt, Rebecca – mentors)	NIH	7/1/12- 6/30/17	1,124,815	223,062	224,860	228,894	N	Predoctoral training program
Tobacco Control Evaluation Center	Cassady, Diana	CDPH	1/1/13- 12/31/17	3,325,000	775,226	784,007	829,191		Y

c. Description of certificate programs or other non-degree offerings of the program, including enrollment data for each of the last three years.

Not applicable.

d. Description of the program's practices, policies, procedures and evaluation that support continuing education and workforce development strategies.

The MPH program's Community Outreach Committee is responsible for communicating with the public about educational events and conducts publicity for Public Health Week. Each training program conducts evaluation based on the requirements of the funding agency.

e. A list of other educational institutions or public health practice organizations, if any, with which the program collaborates to offer continuing education.

Some of the training programs are part of a larger, nationwide program. For instance, the BIRCWH is an NIH-funded women's health training program located in multiple universities. BIRCWH programs at UC Davis, UCSF, and Stanford University sometimes hold joint meetings and conferences.

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

We assess Criterion 3.3 as partially met. There are currently no funds for formal, ongoing professional development programming beyond those funded by the California Department of Public Health's Tobacco Control Program. However, ad hoc events are widely publicized and shared with the practicing public health community.

Strengths: The campus and School of Medicine have active community programming that is widely shared with colleagues in the practicing public health community. The MPH program hosts an annual Public Health Week Symposium.

Weaknesses: Resources are not available to host ongoing professional development classes for colleagues at the California Department of Public Health and the local health departments.

Plans: The MPH program will continue sharing educational events with the wider community. Individual programs, such as the Tobacco Control Evaluation Center, will continue assessments and professional education with the local health departments. In 2018, the MPH program will establish a new quarterly Public Health Grand Rounds to highlight faculty research. Delivered via webinar, the Grand Rounds talks will be publicized to the state health department and local health departments in Northern California.

4.0. Faculty, Staff and Students

4.1. Faculty Qualifications. The program 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 program's mission, goals and objectives.

See ERF 4.1.1-2 Faculty Qualifications for Primary and Secondary Faculty Curriculum Vitae

a. A table showing primary faculty who support the degree programs offered by the program. 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 and include at least the following: a) name, b) title/academic rank, c) FTE or % time, d) tenure status or classification*, g) graduate degrees earned, h) discipline in which degrees were earned, i) institutions from which degrees were earned, j) current instructional areas and k) current research interests.

The UC Davis MPH program faculty are based in several different departments and schools, consistent with the organization of most graduate programs on campus. The campus hosts nearly 100 graduate groups. Each graduate group recruits faculty members from various departments to teach and to govern the group. Many of the MPH program faculty come from the Public Health Sciences department, but others are from various departments in the School of Medicine and School of Veterinary Medicine. Secondary faculty who teach electives and advise students are from a wide range of departments across campus, including Nutrition, the School of Law, Communications, etc.

Specialty	Name	Title/	Tenure	FTE or %	Degrees	Institution	Discipline in which	Teaching	Research
Area		Academic	Status	Time to	Earned	where	degrees were earned	Area	Interest
		Rank		the		degrees			
				program		were			
						earned			
Biostatistics	Bang, Heejung	Professor	Tenured	.65	PhD, MA	North Carolina State U.	Statistics	EPI 226: Methods for Longitudinal and Repeated	Clinical trials and observational studies.
								Measurement Data; EPI 203: Quantitative Epidemiology II: Statistical	Medical cost and cost- effectiveness analysis, prediction and screening modeling.
Biostatistics	Beckett, Laurel	Professor	Tenured	.50	PhD, MS	Stanford U.	Statistics	SPH 244: Introduction to Health Science Statistics	Statistical methods for longitudinal data, population-based studies, and translational research between basic science and clinical medicine.

Specialty	Name	Title/	Tenure	FTE or %	Degrees	Institution	Discipline in which	Teaching	Research
Area		Academic	Status	Time to	Earned	where	degrees were earned	Area	Interest
		Rank		the		degrees			
				program		were			
						earned			
Biostatistics	Kim, Kyoungmi	Assistant Professor	Tenured	.50	PhD, MS	U. of Kentucky, Lexington	Statistics; (Applied) Mathematics	SPH 245: Biostatistics for the Health Sciences	
Epidemiology	Kass, Philip	Professor	Tenured	.75	DVM, MPVM, PhD	UC Davis	Veterinary Medicine; Preventative Veterinary Medicine; Comparative Pathology/Epidemiology	SPH 290: Topics in Public Health; EPI 207: Advanced Epidemiologic Methodology	Observational study design and inference. Companion animals as models for human health problems
Epidemiology	Keegan, Theresa	Associate Professor	Not Tenured	.50	PhD, MS	Stanford U.; Ball State U.	Epidemiology; Wellness Management	EPI 205: Principles of Epidemiology	Cancer surveillance, cancer outcomes and cancer survivorship.

Specialty Area	Name	Title/ Academic Rank	Tenure Status	FTE or % Time to the program	Degrees Earned	Institution where degrees were earned	Discipline in which degrees were earned	Teaching Area	Research Interest
Epidemiology	Pollock, Bradley	Professor, Department Chair	Tenured	.75	PhD, MPH	UC Los Angeles	Epidemiology	EPI 206: Epidemiologic Study Design; SPH 298: The Environment: Epidemiology and Policy; SPH EPI 290 Epidemiology Seminars; SPH 298: Principles and Applications of Cancer Prevention & Control: A Population- Based Perspective	Cancer Epidemiology

Table 4.1.a.	Current Pr	imary Facult	y Supportii	ng Degree (Offerings	of Program,	2016-17		
Specialty	Name	Title/	Tenure	FTE or %	Degrees	Institution	Discipline in which	Teaching	Research
Area		Academic	Status	Time to	Earned	where	degrees were earned	Area	Interest
		Rank		the		degrees			
				program		were			
						earned			
General Public Health	Schenker, Marc	Professor	Tenured	.85	MD, MPH	UC San Francisco; Harvard U.	Medicine; Epidemiology; Occupational Medicine	SPH 290: Topics in Public Health; EPI 251: Environmental Epidemiology	Environmental and occupational risk factors for respiratory disease and lung cancer, occupational and other health issues of migrant populations.
Epidemiology	Schmidt, Rebecca	Assistant Professor	Not Tenured	.65	PhD, MS	U. of Iowa	Epidemiology	EPI 208: Analysis and Interpretation of Epidemiological Data; EPI 230 Introduction to Molecular Epidemiology	Molecular epidemiology, gene by environmental interaction in the etiology of reproductive and child developmental outcomes.

Specialty Area	Name	Title/ Academic Rank	Tenure Status	FTE or % Time to the program	Degrees Earned	Institution where degrees were earned	Discipline in which degrees were earned	Teaching Area	Research Interest
Epidemiology	Smith, Woutrina	Associate Professor	Tenured	.85	DVM, MPVM, PhD	UC Davis	Veterinary Medicine; Preventative Veterinary Medicine; Comparative Pathology	EPI 205: Principles of Epidemiology; EPI 290 Epidemiology Seminars	One Health approaches to investigate the epidemiology and transmission dynamics of zoonotic pathogens.
General Public Health	Bennett, Deborah	Associate Professor	Tenured	.60	PhD, MS	UC Los Angeles; UC Berkeley	Mechanical Engineering	SPH 262: Principles of Environmental Heath	Fate, transport and exposure to chemicals in a multimedia environment within the context of environmental exposure and risk assessment.
General Public Health	Cassady, Diana	Professor	Not Tenured	.60	DrPH, MPH, MA	UC Berkeley; Stanford U.	Health Education; Communication	SPH 223: Obesity Prevention in Community Settings	Nutrition, health education and social marketing

Specialty Area	Name	Title/ Academic Rank	Tenure Status	FTE or % Time to the	Degrees Earned	Institution where degrees	Discipline in which degrees were earned	Teaching Area	Research Interest
				program		were earned			
General Public Health	Chen, Moon	Professor	Tenured	.50	PhD, MPH, MS	Texas Women's U.; Tulane U.; U. of Michigan	Health Education; International Health; Environmental Health Sciences	SPH 298: Principles and Applications of Cancer Prevention & Control: A Population- Based Perspective	Cancer health disparities
General Public Health	De Vogli, Roberto	Visiting Professor	Not Tenured	.60	PhD, MPH, Laurea	UC Los Angeles; UC Los Angeles; U. of Padua	Public Policy; Global Health; Psychology	SPH 222: Social and Behavioral Aspects of Public Health; SPH 204: Globalization and Health: Evidence and Policies; SPH 290: Topics in Public Health	

Specialty	Name	Title/	Tenure	FTE or %	Degrees	Institution	Discipline in which	Teaching	Research
Area		Academic	Status	Time to	Earned	where	degrees were earned	Area	Interest
		Rank		the		degrees			
				program		were			
						earned			
General Public Health	Garcia, Lorena	Associate Professor	Tenured	.85	DrPH, MPH	UC Los Angeles; Boston U.	Epidemiology	SPH 201: Introduction to Public Health; SPH 205 Health Disparities	Health disparities, in particular obesity and diabetes, intimate partner violence, immigrant health and acculturation in the Latino community.
General Public Health	Leigh, J. Paul	Professor	Tenured	.60	PhD	U. of Wisconsin	Economics	SPH 273: Health Services Administration	Health costs of occupational injury and illness
General Public Health	McCurdy, Stephen	Professor, Program Director	In- residence, academic tenured	.85	MD, MPH	UC San Diego; UC Berkeley	Medicine; Epidemiology	SPH 290: Topics in Public Health; SPH 297: Public Health Practicum	Agricultural health

able 4.1.a. Current Primary Faculty Supporting Degree Offerings of Program, 2016-17								
Name	Title/	Tenure	FTE or %	Degrees	Institution	Discipline in which	Teaching	Research
	Academic	Status	Time to	Earned	where	degrees were earned	Area	Interest
	Rank		the		degrees			
			program		were			
					earned			
Yoo,	Associate	Tenured	1.0	MD,	Hokkaido	Medicine, Health Policy	SPH 274:	Health
Byung-	Professor			MsC,	U.; Harvard	and Management;	Economic	economics,
Kwang				PhD	U.; John	Health Policy and	Evaluation in	health policy,
					Hopkins U.	Management (Health	Health Care;	health services
						Economics)	SPH 276:	research and
							Critical	long-term and
							Assessment in	international
							Health Policy	comparisons o
							and Economics	health care
								systems.
	Name Yoo, Byung-	Name Title/ Academic Rank Yoo, Byung- Professor	Name Title/ Academic Rank Yoo, Associate Professor Tenure Status Tenured Tenured	Name Title/ Tenure STE or % Academic Rank Status Time to the program Yoo, Associate Professor Tenured 1.0	Name Title/ Tenure Status Time to Earned the program Yoo, Associate Byung- Professor Tenured 1.0 MD, MsC,	Name Title/ Academic Status Time to Earned where degrees were earned Yoo, Associate Byung- Kwang Professor Kwang Professor Rank Rank Professor Rank Professor Rank Professor Rank Professor Rank Professor Professor Professor Professor Rank Professor Profess	Name	Name Title/ Academic Rank Status Time to the program Earned the program Medicine, Health Policy Associate Professor Kwang Kwang

b. Summary data on the qualifications of other program faculty (adjunct, part-time, secondary appointments, etc.). Data should be provided in table format and include at least the following: a) name, b) title/academic rank, c) title and current employment, d) FTE or % time allocated to the program, e) highest degree earned (optional: programs 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 program.

Table 4.1.b. Othe	Table 4.1.b. Other Faculty Used to Support Teaching Program									
Specialty Area	Name	Title/Academic Rank	Title & Current Employer	FTE or % Time	Degrees Earned	Discipline for earned graduate degrees	Program Contributions			
Biostatistics	Iosif, Ana-Maria	Associate Professor	Dept. of Public Health Sciences, UC Davis	.15	PhD, MA, MA	Statistics, Statistics, Applied Statistics and Optimization	Research			

Biostatistics	Li, Chin-Shang	Professor	Dept. of Public Health Sciences, UC Davis	.40	PhD, MS	Statistics, Applied Mathematics	Teaching, Research
Biostatistics	Rocke, David	Distinguished Professor	Dept. of Public Health Sciences, UC Davis	.40	PhD, MA	Mathematics	Teaching, Research
Biostatistics	Qi, Li-Hong	Associate Professor	Dept. of Public Health Sciences, UC Davis	.15	PhD, MS, MS, MS	Biostatistics, Biostatistics, Statistics, Applied Mathematics	Research
Epidemiology	Chomel, Bruno B.	Professor	Dept. Population Health & Reproduction, UC Davis	.25	DVM, PhD, MS	Veterinary Medicine, Microbiology	Research, Committee Service
Epidemiology	Cress, Rosemary	Associate Professor	Dept. of Public Health Sciences, UC Davis	.40	DrPH, MPH	Epidemiology	Teaching, Research
Epidemiology	Gold, Ellen B.	Emeritus Professor	Dept. of Public Health Sciences, UC Davis;	.15	PhD, MA	Epidemiology, Zoology	Research
Epidemiology	Hertz-Picciotto	Professor	Dept. of Public Health Sciences, UC Davis	.40	PhD	Epidemiology	Teaching, Research
Epidemiology	Kaufman, Farla Lynne	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis; Epidemiologist, CA Environmental Protection Agency	.25	PhD, MS	Epidemiology, Nutrition, Kinesiology	Teaching

Epidemiology	Lopez, Beatriz Martinez	Associate Professor	Dept. of Medicine and Epidemiology, UC Davis	.35	DVM, MPVM, PhD	Veterinary Medicine, Veterinary Epidemiology	Teaching, Committee Service
Epidemiology	Romano, Patrick	Professor	Dept. of General Medicine and Pediatrics, UC Davis	.15	MD, MPH	Medicine, Public Health	Research
General Public Health	Anderson, Nicholas	Associate Professor	Dept. of Public Health Sciences, UC Davis	.15	PhD, MPH	Biomedical Informatics	Research
General Public Health	Bauer, Gerhard	Assistant Adjunct Professor	Director, Good Manufacturing Practice, UC Davis Institute for Regenerative Cures; Dept. of Internal Medicine	.20	MD	Medicine	Community Service, Student Advising
General Public Health	Bell, Robert	Professor	Dept. of Communications, UC Davis	.15	PhD, MA	Communication	Research
General Public Health	Conroy, Shannon	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis	.10	PhD	Epidemiology	Committee Service
General Public Health	Dharmar, Madan	Associate Professor in Residence	Betty Irene School of Nursing; Dept. of Pediatrics, UC Davis	.40	PhD, MD	Epidemiology, Medicine	Teaching, Research

General Public Health	Heinig, M. Jane	Academic Administrator	Dept. of Nutrition; Director, Human Lactation Center, UC Davis	.35	PhD, MS	Nutrition Science	Research, Student Advising, Committee Service
General Public Health	Hogarth, Michael	Professor	Dept. of Pathology and Laboratory Medicine, UC Davis	.40	MD	Medicine	Teaching, Research
General Public Health	Hoch, Jeffrey	Professor	Dept. of Public Health Sciences, UC Davis	.40	PhD	Health Policy	Teaching, Research
General Public Health	Ikemoto, Lisa	Professor of Law	School of Law, UC Davis	.10	JD, LLM	Law	Committee Service
General Public Health	Ko, Michelle	Assistant Professor	Dept. of Public Health Sciences, UC Davis	.15	MD, PhD MPH	Medicine, Health Policy and Management	Research
General Public Health	Koga, P. Marius	Assistant Professor	Dept. of Public Health Sciences, UC Davis	.25	MD, MPH	Medicine, International Health	Research, Student Advising
General Public Health	Kurtz, Caroline	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis; Assistant Branch Chief of Local Programs and Training, Nutrition Education and Obesity	.35	PhD	Nutrition	Teaching, Student Advising

			Prevention Branch, CDPH				
General Public Health	Lyman, Donald	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis	.10	MD	Medicine	Committee Service
General Public Health	Middleton, Elisabeth Rose	Associate Professor	Dept. of Native American Studies, UC Davis	.15	PhD	Environmental Science, Policy, and Management	Research
General Public Health	Nunez de Ybarra, Jessica	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis; California Wellness Plan Implementation, Chronic Disease Control Branch, CDPH	.25	MD, MPH	Medicine	Teaching
General Public Health	O'Malley, Michael	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis	.25	MD, MPH	Medicine, Epidemiology	Teaching
General Public Health	Peck, Caroline	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis; Chief, Chronic Disease Control Branch, CDPH	.10	MD, MPH	Medicine	Committee Service
General Public Health	Pocekay, Dennis	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis	.20	MD, MPH, MS	Medicine, Applied Mechanics	Student Advising, Committee Service

General Public Health	Starr, Mark	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis; Deputy Director for Environmental Health, CDPH	.35	DVM, MPVM	Veterinary Medicine	Teaching, Committee Service, Teaching
General Public Health	Thiel de Bocanegra, Heike	Volunteer Clinical Faculty (VCF)	Dept. of Public Health Sciences, UC Davis; Associate Professor, Dept. of Obstetrics, Gynecology & Reproductive Sciences, UC San Francisco	.10	PhD, MA MPH,	International Community Health, Psychology	Student Advising
General Public Health	Villablanca, Amparo C.	Professor	Professor and Lazda Endowed Chair, Women's Cardiovascular Medicine, Dept. of Internal Medicine; Director and Founder, UC Davis Women's Cardiovascular Medicine Program; Director, Women in Medicine and Health Sciences, UC Davis	.10	MD	Medicine	Student Advising

General Public	Zhang, Jingwen	Assistant	Dept. of	.25	PhD, MA,	Communications	Teaching
Health		Professor	Communications,		MA		
			UC Davis				

Faculty FTE calculation: 25% Teaching = 1 public health course, 50% Teaching >= 2 public health courses, 10% Committee Service, 15% Research, 10% Student Advising and % of time does not include community preceptorship for our public health practicum, which can involve significant time.

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 program. Faculty with significant practice experience outside of that which is typically associated with an academic career should also be identified.

Integration of perspectives from field of practice: The UC Davis MPH program faculty bring a wide perspective to teaching. Classroom instructors have field experience that is relevant to their subject, and this experience becomes part of their teaching. Field experience is also strongly integrated into teaching in our SPH 290: Topics in Public Health seminar course. Here we pair a University faculty member with a Volunteer Clinical Faculty (VCF) member from the California Department of Public Health (CDPH) as instructors of record for the course. For example, the initial Summer Session faculty for the SPH 290 Topics in Public Health seminar are Stephen McCurdy, MD MPH (UC Davis) and Jessica Núñez de Ybarra, MD MPH (CDPH). In addition, the speakers at each of the weekly seminars are practicing public health professionals, providing the students with exposure to a wide spectrum of public health. For instance, the fall 2016 SPH 290 course guest speakers included the mayor of Davis who spoke about public health at the city level; a Senior Safety Engineer from the Division of Occupational Safety and Health (Cal/OSHA) who addressed prevention of heat illness among construction and farmworkers; and, an advocate from the California Rural Legal Assistance Foundation who discussed reducing pesticide exposure among farmworkers.

Appointment track for practitioners: The University provides Volunteer Clinical Faculty (VCF) appointments for community practitioners who will have a significant role (at least 50 hours per year) in teaching or administration of University programs such as the MPH Program. Examples of VCF contributions to the MPH program include Caroline Kurtz, PhD and Mark Starr, DVM, MPVM of the California Department of Public Health, who are Instructors of Record each year in SPH 290. VCF also act as practicum preceptors for MPH students, such as Heike Thiel de Bocanegra, PhD, who has supervised several practicum projects on women's health and access to reproductive health care. In addition, VCF serve on MPH committees such as Caroline Peck, MD on the MPH Executive Committee, Shannon Conroy, PhD, on the MPH Admissions and Advancement Committee and Donald Lyman, MD DTPH on the MPH Community Development Committee.

d. Identification of measurable objectives by which the program assesses the qualifications of its faculty complement, along with data regarding the performance of the program against those measures for each of the last three years.

Table 4.1.d. Outcome Measures for Faculty Qualifications								
Outcome Measure	2014-2015	2015-2016	2016-2017					
90% of primary faculty have a PhD or MD/MPH degree.	93%	95%	100%					
30% of faculty are practicing public health professionals (VCF).	29%	18%	20%					

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

We assess Criterion 4.1 as met with commentary. There are sufficient MPH faculty to cover teaching commitments, and they are particularly strong in certain public health disciplines, such as epidemiology and biostatistics. The areas of health policy and behavioral sciences have fewer faculty. The graduate group systems allows the MPH program to recruit faculty from across campus. The Public Health Sciences department, the administration home of the MPH program, continues to add 2-3 new faculty each year and some of these faculty join and teach in the MPH program.

Strengths: The UC Davis MPH program has a strong multidisciplinary faculty well recognized in their respective fields and with excellent publication and funding records. In addition, the Volunteer Clinical Faculty add expertise in public health practice to the coursework. We note that faculty expertise is particularly strong in the fields of epidemiology and biostatistics, and a fair representation of faculty in environmental and occupational health.

Weaknesses: There is faculty coverage in the core public health disciplines of health policy and behavioral sciences, but with limited depth.

Plans relating to this criterion: The MPH program recently added a new member with expertise in behavioral sciences from the Nutrition department. The graduate group adds 2-5 new faculty each year to its membership and plans to focus on recruiting new members to expand underrepresented areas of expertise. In addition, the Public Health Sciences department may hire new faculty in these areas. For instance, the department has a new Division of Health Policy and Economics, and has plans to add new faculty in this division. The department will add six new faculty by the end of 2018, and anticipates hiring 2-4 new faculty each year over the next five years. Some of these faculty will join the Graduate Group and will teach MPH courses and/or advise MPH students.

- 4.2. Faculty Policies and Procedures. The program 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.
- a. A faculty handbook or other written document that outlines faculty rules and regulations.

Faculty are governed by the provisions in the Academic Policy Manual, which can be found at http://manuals.ucdavis.edu/apm/apm-toc.htm. Faculty are provided with the Faculty compensation plan by the department of Public Health Sciences. The Faculty Guide outlines policies for teaching [see ERF 4.2.a.1 UC Davis Faculty Guide].

b. Description of provisions for faculty development, including identification of support for faculty categories other than regular full-time appointments.

The UC Davis campus and the School of Medicine provide faculty development programs for all academic ranks. Opportunities include workshops, courses, grants, travel awards, mentorships, leadership development, and sabbatical leaves. They cover topics such as teaching methods, integrating technology into teaching, teaching with writing, test question development, peer review, grading, grant-writing, leadership, media training, and work-life balance.

The <u>Clinical and Translational Sciences Center</u> offers a speakers series, statistics workshops and drop-in sessions, and individual consulting on grant proposals. They also provide small grants of up to \$50,000 for faculty to collect preliminary data to support larger grants and cores in biostatistics, informatics, and community engagement to assist with proposals and funded studies.

The School of Medicine's <u>Faculty Development and Diversity Program</u> offers a wide variety of programs to ensure that all faculty have the opportunity to succeed, including an annual series of workshops designed for early and mid-career faculty. There is also a mentoring academy and an annual series of workshops on preparing for merit and promotion reviews. The School offers scholarships to the Association of American Medical Colleges leadership development programs and hosts the *Women in Medicine and Health Sciences* group, which convenes women faculty across the school for educational and networking events.

Research support is also offered on the Davis campus. The Office of Research issues a *Weekly Research Funding Update* and manages the limited submissions process for funders who will accept only one application from an institution. The library offers a stipend of approximately \$1000 to pay for publications in open access journals. And the Academic Senate and Federation provide \$800 travel awards to attend meetings and present original work for one meeting, domestic or international, for travel and other allowable expenses.

Faculty development in the area of teaching is provided through classes at the School of Medicine and through the campus's <u>Center for Educational Effectiveness</u>. The Center hosts online print and video modules on effective teaching; provides individual consultations on syllabi and course materials; and, hosts regular workshops on teaching topics. Academic Technology Services hosts Friday sessions on integrating technology into teaching, from using the campus learning management system to adding clickers to large lecture courses. The faculty development resources described above are available to all regular UC Davis faculty regardless of rank or track. (However, they are not generally available to our Volunteer Clinical Faculty.)

c. Description of formal procedures for evaluating faculty competence and performance.

Faculty tracks: The University has three parallel faculty tracks and a Volunteer Clinical Faculty track. (There are also several clinical tracks, but these are not relevant for the MPH Program.) The Ladder Rank Faculty track comprises faculty who receive base support through state funding (known as 19900 funds or FTE funding) and thus have a clear expectation of meeting teaching requirements in their schools and departments. Ladder-rank faculty are held to University standards of excellence in teaching, research, and service. Ladder-Rank Faculty may supplement their base support, and thus increase their salaries, with grants, clinical work, and administrative positions.

The second track is the In-Residence track. In-Residence faculty are held to the same quantitative and qualitative standards of excellence as are Ladder-Rank faculty for teaching, research, and service. However, they do not receive base support from the state's 19900 fund. Base support for In-Residence positions comes from grants, departmental sources, funds received for clinical care, and program support. In-Residence faculty have the same opportunity to supplement their base funding, and thereby increase their salaries, with grants, clinical work, and administrative positions.

The third track is the Adjunct track. Adjunct faculty, including those involved in teaching in the UC Davis MPH program, do not receive state funding for their salaries and thus have a reduced (5-10%) expectation for teaching, with the remainder of their effort focused primarily on research, deriving 90-95% of their salaries from research and service grants and contracts. Some service grants and contracts are specifically intended to support teaching, and adjunct faculty receiving these may increase their teaching involvement above the normal 5-10%.

The Volunteer Clinical Faculty (VCF) track is designed for community practitioners who wish to participate directly in the University's teaching, research, or service missions. These are unpaid positions. The MPH faculty includes practitioners in the state and local health departments as VCF.

Faculty evaluation: The procedures for evaluating faculty performance and for advancement are the same for the Ladder-Rank and In-Residence tracks, but differ slightly for the Adjunct

track. Evaluation typically involves an annual review with the Division Chief or Department Chair addressing productivity in research (including publication, funding, and ongoing projects), teaching (including student evaluations and peer evaluation through observed teaching), and service for all three tracks, with more emphasis on research for the Adjunct track, given the nature of the funding. Merit reviews occur every two years for Assistant and Associate level and every three years for Full Professor and promotion of rank every five to seven years. Merit and promotion actions include review by the faculty member's School or College; promotion actions involve additional campus review.

d. Description of the processes used for student course evaluation and evaluation of instructional effectiveness.

Students receive course evaluation forms in class during the last week of each course. The evaluations include standard questions, such as the extent to which the course met its stated objectives. Safeguards ensure confidentiality to encourage candor. Course evaluations are anonymous and are compiled by the Student Affairs Officer (not the instructor). Consistent with university policy, summary course evaluations are not shared with instructors until grades are submitted, and then in a manner to protect student anonymity [see ERF 4.2 Faculty Policies and Procedures, 4.2.d Course Evaluation Summary Results].

Once the Student Affairs Officer has compiled the course evaluations and verified that grades are recorded, evaluations are given to the instructor, MPH Program Director, and MPH Curriculum Committee to review. The review may lead to changes in course structure and/or content. Based on student feedback, the 4-hour block schedule in SPH 245 was changed to 2-hour block schedule, twice a week. Based on SPH 297 course evaluations, MPH students begin the Public Health Practicum in Fall quarter. In addition, SPH 290 course evaluations are provided to the Instructors of Record for scheduling future guest speakers.

The MPH Curriculum Committee reviews the student course evaluations each quarter. Students may also provide informal feedback to the MPH Program Director by email or verbally at any time. Where problems are identified, the MPH Program Director or MPH Curriculum Committee chairperson will contact the involved faculty member to address the issues.

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

The MPH program follows the clearly defined policies of the University of California regarding recruitment, advancement, and evaluation of faculty [see ERF 4.2 Faculty Policies and Procedures, 4.2.e Promotion and Tenure Guidelines for Affirmative Action Guidelines, as well as Appointment and Promotion Guidelines]. Furthermore, MPH faculty benefit from a rich selection of faculty develop programs hosted by the campus and the School of Medicine.

We assess Criterion 4.2 as met.

Strengths: The University of California system, as well as the UC Davis campus, provide a clear set of policies for use by the MPH program.

Weaknesses: None.

Plans: Continue to follow system wide and campus policies related to faculty.

4.3. Student Recruitment and Admissions. The program shall have student recruitment and admissions policies and procedures designed to locate and select qualified individuals capable of taking advantage of the program's various learning activities, which will enable each of them to develop competence for a career in public health.

a. Description of the program's recruitment policies and procedures.

The UC Davis program recruits highly qualified individuals who are interested in disease prevention and community health. Applicants must have a minimum of a baccalaureate degree from an accredited institution for acceptance into the program. Recruitment measures include college visits at graduate fairs, monthly admission webinars, presentations to student interest groups, linkage through the ASPPH website and our website.

The MPH website (mph.ucdavis.edu) is a useful communication tool for prospective applicants to learn about the admission and degree requirements, faculty, course descriptions, fees and financial aid. Other internet-based recruitment methods include program description on the ASPPH website (http://www.aspph.org/program-finder/?program=7039) and admission webinars. Each fall, the program hosts 4-5 webinars during the evening by which prospective applicants can learn about the graduate program and Q&A session. The monthly webinar yields approximately 20-30 attendees each. During recruitment cycle, MPH program staff send email outreach communication to multiple higher education institutions serving diverse student backgrounds, student health centers and student organizations [see ERF 4.3.a.1 Sample Recruitment Emails].

The MPH program has exhibition materials such as a large display and small pop-up stand that are used for displays at graduate fairs and conferences. Each year, MPH program staff visit graduate and professional fairs across the state of California. Prospective applicants are provided program brochures, admission requirements and curriculum materials. Visits have been made to various institutions over the last three years. See Table 4.3.a. below.

Table 4.3.a. Visits to Various Undergraduate Institutions and Graduate Fairs						
2014-2015	2015-2016	2016-2017				
UC Davis Pre-Medical and Pre- Health Professions National Conference	California State University: Sacramento Graduate and Professional School Information Day*	UC Merced Graduate School Fair*				
UC Merced Graduate School Fair*	UC Merced Graduate School Fair*	UC Davis Pre-Medical and Pre- Health Professions National Conference				
UC Davis Graduate School Information Day	UC Davis Pre-Medical and Pre- Health Professions National Conference	San Francisco State University Graduate Fair*				
California State University: Sacramento Fall Grad Fest*	San Francisco State University Graduate School Fair*	UC Davis Graduate School Information Day				

California State University: Sacramento Graduate and Professional School Information	2015 Idealist Graduate Fair (San Francisco, CA)	UC Los Angeles Graduate and Professional School Fair
Day*		
California Forum for Diversity in	CSU Los Angeles Graduate and	Loyola Marymount University
Graduate Education (UC San Diego)	Professional Schools Fair*	Graduate School Fair*
UC Davis School of Medicine Residency Fair	California Forum in Diversity in Graduate Education (UC Santa Barbara)	UC Riverside Graduate and Professional School Fair*
Stanford University Minority Medical Alliance Pre-Health Conference	UC Davis Graduate School Information Day	California State University: Los Angeles Graduate and Professional School Fair*
California State University: Sacramento Spring Grad Fest*	UC Davis School of Medicine Residency Fair	California Forum for Diversity in Graduate Education (Loyola Marymount University)
California Forum for Diversity in Graduate Education (Sonoma State)	California Forum for Diversity in Graduate Education (San Jose State University)	UC Davis School of Medicine Residency Fair
		California Forum for Diversity in Graduate Education (UC Merced)

^{*}Hispanic Serving Institution (Hispanic Association of Colleges and Universities).

In addition to graduate fairs, the MPH program held presentations to student interest groups. For instance, American Medical Student Association at American River College, Chicanos/Latinos in Health Education, Minority Association of Pre-Medical Students, Shifa Clinic, Imani Clinic and Clínica Tepati.

Specific to underrepresented student recruitment, the program exhibits at the California Forum for Diversity in Graduate Education and a number of Hispanic-serving institutions defined by the <u>Hispanic Association of Colleges and Universities</u>. The program also works in concert with Dr. Josephine Moreno and Dr. Steve Lee, Graduate Diversity Officers in the Office of Graduate Studies, who are charged with increasing diversity in graduate education by recruiting at colleges and universities.

b. Statement of admissions policies and procedures.

Applicants provide the application materials, which include the following:

- Online graduate school application
- Official transcripts
- Graduate Record Examination (MCAT accepted for current medical students or recent medical school graduates)
- Test of English as a Foreign Language (TOEFL) for nonnative English speakers
- Three letters of recommendation
- Statement of Purpose
- Personal History and Diversity Statement

Applicants must have a baccalaureate degree from an accredited institution with at least a 3.0 grade-point average on graduation. The undergraduate degree must be conferred before the student begins taking courses in the MPH program. Official transcripts are required from each institution the applicant has attended. Applicants must be in good academic standing. Students must complete and submit results from the Graduate Record Examination (GRE). The program also accepts MCAT scores for those enrolled in or recent graduates of medical school and GMAT scores for those enrolled in or recent graduates of a US MBA program. Students for whom English is not the native language are required to take the TOEFL and achieve a minimum score of 550 paper-based test (PBT) or 80 internet-based test (iBT). Although 80 iBT is the minimum required for admission, additional English language testing may be required for students with iBT scores below 104.

Applicants also submit a curriculum vitae or résumé listing their experience and background in public health. A statement of purpose describes their interests and professional goals as they relate to public health and how they plan to use the MPH in their career. Finally, three academic or professional letters of recommendation are required. The recommenders submit these electronically through the Office of Graduate Studies online application utility. Incomplete applications are not reviewed.

The MPH Admissions and Advancement Committee reviews applicant materials and develops a list of applicants recommended for admission. Formal offers of admission come from the Vice Provost-Graduate Education and Dean Prasant Mohapatra, Office of Graduate Studies.

c. Examples of recruitment materials and other publications and advertising that describe, at a minimum, academic calendars, grading and the academic offerings of the program. If a program 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 program. In addition, references to website addresses may be included.

The UC Davis MPH Program website (mph.ucdavis.edu) is the most complete source for the information requested here. See ERF 4.3.c.1 MPH Program website for a copy of the website materials. Highlights of our website include core curriculum, accreditation status, grading, admission materials, fees and financial aid, student profiles and the student handbook.

In addition to our website, recruitment materials include a tri-fold brochure [See ERF 4.3.c.2]; Admissions Requirements and Process handout [See ERF 4.3.c.3]; Curriculum handout [See ERF 4.3.c.4]; and admission webinar flyer [See ERF 4.3.c.5]. Lastly, student profiles serve as recruitment materials by providing a snapshot of the backgrounds and diversity of current students.

d. Quantitative information on the number of applicants, acceptances and enrollment, by concentration, for each degree, for each of the last three years.

Table 4.3.d. Quantitative Data on Applicants, Acceptances, and Enrollments, 2014 to 2017							
		AY 2014-15	AY 2015-16	AY 2016-17			
	Applied	153	171	139			
MPH	Accepted	82	77	73			
	Enrolled	27	35	37			

The MPH program offers specialty areas in General Public Health, Epidemiology and Biostatistics [See Criterion 2.1.a.]. Prospective applicants do not identify or submit the online graduate application through the UC Davis Office of Graduate Studies to specific specialty areas.

e. Quantitative information on the number of students enrolled in each specialty area of each degree identified in the instructional matrix, including headcounts of full- and part-time students and an FTE conversion, 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.

Table 4.3.e. Student Enrollment Data from 2014 to 2017									
	AY 2014-2015		AY 2015-16		AY 2016-17				
	HC FT	HC PT	FTE	HC FT	HC PT	FTE	HC FT	HC PT	FTE
General Public Health	21	8	25	28	6	31	30	7	33.5
Epidemiology	4	0	4	4	2	5	7	1	7.5
Biostatistics	0	0	0	0	0	0	0	0	0

For students, 1 FTE = 1 student taking 13.5 or more quarter credits per quarter (40.5 quarter units annually). In AY 2014-15, six students continued at PT status from the 2013-14 cohort.

In AY 2015-16, five students continued at PT status from the 2014-15 cohort. One student withdrew from the program.

In AY 2016-17, eight students continued at PT status from the 2015-16 cohort.

FTE calculation: part-time students =.5 regardless of the number of units or quarters enrolled.

There is a trend toward a larger class over time, with more students each year in the General Public Health and Epidemiology specialty areas. The Biostatistics specialty was approved for the 2014-15 academic year, but no students have enrolled in this specialty. The MPH program has not advertised the Biostatistics specialty because we are waiting on approval of new degree requirements including the Biostatistics specialty.

f. Identification of measurable objectives by which the program may evaluate its success in enrolling a qualified student body, along with data regarding the performance of the program against those measures for each of the last three years.

Table 4.3.f. Outcome Measures for Enrolling a Qualified Study Body							
Outcome Measure	AY 2014-2015	AY 2015-2016	AY 2016-2017				
The average GPA of each entering class is 3.4.	3.42	3.50	3.45				
The demographics of each MPH class represent the racial and ethnic diversity of California.	29.6% self-identify as Hispanic/Latino/Mexican American/Chicano 3.7% self-identify as Black/African American 3.7% self-identify as American Indian	8.6% self-identify as Hispanic/Latino/Mexican American/Chicano 0% self-identify as Black/African American 2.8% self-identify as American Indian	18.9% self-identify as Hispanic/Latino/Mexican American/Chicano 5.4% self-identify as Black/African American 2.7% self-identify as American Indian				

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

We assess Criterion 4.3 as met with commentary. The MPH program has expanded the class size while maintaining a highly qualified study body. However, it remains a challenge to recruit students as diverse as the state of California.

Strengths: The MPH program has added staff and made better use of current students and alumni in its recruitment efforts. It has also revised its admissions review process in accord with University of California guidelines to improve the diversity of students.

Weaknesses: The pool of applicants lacks the diversity we hope for. Recruitment efforts have expanded in the last five years, but with less impact than anticipated. Also, the absence of large grants for financial aid is a primary barrier to recruiting a diverse student body. Smaller grants of \$10,000, supplied by an external organization, were routinely rejected by prospective students because they received better financial aid offers from other institutions, and so were not successful in recruiting historically underrepresented minority students.

Plans: The MPH program plans to expand recruitment efforts with Hispanic Serving Institutions and others to more effectively recruit a diverse pool of applicants, and to continue working with alumni on recruitment efforts. To address the need for student financial support, the MPH program will continue to work with the new undergraduate public health minor to secure teaching assistant positions for MPH students. Several new courses will be added in 2017-18, and enrollment in most undergraduate public health courses is expected to expand, providing more opportunities for MPH student support.

- 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.
- a. Description of the program's advising services for students in all degrees and concentrations, including sample materials such as student handbooks. Include an explanation of how faculty are selected for and oriented to their advising responsibilities.

Students are matched with an advisor when they begin the program in August. Before the students enter the program in Summer Session II, the Student Affairs Officer sends an inquiry to all students that includes a list of all MPH faculty members and their areas of interest. Students are asked to examine the list and identify three faculty members who might serve as an advisor. The Student Affairs Officer then matches students based on the student's request and the backgrounds and interests of both the student and faculty member.

In some situations, the optimal match cannot be made due to faculty being on sabbatical or not being available for advising. Once the assignments have been made, the SAO contacts both the students and the chosen faculty members to inform them of the assignment. If the student subsequently concludes the match inappropriate, the student may be reassigned. In addition, students are free to supplement their advisor by meeting with additional faculty.

Both the student and the faculty member receive a copy of the Student Handbook [see ERF 1.5.b] that details the responsibilities of the advisor and advisee, as well as the advising requirements. The student initiates meetings with the advisor through email and phone interactions. Advising meetings are to be held quarterly.

On the first day of instruction during the Summer Quarter, we hold an orientation session for the students [see ERF 4.4.a.1 2016 MPH New Student Orientation Agenda]. The students receive the Student Handbook, and the Program Director reviews its salient points and answers any questions that arise. Material in the handbook covered during orientation includes:

- Program History and Overview
- Program Mission, Goals, and Objectives
- Learning Objectives
- Public Health Values and Professional Conduct
- Degree Requirements
- Curriculum
- Required Courses
- Elective Courses
- Areas of Emphasis
- Advisors
- Faculty
- Resources for Students

• MPH Core Competencies

Starting in the 2015-2016 academic year, the program strongly encourages individual academic advising sessions. The Student Affairs Officer conducts these meetings each fall, and uses a degree checklist and calendar to track completed requirements and develops a course plan to ensure each student graduates on time [see ERF 4.4.a.2 Sample MPH Degree Checklist]. Students who change their graduation date often visit for a revised academic plan, and all students are free to drop into the MPH office for questions about courses, timing of graduation, filing paperwork, and other academic advising questions.

b. Description of the program's career counseling services for students in all degree programs. Include an explanation of efforts to tailor services to meet specific needs in the program's student population.

Students have access to career advice and resources from both the MPH program and the UC Davis campus. Students have the opportunity to network with public health workers in the field at quarterly social events and each week at the SPH 290 seminar session. In addition, the MPH program provides the following career counseling services.

- It distributes information about paid federal and state training programs for new MPH graduates at the orientation session. Among the class of 2017, 11 students applied for the California Epidemiology Investigation Service (Cal-EIS), a 2-year post-graduate training program, and two students applied to the CDC's Public Health Associate Program.
- Our MPH Program <u>website</u> has a link to a career website that offers students links to sources for jobs in the local, county, state, and federal government; community clinics and medical centers; and global organizations in public health.
- Our MPH Program's <u>Facebook page</u> regularly announces job openings, professional education, and training opportunities relevant to student and alumni.
- In July 2016, the program created a new weekly MPH Career Newsletter announcing jobs and career events that is e-mailed to current students [see ERF 4.4.b.1 Sample Career Resources Newsletters].
- In response to student requests, the MPH alumni host a workshop each year on how to get a job with the California Department of Public Health.

The two main career advising resources for students on the UC Davis campus are the Internship and Career Center and Grad Pathways. Students also have access to the Internship and Career Center, which provides one-on-one career advising to students. It also offers numerous workshops throughout the year in topics such as career assessment, career planning, writing résumés and CVs, searching for jobs, interviewing, negotiating, grant writing, and finding employment with the government. They organize career fairs that often specialize in a specific area, such as for graduate students, health and science majors, etc. They coordinate oncampus recruiting and a website where employers post job openings. The GradPathways program is hosted by the UC Davis Office of Graduate Studies to promote success during and after graduate school. It hosts 150 workshops annually on topics including career exploration,

job searching, and networking. Their weekly newsletter with information and events is emailed to all graduate students on campus, including the MPH students.

Perhaps the most important resource is the access our students have to the practicing public health community through the weekly SPH 290: Topics in Public Health Seminar, their practicum experiences, and networking with each other and with alumni. Many of our students have gone from a practicum experience to employment with the same state agency. For instance, the California Department of Public Health hired three graduates in their Tobacco Control Program, two graduates in their Maternal, Child and Adolescent Health Branch, and one graduate in the Office of Health Equity. The California Department of Social Services hired two graduates to help administer a large USDA-funded SNAP Ed program, and the California Department of Health Care Services hired a graduate as a public health medical officer.

c. Information about student satisfaction with advising and career counseling services.

The UC Davis MPH Program administers an MPH Graduate Survey at the end of each academic year [see ERF 2.7]. The survey includes information on student satisfaction with various aspects of the program, including a question about advising and counseling services. On a five-point scale, where 5.0 is the highest score, the average score for advising was 3.06 and 2.55 in career counseling services. The response rate was 48.5% for the 2015-16 academic year. The MPH program now requires an academic advising session with the program's Student Affairs Officer. The session involves creating an annual course plan with a goal of on-time graduation. The plan can be modified as student needs change. The MPH program has improved communication about career advising opportunities by implementing a new e-newsletter (described below). These new activities should improve student satisfaction with academic advising and career counseling.

Some students have commented on difficulties related to being matched with an advisor unfamiliar with their area of interest or who was unavailable. Problems such as these often can be remedied by informing students that they may need to be persistent in contacting advisors, but to see about a change early on if it appears the match is not successful. The Program also emphasizes to the advisors their responsibility to the student.

Students are responsible for seeking career counseling from their academic advisor, alumni mentor, and from various campus resources. One example is Grad Pathways, which offers workshops, panel discussions, and skill building sessions on career exploration and job seeking. Each year the MPH Alumni offer an evening session on how to find a job with the state of California (typically the Department of Public Health or Department of Health Care Services). In 2016 the MPH program started a weekly e-mail newsletter for students that lists workshops and job openings in public health.

d. Description of the procedures by which students may communicate their concerns to program 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.

Entering students are provided with a Student Handbook that contains information regarding the program's commitment to fair and ethical dealing and includes the campus' code for Expectations of Professional Conduct from the Student Judicial Affairs Office (available at http://sja.ucdavis.edu/cac.html). At orientation and in the Student Handbook, we explain that students having difficulty should try to resolve the issue (i.e., with a professor) or talk with the Student Affairs Officer. Students are encouraged to meet with professors, faculty advisors, and/or the MPH Program Director to discuss grievances. The MPH Program's open-door policy contributes to the fact that student concerns have been resolved by changing an advisor, or finding a new course or practicum placement.

In the last three years, no grievances have been filed. However, there was one instance of several students signing the SPH 290 attendance sheet for students who did not attend in Spring Quarter 2015. This was addressed and resolved by the campus Student Judicial Affairs office.

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

We assess Criterion 4.4 as partially met.

Strengths: The UC Davis MPH Program had a strong system of academic and career advising, and has made improvements since the last self-study. These improvements include individualized student academic advising sessions and the addition of resources for career advising. In addition, the campus resources for graduate career advising have expanded in the last five years and are fully available to the MPH students.

Weaknesses: The low response rate (48%) on the student satisfaction survey does not provide a full picture of student needs. However, those responding to the survey rate some aspects of advising poorly.

Plans: Continue to improve academic advising and career counselling services based on student input and ideas from other MPH programs; improve survey response rate to get a representative portrait of student satisfaction with these services.