

ACADEMIC PROGRAM REVIEW

SELF-STUDY

MEL AND ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH



Mel and Enid Zuckerman
College of Public Health

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OUTLINE

	<u>PAGE</u>
A. PROGRAM DESCRIPTION AND GOALS.....	3
B. PROGRAM HISTORY	15
C. OVERVIEW OF THE PROGRAM’S ACADEMIC QUALITY.....	20
D. FACULTY	30
E. UNDERGRADUATE PROGRAM.....	36
F. GRADUATE PROGRAM.....	47
G. STUDENT OUTCOMES ASSESSMENT.....	71
H. THRESHOLD FOR DEFINING PRODUCTIVE PROGRAMS.....	78
I. ACADEMIC OUTREACH	79
J. COLLABORATION WITH OTHER UNITS.....	87
K. RESOURCES	90
L. ADMINISTRATION.....	94
M. DIVERSITY/AFFIRMATIVE ACTION	100
N. DEPARTMENT DATA PROFILES	102

APR SELF-STUDY TABLES/FIGURES/APPENDICES

Table 1	Comparison of Past & Present MEZCOPH Goals
Table 2	Current MEZCOPH Goals and Objectives
Table 3	Mapping of MEZCOPH Goals to UA Strategic Plan
Table 4	Results from Faculty Surveys
Table 5	BSHS ACT & SAT Mean Scores
Table 6	Undergraduate Program Underrepresented Minorities
Table 7	BSHS GPAs
Table 8	BSHS Time to Graduation
Table 9	BSHS Difference in Time to Graduation
Table 10	Courses That Address the DrPH Competency Domains
Table 11	University, Regional, or National Student Awards
Table 12	MPH & MS (Epidemiology) Time to Graduation
Table 13	Epidemiology Doctoral Time to Graduation
Table 14	TA FTE and Number of Students in a Class
Table 15	Average GPA & GRE Scores for Entering Graduate Students (2003-09)
Table 16	Race & Ethnicity of MEZCOPH Graduate Students
Table 17	Number of MEZCOPH Students with Graduate Assistant or Associate Positions
Table 18	Graduate Student Satisfaction w/ Academic Advising
Table 19	Mean Number of Advisees
Table 20	Graduate Student Satisfaction w/ Office of Student Services & Alumni Affairs
Table 21	Completion Rates for Master's Students (1999-2008)
Table 22	Completion Rates for Doctoral Students (1997-2008)
Table 23	Career Destinations of Graduates (2007-2008)
Table 24	Summary of Student Outcomes
Table 25	Faculty Compensation, Data Comparisons with Peer Institutions
Table 26	Administrative, Service & Research Employee FTE by Office/Department
Table 27	MEZCOPH Standing Committees 2009-2010
Figure 1	DrPH Conceptual Model from the ASPH DrPH Competency Workgroup
Figure 2	Academic Activities That Helped Prepare Alumni
Figure 3	Financial Planning & Management
Appendix A.3.	MEZCOPH Strategic Plan
Appendix C.1.	Faculty Survey of Academic Programs
Appendix D.1.a.	Primary Faculty-Teaching
Appendix D.1.b.	Primary Faculty-Research/Community
Appendix D.1.c.	Joint Faculty
Appendix D.1.d.	Academic Professionals
Appendix D.4.a.	Faculty Intramural Activities
Appendix D.4.b.	Faculty Awards
Appendix E.4.d.	Undergraduate Student Advising Comments
Appendix F.3.e.1.	Graduates' Job Titles & Places of Employment
Appendix G.1.	Academic Program Learning Objectives
Appendix G.5.	Instructional Outcomes
Appendix I.3.	Outreach Data on Objectives
Appendix I.3.1.	Community Partners Feedback Survey
Appendix N.	MEZCOPH Data Reports

A. PROGRAM DESCRIPTION AND GOALS

A.1. Briefly describe the unit under review; this should include a statement of the unit's mission, role, and scope.

The University of Arizona Mel and Enid Zuckerman College of Public Health (MEZCOPH) was established as a college within the Arizona Health Sciences Center (AHSC) in January 2000. MEZCOPH consists of three divisions with two sections within each division. The divisions and sections are: the Division of Health Promotion Sciences (HPS) with the sections of Family and Child Health (FCH) and the section of Health Behavior and Health Promotion (HBHP); the Division of Biostatistics and Epidemiology (BIOSTAT-EPI) with the section of Biostatistics (BIOSTATS) and the section of Epidemiology (EPI); and the Division of Community, Environment and Policy (CEP) with the section of Environmental Health Sciences (EHS) and the section of Public Health Policy and Management (PHPM). The divisions are the administrative units within MEZCOPH that oversee the work plans for the faculty, academic professionals (APs) and staff with regard to research and service programs and the sections are the academic units that oversee the degree programs.

MEZCOPH offers tremendous opportunities to its students for education, research and community involvement thanks to a locale rich in history, research opportunities, and university academic resources. The college ranks among the top five in American Indian and Hispanic graduates and students enrolled among accredited schools of public health, according to recent data from the Association of Schools of Public Health (ASPH-- <http://www.asph.org/UserFiles/2008%20Data%20Report.pdf>).

In its 10-years of existence, MEZCOPH has gained national and international recognition for research productivity and integration into communities across Arizona, the Southwest, Mexico and the globe. MEZCOPH conducts cutting-edge science and research, and has deep community commitments for improving the public's health. The faculty, students and alumni are finding new approaches to chronic disease prevention, community public health preparedness, family wellness and advocacy for public health policy. The college provides for a dynamic interchange between public health research and community outreach, translating research findings into community programs and transforming community needs into basic and applied public health research.

Among the areas addressed by public health research and community-based programs are cancer, diabetes, heart disease, nutrition, exercise, violence prevention, environmental hazards, media literacy, bioterrorism, public health preparedness and many others. Through collaborative efforts with county and state health departments, community residents and leaders, and other health professionals, MEZCOPH strives to be the premier leader in eradicating health disparities in Arizona and the Southwest.

The mission statement for MEZCOPH exemplifies its values and role as stated below:

The Mel and Enid Zuckerman College of Public Health is dedicated to promoting the health of communities in the southwest and globally with an emphasis on achieving health equity through excellence in education, research & service.

A.2. Briefly describe each of the academic degree programs being reviewed, including the name of the degree and major and the purpose and scope of the program.

MEZCOPH offers professional and academic degrees at the bachelor, master and doctoral levels. The college's academic programs include a Bachelor of Science (BS) major in public health, a Master of Public Health (MPH) Program, a Doctor of Public Health (DrPH), MS/PhD degrees in Epidemiology, a PhD degree in Biostatistics and newly established MS/PhD degrees in Environmental Health Sciences (which will enroll its first students in fall 2010). A college-wide Education Committee administers these programs. The Education Committee is comprised of the six section chairs, the director of the undergraduate program, the Associate Dean for Academic Affairs, the Assistant Dean for Student Affairs and students from each academic level.

Bachelor of Science Degree with a major in Public Health (BS)

The Health Education program was initially established at the UA in the 1950s in the Health, Physical Education, and Recreation Department. It moved to the College of Medicine in 1994 and moved into the College of Public Health in 2000. There were two parts to this program. First, the curriculum was based on the National Commission for Health Education Credentialing (NCHES). Upon graduation students were able to take an exam to be a Certified Health Education Specialist (CHES). A second part of the program was to allow graduates to work in school health programs. However, most school health programs and the State of Arizona allow physical education teachers to provide health education courses. We had a hard time finding an appropriate preceptor for our students. However, a moratorium on admissions was established in 2007 because our college had noticed that the program was too restrictive compared with the growing need within the public health workforce. At the same time we had lost faculty who were dedicated to this program. Thus, it was an opportune time for the moratorium and provided time to plan for a new major.

During the past 5 years, there has been an increased recognition to advance undergraduate education in the area of public health. This interest has developed from the growing acknowledgement that the issues being addressed by public health professionals are changing rapidly and the public itself does not understand or appreciate its role in society.⁽¹⁻³⁾ In response to these growing concerns, the Institute of Medicine, the Council of Colleges of Arts and Sciences and the Association of Schools of Public Health developed documents that set out a strategy to improve academic public health education for training professionals in public health.⁽⁴⁻⁶⁾ In fact, the Institution of Medicine has recommended that “all undergraduates have access to undergraduate public health education.”⁽⁴⁾ It is within the framework for public health education being developed on the national stage and the local and state needs to have

(1-3) 1. Fineberg HV, et al. Changing public health training needs: Professional education and the paradigm of public health. *Annu Rev Public Health* 1994, 15:237-57.

2. Gostin LO, et al. The future of the public's health: vision, values, and strategies. *Health Affairs* 2004, 23(4):96-107.

3. General competencies and accreditation in graduate medical education. 2002, 21(5):103-111.

(4-6) 4. Rosenstock GK, et al. Who will keep the public healthy? Educating public health professionals for the 21st century. Washington, DC. National Academy Press, 2003.

5. Riegelman RK, et al. The educated citizen and public health: a consensus report on public health and undergraduate education. Council of Colleges of Arts and Sciences, October 2007.

6. ASPH Education Committee, the Undergraduate Public Health Education Taskforce. Statement on Recommended Content for an Introductory Undergraduate Public Health Course. <http://www.asph.org/document.cfm?page=977>.

trained public health professionals that the MEZCOPH constituted a workforce to reconstruct its Bachelor of Science in Health Sciences program. In response to this work we have planned a new major in Public Health which will replace its current health education major.

In addition to responding to the public health challenges for the 21st century, there are three additional reasons MEZCOPH developed this program. First, a MEZCOPH undergraduate education now provides a curriculum that will result in an educated citizenry regarding public health issues. It will also significantly contribute to solving the public health workforce shortage that is present in Arizona and the nation by having an undergraduate professional degree to prepare students for health careers in medicine, nursing, public health, or pharmacy.

The curriculum is based on the recommendations of the Association of Schools of Public Health taskforce on undergraduate education. It includes at a minimum instruction in three courses: epidemiology, global health and general public health principles. The new undergraduate program, Bachelor of Science with a Major in Public Health replaces the current major in the health education within the current Bachelor of Sciences in Health Sciences (BSHS) program. The major in Public Health is designed to allow students to gain a broad range of knowledge regarding the field of public health, to obtain a concentrated area of knowledge in one or two specific tracks and to obtain field experience for future employment.

Students can currently focus in one of two tracks within the major as they plan for the next step in their professional career. MEZCOPH will initially provide two tracks: (1) Environmental and Occupational Health and (2) Health Behaviors. Additional tracks developed in the future using CPH courses will be submitted and approved by the University Office of Academic Affairs before they are implemented. All of the tracks are designed to create an educated citizenry in the area of public health and will provide students with the knowledge and skills needed to immediately enter the public health workforce following graduation. Each track will also prepare students for graduate/professional education in a variety of health careers and will prepare students for master level and doctoral level studies in related areas within MEZCOPH. A future track could be specifically developed to prepare students for graduate programs in medicine, pharmacy or nursing.

Master of Public Health Degree (MPH)

The cornerstone of the instructional programs at MEZCOPH is the MPH program. The MEZCOPH MPH offers a program in which students acquire a sound academic background for competent practice in the field of public health. All MPH students are required to complete a core set of instruction in the five disciplines of public health – biostatistics, epidemiology, environmental and occupational health, health administration and policy, and social and behavioral aspects of public health. Students are now able to obtain the MPH degree through one of seven concentration areas, including: (1) Biostatistics, (2) Environmental and Occupational Health, (3) Epidemiology, (4) Family and Child Health, (5) Public Health Policy and Management, and (6) Health Behavior and Health Promotion. A seventh concentration, Public Health Practice, will admit its first students in fall 2010. Students in all concentrations are required to complete an internship, orally present their project and write a written report as the culminating experience of their degree work. The MPH program has established dual degree offerings (MS-MPH dual degrees) with Latin American Studies and Mexican American Studies. Students are also able to obtain dual degrees with the College of Medicine (MD-MPH), the Eller College of Management (MBA-MPH) and the James E. Rogers College of Law (JD-MPH).

The MPH degree is designed to be an interdisciplinary graduate professional degree in public health. The MPH Program provides opportunities for students to obtain broad knowledge and basic skills in the

core areas of public health. Students are able to acquire proficiency in one or more specialized areas through advanced coursework, and gain experience in applying advanced knowledge to the solution of actual health problems in community settings during internship training.

MPH students are admitted to the MPH Program rather than to a section within the MEZCOPH. All students take a series of core courses chosen to provide the breadth of knowledge necessary for understanding public health. Students then complete a set of required concentration courses that are unique to each concentration area. Students also take electives to complete their program of study. The number of credit hours required for concentration area courses depends on the concentration selected but the comprehensive curriculum for each concentration area must meet or exceed 42 credit hours. The practice portion of the MPH curriculum is provided through a required internship served with a federal, state or local health agency, in a private health related organization, or in the industrial sector. The internship gives students the opportunity to observe and participate in the application of public health theory based on their scope of public health practice. The length of the internship varies by concentration area. The variation in length of internship is due to the students' need for exposure to the practice community in their particular field of study. The faculty determines this need by assessing the concentration area curriculum for practice, theory, and content and has adjusted the length of internship to accommodate issues/topics not covered by course content.

Although each concentration area developed its own specific learning objectives, the MPH Program strives to have students develop an understanding of:

- The biological, physical, environmental and social factors that affect the health of the community;
- The components, operation and financing of health services delivery systems, including facilities and personnel;
- Planning, policy analysis and administration of community health service programs;
- The process for identifying and measuring community health needs; and
- Relevant concepts from the appropriate social and behavioral sciences, such as cultural diversity and social marketing.

Doctor of Public Health Degree (DrPH)

The DrPH is an advanced, professional degree program focused on developing future leaders in public health practice, who will advance the public's health through the integration and application of a broad range of knowledge and analytical skills in leadership, practice, policy analysis, research, program management and professional communication. The program accepted its first students in the fall of 2007. The program is designed for students who have a previously awarded Master's degree, preferably an MPH degree, and at least two years of public health work related experience. Additionally, applicants with a Bachelor's degree and 5 years of public health work-related experience may be considered for admission into the program. Students entering without a prior MPH degree will be required to complete the five core MPH courses offered through MEZCOPH, or their equivalent, in addition to the minimum DrPH units of course work in the major. There are two major concentration areas of study available to DrPH candidates: Maternal and Child Health (MCH) and Public Health Policy and Management (PHPM). The program also offers a doctoral level minor in public health. The PhD Minor in Public Health is designed for individuals from other University of Arizona doctoral degree programs who wish to obtain graduate training in Public Health. The Public Health minor consists of a minimum of three MPH core courses and two additional concentration specific courses agreed upon by the student and his or her minor advisor.

Epidemiology MS and PhD Degrees

The Epidemiology Program has a primary role of providing quality epidemiological scientific education to graduate students in an environment responsive to the health and healthcare needs of the richly diverse population of Arizona and the Southwest through the delivery of didactic and experiential epidemiological and scientific training. The mission of the Epidemiology Program is to provide an academic graduate education in Epidemiology leading to advanced degrees (MS, PhD). It does so by providing education in Epidemiology and Biostatistics, which advances the knowledge of disease causation and natural history using rigorous and systematic study design and methods to illuminate the impact of biomedical, environmental, behavioral and social factors on the health of populations. The Epidemiology Program offers MS, PhD, and a PhD minor degree options. Current strengths in the programs research curriculum are in cancer, cardiovascular, respiratory, environmental and occupational, infectious, nutritional and molecular/genetic epidemiology. The Epidemiology Program interrelates educationally with biostatistics, various basic sciences, clinical sciences, and public health. The program is involved in several training grants for pre- and post-doctoral training, including those in clinical research and cancer prevention and control.

The basic epidemiological education occurs in a sequence of three courses in epidemiology, three courses in biostatistics, and epidemiological seminars. Epidemiology graduate students can then proceed further into core courses in epidemiology, biostatistics, and/or sub-specialty courses (e.g., infectious diseases, cancer biology, health services, cardio-pulmonary diseases, environmental health, nutrition, and genetics). These sub-specialty courses and courses in PhD minor fields are very important for the PhD students training.

The epidemiology degrees prepare MS graduates for employment in university, government or corporate research, for epidemiological careers in public health and other health governmental agencies, hospitals, health care systems, insurance companies, industry, and other health-oriented organizations. It also prepares them for potential training roles at the community level, and orients them toward professional and outreach forms of service.

The Epidemiology Program prepares PhD graduates primarily for academic appointments in the field. They are also prepared for government or corporate research, for epidemiological careers in governmental public health and other health areas in government agencies and international health-related agencies, for health care systems, and for industry. The program also prepares PhD minors for similar employment.

Biostatistics PhD Degree

The PhD in Biostatistics is offered by the Biostatistics section. The first students were accepted in fall 2007. The doctoral degree program in Biostatistics has an emphasis on the foundations of statistical reasoning and requires its graduates to complete rigorous training in applied probability and statistical analyses. This program prepares students who have demonstrated excellence in mathematics and the sciences to become research biostatisticians in academia, industry, or government.

The PhD program in Biostatistics is designed for individuals having strong quantitative skills with a background or interest in the biological, medical, or health sciences, and potential to become effective researchers in biostatistics. Applicants for the PhD in Biostatistics must have a prior Bachelor's degree. Applicants with a Master's degree in biostatistics, statistics, or applied mathematics will be given preference for admission and financial support. To the extent possible, the curriculum of each student is

tailored to his or her background and interests. A competitive applicant to the PhD in Biostatistics will have a strong quantitative background; at least three semesters of college-level calculus and multivariable/vector calculus is required; in addition, one semester of linear algebra is strongly recommended.

The program is research oriented and centers on a major research project. The overall course of study is developed by the student and the advisor, and is approved by the student's Graduate committee and the Chair the Biostatistics Section.

Environmental Health Sciences MS and PhD Degrees

The MS and PhD in Environmental Health Sciences (EHS) are offered by the section of Environmental Health Sciences (EHS). Students will be accepted beginning in fall 2010. EHS is the scientific discipline concerned with the behaviors and environmental conditions linked to human injury or disease. Through the use of applied research in a multi- and interdisciplinary approach, EHS provides the critical link between the environment and human health impacts.

The degree prepares individuals to evaluate and control health risks posed by chemical and biological contaminants and physical exposures (noise, heat and radiation) in occupational and non-occupational environments. Students will receive advanced systematic training in epidemiological and community-based research methods, biostatistical analysis, environmental health sciences, prevention sciences and behavioral sciences. Graduates of this program will have a strong base of skills in these areas and will be able to apply the major theories and methods from these areas to public health research, evaluation, analysis and decision-making. The overall goal will be to specify approaches for assessing, preventing and controlling environmental hazards to human health and safety. Advanced courses are available in a variety of specialty areas tailored to the student's interests: Climate and Health; Environmental Contaminant Modeling; and Occupational Health and Safety.

The MS/PhD in EHS is designed for individuals who seek training for leadership roles in environmental health research. It is anticipated graduates will occupy positions as project leaders, program developers, and academicians. Students will be admitted to the MS/PhD program and expected to complete a Master's degree prior to admission to the PhD program. Only those students who completed a related Master's degree program will be admitted directly to the PhD program.

A.3. What are the major goals of this academic unit? If these have changed over the past 5 to 7 years, provide a summary of the changes. How are these goals expected to change in the future? (Append the program's or unit's strategic plan.)

In response to comments from the Council on Education for Public Health (CEPH) during our 2005 accreditation review, the MEZCOPH Evaluation Committee developed a process to increase input from the college community into the college's goals and objectives. The initial step in the year-long process was a full-day retreat of faculty to review the goals and objectives included in the 2001 Academic Program Review and the 2005 CEPH Accreditation Self-Study. Suggestions from this retreat were recorded and given to the designated standing committees to make final proposals of goals and objectives. Standing college committees and their goals and objective area assignments were as follows: 1) Education Committee – Instructional; 2) Dean's Council – Organization; 3) Research Advisory Committee (RAC) – Research; and 4) Community Engagement, Practice, and Service

Committee (CEPAS) – Service. Each committee reviewed the retreat feedback and proposed goals and objectives. The Evaluation Committee provides each of these standing committees with an annual assessment of each objective which they review and present and discuss at an annual college-wide meeting. The expectation is the college’s goals and objectives will be reviewed for revision in 2011 to determine necessary changes for the following CEPH accreditation cycle.

The college’s goals did not change significantly during the 2006 feedback process (**See Table 1**). The primary change was to rework goals so they reflected a deeper understanding of MEZCOPH’s intentions. The term excellence was eliminated from the goals as there was wide disagreement of what that meant. We chose to make the goals reflect more directly what we are trying to achieve. This resulted in Instruction and Organization goals each being divided into two additional goals. A complete listing of the college’s goals and objectives are listed in **Table 2**. The potential changes to these goals will be determined by the on-going evaluation of MEZCOPH’s accomplishments through annual assessments. The general strategy for changes will be to modify goals and objectives once we continually meet them and in response to changes in the economic status of the college, add goals and objectives as we mature as a college and evaluate college processes and the goals themselves in cases when the goals and objectives are not met on a continual process. Finally, the goals and objectives will be reviewed in terms of MEZCOPH’s Strategic Plan (**Appendix A.3.**) and the University’s strategic plan.

Table 1: Comparison of Past to Present MEZCOPH Goals	
College Goals (2001-2005)	College Goals (2006-present)
Instruction	
To provide excellent public health education for professional and academic leadership.	Goal 1: To recruit and develop a diverse and robust academic community. Goal 2: To educate individuals for successful public health professional, research and academic careers. Goal 3: Foster the success of our students
Organization	
To establish and maintain a fair and equitable organization that will support the programs, practice, and policies of MEZCOPH.	Goal 1: To actively maintain a stable, fair and equitable organization that supports the programs, practice and policies of MEZCOPH. Goal 2: To continually expand the resources of MEZCOPH.
Research	
To foster excellence in public health research with an emphasis on health disparities, diverse populations and the Southwest.	Goal 1: To conduct and disseminate research with an emphasis on diverse populations and the Southwest.
Service	
To foster excellence in public health community outreach, practice, and service.	Goal 1: To advance community engagement, practice and service in public health.

Table 2: Current MEZCOPH Goals and Objectives	
Goals	Objectives
Instruction	
Goal 1: To recruit and develop a diverse and robust academic	Objective 1.1: Increase the number of applicants to our graduate degree programs at a rate comparable to annual increase in number of applicants to SOPHAS pool.
	Objective 1.2: 33% of applicants, 33% accepted, and 33% matriculated students will be from the Southwest.

Table 2: Current MEZCOPH Goals and Objectives	
Goals	Objectives
community.	Objective 1.3: At the graduate level, ensure that 40% of applicants, accepted, and matriculated students will represent a diversity of racial and ethnic groups, as measured by underrepresented US minorities and international students.
	Objective 1.4: In each Section, increase the percentage of accepted students who matriculate.
	Objective 1.5: Increase the percentage of matriculated students who have an entry GPA of ≥ 3.25 .
	Objective 1.6: Annually review Instructional Goal 1 objectives and develop yearly recruitment plan based on past year performance.
Goal 2: To educate individuals for successful public health professional, research and academic careers.	Objective 2.1: Ensure 67% of students participate in experiential/applied learning opportunities beyond internships, theses and dissertations as measured by the number of students who take field-based courses, laboratories, service learning courses, and participate in experiential activities within courses and independent studies.
	Objective 2.2: Ensure 67% of all students work with community based programs prior to graduation.
	Objective 2.3: Ensure 33% of MPH students are involved with research teams prior to graduation.
	Objective 2.4: Ensure 33% of public health graduate students are involved in public health instruction prior to graduation.
	Objective 2.5: Ensure that each section reviews their academic programs identifying their strengths and weaknesses and including how they addressed their academic programs' learning competencies. Reviews will be performed at 3 year intervals.
Goal 3: Foster the success of our students.	Objective 3.1: Graduate 85% of all graduate students within the allowable time to degree, as determined by the UA Graduate College.
	Objective 3.2: Ensure 25% of graduate students present at established professional meetings and conferences (not including internship conference).
	Objective 3.3: Ensure 67% of students are members of public health professional organizations.
	Objective 3.4: Ensure 33% of students provide extramural service to community organizations.
	Objective 3.5: Ensure 67% of MS and doctoral students are authors or coauthors of peer reviewed papers
	Objective 3.6: Ensure 33% of MPH students are authors or coauthors of peer reviewed or non peer reviewed scholarly work.
	Objective 3.7: Provide and maintain opportunities for students to develop leadership skills through membership on internal and external committees, clubs and events.
	Objective 3.8: Provide leadership training for student leaders through courses, short-term workshops, and special leadership development events.
	Objective 3.9: Ensure 67% of graduate students are funded through assistantships, scholarships, and grants.
	Objective 3.10: Ensure 33% of graduate students apply for external funding awards, (meeting support scholarships, scholarships, fellowships, etc.).

Table 2: Current MEZCOPH Goals and Objectives

Goals	Objectives
Organizational	
Goal 1: To actively maintain a stable, fair and equitable organization that supports the programs, practice and policies of MEZCOPH.	Objective 1.1: Shared governance is carried out in accordance with MEZCOPH bylaws through the establishment of the following standing committees: Faculty Assembly, AP Assembly, Staff Committee, and Diversity Committee.
	Objective 1.2: Ensure that students, faculty, appointed/administrative personnel and staff are members of standing MEZCOPH committees as designated in College bylaws.
	Objective 1.3: All faculty searches will have documented evidence of efforts to obtain a diverse pool of applicants.
	Objective 1.4: Continuously evaluate diversity of MEZCOPH faculty, appointed/administrative personnel and staff.
Goal 2: To continually expand the resources of MEZCOPH.	Objective 2.1: Increase the number of donors by 15% each year.
	Objective 2.2: Increase state funding by a minimum of three million dollars by fiscal year 2010.
	Objective 2.3: College expenditure per student will be at least fifteen thousand dollars by July 1, 2010.
	Objective 2.4: Increase research and teaching space square footage by 50% by fiscal year 2012.
	Objective 2.5: Income from private sources will be at least two million dollars per year.
Research	
Goal 1: To conduct and disseminate research with an emphasis on diverse populations and the Southwest.	Objective 1.1: At least 80% of faculty will be principal investigators on at least one grant or contract annually.
	Objective 1.2: At least 50% of grants or contracts focus on health disparities, diverse populations (Hispanics, American Indians, rural under-served), or the Southwest (Arizona, New Mexico, Colorado, and Texas).
	Objective 1.3: Faculty will publish, on average, three peer-reviewed articles per year.
	Objective 1.4: Annually, at least 50% of extramurally funded projects will involve one or more student participants.
	Objective 1.5: Annually, at least 30% of publications (articles, books, monographs, and presentations) will include one or more student authors.
Service	
Goal 1: To advance community engagement, practice and service in public health.	Objective 1.1: Ensure that no fewer than 50% of faculty and academic professionals are involved in community outreach, practice and service activities that focus on four categories: eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and Public Health Preparedness.
	Objective 1.2: Ensure that no fewer than 75% of the MPH student internships are community-based and focused on community outreach, practice and service activities that emphasize eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and Public Health Preparedness.
	Objective 1.3: Geographic Reach: <ol style="list-style-type: none"> a. Maintain engagement, practice and service presence in all 15 counties at least at 2004 levels. b. Increase engagement, practice and service presence in Maricopa, La Paz, Yavapai and Mohave Counties.

Goals	Objectives
	Objective 1.4: Ensure that no fewer than 50% of faculty and academic professionals are involved in the delivery of workforce development/continuing education activities to diverse audiences.

A.4. How do these goals relate to the University’s strategic plan and mission as expressed in the University of Arizona’s Five-Year Strategic Plan?

As stated in the University of Arizona’s Five-Year Strategic Plan (2010-2014), “the mission of the University of Arizona is to improve life for the people of Arizona and beyond through education, research, creative expression, and community engagement.” Stated in Section A.1., the MEZCOPH mission mirrors the University’s focus on education, research and community engagement. We are committed to improving the lives of the people of Arizona and achieving health equity in the Southwest and globally.

The MEZCOPH goals for instruction, research, service and the overall organization reflect and compliment the University’s strategic plan and mission. The University highlighted four strategic directions: a) expanding access and enhancing educational excellence, b) increasing achievements in research, scholarship, and creative expression, c) expanding community engagement and workforce impact, and d) improving productivity and increasing efficiency. **Table 3** shows how each of the College’s goals is matched to its related strategic direction.

University Strategic Direction	MEZCOPH Goal that targets the Strategic Direction
Expanding access and enhancing educational excellence.	To recruit and develop a diverse and robust academic community. To educate individuals for successful public health professional, research and academic careers. Foster the success of our students
Increasing achievements in research and creative expression.	To conduct and disseminate research with an emphasis on diverse populations and the Southwest.
Expanding community engagement and workforce impact.	To advance community engagement, practice and service in public health.
Improving productivity and increasing efficiency.	To actively maintain a stable, fair and equitable organization that supports the programs, practice and policies of MEZCOPH. To continually expand the resources of MEZCOPH.

MEZCOPH goals and objectives (See **Table 2** in Section A.3.) address the University Strategic Directions in the following ways:

Expanding access and enhancing educational excellence

MEZCOPH seeks to expand access and enhance educational excellence by continuing to target recruitment and enrollment efforts toward individuals from a diversity of racial and ethnic groups. MEZCOPH has increased enrollment and responded to the economic challenges, while at the same time expanding its graduate and undergraduate programs in Tucson and Phoenix. MEZCOPH has maintained a diverse student body and its alumni have found jobs within a depressed economy. The 2009 data shows MEZCOPH successfully increased enrollment in the MPH program by 30% and almost tripled the doctorate program enrollment compared with 2008. MEZCOPH plans to continue its success in admitting a diverse and well-qualified student body, maintain its goal of ensuring 40% of matriculated graduate students represent racial and ethnic groups, as measured by underrepresented US minorities and international students. MEZCOPH expects no fewer than 75% of the MPH student internships to be community-based, focused on community outreach, practice and service activities eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and public health preparedness. At the undergraduate level, representation of diversity within the MEZCOPH student body has exceeded 40% for the past five years. More information on student diversity is provided in Section M.

Students are actively engaged in academic excellence. From the most recent evaluation report, 68% of funded projects involve one or more student participants and 40% of publications (articles, books, monographs, presentations) by faculty included one or more student authors. MEZCOPH also has objectives that target increased matriculation to address the need identified in the UA Strategic Plan for increased numbers of public health professionals. MEZCOPH data indicate that the graduate program alumni continue to secure employment in public health positions or are pursuing further academic training.

Increasing achievements in research, scholarship, and creative expression

The MEZCOPH mission demonstrates prioritization of the Southwest and commitment to reducing health inequities in vulnerable populations such as Native American and Hispanic populations. At least 50% of all MEZCOPH grants and contracts have continued to focus on health disparities, diverse populations (Hispanics, American Indians, rural under-served), or the Southwest (Arizona, New Mexico, Colorado, Texas). The most recent evaluation data confirms that MEZCOPH conducts projects in every Arizona County, as described in Section I.

Expanding community engagement and workforce impact

The field of public health directly addresses one of the key issues identified in the University's Strategic Plan, namely for the University to be a "laboratory for addressing social needs." MEZCOPH is strongly committed to community engagement and workforce development in the state of Arizona. The college expected and reached its goal that at least 50% of the faculty members are involved in community outreach, practice and service activities that focus on four categories: eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and public health preparedness. Further, the college has set a goal to ensure 67% of all students work with community based programs prior to graduation. For the 2008-09 year, 90% of MPH graduates worked with community based programs prior to graduation. In addition, the college expects at least 50% of its faculty to be involved in workforce development to expand the public health workforce in the State.

Improving productivity and increasing efficiency

MEZCOPH is working on developing innovative, high demand programs and certificates by streamlining curricula to ensure the best use of faculty while creating incentives for teaching innovations through strategic deployments of tuition revenues. MEZCOPH currently is engaged with developing several certificate programs. The graduate certificate in public health has enrolled students for the past two years. Certificate programs in maternal and child health (MCH) and in global health are under development. It has provided training with the support of several federal grants, including one on health preparedness and funding for its MCH certificate program. We also had an NIH funded Clinical Research Training Program that supported provided additional epidemiology training to UA faculty members. Although not currently funded by NIH, this program still exists and allows clinical faculty to increase their research skills. Success in these programs has now opened the door for other potential certificate programs including ones in areas such as environmental health sciences and bioinformatics. Additional productivity in course work and offerings are also under development and will be conducted in partnership with international institutions of higher education throughout the world through the recently developed Global Health Institute.

B. PROGRAM HISTORY

B.1. Describe the program's history since the last program review or within the past 5 years, emphasizing major changes that have occurred. Include information on academic programs that have been renamed, merged, or disestablished.

The previous Academic Program Review was completed during the 2002-2003 academic year. Since that time there have been major changes in the structure of the MEZCOPH MPH program, the establishment of two new doctoral programs, and the disestablishment of the Bachelor of Science in Health Sciences (BSHS) and subsequent establishment of the BS degree in Public Health. Infrastructure support for the MEZCOPH academic programs was significantly expanded through additional funding which allowed transfer of faculty to tenure-eligible lines and additional faculty recruitment, and the opening of Drachman Hall as the college's home.

A major administrative change in the structure of the MPH program occurred during the 2003-2004 academic year with the dissolution of the tri-university agreement. Previously, MEZCOPH had collaborated with Arizona State University (ASU) and Northern Arizona University (NAU) to offer three MPH concentrations on these campuses. MEZCOPH accepted its last class of students into the collaborative program with NAU in fall 2003. These students pursued an MPH in the Health Education and Behavioral Sciences Concentration. Similarly, the last class of students entered the Health Administration and Policy concentration at ASU in fall 2003. The last class accepted into the Community Health Practice concentration at the ASU campus was in fall 2004. Many of these students were pursuing the joint MS Nursing – MPH degree. Most of the students who were accepted at ASU and NAU completed their degrees during the 2005-06 academic year, with a few students completing during the 2006-2007 academic year.

The MPH Public Health Policy and Management concentration was established at the University of Arizona in fall 2003 to meet the CEPH mandate that all core concentrations be offered at the lead university. Students are now able to obtain the MPH degree through one of seven concentration areas, including: (1) Biostatistics, (2) Environmental and Occupational Health, (3) Epidemiology, (4) Family and Child Health, (5) Health Behavior Health Promotion, (6) Public Health Policy and Management, and (7) a new Public Health Practice concentration will admit its first class of students for classes in fall 2010. The Public Health Practice concentration is geared toward students who are able to enroll in courses that utilize a combination of distance and in person teaching modalities, and is available in Phoenix.

Since the last program review, MEZCOPH has established two additional doctoral programs: a professional DrPH and a PhD in Biostatistics. This was in response to the CEPH revised accreditation criteria promulgated in June 2005. The revised criteria require that all schools have a minimum of three doctoral programs in the core areas of public health. Previously, the only MEZCOPH doctoral program was in Epidemiology. Faculty working groups were convened to plan and complete the UA and Arizona Board of Regents (ABOR) approval requests. The DrPH and PhD in Biostatistics received Planning Approval by ABOR in June 2006. They successfully completed the rigorous implementation approval process in the fall semester 2006 and were approved by ABOR in January 2007. Thus, MEZCOPH was able to recruit and matriculate students for the 2007-2008 academic year.

MEZCOPH submitted a proposal to establish a PhD program in Environmental Health Sciences, which was recently approved. The first students admitted into the program will begin classes in fall 2010.

An additional major programmatic change was the MEZCOPH undergraduate degree. The previous BSHS program was designed to produce health educators. To broaden the appeal of public health to undergraduate students and to take advantage of changes in the expertise of the faculty, the BSHS program was disestablished and replaced by the BS in Public Health. The last graduation opportunity for the BSHS program is August 2010. The first admission opportunity for the BS program was December 2009.

Two major infrastructure changes have also impacted the academic programs. The first was the ability to transfer approximately 20 non-tenure eligible faculty members to tenure-eligible status during the FY2005-2006, due in part to a \$2 million commitment negotiated by then Dean G. Marie Swanson. The funding commitment was phased in over the course of several years allowing for the staged hiring of new faculty. At the end of FY 2007-2008 Dr. Iman Hakim was offered the permanent position of Dean for the college effective July 1, 2008. Dr. Hakim was able to negotiate a start-up package that provided an increase to the college's base budget of \$500,000 over a 3-year period to allow for program development via faculty recruitment. These additions allowed MEZCOPH to stabilize funding for existing faculty and to recruit new faculty, which helped stabilize and expand MEZCOPH academic programs.

Finally, MEZCOPH obtained its academic home through the completion and occupancy of Drachman Hall in 2006. This allowed the academic programs to host all of their courses within the same building, and allowed students easier access to faculty. It also promoted greater camaraderie among faculty members, helping in the evolution of the academic programs.

B.2. Provide a summary of the recommendations of the previous academic program review and the unit's response to those recommendations

The following items summarize comments, concerns and recommendations that were identified by the site visit team during the 2002 Academic Program Review. The issues are presented in italics; discussion of how MEZCOPH has addressed these issues follows each item.

The college cannot grow and will suffer attrition of high quality faculty, staff and students if a stable funding base is not assured in the near future.

At the time of the 2002 APR, state funding for MEZCOPH was at \$2,338,798. By the beginning FY2005-2006, state funding was increased to \$5,350,607 due in part to a two million dollar commitment negotiated by Dean G. Marie Swanson. The funding commitment was phased in over the course of several years allowing for the staged hiring of new faculty. Budget reductions to state allocated funds during Dr. Swanson's tenure were offset by position vacancies and the newly allocated funds. At the end of FY 2007-2008, Dr. Iman Hakim was offered the permanent position of Dean effective July 1, 2008. Dr. Hakim negotiated a start up package that provided an increase to the College's base budget of \$500,000 over a 3 year period to allow for program development via faculty recruitment. Budget reductions during FY2007-2008 and FY2008-2009 were absorbed by reductions in support staff and in the number of administrative professionals. Future financial cuts may jeopardize the stability of the college due to the decreasing number of people who are able to provide the needed support systems for the college (see Section L.3).

Summer teaching, distributed learning, consulting and other faculty activities need to benefit the college financially.

MEZCOPH has continued to work to expand teaching activities to provide financial benefits to the college. The number of summer courses and other distance learning courses offered through the Outreach College has increased over the past several years. Certificate programs, such as the MCH certificate program, that used the usual course registration and tuition payment processes are now conducted through the Outreach College. The Public Health Certificate program also uses the Outreach College as a mechanism to recover a percent of student tuition. In 2002, MEZCOPH was decreasing the number of undergraduate courses offered during the summer. The establishment of a new undergraduate major will provide the opportunity to increase the number of summer school course offerings. Consulting by college faculty through service projects have not brought in substantial funds to the college.

The indirect cost recovery needs to be improved. The off-site rate on grants for faculty housed in the numerous buildings used by the college should be converted to the full on-campus rate immediately. A more equitable distribution needs to be provided to the college, units and individuals who generate the funds. Improve the indirect cost recovery proportion to the college for research conducted with other cooperating units.

The construction of Drachman Hall has made it possible for MEZCOPH researchers to request and the college and institution to receive the higher on-campus federally negotiated indirect costs rate on more grants and contracts. A majority of the faculty, staff and students now occupy the new on-campus facility resulting in the ability to include the higher on-campus rate. In addition, the college made a concerted effort to share the indirect cost distribution with the various colleges and colleagues across campus. This policy is working in the college's favor and provides an additional 10% or more in indirect allocation revenue each quarter.

Faculty recruitment and retention is problematic given the reliance on soft money, particularly at the senior levels.

With the advent of additional state funds, 17 faculty members who were previously on soft money were moved to tenure track lines between the years 2005 and 2006. Of these faculty members, 4 have since obtained tenure, and 5 have retired, resigned or transferred. Furthermore, over the past 3 years, MEZCOPH has recruited 21 new faculty members, 14 are tenure track faculty and 7 have non-tenure track faculty lines.

Although gains have been made in attracting and retaining students from diverse populations to the MPH, MS and PhD and undergraduate programs, a solid commitment and plan should be in place in accordance with the goal of Dr. Likens, President of the University of Arizona to "...aggressively recruit top minority scholars and work hard to retain others who might have a harder time academically."

The MEZCOPH academic programs have continually been able to attract, matriculate and graduate a diverse student body. We have set college level goals to have more than 40% of applicants, accepted, and matriculated students from racial and ethnic groups, as measured by underrepresented US minorities and international students. This goal was met for the students entering in fall 2009. The College seeks out and participates in minority recruitment events and programs for both undergraduate and graduate students. Further, the proportion of students who enter the graduate programs with a GPA greater than

3.25 was less than 60% in 2005 and 2006. By 2008 students entering MEZCOPH graduate programs with a GPA greater than 3.25 rose to greater than 90% and in 2009 it was 67%.

Administrative difficulties persist in the Tri-University relationship despite the existence of a tri-university agreement for the College and its MPH program. Registration and financial aid, different academic calendars, differential course offerings on the various campuses all pose problems. For courses offered via teleconferencing the student base at NAU and ASU express the need for several on-site presentations during the course of a semester. NAU and ASU faculty must feel that they are full CoPH partners.

The Tri-university relationship was dismantled in 2004. All the academic programs are now under one administration within MEZCOPH.

The four biostatisticians in the College have greater demands than they can reasonably be expected to fulfill. The teaching is being well addressed but the ability to expand the research base is limited by the number of faculty.

The biostatistics section now has six faculty members. Although they still have many research demands, they have established strong teaching portfolios in addition to being actively engaged in research programs. Furthermore, the biostatistics students now have access to a greater number of statisticians through the UA Graduate Interdisciplinary Program (GIDP) in Statistics which was established in 2006. This program has 43 faculty members, and 2 executive board members are from MEZCOPH.

Opportunities and Additional Recommendations

Move immediately to secure stable funding for the essential functions of the College. Devote development resources to raising the two endowments that have been established. Use greater indirect cost recovery to support the infrastructure of the College. Consider advancing from internal sources the equivalent of the pending decision package until such time as it is funded.

In FY2006-2007 the College received a gift to establish an endowed chair to honor the Dean. The addition of the dean's chair endowment compliments the two long-established endowed chairs in the college (the Canyon Ranch Endowed Chair and Community Health Equity Fund for Rural and Border Health Endowed Chair). The college has also added a variety of endowments and restricted gifts that provide scholarship opportunities to our students. The college's community advisory board has initiated a major fundraising campaign to raise three million dollars in endowments for student scholarships; \$1.8 million of this amount has currently been obtained.

Faculty lack diversity, especially in the tenure/tenure eligible series. Although commendable efforts are underway to seek endowments for diverse faculty, state lines must occasionally be directed to these hirings as well.

Since 2002, the college has hired 29 new faculty members. The current faculty roster includes 29 women (57%). In addition, 12 faculty members are from underrepresented racial/ethnic groups (24%). The most recent hires into tenure track positions include a Hispanic male, a Hispanic female and an African American male.

In addressing the public health workforce needs of the entire state, notably opportunities for Hispanic and Native American communities, the College should develop more flexible course scheduling and

formats. The College should actively encourage matriculation of non-traditional students in all of its programs and work closely with state, county and tribal health departments to best ensure the College meets the workforce needs of the state.

MEZCOPH has now developed online offerings for all five of the MPH core courses (Biostatistics, Epidemiology, Environmental and Occupational Health, Public Health Policy and Management, and Sociocultural and Behavioral Aspects of Public Health). MEZCOPH has also developed a strong collaboration with the Diné College, the largest tribal college in the United States to provide an undergraduate certificate in public health. MEZCOPH is continually putting more courses online and will initiate an MPH in Public Health Practice starting fall 2010 that will allow students to take courses in Phoenix.

Hire additional biostatistics faculty and develop a M.S. and Ph.D. program in this concentration. We further recommend that the University continue to involve CoPH faculty in planning initiatives related to statistics, such as the Interdisciplinary Graduate Program in Statistics that is currently under development.

A PhD program in Biostatistics was approved and began admitting students in 2007 and the UA has also created the GIDP in statistics with significant input from MEZCOPH faculty members.

Strengthen the undergraduate program by broadening the program options to include public health, encouraging participation in the teaching program by graduate faculty, and better publicizing the program to attract more students. The undergraduate program should be expanded beyond areas addressing CHES certification.

The undergraduate program in health education was disestablished in 2009 in order to make room for a new BS with a major in public health. Additionally, unlike the previous health education undergraduate program, the current BS program is not housed within a single unit and is college-wide to take advantage of the technical and instructional expertise that is present throughout the college.

The current restriction of 10 students per year per discipline in the MPH program is unnecessarily limiting the growth of the program. Increased offerings of core courses would allow for growth of the MPH program without resulting in excessively large class sizes for these required courses.

There is currently no cap on admission for any concentration within the MPH program.

Continue to take advantage of the border area by developing courses and fieldwork in conjunction with the medical school in Hermosillo or elsewhere in Sonora, perhaps in collaboration with similar existing partnerships between universities in California and Baja California.

Since 2002, MEZCOPH has developed several new programs with Mexican Institutions and colleagues. These include a *diplomado* program that was in collaboration with El Colegio de Sonora. A grant was also funded to conduct a project on corporate responsibility with COLSON and with the Center for Investigations on Agriculture and Development (CIAD). MEZCOPH faculty members are also working toward providing leadership training that will include students from both sides of the US-Mexico border. Additionally, one of our faculty members is a member of the US-Mexico Border Health Commission. Field experience is being expanded in our coursework too as MEZCOPH now has several service learning courses that take place in northern Arizona, along the US-Mexico border, in the urban area of Tucson and in rural communities within the state such as in the town of Globe, Arizona.

C. OVERVIEW OF THE PROGRAM'S ACADEMIC QUALITY

C.1. In the view of the faculty, what is the overall quality of this program?

In November 2009, faculty members provided their perspective of the academic programs by completing questionnaires for each of the five programs (**Appendix C.1.**). The questionnaires were sent out using SurveyMonkey®. The survey questions were based on obtaining information that would be used to identify strengths and weaknesses of the academic programs and to respond to data needs for our next accreditation self-study.

A summary of the quantitative results is presented in **Table 4.** The three established academic programs (undergraduate, MPH, and epidemiology) were all considered to have better than adequate quality. The newest doctoral programs in Biostatistics and Public Health have not yet graduated students. They scored lower and were not considered to be adequate at the current time. Similarly, the faculty reported that the established programs were considered to be better than comparison programs but the newer programs still lag behind other programs. However, applicants and students in all these programs were considered to be more than qualified. Further, students in all programs were considered to have very good access to resources and the faculty believed that their teaching loads, quality of teaching and research were more than appropriate.

Faculty Responses	Academic Program				
	BS	MPH	EPI	BIOSTATS	DrPH
n	9	27	3	4	11
Program Quality	3.6	3.6	3.7	2.8	2.9
Comparison to Other Programs	3.2	3.5	3.3	2.5	2.9
Student Resources	4.4	4.0	3.3	4.3	3.9
Qualified Applicants	3.4	3.2	3.7	2.8	3.3
Student Academics	3.4	3.3	3.3	2.5	3.2
Teaching Load	3.1	3.2	3.3	3.0	3.1
Research	3.8	3.6	3.7	3.5	3.4
Teaching	3.7	3.5	3.7	3.3	3.4
Awards	3.3	3.5	3.3	3.0	3.2
Faculty Service <3 yrs (%)	55.5	22.2	0.0	50.0	27.3

Average scores based on a scale: 1 – 5 from worse to best. Depending on the question, a score of 3 was considered good, adequate, appropriate, similar, acceptable; qualified, or appropriate.

The following sections provide specific comments from individual faculty members regarding each of the academic programs. (There were no specific comments provided by the epidemiology faculty.) Although the following comments are by individual faculty members and they do not necessarily reflect the collective thought of the faculty, they are issues that clearly need to be addressed regarding the academic programs in order to obtain a consensus regarding the future directions for the programs.

Undergraduate Program

The undergraduate program was transformed over the past 2 years. Given the newness of the current program, comments were also based on the history of the undergraduate program in health education and students who are currently in the program. Many of the comments related to growing the program and offering courses that meet the pedagogical needs of the program to enhance student recruitment and

the program's reputation. Specific comments from the faculty, in response to the targeted issues are shown below.

Areas to Improve

- It is too early to address which areas need to be improved.
- The program does need to establish a greater and more expanded reputation to attract students into the new major.
- Support for more structured internships is needed.
- Program faculty need to determine what to do about allowing non-majors to enroll in the major courses.
- We need to schedule undergraduate courses after 9am to reduce the number of undergrad "zombies."
- There needs to be more support for instructors.

Courses to Add

- The undergraduate program was developed in a good way and it was changed in beneficial ways.
- The program needs to expand tracks so students can study health care, and the biology of public health; these additions will enhance a student's ability to enter graduate programs.
- The program needs to create its own prerequisites and not rely on other programs since we do not have control as to when or if they are offered.
- We need more electives related to public health behaviors; writing courses and courses on public health practice.

Courses to Drop

There are no specific courses that should be dropped. However, Ethical Leadership will likely have reduced enrollment since it is not required. Reinstating this course as a requirement is recommended.

Additional Comments

We need to increase institutional support for advising to prepare for the increased number of students who will enter this program. We need to give students as many opportunities as possible to get real world experience. One possibility could be a faculty-led study abroad experience. Another could be an internship-like experience when students are freshman or sophomores. We need a formal venue to facilitate communication among faculty in terms of (1) class logistics such as exam timing and (2) exchange of what does and does not work for undergraduates. We need to create an ongoing support for those teaching in the undergrad program to share resources, ideas and concerns.

Master of Public Health (MPH)

The MPH program is the largest program in the college in terms of the number of faculty members who are involved with teaching, mentoring, the number of courses taught, and the number of enrolled students. Consequently, faculty suggested there must be continual collaboration and strategic planning within the program. The overall comments from the faculty also focus on working from the college's strengths that include service learning, and its regional advantages. Specific comments from the faculty, in response to the targeted issues are shown below.

Areas to Improve

There was great variety in comments from faculty members regarding ways to improve the program. Overall the comments suggest the program needs to focus on its strength in service learning, student

focused education and provide a more strategic approach to developing new courses and evaluating faculty effort.

The following are specific comments:

- There needs to be much more service learning incorporated into our courses. This is what brings public health alive for our students and increases the kind of learning they will carry into their practice. It depends on the direction we want to go. We are a land grant institution, so we serve the state. To the degree we compete with other colleges of public health where research is a greater priority, MEZCOPH understands that a balance between academics and research is difficult, but not impossible.
- Some courses need to be redefined to meet the needs of concentrations.
- Some faculty members need more training in syllabus design and development. Students have expressed dissatisfaction with some class syllabi.
- Recruiting students who actually commit coming to the UA is needed. The percent admitted to accepted students seems low.
- Faculty core assignments need to be predictable.
- Development of new courses with each new hire is not recommended.
- Required courses should be covered using a faculty assignment system so each faculty teaches a required/core course and an elective course focused on their expertise.
- We need to improve collaboration with other departments and colleges within the UA.
- Many faculty members are teaching similar classes.
- We need to provide more support to improve the writing ability of minority of students in their first semesters. We need better student and faculty recruitment.
- We need to allow students more flexibility within the sections they are in so that they can tailor the classes more to their needs.
- We need more students.
- We need to strengthen our internships by working with fewer sites.
- A doctoral program in health promotion sciences would go a long way towards improving the quality and quantity of students and research.
- Faculty members are stretched so thin that many times it is difficult for students to get into see them. Our faculty members are wonderful mentors, and the students would really benefit from being a larger focus.
- From my position as a Section Chair, I would like to see us have a few more faculty members in order to increase our focus on the students.
- As in all schools there is quite a bit of variability in the teaching efforts of faculty; some perform the minimal obligation by coordinating all but a few guest lecturers in their courses and others take on the burden of preparing to present and discuss at each session.
- There needs to be more scrutiny of the standards that are employed across all courses or different credit should be given for different types of courses.

Courses to Add

- There have been many new interesting courses developed.
- Current core courses are appropriate for the MPH program.
- Courses need to be reviewed at the concentration level.
- Several specific courses were recommended and included : National Health Care; Evaluation (A comprehensive course that teaches students multiple methods and approaches and also offers the opportunity for students to apply evaluation in a real world setting); Writing in public health;

Critical Thinking in Public Health; More field based courses; More Experiential learning opportunities; Quantitative Methods; Qualitative Methods.

Courses to Drop

- The short service learning courses should be made into 3 hour classes with meetings all semester for debate and discussion.
- The electives need to be streamlined and we need more collaborative efforts with other divisions in coordinating when electives are offered.

Additional Comments

- The program has evolved since its inception. We need more faculty members with DrPH and MPH degree training.
- The more we work together the better we are!
- The strength of this program is how focused it is on border, rural health, and Native American issues.
- The program offers students knowledge and experience that cannot be offered at other programs.
- It is a specialty that I feel should be supported and encouraged.
- We cannot compete with other schools in every facet, but specializing on our strengths could help us develop a valuable and competitive niche.
- We have a strong program and need to be extremely thoughtful in how we expand.

BIOSTATISTICS

This is a new program that currently has eight doctoral students but provides numerous courses for the GIDP in Statistics. The overarching theme in the comments from the faculty was the need for more resources in order to attract more students. Specific comments from the faculty, related to the targeted issues are shown below.

Areas to Improve

- More faculty members and more courses.
- More PhD level courses need to be offered.
- We need new faculty to teach essential upper level courses and more faculty members so we can offer basic doctoral level courses to the students.

Courses to Add

Numerous courses were recommended and included: A second course in the three-course regression series; clinical trials; an applied computational course; Bioinformatics/computational biology; nonparametric statistics, including nonparametric regression; Bayesian analysis; Generalized linear mixed models theory; Applied genetic analyses; Intermediate linear models; Intermediate mathematical statistics; Statistical computing, specifically simulation.

Courses to Drop

Electives in which there are less than 3 students; I think there are some course redundancies among the core courses that could be addressed. The courses we have, we need but some have few students and this can be resolved by getting more students.

Doctor of Public Health (DrPH)

This is a new program with a growing number of students, but no graduates yet. The faculty comments focused on tweaking the curriculum and obtaining more support for students so the program can grow and improve in quality. The specific comments from the faculty, related to the targeted issues are below.

Areas to Improve

- Instructor teaching skills and advising could be improved.
- Developing the student's research skills should be a focus.
- Students need to start on projects well before their third year.
- We need to eliminate the qualifying exam.
- There should be distinct qualitative and quantitative analysis/methods classes geared toward the doctoral level student. We need more students.
- We also need ways to support students so they will attend a new program.

Courses to Add

- Specific method courses requirement
- Doctoral Course on Community Based Participatory Research
- Prevention seminar
- Qualitative Research Methods
- More methods courses.

Courses to Drop

- There are several needs assessment courses as well as several research methods that need to be examined and perhaps taught as a team.
- For doctoral students replace required course in grant writing with a more comprehensive course in quantitative research methods.

C.2. In what areas has the program improved or deteriorated within the last 5 to 7 years? Describe the evidence used to support these conclusions.

The primary change that has improved the academic programs in MEZCOPH has been the creation of sections and a reorganization of the education committee. These structural changes in the college increased the coordination of the academic programs. The major academic change that occurred during the past 5 years was an increase in the number of doctoral program offerings from one to three in order to meet the accreditation criteria for schools of public health. MEZCOPH also revamped the undergraduate program to meet the current public health needs. The MPH program obtained several training grants during the past years that have supported scores of graduate students. The number of total students has declined over the past couple of years. This was expected with the undergraduate program when a moratorium on new health education majors was put into affect while the new public health degree was being planned. The number of students in this program will increase now that it is in place and once again accepting students into the major. There also was a planned decrease in the number of epidemiology students due to the program growing quickly and having many students in the pipeline who had not yet graduated. However, the epidemiology program is now accepting more students and has not set a specific limit on the number of students who will be accepted. Two years ago, with the onset of the central admissions process for the schools of public health (SOPHAS), the MPH program had an initial decrease in the number of MPH students who matriculate. This number of matriculated students

increased this past year, but the program still has not reached the matriculation number from the 2006/7 academic year. This is further discussed under the MPH portion of this section. The following sections provide specific information on each the academic programs.

Undergraduate Program

The undergraduate program made a considerable pedagogical change in its focus to improve its academic program. The current program responded to the need for additional undergraduate education in public health and developed a curriculum consistent with the recommendations from the ASPH. The undergraduate program has a new director, Joe Gerald, MD, PhD. Dr. Gerald has created an executive committee for the program that consists of course instructors and student services professionals from the Office of Student Services. The current personnel support for the undergraduate program has been broadened by including faculty members from each of the sections rather than one section of the college. What is currently not available is the same level of support for the internship experiences. Previously, the majority of the internship advising support was provided by faculty members dedicated to the BSHS and through this current transition period, it is provided by the academic advisor and the program director. This has led to less direct faculty mentoring of students during their internship projects. This may soon change as more faculty members throughout MEZCOPH are engaged in the undergraduate program. These faculty members will take on more honor students, and will work with more students on independent studies as students and faculty members become known to each other. Currently there are more than 100 students who have identified themselves as being pre-public health majors. Although this number changes over time, it has been steadily increasing since the first day of class in fall 2009.

One of the barriers to the growth of the program is classroom seats. Several rooms available for teaching within Drachman Hall seat 60 students or less and there are only 3 classrooms that seat 120 students. Thus, any basic courses that have more than 60 students need to move into the classrooms with 120 seats. In theory, this is not a problem but in reality, all classrooms are shared with the Colleges of Pharmacy and Nursing, resulting in high demand. Growth of the program will be impeded unless greater access to classrooms that seat more than 60 students becomes available.

Master of Public Health

The MPH program has improved its method for strategic planning by increasing faculty input into the curriculum issues. This is due partially to the presence of academic sections within the college in which faculty have taken ownership of the academic curricula that are associated with their section. In addition, the education committee improved the coordination of admissions and has worked to minimize conflicts with class schedules.

The college made significant improvements related to the delivery of the curriculum. All of the five core MPH courses are offered online and this has improved access to these classes by students in the program and for those who are non degree seeking students. The number of service learning courses in the program increased and now there are five significant programs that provide student exposure to the various public health environments beyond their required internships. Service learning has also increased within the curriculum with specific courses and within standard 3-unit courses. An example is the planning and evaluation course taught by Dr. Bergsma that was recently recognized by Delta Omega, the Public Health Honor Society as one of the Nation's top courses. In the past five years, MEZCOPH was awarded one of 12 HRSA funded School of Public Health MCH training grants. New dual degree programs with Latin American Studies, Mexican American Studies, Business and Law have

been important steps to improve the MPH program by expanding the perspectives that students bring to the classroom and the multidisciplinary approaches that are being used in response to class projects.

The disestablishment of the tri-university program could be viewed as a way in which the program has deteriorated over the past years, but in reality, it has improved the coordination of the program. Although this has some barriers for students outside of Tucson to take courses, especially those in northern Arizona and Maricopa County, this has been partially countered by making all the core courses available on line and starting a concentration in Public Health Practice, now available to students in Phoenix.

The MPH program has been relatively stable during the past 5 years in terms of its growth and interaction with outside programs. The number of applicants significantly increased due to SOPHAS and in the past year, the increased number of applicants to MEZCOPH was proportionately greater than that within the SOPHAS program. The proportion of applicants to MEZCOPH increased from 2007 to 2008 by 17.2% compared with 10.5% nationally. MEZCOPH has achieved its objective of having a significant portion of students from the southwest with the proportion applying and being accepted equal to about 1/3 of the applicants. Furthermore, greater than 60% of the matriculated students are from our region. We have maintained a diverse student body with regards to ethnicity, about 40%, for the past several years. MEZCOPH also tends to have a greater percent of students from ethnically underserved population matriculate into the program compared with other students. However, international students are matriculating at a lesser proportion than other students, and this could be due to less financial support is available to them. Parallel with these changes, the proportion of students with a GPA greater than 3.25 who enter the program has also increased over the past 5 years. It was 60% of students in 2005, and increased to 93% in 2008 and 67% in 2009.

The number of tenured faculty members who teach in the MPH program has steadily increased over the past years as the school becomes more established and faculty become tenured. Tenured faculty members provide stability to the program in terms of student advising, regular course offerings, and leadership on college and university level committees.

The number of students in the Environmental and Occupational Health concentration and the Biostatistics concentration remains low. Faculty turnover in the EOH area has been identified as one reason for this situation. Fortunately, EOH is in the process of gaining several new faculty members and will launch an MS/PhD program in fall 2010. Both of these factors should support an increase in applicants and students who matriculate into the program. The Biostatistics program is still relatively small which is consistent with national trends in Biostatistics MPH programs.

Epidemiology

The Epidemiology program over the past years has lost some faculty members but gained others. Three senior faculty members were lost due to relocation, a retirement, and a death. However, a senior faculty member who works on cardiovascular epidemiology and an assistant professor who works in infectious disease epidemiology were recruited along with two additional non-tenure eligible faculty members. MEZCOPH gained two additional non-tenure eligible faculty members who also contribute to teaching in the program. The Epidemiology program has grown its Public Health Experience – Student Epidemiology Response Team (SAFER) - class and this provides direct support to state and county health departments. The biostatistics program has been able to increase opportunities for students regarding their statistical training as additional biostatisticians were hired into the college. Comparison

of the two cross-sectional faculty surveys, specifically the faculty responses in 2002 and 2009 indicate that the overall rating of the Program has gone unchanged from a score of 3.8 to 3.7.

Biostatistics

The Biostatistics PhD program has made steady progress since its inception in 2007. Two recent developments will support its growth. First, the GIDP in Statistics will bring more students onto campus and some of them may change their area of study to biostatistics. Secondly, two assistant professors have been hired since the last program review and they have greatly enhanced the reputation of the program and provide leadership for key courses.

Doctor of Public Health

It is too soon to determine how this program has improved or deteriorated since its inception in 2007. The program has continually modified its curriculum over the years.

C.3. Describe new directions in curriculum, resources, research, reorganization, staffing, or student clientele planned for the next few years and aimed at strengthening the program.

Undergraduate Program

The future of the undergraduate program is framed upon three primary cornerstones: course offerings, student advising, and practical training. First, there will be a need to increase additional offerings of required courses and additional tracks as the program grows. In response to this, an online offering for the required course in communications is underway. Furthermore, an additional track for students who plan to attend a professional graduate school (public health, nursing, medicine, etc) is being developed that will combine health care systems with a course on physical and mental health. The program will need to enhance its capability for student advising as the program grows. Currently student advising is done by one professional. The program needs to know when additional resources will become available and how this will be determined by the University administration to allow for planned growth of the program. Determining when students enter the major will also affect advising. Currently students start out as pre-public health students and apply to the public health major. The program will determine if students should be allowed to enter the program as freshman and if so, how will advising proceed when students start the program earlier and are in the program for a longer period of time. Currently students are engaged in one required practical experience. Increasing the mentoring of students in these activities needs to occur. Integrating more service learning into existing courses will also be beneficial. However, service learning is a faculty/personnel intensive activity. Support for this expansion will be necessary.

Master of Public Health

Currently the MPH program is focused on two issues that are greatly influenced by the current financial condition of the UA, these are: growing the number of students in the program and building up its program in public health practice. The current state of the MPH program is considered to be very solid. Plans over the next few years to increase its student enrollment are based on working from its strength in service learning and community based programs in the Southwest. Increasing its reputation in these areas is considered one of the primary enticements for graduate students in public health. Secondly, expanding the MPH offerings in Phoenix is essential to strengthening its bond with the Arizona Department of Health Services and the Maricopa County Health Department. This expansion will

require that faculty and support services are available for students in Phoenix. The curriculum and engagement with the Phoenix-based public health agencies matches the strategy of having a program that is service based.

Epidemiology

The Epidemiology program over the past few years has expanded upper level courses that are attractive to MEZCOPH students in other sections and it continues to look for these types of opportunities to reach additional students and at the same time provide electives for the epidemiology students. Examples of these courses are in methodology such as, the SAS course, and in subject matter such as, the Maternal and Child Health Epidemiology Course and a recent course on Changing Health Policy: Cultural Understanding & Epi Analysis. The Epidemiology program is also exploring setting up additional dual degree and/or joint degree programs. Discussions are underway with the Maternal and Child Health training program and with Geography about the potential for a dual degree with the MS in Geography. The Epidemiology Program is looking forward to hiring two epidemiology faculty members that can expand the breadth of epidemiology specialties and these may include a focus on molecular epidemiology, and environmental epidemiology. The program would like to add a fourth level course (Epidemiology D) that would focus on Interpretation of Epidemiological Data or an Issues course to test new content. The program is also considering adding required research experiences for PhD students before they start their dissertation work. Finally, the Epidemiology program would like to develop online small courses that can be used to provide certificates. These courses may also provide an opportunity for doctoral students to gain experience with online teaching.

Biostatistics

The biostatistics program is in the start-up phase of providing the doctoral degree. As the program grows in students and faculty, there will be a need to have a greater number of higher level doctoral courses in the curriculum. The specific focus will be to expand courses related to advanced biostatistical methods, public health informatics and statistical modeling.

Doctor of Public Health (DrPH)

The two major areas of study, Public Health Policy and Management, and Maternal and Child Health, are in the process of becoming separate programs in order to grow and meet the specific needs of students in their areas. Opposing goals and objectives by these programs has led to core courses that do not meet the specific needs of students in both areas. Nonetheless, these programs will remain tied to the DrPH competencies that have been developed by ASPH.

C.4. Identify the top five programs in this field. How does this program compare with others nationally? What evidence suggests this conclusion?

In 2007, *US News and World Report* identified the top publically funded schools of public health as being the: University of North Carolina at Chapel Hill, University of Minnesota, University of Washington, University of Michigan, and the UC schools at Los Angeles and Berkeley (UCLA and UC Berkeley were both ranked number five). These schools have twice the number of faculty members as MEZCOPH and have been in business for more than twice as long as MEZCOPH. However, MEZCOPH has been able to obtain nationally competitive training grants and numerous CDC supported programs that only a limited number of schools of public health have obtained, including its program on Health Preparedness, the MCH training grant, and the MEZCOPH Center for Health Equality, which

was developed by an NIH training grant. Faculty from MEZCOPH academic programs are also active in national organizations and serve on several NIH study sections. Students from our programs have also been provided ASPH and CDC fellowships which go to selected students. Our alumni have obtained positions equivalent to those from these other schools with local, national and international agencies.

It should be noted that *US News and World Report* also identified several state funded schools that ranked lower than MEZCOPH. Several of these schools are significantly older than MEZCOPH and thus, support the fact the MEZCOPH has done extremely well given its short time of existence. These schools included Texas A&M, University of South Carolina, SUNY--Albany, San Diego State University, UMDNJ/Rutgers/New Jersey Institute of Technology, University of Arkansas for Medical Sciences (Boozman), University of Kentucky, University of Massachusetts--Amherst, University of North Texas Health Science Center, University of Oklahoma, and the University of Puerto Rico.

D. FACULTY

D.1. Faculty's overall strengths and weaknesses.

MEZCOPH has assembled a faculty that represents all public health disciplines. Many of these individuals are nationally and internationally known for their research expertise, they are effective teachers, and they provide service at the local, state and national levels. In fact, the success of the college to date is largely due to the extraordinary competence and dedication of its faculty in creating the college, developing its mission and goals, and serving the needs of Arizona and the Southwest.

MEZCOPH insures broad representation of individuals within the college by including three categories of faculty. Primary appointed faculty members have both tenure-eligible and non-tenure eligible positions and are expected to contribute to public health research, teaching and service as their primary responsibilities. For these individuals, the college has full responsibility for annual performance reviews, promotion and tenure decisions, compensation, and post-tenure reviews. **Appendix D.1.a.** and **Appendix D.1.b.** provide tables that describe the faculty members who hold a primary faculty appointment.

Joint appointed faculty members are those who contribute to the college's mission and programs, but whose primary appointment is within another department or institution. Their faculty appointments within the college are at the same rank as their primary appointment. These individuals collaborate with college faculty on research and service projects, teach college courses, advise and mentor students, and serve on graduate committees. **Appendix D.1.c.** lists the faculty members who have a joint appointment. All individuals with joint appointments are part of a division to more efficiently allow them to interact with MEZCOPH faculty on research, teaching and service projects.

Academic professionals (APs) are individuals within the college who do not hold faculty appointments but have expertise in specific areas of public health and contribute significantly to the mission of the college. These individuals serve in key administrative positions (such as Associate Dean of Community Programs, Assistant Dean of Student and Alumni Affairs, Assistant Dean for Financial Affairs & Physical Resources, Director of Information Technology) or play significant roles in research, teaching and community service programs. **Appendix D.1.d.** lists these individuals and describes their role within the college.

Adjunct faculty members are those individuals who do not have paid university academic appointments, but contribute in a significant way to the college's mission and programs. These individuals provide guest lectures in courses, serve as site supervisors for MPH internships, assist college faculty and staff in identifying and addressing community concerns, collaborate in the development of new programs, and provide liaison between the community and the college.

The strength of the faculty is that their expertise allows them as a group to provide the required curriculum for the academic programs in the college. Further, MEZCOPH's annual evaluation of our goals and objectives provide evidence that the faculty as a whole are engaged in community service and research that offer opportunities to students to work with community partners and actively participate in research projects.

At the same time, the faculty has many junior faculty members and non-tenured faculty members. This past year, the Associate Dean for Academic Affairs initiated a monthly faculty lunch so non-tenured

faculty could meet and discuss issues related to promotion and tenure, and ways to improve their dossiers with regards to their teaching, research and service.

A college weakness is the lack of faculty size, restricting the number of specialized topics addressed in courses. MEZCOPH has offset this issue by implementing team teaching and having faculty members provide guest lectures on materials that they have specific expertise in but is not part of the primary instructor's focus.

D.2. Nature and breadth of the faculty's research and other scholarly contributions

The research and scholarship mission of MEZCOPH is to conduct research and scholarship for the purpose of advancing knowledge, understanding and application of the biological, cultural, behavioral, social, environmental and economic determinants of health for the improvement of the health and well-being of populations. As noted in our College mission statement, we place a special emphasis on diverse populations and decreasing health disparities. As evident from our current funding, our portfolio is diverse, ranging from bench science to community-based research. Funding is obtained from a wide variety of sources, including federal agencies such as NIH, CDC, HRSA, SAMHSA, and national and local foundations. Equally impressive are the wide-ranging collaborations within and among a variety of academic institutions, state and local health departments, and community agencies locally, nationally and internationally.

The faculty and students in MEZCOPH are actively involved in a large variety of research efforts. We have a long and well-established track record for health disparities research with a focus on Hispanic/border health and American Indian health. Our CDC-designated Prevention Research Center was recently refunded for an additional five years and focuses on these high-risk populations. Furthermore, there are numerous ongoing research projects in all four of the Arizona counties that border Mexico. Other important resources are the State of Arizona and federally-designated Rural Health Office. Given the demographics of Arizona and the Southwest, it is not surprising that a major research focus is American Indian health. We have a number of projects with the southwestern tribes, especially in the areas of prevention and control of chronic diseases. Environmental health is a major research area especially with regards to environmental exposures to sensitive populations, the role of biomarkers in early lung damage, and respiratory protection. Our faculty members are engaged with the mining industry in the State and with public safety personnel, especially firemen. Considerable research is being conducted in the area of women's health and in maternal and child health. Another important area is Health Services Research including studies on access to care and on quality of care evaluation and improvement. Another area of strength is cancer prevention and control, especially the role of nutrition in cancer control. Much of this research is performed in conjunction with the Arizona Cancer Center, an NCI-designated comprehensive cancer center. Many of the studies being conducted can be categorized by their focus on chronic disease prevention, especially diabetes and cardiovascular disease. MEZCOPH also houses the State's tobacco quit line. There is substantial research on substance abuse (tobacco, alcohol and other drugs), especially tobacco control. The specific research interests of investigators within the college are shown in **Appendix D.1.b., D.1.c., and D.1.d.**

D.3. Describe the distribution of full-time and part-time faculty including teaching assistants in the teaching programs of the unit. How are these instructors assigned their teaching loads and particular courses? Do part-time faculty members participate in the academic program's meetings and discussions, in curriculum planning and/or in course design? How are part-time faculty

identified, and how are their credentials evaluated? What role do Teaching Assistants play in instruction, and how are they prepared for their responsibilities?

The distinction between full-time and part-time faculty within MEZCOPH is obscured by the existence of tenured/tenure-eligible and non-tenure eligible faculty. Tenured and tenure-eligible faculty bears more of the teaching load than non-tenure eligible faculty. Non-tenure eligible faculty does teach and have primary responsibility for many courses within MEZCOPH. They are compensated for this effort so that the grants and contracts that fund the majority of their salary are not being asked to fund classroom instruction.

Since most faculty and academic professionals are affiliated with a MEZCOPH academic division, instructors are assigned their teaching loads through their Annual Work Plans. This Work Plan is developed in consultation with their Division Director. The academic program chairs are responsible for identifying individual faculty members with the expertise to teach particular courses. The program chair then works with the faculty member and their Division Director to insure that teaching a particular course is consistent with an individual's Work Plan.

Both tenured/tenure-eligible and non-tenure eligible faculty members participate in academic program meetings, are members of program-specific curriculum committees, and provide input on curriculum planning and course design. Students also are often involved in discussions on additional courses that could be offered, and potential topics to be included in a new course.

Faculty or academic professionals teach all courses within MEZCOPH. Recently we have had senior doctoral students teach undergraduate courses that were developed by a faculty member. Teaching Assistants lead discussion sections, provide office hours to answer student questions, and assist in student grading. They are prepared for these responsibilities through training by individual faculty, administrators and through workshops provided by the Graduate College.

D.4. Faculty's participation, leadership, and influence in the academic profession

The MEZCOPH faculty has been actively involved with different professional activities and organizations at the local, national and international levels. Many of them have served on international, federal and local grant review panels, helping funding agencies make critical decisions on research priorities. Faculty have played significant roles in professional associations, such as the American Public Health Association, the Association of Teachers of Maternal and Child Health, and the Association for Schools of Public Health for annual meetings, presentations, publications, advocating public health concerns and finding solutions for these concerns. Every year faculty members perform a large number of manuscript reviews for scientific journals; they also serve on workforces, steering committees and advisory committees for nationwide public health programs and research projects. Faculty members in the college have been invited speakers for international and national meetings. Their academic activities and leaderships have been documented in **Appendix D.1.a and D1.b**. The curricula vitae for faculty members are on file for review.

The faculty at our college has also been very active in committees at the Division, College and University level. For example, university level service has included membership in the Undergraduate Council, Graduate Council, Faculty Senate and the University Strategic Budget and Planning Committee.

Faculty members serve on peer review committees, admission committees and sections for education programs. Within the college, the Dean's Council monitors, manages, evaluates and directs the activities of the College. Other college committees with broad representation include the Promotion and Tenure Committee, Education Committee, Evaluation Committee, Research Advisory Committee and the Committee on Community Engagement, Practice and Service. Faculty and academic professionals in the college serve on these committees, with rotating terms dictated by the particular committee. Through our annual performance evaluation system the faculty participated in more than 1000 service activities (summation of activities each year by each faculty for the 5 year period). **Appendix D.4.a.** lists the intramural activities reported for 2008.

The faculty productivity has also been recognized by colleagues through the awards that they have received over the past several years. Local, state, national and international awards were bestowed upon several faculty members between 2004 and 2008 (**Appendix D.4.b.**).

D.5. Considering the academic unit's faculty as a whole, describe the faculty's potential for response to change -- to urgent discoveries, changing directions, and/or new external demands. What is the level of morale, commitment, and sense of continuing self-improvement? What is the balance of scholarly depth and breadth in the faculty, and what is the balance of traditional views with work taking place at the field's frontiers?

The MEZCOPH faculty is proactive in modifying its teaching and research trajectories given the current state financial crisis and deep university budget cuts in order to make progress on its mission to promote the health of individuals and communities with a special emphasis on decreasing health disparities. The health needs of Arizonans, in particular the extreme health disparities of American Indian and Hispanic populations and the dismal ranking of Arizona on virtually every public health indicator, mandated that concerned faculty develop a means of addressing these demands.

Prospectively, the faculty uses several methods and resources to keep abreast of the changing needs in public health. First, the faculty relies on its experience in public health and continual involvement with local, state, national and international professional organizations to know the current and emerging issues in public health. This experience is acquired by serving on community and professional boards, attending professional conferences and providing consultative services to public health agencies. Another source of information for understanding the growing needs of public health is alumni surveys. The alumni surveys assess the additional training MEZCOPH graduates believe they need in regards to their public health skills. Additionally, major sources of information about changing needs of public health are the two national professional organizations – the American Public Health Association and the Association of Schools of Public Health. Finally, in this day of electronic media, all of our faculty, staff and students follow emerging and current public health issues through a variety of online sources.

The faculty has adjusted to new issues and has kept an eye on the need for quality education. The addition and integration of service learning has been one way the education program has been able to focus on students in addition to increasing the size of existing classes. The faculty has also increased the number of on-line courses and has added various academic programs including certificate programs, an additional MPH concentration and doctoral programs. Although expanding academic programs has been stressful at times, the faculty has continued to take responsibility to support college initiatives as a

means to improving its educational mission and to diversify its portfolio of funding streams through teaching.

MEZCOPH has been able to support having faculty balance their academic life by providing a substantial amount (51%) of secure funding for tenure track lines. Although the faculty support in MEZCOPH is significantly less than most academic programs within the UA in which faculty have academic appointments, it is comparable to many other schools of public health. The state funding does allow faculty members to not only focus on research but also allows them to provide a significant amount of time to teaching, advising and mentoring students along with intramural and extramural service. Nonetheless, there is a clear inverse correlation between the percent of financial amount provided to faculty and the size of a school of public health in that larger schools guarantee less support to faculty as they have a larger base to draw upon for research collaborations and smaller schools provide more state support directly to their faculty. Currently, MEZCOPH is one of the smallest accredited schools of public health in terms of the number of primary faculty appointments.

D.6. What is the faculty’s collective view of the program’s future, its desired directions, and its means for reaching these objectives? How do planning and incentives direct the program to these ends?

The faculty clearly has both an optimistic and simultaneously a pessimistic view of the program’s future. In general, faculty members believe the future of the MPH program will be strong. However, current fiscal constraints are seen as an impediment to the graduate programs growth and ability to fulfill its mission to help provide an educated public health workforce. Fortunately, since CEPH accreditation was obtained, MEZCOPH has an exceptionally bright future and due to accreditation has secured several training grants. The optimism present within MEZCOPH is partially due to the excellence and diversity of its faculty combined with the commitment they have made to the development and refinement of the program in past years. MEZCOPH has a unique role to play in education, research and service to the diverse populations of the southwest and has successfully established numerous binational education and research programs with colleagues in Mexico.

Faculty members are clear and cohesive on what they believe should be the direction of the graduate programs. The faculty overwhelming voted in 2007 to continue an undergraduate program while at the same time they put a moratorium on admissions to the health education program. At the same time, the MPH program is identified as the foundation for the academic programs in MEZCOPH. The DrPH is the advanced applied doctoral program that will educate the next generation of leaders in the public health workforce. The PhD programs are the academic programs that will lead scientific inquiry in specific areas of study to advance knowledge and improve the public’s health.

The MPH Program needs to continue to be important to our State especially since public health expertise is needed now more than ever to address a variety of issues including bioterrorism. Faculty members believe that the MPH program will need to continue to prepare public health leaders in a variety of fields. The MPH Program will grow because the current health care system will need public health experts to help solve the growing health related issues in the US and internationally. Prevention will be critical in solving our health care/health services needs and economic factors will be an incentive for the various health care systems to work together.

There is ample planning going on within the college to address its stated end goals. However, planning has to continue in order to find the right path for growth for all the academic programs. The

administrative sections that coordinate the academic programs are taking more responsibility and authority for finding the best ways to grow their programs. These efforts are also being coordinated through the Education Committee. Even though not all of the logistical issues of growing the graduate programs are resolved, planning meetings have set a tone and spirit of inclusiveness and cooperation that is laudable and will contribute immensely to directing the programs to their stated goals. The challenge remains, however, that insufficient state funding and continuing cuts in small amounts and potentially large amounts translates to the fact that there are fewer, if any, monetary incentives to help grow the graduate programs compared with the undergraduate program.

Planning relative to the future design or academic constituents of the graduate programs will take into consideration key requirements for accreditation, the realities of fiscal resources and taking advantage of opportunities. An example is our effort to expand and coordinate our global presence in teaching, service and research through the establishment of our Global Health Institute. This is in line with the UA's plan to coordinate the global efforts across colleges. This tactical move will expand our opportunities for extramural funding to directly support our mission. Ultimately, the strength of the graduate programs will rest with the integrity of the individual sections and the ability of their faculty members to meet the teaching, research and service needs of the College.

Our major incentives are a spirit of camaraderie, mutual belief in social justice issues and focus on improving the health of underserved and disparate populations. Additionally, new innovative mechanisms are being developed to reward faculty for extramural research funds through the distribution of indirect funds and by having additional funds made available to faculty who teach beyond their required commitment to the College.

D.7. The unit head/chair should supply a brief overview of the post-tenure review results for the unit. This description should indicate how many tenured faculty were reviewed, how many reviews were satisfactory, how many reviews were not satisfactory and the nature of the improvement plan(s), and an aggregate description of how the tenured faculty contribute to the unit's mission.

Between 2004 and 2008, 13 faculty members went through post-tenure review, 4 were at the rank of Associate Professor and 9 were at the rank of Professor. The overall performance rating of "truly exceptional" was made for 5 faculty members, 7 had ratings of "exceeds expectations," and 1 had a rating of "meets expectations."

Tenured faculty contribute to MEZCOPH by shouldering a heavier teaching load, directing educational programs, serving on masters and doctoral committees, and serving on university committees. They also provide the long-term stability required to increase MEZCOPH's recognition as a nationally recognized leader in addressing health disparities.

E. UNDERGRADUATE PROGRAM

E.1. Describe, in general terms, the undergraduate program(s)

The undergraduate programs in MEZCOPH are currently in transition. The Bachelor of Science in Health Sciences (BSHS) program is designed to produce health educators. To broaden the appeal of public health to undergraduate students and to take advantage of the schools changing areas of expertise, the BSHS program is being disestablished and replaced by the Bachelor of Science with a major in Public Health (BS). The last graduation opportunity for the BSHS program is August 2010 and the first admission opportunity for the BS program was December 2009.

Bachelor of Science in Health Sciences Program (BSHS) CIP 51.2299 (Public Health, other)

The BSHS program has been part of MEZCOPH since 2000. The health education major is designed for individuals who will become professional health educators in community health, public health, school health and biomedical organizations. Graduates augment the public health and community health workforces where they take responsibility for facilitating behavior change that improves the health of individuals, families and communities.

Students in the BSHS program complete the community health education option. The community health education option provides students with competencies needed to work in public, voluntary, private, clinical and worksite health settings.

All health education majors who successfully complete either curriculum option can sit for the examination for voluntary certification offered through the National Commission for Health Education Credentialing.

BSHS	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Enrollment	185	130	202	243	224	231	179
Majors completed	33	28	40	47	51	56	53
Degrees awarded	13	11	14	22	22	38	23

Bachelor of Science (BS) CIP 51.2299 (Public Health, other)

Coursework for the BSPH was first offered in the fall 2009 semester. The program's goal is to train public health professionals to improve the quality of life of individuals and communities within Arizona. The curriculum consists of 120 units to graduate; 58 hours of didactic instruction in public health, followed by 6 credit hours of field work that prepares students for employment by incorporating classroom learning into public health practice. Students planning careers in medicine, dentistry and nursing may also utilize the BS major.

Areas of emphasis within the program include understanding health care systems in the US and abroad, incorporating epidemiologic and statistical methodologies into public health practice, providing culturally appropriate public health interventions, evaluating public health interventions, identifying health disparities, and understanding the link between nutrition and health.

Concentrated study (tracks) in Environmental and Occupational Health and Health Behaviors provides in-depth knowledge of a particular aspect of public health practice. The Environmental and

Occupational Health track focuses on recognition of health hazard sources and approaches used to identify and evaluate them. Through available frameworks student learn to manage and control exposures at individual and population levels. The Health Behaviors track emphasizes preventable behavioral risk factors for social dysfunction, illness and injury.

E.1.a. In the most recent three years, has any single undergraduate degree program in the unit awarded fewer than 24 degrees? If so, an evaluation may be required in accordance with ABOR-approved guidelines set forth in a document entitled “A Methodology for Identifying Low Productive and Duplicative Programs.” The Office of Academic Affairs will contact units that must complete this evaluation.

NOT APPLICABLE

E.2. Department’s role in the college and University in offering proficiency, foundations, and/or general education courses

No courses within the BSHS or BS programs are recognized as proficiency, foundations, or general education courses. However, with the establishment of the new BS program we are having discussions about providing one or two general education courses, such as the ones we teach on Personal Health and Wellness and the US Health Care System, or an introduction to public health concepts and theories. The plan will be to use courses that are required for the major but open to all students. The Undergraduate Executive Committee will make a recommendation to the Education Committee on these courses.

E.2.a. What has been the planning process for these courses? How are such offerings coordinated with other courses taken by these students and with courses offered for students majoring in this field?

NOT APPLICABLE

E.2.b. Who teaches these courses, and what is the evidence of instructional quality for these courses? How (with particular emphasis on “outcomes”) is the quality of these courses assessed? What plans are underway to strengthen these offerings? Describe the process for planning and updating these courses.

NOT APPLICABLE

E.3. The undergraduate major(s) and minor(s) curriculum and courses

E.3.a. How does the undergraduate curriculum(s) reflect the basic goals of the academic program? Does an accrediting body prescribe the curriculum(s)? If so, how is this done?

(Note: Due to the impending disestablishment of BSHS program this section will focus on the curriculum of the newly established BS program.)

There are no formal accreditation requirements for an undergraduate degree in public health. ASPH has recommended that undergraduate public health education address five broad areas:

- Providing a public health overview that places the discipline in a historical and modern perspective
- Addressing population-level public health methodologies including delivery of health information/education, implementation of lifestyle and behavioral change and development of health policy.
- Understanding determinants of disease and disability and the contribution of the environment and public safety to general well-being.
- Understanding of the health delivery system in the United States and abroad with an emphasis on organization/structure, institutions/workforce, and cost, quality and access issues.
- Understanding importance of cultural diversity, special populations and health disparities to population-level health outcomes.

The curriculum addresses these broad themes throughout eight core courses (see below), three track courses, four public health electives and a six-credit hour field work experience.

The core public health courses include an introductory public health course that places the discipline into the broader context of society and health. Three courses in epidemiology, biostatistics and evaluation provide instruction in key public health methodologies. A US health system course explains the development of the US health care system with an emphasis on unique American values and political structure. A nutrition course emphasizes the link between health and nutrition. Lastly, a health disparities course and global health course demonstrate the diversity of views, cultures and challenges that contribute to health and disease across societies.

These core classes are augmented by the choice of one of two tracks: Environmental and Occupational Health or Health Behaviors. The Environmental and Occupational Health track focuses on recognition of health hazard sources and approaches used to identify and evaluate them. The Health Behaviors track emphasizes preventable behavioral risk factors for social dysfunction, illness and injury.

Students are also required to complete 12 credit hours of general public health electives addressing a broad array of public health subject matter. The culminating experience is a six credit hour field work experience that emphasizes the application of public health principles in an agency whose primary mission is public health practice. Students are required to spend one semester actively engaged in the delivery of public health services under the supervision of a qualified preceptor.

Curriculum Bachelor of Science in Public Health (BSPH)

Required Core Courses (28 credit hours):

ENG 308	Technical Writing (3)
CPH 300	Community Health Sciences and Services (3)
CPH 309	Introduction to Epidemiology (3)
CPH 310	Health Care in the United States (3)
CPH 376	Introduction to Health Statistics (4)

- CPH 381 Public Health Planning and Evaluation Methods (3)
- CPH 433 Global Health (3)
- CPH 478 Maternal and Child Nutrition or N SC 310 Principles of Human Nutrition in Health and Disease (3)
- CPH 4xx Health Disparities (3)

Track Courses (9 credit hours)

Environmental and Occupational Health

- CPH 418 Introduction to Health Risk Assessment (3)
- CPH 484 Fundamentals of Industrial and Environmental Health (3)
- CPH 489 Health Preparedness (3)

Health Behavior

- CPH 306 Drugs and Society (3)
- CPH 330 Human Sexuality (3)
- CPH 449 Family Violence (3)

Public Health Electives (12 credit hours) plus General Electives (9 credit hours)

- CPH 321 Health Care Policy and Institutions (3)
- CPH 322 Health Education and Ethical Leadership (3)
- CPH 350 Principles Health Education and Promotion (3)
- CPH 399 Independent Study
- CPH 400 Contemporary Community Health Problems (3)
- CPH 407 Health Economics and Policy (3)
- CPH 409 Evolution and Infectious Disease (3)
- CPH 421 Disease Illness and Mining (3)
- CPH 422 Safety Fundamentals (3)
- CPH 425 Topics in Latino Health (3)
- CPH 499 Independent Study

Field Work (6 credit hours)

- CPH 493A Field Work in Public Health

E.3.b. What evidence is available to compare this curriculum with similar programs nationally and assess its quality? Using this evidence, document the quality of the undergraduate major(s) in the unit’s program(s). In general, what plans are underway to change or strengthen the undergraduate majors(s) in the light of these or other sources of information?

There is neither a formal accrediting body nor ranking system for undergraduate programs in public health. As a result, there is a large heterogeneity within undergraduate programs of public health with regard to parent institution, structure or concentration areas. Only 16% of institutions in the US offer an

undergraduate major, minor or concentration in public health. Most (70%) are not affiliated with graduate programs in public health.

A number of colleges of public health offer undergraduate programs. For example, Johns Hopkins University offers a Bachelor of Arts program with an emphasis in the natural or social sciences. The degree requires 120 semester hours of which 60 are completed in public health. Science prerequisites include physics, organic chemistry and calculus which exceed MEZCOPH requirements. They have no field work requirement. The University of North Carolina at Chapel Hill offers Bachelor of Science degree in biostatistics, environmental sciences, public policy and nutrition. The curriculum structure varies significantly across these majors. No field work experience is required. The lack of a standardized public health bachelor's degree makes it difficult to objectively compare program curricula.

The lack of standardization as well as the newness of the BS major in public health means that there is scant evidence to compare the quality of the program with regard to student outcomes. A recent MEZCOPH faculty survey, rated the quality of the undergraduate program as 3.6 on a scale of 1 – 5, with 5 being best. This speaks favorably of the program but also demonstrates room for improvement. There was no specific area in which the program was rated poorly.

	N	Overall Quality	Student Resources	Compared to Other Programs	Applicant Quality	Student's Academics
	=	good	adequate	similar	qualified	appropriate
BSPH Program	39	3.56	4.44	3.22	3.44	3.44

Subjective comments from the survey noted that it was too early to address questions regarding program quality satisfactorily. Areas of concern included the need for more senior faculty involvement, more structured internships and more support for instructors. Some suggested increasing the number of available tracks. A request was also made for a formal mechanism to foster communication among faculty teaching undergraduate courses.

Undergraduate courses are taught almost exclusively by full-time faculty or APs with a high degree of teaching, research and professional experience. The only course currently being taught by a doctoral student is Introduction to Biostatistics which has been successfully taught by the same epidemiology doctoral student for the past 3 years.

Based on the feedback from the recent faculty survey several proactive steps have been undertaken.

- An executive committee composed of representatives from each of the three MEZCOPH divisions and the office of student affairs has been created.
 - This committee meets to review the activities of the undergraduate program.
- Planning for additional tracks is underway (e.g. pre-Health Professions).

These activities along with ongoing data collection on student outcomes will be used to evaluate and strengthen the quality of the undergraduate program in public health.

E.3.c. How are courses in the undergraduate curriculum(s) coordinated? What evidence is there of sufficient offerings and balance among the various specialties to meet student needs and interests -- is there sufficient breadth of course offerings as well as sufficient depth for specialization?

The Undergraduate Program Director in collaboration with the Associate Dean of Academic Affairs helps coordinate the undergraduate courses. The curriculum is designed so that the students can graduate within four (4) years of entering the UA as a freshman. The program has published a recommended course sequence to help students plan their overall course study. Several introductory courses (CPH 178 and CPH 300) are offered during both the fall and spring semesters to facilitate transfer students into the major with minimal disruption.

During each semester's planning process for course scheduling, course times are evaluated to ensure minimal or no conflicts among core and track courses. By convention, Tuesday and Thursday mornings are when the core courses are offered. Prior to the approval of new courses, an audit is undertaken by the school-wide education committee to ensure course scheduling conflicts are minimal.

Redundancy in course content was recently evaluated during program curricular development in preparation for offering the new degree program. In the future, this evaluation will be conducted by the BS executive committee with formal reporting to the school-wide education committee.

At present, there is insufficient evidence to determine whether the course offerings will be sufficient to meet demand. There is also insufficient evidence to determine what the eventual balance between tracks will be. However, it is likely that the Health Behavior track will be the most heavily subscribed. Early planning has begun on a third, pre-Health Professions track that will prepare students for graduate or professional careers in health care (medical, dental, pharmacy, public health). During the Fall 2009 semester, the undergraduate courses had nearly full enrollment. We expect the popularity of the program to continue to increase over time.

The undergraduate curriculum provides adequate breadth via the eight core public health courses described above. The courses provide more than sufficient content to adequately address the competencies from each of the five core areas of public health practice. Students undertake in-depth study by completing one (or both) of the existing tracks in either Environmental and Occupational Health or Health Behavior. A number of additional elective courses exist at the undergraduate and graduate level that provides in-depth study within a core area. The ability to take courses at the graduate level (either 400/500 or 500) in public health is a particular strength of our curriculum.

E.3.d. What specific efforts are made to incorporate new knowledge and perspectives into the curriculum, and to consolidate or eliminate outdated views?

The curriculum has recently undergone a careful review in preparation to offering this degree program for the first time. Ongoing review of the appropriateness and timeliness of individual course content will be the primary responsibility of individual course instructors. All of the teaching faculty in the College of Public Health are encouraged in faculty development to stay current in their fields and are expected to make positive progress in their areas of expertise and in the multidisciplinary areas of Public Health. Faculty members attend various seminars, public health grand rounds and national conferences for the gathering and exchange of new information and professional experiences.

E.3.e. What efforts are made to involve students actively in their learning through such opportunities as internships, practica, work-study, or seminars?

All undergraduate students are required to successfully complete a 6 credit internship where they perform public health practice for community health agencies, worksite health promotion organizations, or clinics.

Each undergraduate student must submit a formal work plan for the internship experience including learning objectives. A faculty advisor, in collaboration with the Undergraduate Coordinator and the site preceptor, monitor the student internship experience. The program maintains regular contact with the student intern and the site preceptor. Feedback is provided approximately half-way through the internship via a mid-term evaluation completed by the site preceptor. The student's grade is assigned by the faculty advisor, based on the preceptor evaluations, the faculty advisor's observations of the student's work, the student's fulfillment of the learning objectives, and the quality of the final report.

Previous community partners and internship sites are listed below. The program will continue to work to maintain and enhance these relationships as they are an important component of our student's ability to effectively conduct public health practice.

American Cancer Society
American Lung Association of Arizona
American Red Cross
Amity
Arizona Program in Nicotine and Tobacco Research (APNTR)
AZ Cancer Center
AZ Family Planning Council
AZ Health Education Center
Center of Z-Vortex
Child and Family Resources
Commitment to Underserved People (CUPS)
Donor Network of AZ
El Rio Health Center
Homicide Survivors
Indian Health Service
Kino Teen Center
Maricopa County Department of Health Services
Miraval Nutrition Division
Motorola
Pima County Health Department
Pima Prevention Partnership
Southern Arizona Foundation Gay Men's Health Program
Southern Arizona Center Against Sexual Assault
Sunnyside High School Teenage Parent Program
Touchstone Community, Inc.- Phoenix Mental Health Agency
U of A
 Environmental and Behavioral Risk Research
 Life and Work Connections
 Oasis
 Rural Health Office – Mobile Health Clinic

E.4. Undergraduate Students

E.4.a. How does the quality of students selecting this unit for a major compare with the quality of students in other fields at the University of Arizona? In what manner, and how well, do students demonstrate their overall command of the field? How does the quality of students graduating in this unit compare with student quality in similar units nationwide?

No data is available on current BS majors or pre-public health students as the program is new. Admission requirements for the BSPH major include a grade point average of 2.50 and grades of “C” or better in prerequisite courses. These requirements are meant to balance the need for academically capable students and the need to be accessible to students from underrepresented groups (see below).

Data from the old BSHS major and pre-major demonstrate the following. ACT and SAT scores for pre-BSHS students have been slightly lower than university freshman in general. However, the mean scores are still acceptable.

Fall	pre-BSHS Count	BSHS ACT	UA ACT	BSHS SAT	UA SAT
2008	3	19.3	23.6	1050	1096
2007	34	22.6	23.5	1059	1102
2006	38	22.5	23.4	975	1106
2005	24	23.5	23.5	1067	1121
2004	14	21.1	23.7	965	1118
2003	16	19.5	23.6	945	1115
2002	9	22.8	23.4	1045	1099

It is unclear why these scores on standardized exams are lower. Some of these differences may be explained by the program’s appeal to students from underrepresented minorities.

Ethnicity (Enrolled Majors)	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
African-American (n)	13	15	16	17	24	19	11
Hispanic (n)	24	30	49	56	61	58	34
Native American (n)	10	15	16	10	10	13	7
All students (N)	106	132	161	201	235	230	121
Underrepresented Minority (%)	48%	49%	54%	50%	51%	48%	52%

By the time of graduation, the grade point averages of students who completed a BSHS major are comparable to all university graduates.

FY	BSHS Count	BSHS	UA
2008 - 09	53	3.237	3.183
2007 - 08	56	3.015	3.084
2006 - 07	51	3.057	3.199
2005 - 06	47	3.079	3.177
2004 - 05	40	3.112	3.182
2003 - 04	28	2.972	3.171
2002 - 03	33	2.914	3.142

E.4.b. What efforts are underway to attract and retain well qualified undergraduate students?

The program is a regular participant in the main university-wide recruitment activities including Arizona Road Trip, High School Counselor Days, National Scholar Day, Outstanding Junior Day, Peter and Pat Likins Day, Phoenix Junior Night, Senior Evenings, Transfer Advisor Breakfasts, Transfer Up Close and UA Up Close. Other efforts include attendance at the Pima Community College advising fair once or twice a year, the Meet Your Major Fair for undecided students once a year, and the scheduled college information sessions.

The senior program coordinator maintains a close working relationship with other advisors (especially pharmacy, nursing, physiology, pre-health professions) on campus. Major emphasis is given to informing their students about public health as a career/major and presenting at the health profession's clubs. Many of qualified BSHS students originally started in one of the other majors/professions. We expect this to continue with the BS program, but also to have more students directly enter the public health major.

We would also like to emphasize our past abilities to attract and retain students from underrepresented minorities. As mentioned above, approximately 50% of BSHS major students are from one of these groups. We believe the strength of public health lays in its service to communities throughout Arizona that are comprised of underrepresented groups. Given our strong faculty and service activities we expect to continue to successfully recruit students from these groups.

Retention of students has been a priority in the BSHS program. One-on-one advising with the undergraduate program coordinator or faculty adviser serves as the primary retention tool. Students are encouraged to begin working with their advisor at orientation and are advised to continue this relationship through graduation. Students who experience academic difficulties or who are placed on probation are scheduled for mandatory appointments with the program coordinator and advisor to identify strategies or resources to improve their performance.

E.4.c. Discuss time to degree data and compare with time to degree data for undergraduate students in your college and the University.

No data is available on the BS program. Data on the BSHS program demonstrates that the time to graduation for our students is slightly longer than UA undergraduates in general.

Table 8: BSHS Time to Graduation

Year	BSHS Graduates	Mean Yrs to Degree (BSHS)	Mean Yrs to Degree (UA)
2008 - 09	23	4.674	4.378
2007 - 08	38	4.789	4.490
2006 - 07	22	4.705	4.593
2005 - 06	22	5.011	4.674
2004 - 05	14	5.179	4.716
2003 - 04	11	5.000	4.759
2002 - 03	16	4.688	4.702

Much of this can be explained by the fact that our students generally transfer from another major late in their academic career. The fact that the differences in time to graduation are relatively small attests to the organization and structure of the BSHS program.

Table 9: BSHS Difference in Time to Graduation (Percentage)

Classification (pre-BSHS)	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Underclassman (%)	32	39	31	31	34	39	22
Upperclassman (%)	68	61	69	69	66	61	78

E.4.d. How are undergraduate students majoring in the unit’s program(s) advised? How has the advising process been evaluated? If the advising process has been evaluated, what were the results of this evaluation?

The college employs one fulltime employee, a senior program coordinator with academic advising experience, to advise all undergraduate students – those who have been admitted to the major and pre-major, as well as those who are considering the College’s undergraduate degree. The undergraduate advisor, who works under the direction of the Assistant Dean for Student and Alumni Affairs, is located within the College’s Office of Student Services, which also houses a graduate academic progress coordinator and a graduate recruitment and admissions coordinator. The undergraduate advisor provides advising related to the student’s curriculum, internship and graduation.

Upon completion of degree requirements, all students are required to complete an exit survey, on which they evaluate a number of areas including the quality of their advising and are asked to provide feedback on improvements and changes that could be made. Students rate their advising on a Likert scale of 1-5, with 1 being poor and 5 being excellent. Exit survey data from the last academic year reveal great satisfaction with the undergraduate advising and the advisor, with the average rating for this time period being 4.74. Undergraduate advising is a clear strength of the program as evidenced by the following representative comments, “very accessible, respectful, willing to help, great advice, caring, interested, etc.” All student comments can be found in **Appendix E.4.d.**

E.4.e. How do alumni of the program view their educational experience? What methods are used to solicit their views? If statistics on graduation outcomes (% attending graduate school, types of jobs obtained following graduation, etc) are available, please discuss these outcomes.

The Office of Student and Alumni Affairs administers an alumni survey of graduate and undergraduate students one year post graduation and every 3 years thereafter. The graduation outcomes are presented in Section G.

F. GRADUATE PROGRAM

F.1. Overview

F.1.a. Describe, in general terms, the graduate degree program(s) offered by this unit. Include, as appropriate, dual degrees, joint degrees, accelerated masters programs and post-baccalaureate and/or graduate certificate programs. How does (do) the graduate program(s) reflect the basic goals (Section A) of the academic program? What changes have occurred in recent years, and what changes are contemplated for the future?

Master of Public Health

The Master of Public Health degree (CIP Code: 51.2201 Public Health, General (MPH, DPH)) is designed to be an interdisciplinary, graduate, professional degree in public health. The MPH Program provides opportunities for students to obtain broad knowledge and basic skills in the core areas of public health. Students are able to acquire proficiency in one or more specialized areas through advanced coursework, and gain experience in applying advanced knowledge to the solution of actual health problems in community settings during internship training.

The MPH offers a program in which students acquire a sound academic background for competent practice in the field of public health. Students are able to obtain the MPH degree through one of six concentration areas, including:

- Biostatistics
- Environmental and Occupational Health
- Epidemiology
- Family and Child Health
- Health Behavior and Health Promotion
- Public Health Policy and Management

A seventh concentration is starting in fall 2010 in Public Health Practice and this will be available to students in Phoenix as well as in Tucson. The MPH program has had a dual MD-MPH degree since its inception. More recently it has worked with other colleges and departments to offer dual degrees including an MBA-MPH, JD-MPH, MS-MPH in Mexican American Studies and an MS-MPH in Latin American Studies. Additional dual degree and even joint degrees may be developed in the future to leverage existing resources so student scholarship can be enhanced.

The MPH is the cornerstone of the academic programs in the college. It provides students the didactic and experiential learning environments to prepare them as public health professionals. The required internship is one method that assists the college in meeting its outreach goals.

The required five core courses within the MPH program are now all available online and have been packaged together to provide a graduate certificate in public health. A certificate in global health has been approved by both the Education Committee in MEZCOPH and the graduate college. Additionally, federal funds have been obtained to create a certificate program in maternal and child health and courses for this program are currently being developed.

Epidemiology Program

The M.S. and PhD degrees in Epidemiology (CIP 26.1309 - Epidemiology) require a sequence of core courses, multiple electives, research, and thesis (MS) or dissertation (PhD) credits. The core courses include three semesters of introductory Epidemiology (Basic Principles of Epidemiology, Epidemiologic Methods, Quantitative Epidemiology), two semesters of introductory Biostatistics (Statistics for the Medical Sciences, Biostatistics for Research), and four semesters (MS) or six semesters (PhD) of Epidemiology Seminar and/or equivalent (Cancer Prevention/Control Seminar, and others). MS students must have thesis units and PhD students must have dissertation units as well. Both MS & PhD students are strongly advised to take the third semester of Biostatistics (Applied Biostatistics Analysis), as it is data, computer, and consultative based. Strongly recommended/required courses include Infectious Disease Epidemiology, Chronic Disease Epidemiology, and General Linear Models/Longitudinal Analysis. Other recommended electives include: Cancer Epidemiology and Prevention, Environmental-Occupational Epidemiology, Nutritional Epidemiology, Bio-Behavioral Epidemiology, Bioethics, Grant Writing, SAS, Independent Study, and Research. As of this spring (2003), students will be able to take electives in Advanced Biostatistics, Epidemiology of Aging, and, hopefully, for the PhD students the Advanced Epidemiology course and seminar. (Other courses will probably be offered starting next year; plans include Clinical Trials (Biostatistics) and Cardiovascular Trials.) Additional elective courses taught by Program faculty outside of MEZCOPH can be taken, as approved by each student's advisor/committee, based on the student's sub-specialty of interest (e.g., Infectious Disease Epidemiology, Health Services/Outcomes Research, quantitative behavioral science, genetics). The PhD students must select at least one minor discipline whose requirements they must meet.

All students in the Epidemiology Graduate Program (including minors) are required to maintain a B average, and to pass the Qualifying Exam after they have completed the first academic year of courses (or soon thereafter). They are allowed a second attempt; failure is grounds for dismissal. All PhD students must pass the written and oral Comprehensive Exam before they are advanced to candidacy (ABD status); they must complete 80% of their course requirements before they do so. The written portion is a research proposal. If they pass, they take the oral portion, which can cover all aspects of Epidemiology, their required training in Biostatistics, and their minor field. They are allowed a second attempt; failure is grounds for dismissal.

All M.S. students are required to submit a written thesis, developed in consultation with their advisor. This thesis must be in a format that is suitable for submission as a manuscript, must be reviewed by two faculty members in addition to the advisor, and must be presented by the student at an Epidemiology seminar. All PhD students are required to submit a dissertation, as per UA policy. Doctoral students may pursue the "published papers" option allowed by the Graduate College that requires a minimum of two to three papers that are authored by the student and submitted. This option is often preferred due to the common use of first-authored publications as an indicator of productivity in Epidemiology. (We also have a general policy to have student authors on our papers.) PhD students are also expected to present their doctoral work in an Epidemiology seminar on a yearly basis.

Teaching of core and elective courses is performed by regular faculty within the Epidemiology Graduate Program and by others. The Executive Committee and the Graduate College must approve all Regular Faculty. Such approval is based on evidence of continued scholarly and research productivity including publications in peer reviewed journals and academic presses, recent service as thesis/dissertation directors, and funded research. For faculty with more limited teaching experience, their contributions are initially limited to selected lectures under the supervision of more senior faculty. As their

experience expands, they then typically co-teach a course with a more senior faculty member, leading to eventual sole responsibility for the course.

Doctorate in Public Health (DrPH)

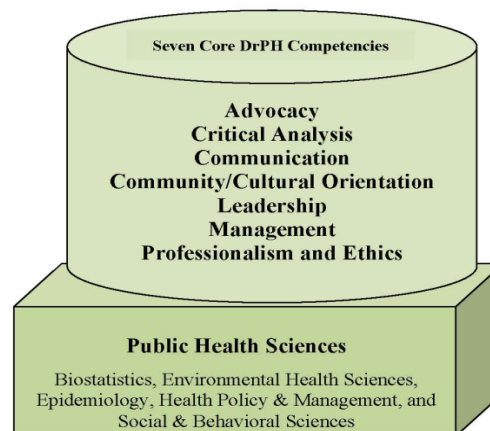
The DrPH (CIP Code: 51.2201 Public Health, General (MPH, DPH)) is an advanced, professional degree program designed for the student who has an MPH degree or its equivalent and who intends to pursue a leadership career as a public health professional. The DrPH program is unique as it focuses on developing future leaders in public health practice, who will advance the public's health through the integration and application of a broad range of knowledge and analytical skills in leadership, practice, policy analysis, research, program management and professional communication. The first students were admitted in fall 2007.

The doctoral program is for individuals who have several years of experience in the public health field. The DrPH program prepares these individuals to translate scientific knowledge into community-based programs that improve the health status of communities, identify solutions to community health problems, and provide leadership in public health policy and management within both academic and nonacademic settings, as well as in public-agency or private-sector settings that emphasize improving the health of the public. It follows that public health workers from the state and region with the requisite experience and subsequent training are best suited and prepared for creating the administrative infrastructure necessary for promotion of a healthy public and amelioration of current public health issues in the region. The DrPH program enables MEZCOPH to expand and strengthen its emphasis on and commitment to the State of Arizona by preparing individuals for these roles.

Currently students are able to focus on two primary areas of study within the DrPH program: Public Health Policy and Management and Maternal and Child Health. The curricula for these two areas of study are currently linked together with a set of core courses. However, future plans are to have them become more independent so they may better meet the needs of individual students in their areas. It will also allow the sections to grow these academic programs in ways that are more commensurate with their areas of focus and their resources.

The DrPH curriculum builds on have the basic foundations of public health. It was developed in parallel with the ASPH program's DrPH Competency Project. This project utilized the following model in **Figure 1** with the basic public health sciences being comprised of the MPH core competency areas.

Figure 1: DrPH Conceptual Model from the ASPH DrPH Competency Workgroup.



Given this model, the DrPH areas of studies in PHPM and MCH developed a curriculum that would address the DrPH domains. The DrPH Domains are identified in the middle column for **Table 10**. The Required PHPM courses are in the left column and the required MCH courses are in the right column with each course being identified by a letter in parenthesis. These are then matched to the DrPH competency domains. The Required DrPH course for all students are listed below and also identified with letters that are matched to the DrPH competency domains.

The core DrPH courses are in:

Ethics, Values, and Policy (**L**)

Communications Course (**M**)

Grant Writing Course (**N**)

Advance Policy and Management Field Course (**O**)

Require 2 Higher Level Methods Course from an approved list to be created. (**P**)

DrPH Seminar (**Q**)

PHPM	DrPH Domain	MCH
Planning & Evaluation (A)	Advocacy (D, F, L)	MCH (H)
Evaluation (B)	Communications (D, M, N)	Research and Evaluation (I)
Budget and Finance (C)	Community and Cultural Sensitivity (H)	MCH Epi
Advance PH Policy Analysis (D)	Critical Analysis (A, B, C, D, E, I, J, N, L, P)	MCH Policy (J)
Advance Administration (E)	Leadership (E, O)	Seminar (K)
Field Seminar (now required above) (F)	Management (C, E, N)	
Seminar (G)	Ethics (L, N, Q)	

Biostatistics (PhD)

The PhD in Biostatistics (CIP Code: 26.1102 – Biostatistics) was developed in response to the biostatistical and research needs of The University of Arizona, and other academic, industry and government agencies. The planning and implementation approval processes were completed during the 2005 – 2006 and 2006 – 2007 academic years, respectively. The first students were admitted in fall 2007.

The PhD in Biostatistics has an emphasis on the foundations of statistical reasoning and requires its graduates to complete rigorous training in applied probability and statistical analysis. Biostatisticians are trained in the development and application of statistical methods to the solution of problems encountered in public health, medicine, pharmacy, nursing and other biological sciences. They collaborate with scientists and investigators in nearly every area related to health, and have made major contributions to our understanding of chronic diseases such as AIDS, cancer, and immunology, as well as to genetics and other forms of illness.

The curriculum was built on existing courses that were developed for the Epidemiology PhD program and the Biostatistics MPH concentration. Students are required to complete advanced training in probability and mathematical statistics, specialized required and elective courses in biostatistical methodology (e.g., Theory of Linear Models, General Linear and Mixed Models, Survival Analysis,

Analysis of Categorical Data), and a dissertation that either develops or extends statistical methodology to an applied clinical or public health research question.

The PhD in Biostatistics is complementary to the Statistics GIDP PhD degree. The Biostatistics PhD is more applied in nature, whereas the Statistics PhD places more emphasis on theoretical statistics. Students in both degree programs take common probability, mathematical statistics, and theory of linear models courses. Students in either program have the option to take elective courses from the other program.

F.1.b. What evidence (resources, reputation, outcomes, NRC rankings, or other criteria) is available concerning the quality of this unit's graduate program(s)? How is this information used to strengthen the graduate program(s)?

Master of Public Health (MPH)

In 2007, *US News and World Report* ranked MEZCOPH at 21 in the nation; 9 schools ahead of MEZCOPH were private schools and 11 were state funded schools. This was the first time the college was ranked and it was placed above several schools that are larger and/or have been in existence for a longer period of time than MEZCOPH. An increase in the national and international reputation of the program is supported by the increase in percent of applicants who are from outside of Arizona. The percentage of out-of-state students who applied to the program in 2001/02 was 52%; in 2008/09, the percent of out of state applicants was 73%. The MPH program is home to one third of the fellows in the University of Arizona Returned Peace Corps Volunteer (RPCV) Fellowship Program, the 2nd largest RPCV Program in the United States and consequently attracts more applications from ex-Peace Corps volunteers.

MEZCOPH participates in SOPHAS, the centralized application service for accredited schools of public health. SOPHAS application and data are shared with all participating schools. The increase in the proportion of students applying to MEZCOPH has exceeded the increase in applications that are registered through this centralized system. The College continues to work on growing its financial resources, i.e. scholarships and assistantships so it can secure commitments from more top applicants.

MEZCOPH students compete well at the local and national levels for top honors. In the past five years, the College has produced four UA Centennial Awardees – Ruth Fesahazion, Carol Goldtooth Begay, Omar Contreras, and Chandra Jennings-Jackson. The Outstanding Hispanic Undergraduate and Graduate Student Awards two years ago went respectively to Rachel Zenuk, now an MPH student, and Nick Meza, an MPH alumnus. At the national level, MEZCOPH students are competitive in the scholarship, fellowship, and internship arena as evidenced by the caliber and number of awards received. **See Table 11.**

Table 11: University, Regional or National Student Awards

Name of Award	Date of Award
Peter W. Likins Inclusive Excellence Award	October 07
3M Industrial Hygiene Scholarship	April 08
2008 Billy D. Young Scholarship	October 08
Centennial Undergraduate Award	May 08
2008 Outstanding Hispanic Graduate Student	May 08
American Industrial Hygiene Association "Best Student Local Section"	June 08
Centennial Graduate Award	Fall 08
2009 Katie Evans Memorial Scholarship	Spring 09
National Research Fellowship from Community Forestry and Environmental Research Partnerships (CFERP)	May 09
Peter W. Likins Inclusive Excellence Award	October 09
Centennial Graduate Award	Fall 09
Association of Schools of Public Health/Centers for Disease Control Fellowship	Fall 09- Summer 11
Hispanic Serving Health Professionals Schools/Centers for Disease Control Fellowship	Fall 09
2009 American College of Rheumatology Research and Education Foundation Medical and Graduate Student Achievement Award	Fall 09
Arizona Daily Star - Tucson Forty Under Forty	October 09

Information about student accomplishments is publicized via print and electronic publications and is used on promotional materials and the website to attract and encourage interested students to apply to the College's programs.

Epidemiology (MS, PhD)

Evidence of the quality of the program can be assessed by looking at what graduates of the program are currently doing and what is being said about the program in national forums. Looking at current jobs of

the 25 PhD graduates from the UA Epidemiology Program, over 68% are currently working in academic research settings, including 4 recent graduates who received nationally funded postdoctoral fellowships. Only one (4%) is not currently working in the field. The others are working in government positions, pharmaceutical companies or NGOs. Our current students also successfully compete for training awards to national meetings and doctoral research funding. Two of our students recently were selected to attend the competitive National Institutes of Health Student research festival. A recent online review of master's and PhD programs in biostatistics, bioinformatics and epidemiology (<http://graduate-school.phds.org/rankings/biostatistics>) included our program. Among small, prestigious schools, we ranked 12th of 67 programs reviewed and 6th among epidemiology programs. Reviewing the criteria for ranking, it appears that this ranking is due to both the high percentage of our students working in the field and in the research productivity of our small faculty.

The Epidemiology Program has ongoing discussions at the regular Epidemiology faculty meetings about the coursework, research needs and opportunities. In addition, the curricula for other academic epidemiology programs are reviewed. Faculty members attend national meetings, discussing training of epidemiology students.

Doctor of Public Health (DrPH)

The DrPH program is too new to have an established reputation for quality. However, members of the faculty have ongoing discussions as to potential additional coursework and research opportunities for students that will help make us more competitive with existing programs. Fortunately, Dr. Taren, the Associate Dean for Academic Affairs, has been an active member of the ASPH DrPH Competency Workgroup and has kept the faculty members abreast of the national discussion regarding the curriculum for DrPH programs.

Biostatistics

The Biostatistics PhD program is too new to have an established reputation for quality. However, members of the faculty have ongoing discussions as to potential additional coursework and research opportunities for students that will help make us more competitive with existing programs.

F.1.c. Discuss time to degree data and compare with time to degree data for graduate students in your college and the University.

The majority of graduate students are from the MPH program with few graduating from the MS program in Epidemiology. Furthermore, there was no significant difference seen in the data among the two master's level programs. Therefore we report the time to degree for all master levels students (MPH and MS in Epidemiology) in **Table 12** and for the Epidemiology doctoral program in **Table 13**. The time to degree for MEZCOPH master's level programs, varying between 2.0 and 2.5 years for the past 10 years is approximately average with other UA master's programs. Over the past eight years, the overall average time to degree for epidemiology doctoral students has been 4.6 years.

Table 12: Public Health Master's Degrees - Time to Graduation FY 2000-2009		
Academic Year	Number of Graduates	Average Years To Degree
FY00-01	65	2.46
FY01/02	55	2.24
FY02/03	59	2.61
FY03/04	64	2.41
FY04/05	58	2.11
FY05/06	73	2.46
FY06/07	61	2.43
FY07/08	57	2.29
FY08/09	78	2.58

Table 13: Epidemiology Doctoral Degree - Time to Graduation FY 2002-2009		
Academic Year	Number of Graduates	Average Years To Degree
FY01/02	1	4.0
FY02/03	1	2.33
FY03/04	3	2.89
FY04/05	2	4.67
FY05/06	2	4.75
FY06/07	1	3.34
FY07/08	3	4.47
FY08/09	7	5.94

F.1.d. Low Productivity

This section is not applicable.

F.2. Curriculum and courses:

F.2.a. What evidence is there of sufficient offerings and balance among the various specialties – is there sufficient breadth of course offerings and sufficient depth for specialization? How are the courses in the graduate program coordinated? What plans are underway to modify the graduate program(s) in the light of available information?

All the academic programs, course approvals and schedule of classes in MEZCOPH are coordinated by the Education Committee in conjunction with the Office of Academic Affairs. The schedule of classes is published on the College's website in two formats: as the list of courses with course title, time, location, and instructor information and as a color coded weekly calendar to visually observe which courses overlap. Minimum standards for class schedules include that the times for core courses do not overlap and required courses within areas of study do not overlap. Also, classes are not scheduled on Wednesday at noon when the college-wide seminar series occurs. Similarly no classes are taught on Mondays at Noon so student organizations can meet. Specific information about course offerings in the academic programs is in the following sections.

Master of Public Health

The MPH program is a professional degree and has a more prescriptive curriculum for students than most graduate academic programs. Students in the MPH program enroll in one of the concentration areas: Biostatistics, Community Health Practice, Environmental and Occupational Health, Epidemiology, Family and Child Health, Health Administration and Policy, Health Education and Behavioral Sciences. There are greater than 60 graduate courses taught by MEZCOPH. MPH students must take 5 core courses. There are three offerings of these courses each year and one of the sections is taught online on an annual basis. Furthermore, each concentration area provides a series of required concentration courses. The Council of Education in Public Health (CEPH) requires that MPH programs require at least 42 credits for the degree in order to be accredited. All of our MPH concentration areas meet this minimum. In addition to the required courses, accreditation requires that all MPH students obtain some field experience and have a capstone experience. Our program requires a graduate internship for all students and the capstone experience is the completion of an internship report with required sections that illustrate how students integrate classroom learning into practice-based projects.

Epidemiology

The Epidemiology Program has general offerings in Epidemiology and Biostatistics, but there remain a limited number of sub-specialty courses. The curriculum covers basic and advanced general Epidemiology & Biostatistics, infectious diseases, chronic diseases, cancer, nutrition, maternal and child health, quantitative epidemiology, environmental & occupational health, and some molecular & genetic epidemiology. The faculty members then work with students to develop tailored academic programs for the students to build sufficient sub-specialty depth.

With the development of the Biostatistics PhD program and the hiring of new biostatisticians and epidemiologists, several courses were added since the last APR. These courses provide more depth to the curricula and were based on recognized needs enumerated by past APR, the faculty, the students, and our training programs. The new epidemiology courses include Public Health Experience: Student Epidemiology Response Team (EPID 596D), Epidemiology of Aging (EPID 673), Principles of Genetic Association Studies (EPID 677), Clinical Trials & Intervention Studies (EPID 675), Changing Health Policy: Cultural Understanding & Epi Analysis (EPID 606), Maternal and Child Health Epidemiology (EPID 630), and an Advanced Epidemiology Seminar for doctoral students (EPID 796A). Similarly, several of the new Biostatistics courses have been utilized by the epidemiology students, specifically: Data Management and SAS Programming (CPH 576D), Biostatistics Consulting (CPH 685), Categorical Data Analysis (CPH647).

While there is breadth in the course offerings, much of the depth in the subspecialty areas comes from utilization of course offerings from other departments and, for the PhD students, completion of minors offered by these departments. As part of the advising and mentoring of students, we inform students of the subspecialties and the strength of the faculty.

The Epidemiology faculty determine what courses should be offered, based on the general needs and based on sub-specialty needs and faculty resources. They determine how the courses should be coordinated. The faculty is also developing structured specialty curricula tracks, in areas of the specific strengths of the existing faculty.

Doctor of Public Health

The DrPH program is a professional doctoral degree that requires 64 units of combined course work and dissertation work for graduation. As a professional degree it has a more prescriptive curriculum compared with PhD programs. The program requires students to take 22 units from a set of DrPH core courses. Each area of study includes an additional 9 units of required courses. Students are then able to take 6 units of electives, 9 units toward a minor and have 18 units of dissertation work. All of the DrPH core courses and required courses for each of the specific areas are present in the college and taught on a regular basis. Students are able to take electives throughout the university system. The intent of the DrPH courses is for the curriculum to address DrPH competency domains that were identified by the Association of Schools of Public Health.

Biostatistics

The Biostatistics PhD program is continuing to develop its curriculum. All students take the Theory of Probability and Theory of Statistics courses (MATH 564 and 566) with students from the Statistics GIDP. Concurrently Biostatistics PhD students take the core Biostatistics sequence: Biostatistics in Public Health, and Biostatistics for Research (CPH 576A and 576B). They additionally take Basic Principles of Epidemiology (CPH 573A) to meet the CEPH requirement that all doctoral students have an introduction to Epidemiology. In their second year, students take Theory of Linear Models (CPH 687), Statistical Consulting (CPH 685), and specialized courses in Design of Experiments (STAT 571B) and Statistical Computing (STAT 675). Subsequently students take a minimum of 15 units of elective courses, which can include courses in Applied Biostatistics Analysis (CPH 576C), Data Management and the SAS Programming Language (CPH 576D), Analysis of Categorical Data (CPH 647), Analysis of High Dimensional Data (CPH 648), Genetic Association Studies (CPH 677), and Survival Analysis (CPH 686). Students also can take elective courses from the Statistics GIDP curriculum. Students are required to take the Biostatistics Seminar.

F.2.b. What evidence is there that the courses meet student needs? Are a sufficient number of courses offered at the 500 level and above? In what ways besides individual thesis or dissertation research are students involved actively in their learning – for example through internships, practica, teaching internships, and/or assistantships?

Master of Public Health

The UA Graduate College requires a minimum of 30 units for a master's degree. The MPH requires a minimum of 42 units. Accreditation requires that that all MPH students have studies in five core areas: (1) Epidemiology, (2) Biostatistics, (3) Environmental and Occupational Health, (4) Health Services Administration, and (5) Sociocultural Aspects of Public Health. MEZCOPH has created a course for each of these areas. Additionally each concentration area has developed its own set of required courses. Students are also required to have field experience through an internship. Several of the concentration areas also require additional practical experience, participation in service learning courses. Similarly, numerous courses have students work directly with community agencies and organizations as part of class projects. Students are able to take all the elective courses within MEZCOPH and students can take courses outside the college as appropriate for their electives.

Epidemiology (MS, PhD)

Student needs are being met generally, as there are enough 500-600 level courses and electives. There are also 500 & 600 level Independent Study offerings, as well as many appropriate sub-specialty electives in other Departments at the 500 and 600 levels.

However, the students (and the faculty) would like to see more courses of a specific nature internally. Available information from students and faculty indicate that we continue to need more hands-on data courses or experiences (e.g., interpretation of epidemiologic data, field epidemiology methods, utilization of secondary data). Plans for more or better molecular and genetic epidemiology courses are underway, as resources are obtained.

In addition to research opportunities during thesis and dissertation research, there are many opportunities for students to work within the large number of research projects being conducted by our faculty. Many of the students are employed as research assistants. They are also encouraged to obtain Independent Study and Research units working on research projects with Program faculty members and colleagues (within the university and outside of it). All of the PhD students are required to obtain teaching experience during the program as TAs and some have taken the lead for teaching undergraduate courses in biostatistics. The new BS program in public health will provide additional opportunities for students to teach as there will now be an undergraduate epidemiology course.

Doctor of Public Health

Student needs are being met generally, as there are enough 500-600 level courses and electives. There are also 500 & 600 level Independent Study offerings. Overall, the DrPH curriculum addresses the competency domains identified by the Association of Schools of Public Health. Students work to develop their own dissertation projects and present it as part of their written comprehensive exam. Currently no students have reached this stage of their studies but several students are actively engaged with organizations and/or projects that will set the stage for their dissertation work.

Biostatistics

Although the curriculum described above gives the Biostatistics PhD students a solid foundation in statistical theory and application, we do not yet currently offer enough 600 level courses that are at the advanced doctoral level. The major omissions in the curriculum are advanced doctoral level courses in longitudinal methods for categorical and count data, nonlinear models, and computer simulation. Although there are plans for the development of these courses, the current Biostatistics faculty cannot add them to their teaching loads without the deletion of courses that are being offered to meet the needs of other MEZCOPH doctoral programs. Some of this conflict is historical since the Epidemiology program existed prior to the Biostatistics PhD and some is structural due to the loss of two senior faculty members.

Due to its size, the Biostatistics PhD program is very successful in involving students in active learning. All current PhD students are supported through faculty research projects, or as TAs for courses, or through staff positions at The University of Arizona. Thus, each student has the opportunity for “one-on-one” support from individual faculty members.

In each program, TAs support the courses in our college. TAs work closely with the faculty members. At the start of each semester, TAs attend a university wide orientation. Currently the amount of TA support for a class is based on an algorithm that matches a full time equivalent (FTE) percent with the number of students in a class.

The algorithm is as follows:

Table 14: TA FTE and Number of Students in a Class

# students	TA FTEs
< 25	Zero
25 - 35	0.25
36-49	0.33
50-60	0.50
60-74	0.58 (0.25 + 0.33)
75-85	0.75
85-99	0.83 (0.50 + 0.33)
100-110	1.00

F.2.c. Do students have adequate resources to carry out their studies, e.g., office and lab space, supplies, travel, photocopying, etc.? What additional resources would be required to improve the quality of the graduate program substantially?

The response to resources is not divided out by program as education resources are centralized within MEZCOPH and made available to students as appropriate. However, the type of support for individual students in specific programs may vary due to a variety of training and research grants that are present in the College at various times.

All students who serve as TAs or Graduate Research Associates (GRAs) are assigned office space in the student carrel/cubicle area located near their section's faculty office space on the second floor of Drachman Hall. Currently there is sufficient space for the TAs and GRAs and they have access to personal cubicle space. Many of the students, in particular, obtain office space at the location of their faculty mentors research and service projects. The central student office cubicles do have access to internet and printers. However, funding for internet charges and printer supplies are limited and typically come from the faculty mentors personal accounts. The College did obtain a laser printer for use in creating posters, with students having first access to this service at nominal costs. The Divisions do cover costs for posters that students are presenting at national meetings and when they are a requirement for a required course.

The College considers attendance at scientific and public health meetings relevant and crucial for the training of graduate students. The College provides partial funding support to students who are attending public health meetings or presenting papers. Students are encouraged to discuss these meetings and travel requests with their faculty mentors and to apply to the scientific conference committees for travel scholarships. Priority is given to students who are presenting a poster or paper at the scientific meeting.

Another potential resource that would enhance the programs would be availability of research funds for the students' thesis and doctoral work. Many of the students are tied to faculty research projects. However, since the doctoral students specifically are supposed to identify independent thesis or dissertation goals, they frequently need additional funding for data collection and analysis.

F.3. Graduate Students

F.3.a. What mechanisms are used to recruit students? Is the program competing well for top students? What help is needed in recruiting? How does (do) the quality of students in this (these) graduate program(s) compare with student quality in other similar programs? Has the quality of students improved over the last 5 years (based on GREs, GPAs, or other admissions criteria)?

MEZCOPH recognizes that high-quality recruitment is essential to the success of its educational programs. Our programs teach students the importance of culturally appropriate materials essential to fulfilling our mission to improve health equity. It follows that we need to educate culturally diverse professionals to meet regional public health needs. The educational programs have launched successful, independent recruitment approaches, which come together under the College's Office of Student Services and Academic Affairs. All recruiting efforts strive to attract a diverse student body interested in meeting the public health needs of the future. The education programs identify and recruit well-qualified students using similar approaches including:

- Distribution of materials highlighting the nature of programs available
- Recruitment of interested parties through professional conferences and meetings, particularly national (APHA), state (AzPHA), and other public health associations
- Exploration of public health through enrollment by unclassified graduate students
- Outreach to regional public health practitioners encouraging evaluation and development of additional skills (e.g., Leadership Institute, Rural Health Outreach Program, Arizona Newspapers Association, Maternal and Child Health Institute)
- Presentations at education fairs and at the three state Universities, to community colleges and high schools
- Local career fairs
- Participation in minority recruitment events, such as Outstanding Minority High School Senior Day
- Participation in minority student recruitment programs (e.g., NIH Initiative for Minority Student Development, Fostering and Achieving Cultural Equity and Sensitivity - FACES, the Minority Medical Education Program and MedStart)
- News releases about the MEZCOPH, faculty achievement and research highlights both in papers throughout the state and through the MEZCOPH Newsletter (and other AHSC and UA publications)
- Advertisements in the *Arizona Republic* (Phoenix newspaper), NAU's student newspaper, the *Lumberjack*
- Providing staff dedicated to the matriculation of the accepted student through post acceptance contact
- Development of an expanded presence on the Web
- Establishment and maintenance of a 1-800 phone number for easy applicant access to the College's Office of Student Services
- Establishment of a college Facebook page

The GREs and GPAs have not changed substantially over the last seven years (See Table 15). These comparisons are, however, difficult to assess since the entering classes are typically small (3-7 new MS and doctoral students total per year) and variable. It is clear, however, that the entering GREs and GPAs are somewhat lower than other similar programs. In the recent online review of master's and PhD programs in biostatistics, bioinformatics and epidemiology (<http://graduate-school.phds.org/rankings/biostatistics>), the entering GREs of our students was lower than those institutions that ranked higher than the UA Epidemiology PhD Program. Scores on required admissions test have remained relatively stable for the past three years as evidenced by the following table.

Table 15: Average GPA and GRE* Scores for Entering Graduate Students who Matriculated in 2003-2009							
	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
MPH							
GPA	3.47	3.47	3.42	3.48	3.51	3.61	3.34
GRE	1030	1092	1116	1077	1062	1138	1088
MS Epidemiology							
GPA	3.3	3.74	3.39	3.87	N/A	NA	NA
GRE	1200	1235	1110	1370	1270	NA	NA
PhD Epidemiology							
GPA	3.59	3.63	3.79	3.77	3.83	NA	3.68
GRE	1233	1420	1177	1183	1390	1290	
PhD Biostatistics							
GPA					3.81	3.87	3.40
GRE					1160	1270	1280
DrPH MCH							
GPA					3.78	NA	3.31
GRE					1108	NA	1050
DrPH PHPM							
GPA					3.52	3.54	3.32
GRE					1160	1180	1033

* Combined verbal and quantitative GRE Score

Not Accepting Applications

NA = Not Available or Not Applicable

F.3.b. What is the current gender and race/ethnicity composition of the unit’s graduate students? How do these figures compare with similar figures for undergraduates? For similar graduate programs at other schools?

The MEZCOPH graduate student body is 74% female and 26% male, which mirrors the gender composition found in the field of public health and at most schools of public health. MEZCOPH graduate student diversity is outstanding compared to both the University of Arizona and to the other accredited schools of public health. 17% of all UA graduate students come from underrepresented minority groups. Within MEZCOPH, nearly 36% of its graduate student body, or more than twice the percentage of diverse graduate students at the UA, is comprised of underrepresented minority students.

At the national level, within the accredited schools of public health, MEZCOPH has similarly earned a good reputation for its student diversity. For the last five years, MEZCOPH has ranked within the top two schools of public health for its percentage of Native American applicants, students and graduates and within the top six schools of public health for the percentage of Hispanic applicants (includes the University of Puerto Rico), students and graduates. MEZCOPH’s undergraduate student body reflects even greater diversity than the graduate student body.

The current race and ethnicity composition of the MEZCOPH graduate students is reported in **Table 16** shown below.

Table 16: Race and Ethnicity Composition of MEZCOPH Graduate Students

Diversity of MEZCOPH Graduate Students	2009		2008		2007		2006		2005		2004	
	#	%	#	%	#	%	#	%	#	%	#	%
	African American	17	7.49%	16	6.8%	12	5.0%	13	5.7%	11	4.7%	10
Asian American	16	7.05%	15	6.4%	21	8.7%	24	10.4%	23	9.7%	17	7.7%
Hispanic	29	12.78%	33	14.0%	32	13.2%	30	13.0%	28	11.9%	33	14.9%
Native American	19	8.37%	17	7.2%	17	7.0%	12	5.2%	13	5.5%	11	5.0%
International	17	7.49%	20	8.5%	22	9.1%	15	6.5%	17	7.2%	19	8.6%
Unknown/Do not wish to Report	4	1.76%	2	0.9%	3	1.2%	4	1.7%	1	0.4%	1	0.5%
White	125	55.07%	132	56.2%	135	55.8%	132	57.4%	143	60.6%	131	59.0%
Total	227	100.00%	235	100.0%	242	100.0%	230	100.0%	236	100.0%	222	100.0%
MEZCOPH Graduate Diversity (US Underrepresented Minorities)		35.68%		34.5%		33.88%		34.3%		31.8%		32.0%
MEZCOPH Graduate Diversity (International and Underrepresented US Minorities)		43.17%		43.0%		43.0%		40.87%		38.98%		40.5%

The greatest difference between the College's undergraduate and graduate student bodies occurs in the percentage of Hispanic students. 28.15% of MEZCOPH undergraduates are Hispanic, more closely reflecting the percentage of the Hispanic population (29.6%) in the State of Arizona than the graduate student body, which includes 12.8% Hispanic students.

The college values diversity in the broadest sense of the word and in addition to recruiting academically well-prepared students, seeks to admit an experientially diverse and community engaged student body, as well. While difficult to quantify these characteristics in our student body, there are indicators that we have been very successful in this regard. For example, for the past five years, one third of the University's Returned Peace Corps Volunteer (RPCV) Fellows are College of Public Health students. The UA RPCV Program is the 2nd largest program of its kind. Beginning in 2007, MEZCOPH students have planned and hosted an annual comprehensive Social Justice Symposium, complete with well-known keynote speakers, breakout sessions, and poster presentations. MEZCOPH students have won the Peter Likins Inclusive Excellence Award twice in the last three years for these efforts and others to promote diversity and an inclusive learning environment.

Our students come from diverse backgrounds e.g., directly from undergraduate education, from other fields, or from experience working. Some are working still. Our students are also diverse in terms of age, religion, country of origin, native language, urban/rural background, level of education, professional attainment, and specific interests. We share our diverse experiences and opinions in the process of education and training in our desired discipline, collegially and professionally, and benefit intellectually and personally from such sharing. After all, public health is the study of a community's health.

F.3.c. Are stipend levels and availability adequate? In addressing this, consider how many of the total number of graduate students have a teaching or research assistantship; what impact increasing stipends (number or amount) would have on the graduate program; the salary range of stipends for half-time research assistantships and teaching assistantships; what financial support is provided for students presenting scholarly papers; what steps have been taken to improve student support; what additional program, college, or university-level support is needed to strengthen students' programs?

There are a number of resources available for student support. These sources come from the Graduate College and from MEZCOPH resources. However, most of these resources only support a few students and often they do not have a sufficient amount of funds associated with them. We are not able to provide enough funds to allow a young professional to take leave from work for 2 years and attend the MPH program.

Starting in 2002/03, MPH students started to receive support from the Graduate School's Peace Corps Fellowship Program. MEZCOPH has 12 named scholarships that offer funds for tuition and research with amounts varying from \$500 to \$5000. The COPH has always reserved funds to support student travel to either the American Public Health Association Annual Meeting or to present a research paper. However, the number of students who received support has decreased during the past two years. This is often due to the location of the American Public Health Association Annual Meeting and its distance from Arizona; fewer students are able to travel even with some financial support when the meeting is on the east coast compared with the west coast.

Additional registration and tuition scholarships would greatly enhance the quality of students. Each year several applicants do not attend MEZCOPH because they are offered better support elsewhere. It is also difficult for MEZCOPH to commit to giving support to all potential students in the spring at the time of recruitment because the Graduate College often does not make their allotment to the College until students are offered support from other schools. Thus, applicants take the earliest offers and then decline coming to the UA.

Graduate students finance their education through a variety of means – MEZCOPH scholarships, Graduate College Tuition Scholarships, graduate assistantships, associateships, and loans. As a young college, MEZCOPH scholarship coffers have been inadequate to support many students. Consequently, the College's Community Advisory Board is in the midst of carrying out a major fundraising initiative to establish a \$3M scholarship endowment. Preliminary efforts to increase scholarship funds and awards have been successful. In 2008, the College awarded \$43,000 in scholarships to 21 students. One year later, in 2009, the College was able to make 45 awards totaling \$96,000. MPH and DrPH students are now benefitting from small scholarships that result from funds raised through program fees that were initiated several years ago.

Additional resources that could improve the quality of the graduate program substantially –

Although we have been able to obtain some additional support for the next two years as part of the Dean's start up package, we cannot currently guarantee our students funding for either the two years of a Master degree or the four to five years for a doctoral program. This inability to guarantee funding has inhibited substantially our ability to recruit students into the program and has limited the academic course of students within the programs. One of the primary requests for students is a GRA position. The numbers of these positions are currently very limited: either to specific research positions funded by faculty research or teaching assistantships. The ongoing search for funding by our current students slows their progress through their academic program. The lack of these positions is also decreasing our ability

to recruit the top applicants into our program; they are simply going to other schools that can offer GRA positions for the duration of their studies.

Another potential resource that would enhance the programs would be availability of research funds for the students' thesis and doctoral work. Many of the students are tied to faculty research projects. However, since the doctoral students specifically are supposed to identify independent thesis or dissertation goals, they frequently need additional funding for data collection and analysis.

The number of GRAs held by the College's students is reported in **Table 17**. Roughly one third of the student body secures graduate assistantships. Ten to 15 percent of these positions are provided to MEZCOPH students by non College of Public Health entities. While the number of assistantship positions has increased slightly each year, the actual number of students who benefitted from the assistantships went down in 2008 because a portion of students held multiple positions. The addition of two doctoral programs greatly accelerated the need for more assistantships to be used as recruiting tools and the College has found itself lacking for the resources necessary to successfully recruit the top students who apply. While salaries for teaching assistants and associates have increased marginally in the last three years, students report that the benefits associated with an assistantship – tuition waivers and health insurance – are more important to them than a raise in the salary.

Table 17: Number of MEZCOPH Students With Graduate Assistant or Associate Positions 2006-2009									
	2006/07			2007/08			2008/09		
# of Semesters that Student Held Assistantship →	1 Sem	2 Sem	Total # of Students with Assistantships for the Year	1 Sem	2 Sem	Total # of Students with Assistantships for the Year	1 Sem	2 Sem	Total # of Students with Assistantships for the Year
Degree Program ↓									
Biostatistics PhD				0	2	2	0	2	2
DrPH				2	3	5	1	4	5
Epidemiology MS	2	1	3	2	2	4	1	0	1
Epidemiology PhD	2	9	11	7	3	10	0	6	6
MPH	24	31	55	19	34	53	10	43	53
Total # of Students with Assistantships	28	41	69	30	44	74	12	55	67
Total # of Semester Assistantship Positions Held by MEZCOPH Students	110			118			122		

The College values the educational opportunities for students that occur outside the classroom and provides funding or student travel to conferences. Stipends are generally capped at \$500, unless the student is presenting scholarly papers, posters, or abstracts. Students are encouraged to apply for alternate sources of travel funding

and are required to show proof of such application when requesting funding exceeding \$500. Approximately fifteen to twenty students receive travel funding each year.

Curriculum in the College's largest academic program, the MPH Program, includes a mandatory practicum experience that students complete in a community setting. Because of the diversity of student experiences, as well as the concentration focus chosen by each individual, there are a good number of students who wish to complete international internships. Funding for such experiences is scarce and the College continues to seek partners who will assist by providing partial support to our students. Reinstatement of the University's Final Project Fund that would cover an internship in addition to thesis and dissertation support would be extremely helpful to MEZCOPH students in this regard.

F.3.d. What is the nature and quality of the advising for graduate students, and how has advising been assessed? What is the average ratio of student/faculty thesis supervision?

MEZCOPH faculty members provide academic, internship, thesis/dissertation and career advising to graduate students. Upon admission, all graduate students are assigned an academic advisor, whose job it is to provide guidance regarding curriculum choices, general academic progress issues and career paths and options. Students may switch advisors if desired. When an MPH student is ready to begin planning an internship, he or she is encouraged to choose an advisor with experience in the desired internship interest area. The internship advisor must be a faculty member in the academic section of MEZCOPH where the student's curriculum is offered. This person serves as the student's Graduate Committee Chair, may or may not be the same person as the academic advisor. The Internship Advisor/Graduate Committee Chair works in collaboration with another faculty committee member and the student's agency preceptor to help the student plan and execute the internship experience. Additionally, it is the responsibility of the Internship Advisor to provide guidance to the student regarding writing of the final internship report. Similarly, MS and doctoral students are assigned academic advisors as they come into the college and are encouraged to find research advisors who have expertise in the content area of their proposed thesis or dissertation project. They may choose a different Thesis or Dissertation Committee Chair, who meets the Graduate College criteria for Committee Chairs.

In addition to the advising that faculty members provide, the Office of Student Services and Alumni Affairs (OSSAA), staffed by the Assistant Dean of Student and Alumni Affairs, graduate and undergraduate academic progress coordinators, and an admissions coordinator, provides non-academic advising and support services, such as those related to completing required Graduate College and MEZCOPH paperwork, communicating deadlines, coordinating academic and student events and meetings, student club advisement, and course registration. The OSSAA also offers career advising services, such as resume workshops, one-on-one resume reviews, and a jobs listserv and website which employers have begun to utilize frequently to advertise public health positions.

Satisfaction with advising services is assessed using an online mandatory exit survey administered at the end of the student's curriculum. In addition to rating the various components of advising they receive, graduates are asked to comment on the advising strengths of the College and to provide suggestions for improving advising. These comments and suggestions, provided by the last four graduating cohorts are in **Table 18 and Table 19**.

Table 18: Graduate Student Satisfaction with Academic Advising Provided by Faculty Average Ratings of Each Graduating Cohort - December 2008 through December 2009			
	Exit Survey Question On a scale of 1-5 with 1 being poor, 5 being excellent and NA being non-applicable, how would you rate the following:		
Exit Survey Semester and Number of Respondents↓	Academic Advising Provided by Faculty	Career Advising Provided by Faculty	Internship Committee Advising
December 08 (N=19)	3.79	3.4	4.47
May 09 (N=46)	3.56	3.25	3.89
August 09 (N=12)	4.08	3.58	4
December 09 (N=12)	4.33	3.57	4.25

Table 19: Graduate Student Satisfaction with Support from the Office of Student Services & Alumni Affairs Average Ratings of Each Graduating Cohort - December 2008 through December 2009		
	Exit Survey Question On a scale of 1-5 with 1 being poor, 5 being excellent and NA being non-applicable, how would you rate the following:	
Exit Survey Semester and Number of Respondents↓	Office of Student Services and Alumni Affairs Student Support Activities	Career Services Advising Provided by OSSAA
December 08 (N=19)	4.16	3.83
May 09 (N=46)	4.17	3.9
August 09 (N=12)	3.83	3.58
December 09 (N=12)	4.33	3.73

Review of these data and accompanying comments reveal some unevenness in the academic advising throughout the college. Student satisfaction was strong regarding how accessible faculty members were to meet. However, students also thought that the faculty did not have as much knowledge of rules and processes within the college. The ratings of satisfaction with internship advising are similar to those of academic advising satisfaction; however, the comments about the internship advising process reveal much greater satisfaction than with academic advising. Many of these comments regarding strengths of internship advising reflect the students' appreciation for the faculty member's sharing of their expertise, professional guidance and caring nature. The weaknesses or suggestions for improvement of internship advising are, again, related to becoming more knowledgeable about procedures, forms, etc. Several positive comments regarding dissertation advising were received; however, dissertation advising ratings were not received in the Exit Surveys. The Office of Information Technology will check the exit survey instrument to ensure that the instrument allows doctoral students to provide ratings in the future.

Comments related to satisfaction with the services provided by OSSAA centered on the welcoming and supportive nature of the office but stressed the need for clearer communication of deadlines, events and opportunities. Interestingly, the suggestions for improvement included a nearly equal number of comments regarding the excessive emails students received and the desire to receive more information. This is an issue

common to the other schools of public health. The OSSAA played a leadership role in establishing the Student Services Council of the Association of Schools of Public Health and the Council's role is facilitating networking of student service professionals throughout the schools for the purpose of identifying issues and sharing best practices for serving students at all accredited schools of public health.

Ratings of and comments related to satisfaction with career advising and services received from both the faculty and the Office of Student Services show a perceived need for improvement, especially in the area of communicating opportunities. Students value the résumé workshops and made good suggestions for improvement, including involving the alumni in career advising.

The advising feedback received from exit surveys is used to inform the agenda for advising workshops, the last one held in August of 2009. Additionally, the most recent feedback is due to be discussed in Section meetings during the spring 2010 semester.

Student Handbooks are published for each graduate program. They provide common guidance and promote mutual expectations by the students and faculty. The Handbooks are discussed during Student Orientation and given to all students and faculty, in paper form and online access. An advisor is assigned to each student entering the program. Students are also asked to meet with this advisor on a regular basis and to meet the Program Chair. They are told that they are able to change advisors as their research and career goals change. They are encouraged to meet all the faculty members and learn about their research.

Students submit annual progress reports during the spring semester and which are reviewed by the faculty advisor. Overall students are encouraged to meet with their advisor often and for MPH students this is at least two times during the semester. MS students meet with their mentor(s) about their thesis at least once per month, and their committee meets with them at least once per semester. PhD students need to submit a progress plan and schedule of activities (milestones) each semester. These students meet with their mentor(s) at least monthly (usually more frequently) as they prepare for their Comprehensive Exam, and as they work on their Dissertation. They meet with their Committee at least once per semester and with Committee members more frequently as they work on their Dissertation. The students assess all the instructors via the formal teacher course evaluation (TCE) reports. Although not formally established, similar advising practices are recommended for the DrPH students.

Over the past 2.5 academic years, we have had on average 2.2 MPH students graduate per faculty member each year. Over the same time period, each faculty member has been on an average of 2.9 internship committees per year, (1.6 as chair and 1.3 as a committee member). The mean number of advisees is relatively evenly distributed by the rank of faculty members.

Rank	Advisees Mean±1SD (range)	Internship Chair Mean±1SD (range)	Committee Member Mean±1SD (range)
APs/NTE Faculty	2.0 ± 1.3 (0.8-3.6)	1.5 ± 2.2 (0.0-5.2)	1.1 ± 0.9 (0.0-2.4)
Non-tenured TE Faculty	2.2 ± 1.0 (0.4-4.0)	1.6 ± 1.3 (0.0-5.2)	1.2 ± 1.4 (0.4-5.6)
Tenured Faculty	2.3 ± 1.1 (0.4-4.0)	1.6 ± 1.7 (0.0-5.6)	1.3 ± 1.1 (0.0-3.6)

There are currently 6 tenure-line epidemiology faculty members with primary advising for 27 MS and PhD students, but some of those students have other advisors/mentors on their thesis or doctoral committees. All theses committees have 3 active members and all doctoral committees have 4-5 active members. The students

are allowed to change or add advisors, and some do at times. The changes are due usually to either changes in emphasis or the need for more specific programmatic advice. They are allowed to obtain additional advising from the Program Chair and/or staff, and do so. We insure that they visit their advisors regularly (as discussed above).

F.3.e. What are the retention rates in this graduate program? How do these rates compare with the rates of 5 years ago? Provide a list of all graduates from the last 3 to 5 years and indicate where they have been placed. How do graduates of your program view their graduate experience, and how are their views solicited? What program modifications do these views suggest?

Time to degree data shown previously in Section F.1.c. reflect a small increase in the average time it takes for master’s level students to graduate. This increase was due to an increasing number of dual degree MD/MPH students who have graduated in the past 5 years. MEZCOPH began admitting the MD/MPH students in 1999; they generally take at least five years to complete both degrees and this amount of time for each student is factored into the formula to compute time to degree. The college is also exploring the redesign of the MPH curriculum to accommodate practicum experiences earlier in the curriculum and these changes may allow students to graduate sooner without having to take a final semester to complete their internship reports.

In addition to reflecting a healthy time to degree, the College’s ability to retain and graduate a significant percentage of the students it admits is of particular importance. The College tracks its completion rate annually, monitoring changes and seeking ways of increasing this rate. **Table 21** shows that over the past ten years, the completion rate for master’s level students has varied between 80% and 90%. Upon investigation, the lowest rate - 80% - reflects a year when the majority of non-continuing students dropped within the first semester and who reported a lack of understanding of the time commitment necessary for graduate study. On the College’s part, this indicated a need to review admissions decisions to determine whether this inability to commit could have been predicted in the application process. Steps to review applications with this criterion in mind were taken and the completion rates that follow have risen. For years 2005 to the present, a significant number of master’s students continue to work toward their degrees and it is expected that outstanding completion rates for these years will result. MEZCOPH’s completion rates are better than the majority of other schools of public health.

Table 21: Completion Rates for MEZCOPH Master's Degree Students FY 1999 – 2008							
	Number of Students Who Started	Withdrew Students		Continuing Students		Completion/ Graduation Rate	
		#	%	#	%	#	%
1999/00	74	10	14%	0	0%	64	86%
2000/01	72	6	8%	1	1%	65	90%
2001/02	59	12	20%	0	0%	47	80%
2002/03	83	11	13%	0	0%	72	87%
2003/04	81	13	16%	1	1%	67	83%
2004/05	73	9	12%	3	4%	61	84%
2005/06	72	8	11%	9	13%	55	76%
2006/07	77	3	4%	15	19%	59	77%
2007/08	75	1	1%	19	25%	54	72%

While the College now has three doctoral programs, the Epidemiology PhD Program is the only program old enough to have graduates. **Table 22** indicates its completion rates. Again, inadequate comprehension of what a doctoral program entailed was cited as the reason for the 2 drops in the 1998/99 cohort. Of the 3 non-continuing students since 2002, only one student has truly dropped the study of epidemiology. The other two non-continuers included a student who transferred to another University to be with her spouse and a male student who also needed to relocate for family reasons; he earned an MS degree prior to leaving. Again, a significant percentage of the 2001 and later cohorts continue to work towards their degrees and the expectation is that the completion rate will remain high.

	Number of Students Who Started	Non Continuing Students		Currently Enrolled Students		Completion/ Graduation Rate	
		#	%	#	%	#	%
1997/98	1	0	0%	0	0%	1	100%
1998/99	2	2	100%	0	0%	0	0%
1999/00	3	0	0%	0	0%	3	100%
2000/01	6	0	0%	1	17%	5	83%
2001/02	2	0	0%	2	100%	0	0%
2002/03	12	1	8%	4	33%	7	58%
2003/04	7	1	14%	3	43%	3	43%
2004/05	3	0	0%	2	67%	1	33%
2005/06	7	1	14%	4	57%	2	29%
2006/07	5	0	0%	5	100%	0	0%
2007/08	1	0	0%	1	100%	0	0%

A list of graduates from 2003 through 2008, along with their job titles and places of employment is attached in **Appendix F.3.e.1**. Alumni survey data, performed at 1 year post graduation and every 3 years thereafter, suggests graduates view the training they received from MEZCOPH as preparing them well for their careers. A summary of career destinations of 2007/08 graduates of MEZCOPH graduate programs is provided in **Table 23**.

Federal government (U.S. or Foreign)	2%
Military	2%
State or local government	13%
Hospital or other health care provider	8%
Association, foundation, voluntary, NGO or other non-profit organization	11%
Consulting firm	7.5%
Other industrial or commercial firm	2%
University or College Staff	9%
University or College Faculty	7.5%
Continuing training	24.5%
Self-employed	2%
Seeking employment	11.5%
TOTAL	100%

F.4. Does this unit offer courses taken by significant numbers of students from other units? If so, the self-study should address the following questions:

During the calendar year 2009, 18% (n=229) of the seats in classes were taken by non MEZCOPH students. The majority of these seats were in our introductory courses to epidemiology and biostatistics. The biostatistics course and other statistics courses are coordinated with the GIDP in statistics. Several of our environmental health sciences courses are also cross listed and coordinated with the Department of Soil, Water and Environmental Sciences. The post-doctoral Clinical Research Program requires the two course epidemiology and biostatistics sequence. Some other programs require those courses, such as Toxicology and Pharmacoeconomics (about 3-5 students each year). Some programs highly recommend these courses for their students (such as Micro/Vet Sciences, certain nursing programs, gerontology, and geography). We will commonly have about 5-10 students each year in the introductory course from such programs. In addition, non-degree seeking graduate students enroll in the introductory epidemiology course. We have encouraged these students to take the summer online course to maintain smaller classes. We currently offer the introductory course three times per year, twice in face-face format and once as an online course.

We also have a small number of non-Program students taking our more advanced courses, but this has not been a problem. Many of these students are seeking a minor in epidemiology as part of their doctoral work in another department. The Cancer Epidemiology course and Nutritional Epidemiology course are approximately 25-50% students from other programs. Students in other programs take topic related courses that are related to their graduate degrees including those in engineering, nutrition and anthropology.

F.4.a. Describe the planning process used for these courses. How are such offerings coordinated with other courses taken by these students, and with courses offered for students concentrating in this graduate program? What coordination problems, if any, have you encountered?

The coordination is done by faculty members working with the other academic programs. This has not been a problem given the limited number of courses that are coordinated.

F.4.b. Who teaches these courses? What has been the coordination of this instruction with the home departments of students taking these courses?

All these courses are taught by MEZCOPH faculty and meet the needs of MEZCOPH students as well as the students who need to take these courses as requirements for their degrees.

F.4.c. What is the instructional quality of these offerings for non-majors, and how is their quality assessed? What plans are underway to use these data or other information in strengthening these offerings?

Faculty teaching evaluation (TCE) is performed using University of Arizona evaluation formats, internal review by more senior faculty, and student feedback. All courses undergo Teacher-Course Evaluation (T.C.E). The results of these evaluations are provided both to the course faculty and program chair. The program chair reviews these documents and discusses successes/problems with the appropriate faculty member. Faculty members who consistently receive poor student evaluations are removed from teaching core courses. Results are stratified by the type of student to preserve confidentiality.

F.5. Do a significant number of students from your unit utilize graduate courses from other fields? What coordination problems, if any, have been encountered?

Students do take courses from other departments. The MPH program is relatively prescriptive in nature with students having 2 or 3 electives. Medical anthropology and public health administration are the most common type of courses that our students take outside the college. Other courses that students take include foreign language classes (sometimes at the undergraduate level), on line courses which do not have scheduling issues and cross listed courses that have been integrated into our curriculum. The most common problem with coordination is when courses in other departments are only taught every other year. These are elective courses for our students but do limit when students can take the course or even if they can take the course.

F.6. How many PhD students in your program complete minors in other disciplines? How many PhD students from other programs complete minors in your discipline?

There are currently 49 doctoral students in the program with 24 faculty members serving as advisors and committee chairs. Most faculty members have one or two advisees but two faculty members have seven advisees at the current time. The larger advisee load is within the Epidemiology program. Overall, these numbers are acceptable and will increase over time with a more even distribution of responsibilities among faculty members as junior faculty become tenured and more established. There have been 13 students taking a minor from MEZCOPH since 2004 and they have been advised by a total of 9 faculty members. Of those 13, 2 minored in Biostatistics and 3 minored in Epidemiology; 14 of those graduates selected a minor outside Public Health.

G. STUDENT OUTCOMES ASSESSMENT

G.1. List the intended student outcomes: describe what students should know, understand, and be able to do at the conclusion of a course, a series of courses, or the full academic program.

The intended student outcomes for the instructional programs at MEZCOPH are outlined in individual course learning objectives and program learning objectives and competencies. Specific learning objectives have been developed for each academic program and these are presented in **Appendix G.1**. All students receive information about the competencies that the program addresses. All students receive a course syllabus at the beginning of each course that includes a description of the course, specific learning objectives for the course and how students are evaluated.

Undergraduate Program

The undergraduate program is designed to create an educated citizenry in the area of public health. Students graduating from this program will have a strong background in social and biological sciences, analytical thinking skills, and knowledge about the legislative process related to public health policies and programs. Graduates will be able to obtain jobs in a number of health-related fields. Second, this program will allow graduates to step directly into entry-level public health positions with specialized knowledge about planning, implementing and evaluating public health programs. Third, the undergraduate program will prepare students for graduate or professional education in a health-related area of study.

Master of Public Health and Joint Degree Programs

The MPH degree is designed to be an interdisciplinary, graduate, professional degree in public health. The MPH Program provides opportunities for students to obtain broad knowledge and basic skills in the core areas of public health. Students are able to acquire proficiency in one or more specialized areas through advanced coursework, and gain experience in applying advanced knowledge to the solution of actual health problems in community settings during internship training. The MPH offers a program in which students acquire a sound academic background for competent practice in the field of public health. Students are able to obtain the MPH degree through one of seven concentration areas, including: Biostatistics, Environmental and Occupational Health, Epidemiology, Family and Child Health, Health Behavior and Health Promotion, Public Health Policy and Management, and in Public Health Practice (starting fall 2010). Graduates are able to enter mid-level to high level management positions in a variety of public health organizations and have the expertise to lead the planning, implementation, and evaluation of public health projects and programs.

Epidemiology Program

The MS and PhD Epidemiology programs teach students about the occurrence of disease among human populations, considering changes within populations over time and differences among and between populations in disease risk. The program trains individuals for careers in research and teaching in academic settings, research institutes, government agencies and industry. It has been designed for students whose careers will focus on conducting investigator-initiated and collaborative epidemiologic research.

DrPH

The DrPH is an advanced, professional degree program that focuses on developing future leaders in public health practice, who will advance the public's health through the integration and application of a broad range of knowledge and analytical skills in leadership, practice, policy analysis, research, program management and professional communication.

Biostatistics

The PhD in Biostatistics has an emphasis on the foundations of statistical reasoning and requires its graduates to complete training in applied probability and statistical analyses. This program prepares students who have demonstrated excellence in mathematics and the sciences to become research biostatisticians in academia, industry, or government.

G.2. List and characterize the different methods used to assess intended student outcomes. Describe how the data are collected. Are the data collected from a representative sample?

Student outcomes are assessed several different ways as summarized in **Table 24**. As each program and its courses has identified competencies and learning objectives, performance in coursework is considered an important student outcome. The performance of students in their internships is another factor that is used to determine how students reach intended outcomes. The evaluation of internships is conducted by 2 faculty members along with their field preceptor. The academic programs that offer doctoral programs also use an early qualifying exam to determine the ability of students to conduct doctoral work and to diagnosis potential weaknesses that need to be addressed during their studies. Students complete exits surveys to determine their involvement with meeting our college-level goals of being engaged in research and with community organizations. Alumni surveys are done on a regular basis using SurveyMonkey® to obtain information regarding how their academic program prepared students for their current positions. Finally, MEZCOPH conducts an annual evaluation of instructional outcomes that are set for the college. The sources for this evaluation vary based on the goal and objective that is being monitored.

Method	Programs	Description	Sample
Coursework	All Programs	GPA's, Time to graduation	All students
Internship	BS, MPH	Reports, Internship Presentations for MPH students	All Students
Qualifying Exam	PhDs and DrPH	Written Review	All PhD and DrPH
Comprehensive Exam	PhD and DrPH	Oral and Written Exams	PhDs and DrPH
Thesis/Dissertation Defense	MS, PhD, and DrPH	Written and oral defense	PhDs and DrPH
Exit Surveys	All Programs	Questions about program upon completion	All students
Alumni Surveys	Graduate Programs	Sent by SurveyMonkey® to alumni	Convenience sample
Annual Evaluation Reports	Various Programs	Various data bases used to measure our instructional goals and objectives	Student Progress reports and faculty annual performance reviews

In addition to the assessment methods listed for each of the College's instructional programs, MEZCOPH considers information provided by program alumni to be invaluable in assessing student learning, quality of the academic program and the College's performance.

Undergraduate Program

Each student is expected to complete all of the required courses for the Public Health major. Successful completion of each course at a grade of "C" or better is considered evidence of meeting the learning objectives in each course. Students must apply for admission to the Public Health major with a minimum overall grade point average of 2.50 in a 4.0 system, two formal letters of recommendation, and a written statement on their career goals and objectives. Upon admission to the major and before the internship experience, the student meets with an advisor and completes a self-assessment of the entry-level health educator responsibilities and competencies and objectives. Identified areas of weakness and plans for strengthening these competencies are addressed in planning the student's internship experience or student teaching experience.

In the undergraduate program, each student submits a formal work plan for the internship experience that is reviewed and approved by the faculty internship advisor and the site preceptor. The work plan includes the internship learning objectives. Their advisor is assigned to monitor all student internship experiences and student teaching. The advisor is responsible for regular communication with the student intern and the site preceptor. The site preceptor evaluates the student's performance at mid-term and at the end of the student's internship. The student also submits a final report of the experience and the project that he/she completes for the agency. The student's grade is assigned by the advisor, based on the preceptor evaluations, the advisor's observations of the student's work, the student's fulfillment of the learning objectives, and the quality of the final report.

Master of Public Health Program

The procedure for assessing and documenting how students have met specified learning objectives involves three processes. The first review process is to determine that students have met the requirements listed in the section above. Each student must (a) pass all courses, (b) maintain a 3.0 GPA, and (c) have no incompletes in his or her coursework. Students who have a GPA less than 3.0 are put on academic probation and additional work by the student, supervised by his or her faculty advisor is promoted. The second process is the successful completion of an internship, including a written report and oral presentation. The third and final process is the degree check to determine if all program requirements have been appropriately completed.

In addition to the current review of interns by site supervisors and the reading of MPH internship reports by a faculty advisor and a second reader, MEZCOPH has a formal evaluation of the internship reports using a standardized form.

Doctoral Programs

The evaluation of students in the MS and PhD programs is conducted through graduate committees under the supervision of the Graduate College. These committees review the academic record and the thesis/dissertation. Students also take qualifying examinations that monitor their knowledge and ability to conduct doctoral work. The defense of the student research projects - thesis and dissertations—is the final assessment that indicates students have met their learning objectives.

G.3. Specify how student outcomes are related to the mission and goals of the program, the college, and the University.

The mission and goals for the education programs in MEZCOPH are centered on health promotion in diverse populations, decreasing health disparities, advancing knowledge, understanding and application of the determinants of health for the improvement of the well being of populations, and fostering excellence in public health service locally and globally. Similarly, the goals of the UA focus on collaboration with people and organizations of Arizona and beyond to improve the quality of life and to create a dynamic, inclusive community that excites and engages its members and promotes a sense of belonging.

The instructional goals, objectives, core competencies and learning objectives for the academic programs in MEZCOPH are developed with community constituencies in mind. It is imperative that all graduates of MEZCOPH be culturally aware and competent and be able to work with individuals to promote health and well being in their communities. At the same time, research and scholarly activity for the purpose of advancing an understanding of the determinants of health is also at the core of the College's intended student outcomes. This union of academic activity and community engagement is pervasive throughout the College's learning objectives and competencies.

G.4. Describe how faculty and students are involved in the development and implementation of student outcomes measurement.

The college has six sections which oversee the academic programs in their area of expertise. The chairs of these sections serve on the education committee along with the directors for college-wide programs such as the BS major in public health. There are also three student representatives on the education committee (undergraduate, MPH, and MS or PhD student) that provide a single vote on issues. Each section works to determine if there are any special curricular issues that they need to address for their students. Any changes in required courses or graduation requirements brought up from the sections need to be approved by the education committee. The education committee meetings have resulted in defined changes in the curriculum. The education committee developed the instructional goals for the college.

All faculty and students are invited to attend the presentation of the college's goals and objectives during the winter reading day (day before final exams start). As results of the college's monitoring of goals and objectives are presented, faculty and students are able to comment and provide input on their interpretation and make recommendations for programmatic changes that can help the college meet current goals and create new goals.

Prospectively, the faculty uses several methods and resources to keep abreast of the changing needs in public health practice. First, the faculty relies on its experience in public health and continual involvement with local, state, national and international professional organizations to know the current and emerging issues in public health. This experience is acquired by serving on community and professional boards, attending professional conferences and providing consultative services to public health agencies. The strong service orientation of faculty members provides the foundation for internal assessments of the changing needs in the learning objectives and the educational programs of the MEZCOPH. For example, faculty members serve on numerous community boards, have leadership in their professional organizations, and serve as reviewers for research grants for various organizations.

Another source of information for understanding the growing needs of public health and how to modify the education programs to meet these needs is alumni surveys. The alumni surveys assess the additional training MEZCOPH graduates believe they need in regards to their public health skills. The results from the most recent

surveys indicate that the college responded to a past concern on providing more education to build analytical competencies. However, it also indicated that we now need to work more on providing financial planning and management skills to our students. (Possibly nudged forward by the current economic downturn.)

Two major sources of information about changing needs of public health are the national professional organizations—APHA and ASPH. The MEZCOPH Associate Dean for Academic Programs has attended the annual ASPH retreat for Associate Deans for Academic Programs. The topics addressed there, such as faculty recruitment, retention, diversity, mentoring and accreditation have been invaluable in shaping the programs of the College. Informal discussions have helped in identifying common practices among other Schools of Public Health. The Associate Dean was also on a workgroup for developing the DrPH competencies.

In addition, the Dean of MEZCOPH, along with the Associate Deans, the Assistant Dean and the Division Directors attend the annual ASPH meeting, followed by the APHA meeting. Both provide extensive and current information regarding evolving public health issues.

In this day of electronic media, all of our faculty, staff and students follow emerging and current public health issues through a variety of online sources: the APHA, the World Health Association, the Pan American Health Association, the U.S./Mexico Border Health Organization, the Centers for Disease Control and Prevention, the National Institutes of Health, and the U.S. Surgeon General's Office. We also follow private websites, such as the American Cancer Association, the American Heart Association, and the American Lung Association.

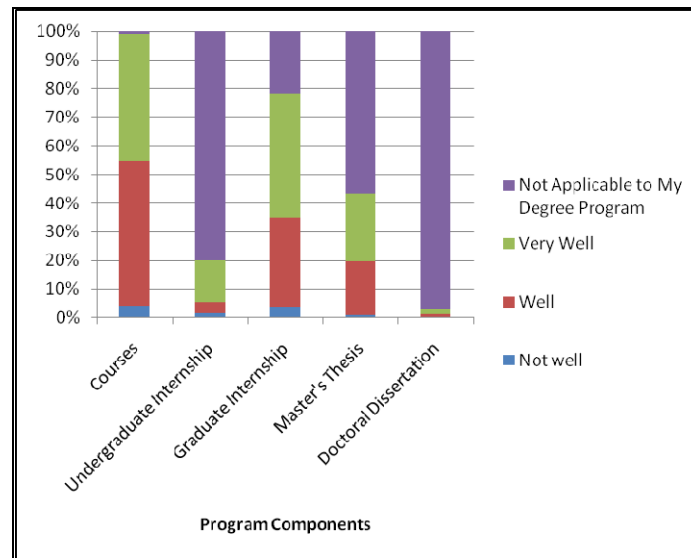
G.5. Describe results of the outcomes assessment from your program and indicated how these will be used to improve learning and instruction.

This section will focus on information that goes beyond grades and graduation rates. However, quickly summarizing these results, our graduation rate is meeting the accreditation criteria of 80% within the normal time frame for degrees. The goals for our instructional programs were presented in **Table 1** in Section A.3. Most of the goals were met as indicated in **Appendix G.5**.

It is believed that the most important data are how our students are prepared for the workforce and their contribution to public health while they were students.

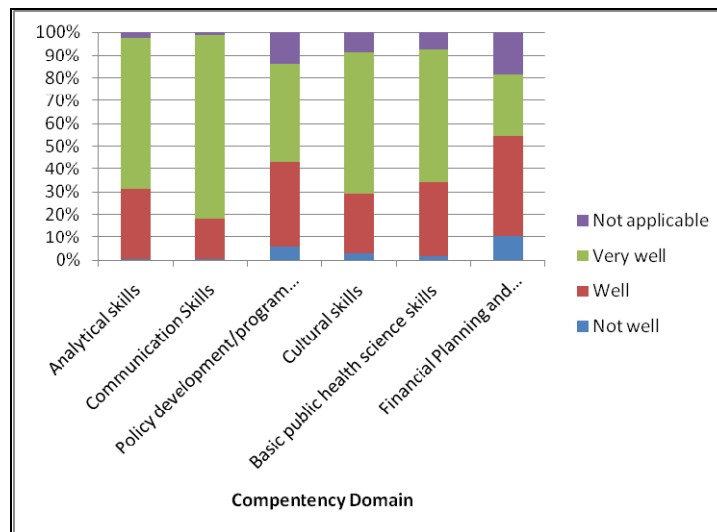
Data obtained from our alumni surveys is provided in the following figures. The most recent survey conducted at the end of 2009 and through January 2010 resulted in 178 responses. As can be seen from **Figure 2**, the alumni believed that all parts of the program prepared them for their current positions. The majority of alumni believed that courses prepared them well and very well for their position. The undergraduate internship clearly was a very good preparation for the alumni with nearly 70% reporting "very well" as it helped with their current position. Similarly nearly 90% of the alumni thought their internships prepared them well or very well for their position. Thesis and dissertations also were seen as being very helpful within the epidemiology program.

Figure 2: How academic activities helped prepare alumni for their current position



More than 80% of the alumni reported that they were able to perform all the core competencies well or very well within their positions, except in the area of financial planning and management (**Figure 3**). However, even with financial planning and management, 70% believed they were able to perform the competency well or very well. Interestingly, this was also the competency domain which alumni did not find as applicable to their position. The strongest parts of the program appear to be how it prepares students to perform the analytical, communication and cultural competencies, as more than 50% of respondents reported they could perform them very well. These are encouraging results and can be used to find ways to integrate more financial planning and management into the core courses and concentration areas.

Figure 3: How the academic program prepared alumni to address competency areas in their position.



The following results from our most recent review of college-level instructional goals and objectives illustrate these values.

1. For 2008/09 year, 71% of graduating students (76% -Grad students; 69% undergrads) participated in experiential learning opportunities beyond internships, theses and dissertations. (Goal was 67%)

2. For the 2008/09 year, 90% of MPH graduates worked with community based programs prior to graduation. (Goal was 33%)
3. For the 2008/09 year, 36% of public health graduate students were involved in public health instruction prior to graduation. (Goal was 33%)
4. For the 2008/09 year, 46% of graduates presented at established professional meetings. (Goal was 25%)
5. For the 2008/09 year, 57% of graduate students were members of public health professional organizations. (Goal was 66%) This information has directed MEZCOPH to provide more information on the advantages of becoming student members in professional organizations and afterwards.
6. For the 2008/09 year, 32% of all graduating students provided extramural service to community organizations prior to graduation. (Goal was 33%). Although this goal was essentially met, it does provide information that MEZCOPH needs to find additional ways to get more students engaged in community organizations outside of their internships while enrolled in our programs. One response has been increasing the number of service oriented courses.
7. For the 2008/09 year, 100% of the graduating MS and doctoral students were authors or co-authors of peer reviewed papers. (Goal was 67%) These papers included policy briefs, white papers, poster presentations, and manuscripts. We believe that this shows our students are making very good progress toward their career while being a student. Furthermore, 46% of graduating MPH students were authors or co-authors of peer reviewed or non peer reviewed scholarly work prior to graduation. (Goal was 33%)

Additionally some of our service and research goals for the college include student involvement. The outcomes for goals that identify students as participating in research are the following:

1. 97% of MPH students' internship were community based and emphasize eliminating health disparities in 2008-09. (Goal was 75%)
2. 69% of funded projects involve one or more student participants in 2008 (Goal was 50%)
3. 32% of publications (articles, books, monographs, presentations) included one or more student authors in 2008 (Goal was 30%) and in 2007 42% of publications included one or more student authors.

These results are presented at college-wide meetings and reviewed by the education committee. Recommendations from faculty and students are then discussed and appropriate curricular changes will be made via the education committee.

G.6. Explain how the results of student outcomes assessment are incorporated in strategic planning and curricular review processes in your unit.

Data from student outcomes assessment are used to improve instruction when it is clear that a shift in student performance has occurred. Data are analyzed by topic related committees (Education, Service and Research) to determine the reason for the change in student performance and appropriate modifications are made to curriculum and/or its delivery mechanism. This may also occur at the individual instructor or program committee level.

Data from student outcomes assessment are considered in strategic and curricular planning when it is clear that a change in public health practice needs has occurred or a different organizational direction is desired. Analysis of data will show where there are strengths and weaknesses in student outcomes, allowing the college the ability to monitor its performance, capitalize on its strengths and build what is lacking. Currently, faculty receive information from course and qualifying examinations, TCEs, and internship presentation evaluations on a consistent basis.

H. THRESHOLD FOR DEFINING PRODUCTIVE PROGRAMS

Not Applicable

I. ACADEMIC OUTREACH

I.1. Describe the nature of academic outreach activities in this academic unit.

The College places a high value on service to the community and on research that is conducted within a community based participatory research framework. The academic outreach activities are embedded into the college through the individual efforts of its faculty, established offices and centers in the college and a series of continuing education and graduate certificate programs.

The effort of individuals in the college includes many of the faculty, academic professionals and staff who have provided over 25 years of service to the State of Arizona, the Southwest, the border region and globally, long before the college was established. The longevity and quality of service is epitomized by the selection of one of our faculty members in 2006 and our Associate Dean for Community Programs in 2002 who received the University of Arizona Henry and Phyllis Koffler Award for outstanding work in community outreach and service.

Emphasis on outreach is reflected in the academic units and centers in the college including the Rural Health Office, the Canyon Ranch Center for Prevention and Health Promotion, the Center for Health Equality, and the Public Health Preparedness Center – the latter two centers are federally recognized centers via grants. The following sections provide brief descriptions of the units that have identified outreach and service and applied research as one of their primary roles.

- **The Rural Health Office:** The Arizona Rural Health Office (RHO) has been in existence for over two decades at the UA. Established through an Arizona legislative appropriation, the RHO has provided an extensive framework for service collaboration with underserved rural communities in the state of Arizona as well as throughout the Southwest and internationally. For the past 12 years, the RHO has been designated as Arizona’s State Office of Rural Health through the federal Office of Rural Health Policy and the Health Resources and Services Administration of the U.S. Department of Health and Human Services. The RHO serves as a major link to rural community clinics and public health departments, Indian Health Service hospitals and rural critical access hospitals, and tribal and non-tribal EMS systems. Additionally, the RHO has collaborated with communities and provided direct technical assistance in order to increase access to care, provide disease-prevention and health-promotion activities, enhance rural health infrastructure and to build long-term partnerships to decrease health disparities in underserved communities.

Most recently the RHO produced three publications that are aimed at strengthening the rural infrastructure: a statewide rural health plan to be utilized by rural communities and rural constituencies in addressing rural health needs, a planning guide for designating rural health clinics, and a rural health resource manual. The RHO is involved in many other rural health activities. For instance it administers and implements the federal Small Hospital Improvement Program, is performing rural health workforce analyses per Arizona AHEC funding, plans and executes an annual rural health conference in Flagstaff and a Legislative Forum in Phoenix, organizes and sponsors local rural health assemblies across the State, administers a student rural practicum and in-service learning courses, and teaches rural oriented public health courses.

One of the most important programs within the Rural Health Office is the Arizona Rural Hospital Flexibility Program. Congress created this program in 1997 to sustain health care access for rural residents, improve emergency medical care, and promote linkages between rural hospitals and larger, tertiary care facilities. The Arizona Flex program has developed close ties with the State’s small rural hospitals and many of the county and local health officers and EMS agencies in the geographic areas covered by the rural hospitals eligible to participate in the program. Assistance is provided to hospitals seeking a new “critical access” designation from the federal Center for Medicare and Medicaid Services. This designation allows the

hospital to receive cost-based reimbursement for their Medicare population. The Arizona program is a national leader by including Indian Health Services (IHS) hospitals within the program. Moreover, the Flex program worked closely with state policy-makers in the development of a pool of funds through the Arizona Health Care Cost Containment System (AHCCCS) to be distributed to the critical access hospitals. In addition to providing technical assistance for the critical access designation process, the Flex program staff completed analyses of the economic impact of rural hospitals in their local communities, health care needs assessments, and EMS needs assessments. They also have distributed mini-grants focusing on strengthening rural hospital infrastructures.

- **Canyon Ranch Center for Prevention and Health Promotion:** Originally funded in 1998, the Center is one of 35 Centers for Disease Control and Prevention, Prevention Research Centers. The mission of the Center is to partner with communities to improve the health and well-being of people living in the US-Mexico Border states through research, training, advocacy and policy change. Center projects focus on working closely with communities to address chronic disease prevention and control in underserved populations along the US-Mexico border. The Center team consists of multidisciplinary faculty and staff from all three Divisions of the College and our Community Action Board. The Board has members from four Arizona border counties, two tribal nations, as well as representatives from several state level agencies. The center provides a framework for regular outreach, practice and service for the entire faculty, staff, students and community partners who collaborate with the Center. Current funding for the Center (2009-2014) focuses on increasing collaborations between community and academic partners, building infrastructure in both settings and collaboratively developing a community health worker model for targeting chronic disease prevention through community level advocacy.

Among the many Center partnerships with community organizations is collaboration in the Tucson region with the Canyon Ranch Institute, the Tucson based Child-Parent Centers, Inc. Head Start Program, and the Family Literacy Program. This initiative is focused on the development of a program that will assist Head Start families and Family Literacy families in increasing healthy behaviors that serve as a foundation for the prevention of chronic disease. Center faculty and staff also worked closely with the Arizona Department of Health Services on the Steps to a Healthier United States Initiative by providing both evaluation and technical assistance to a border-wide initiative funded to border counties and the Tohono O'odham nation. With a focus on prevention of obesity, diabetes, asthma and tobacco use, the college partnered with community organizations and Arizona Department of Health Services (ADHS) to implement innovative programs for prevention.

- **Center for Health Equality:** From 2003 through 2009, MEZCOPH was awarded an EXPORT Center grant (Excellence in Partnerships for Community Outreach, Research in Health Disparities and Training) by the National Institutes of Health to develop a comprehensive Center of Excellence. The center was a collaborative effort between MEZCOPH, the Mexican American Studies and Research Center, the Native American Research and Training Center, and the University of Arizona's Graduate College. The overall goal of the EXPORT Center grant was to eradicate health disparities in our state by integrating research, training and community outreach focusing on diabetes and substance abuse in Native American and Hispanic communities. This integration is critical to the academic outreach mission of our college. The EXPORT community outreach core partnered with an urban Hispanic community and a rural Native American community to develop and implement interventions that focused on strengthening the infrastructure for addressing diabetes and substance abuse. As part of the EXPORT Training and Education Core, a total of 69 Fellows (comprised of 8 African American, 1 Asian, 1 Pacific Islander, 17 American Indian, and 42 Hispanic graduate students) have received mentoring and training above and beyond the core graduate level public health curriculum. These MPH, Latino Health, and Epidemiology fellows participated in workshops on qualitative and quantitative research methodologies, public speaking and presentations,

grant writing, community based research, advocacy and community organizing, racial and ethnic health disparities, and evaluation techniques. From this extensive education and training, the fellows developed a wide range of skills that allowed them to effectively outreach and address health issues in the targeted communities.

- **Arizona Center for Public Health Preparedness:** The Arizona Center for Public Health Preparedness (AzCPHP) is part of a national network of training centers designed to strengthen the public health workforce readiness to respond to terrorism and other public health threats. The AzCPHP was funded in 2005 by the Centers for Disease Control and Prevention. The AzCPHP aim is to improve the capacity of the public health workforce to respond to an all-hazard type of public health emergency in Arizona and the Southwest by providing comprehensive competency-based education and training in emergency preparedness.

Since 2004, the AzCPHP has developed over 85 unique public health preparedness training programs delivered in a variety of formats including: online web-based courses, exercises, and workshops. The center has trained over 2500 public health practitioners with job roles which include administrators, bioterrorism coordinators, communicable disease specialists, emergency management, epidemiologists, first responders, health educators, law enforcement, public information officers, and public health leaders. Its foremost training achievement is the development of the Basic Certificate in Public Health Preparedness. The three (3) part comprehensive competency-based certificate program has been awarded to over 130 participants with 617 enrollments as of June 2009. The Certificate Program is also part of the curriculum for the CPH 489 Public Health Preparedness elective course offered through the Division of Community, Environment, and Policy.

The AzCPHP has continued its success largely due to the partnerships established since its inception. AzCPHP partnered with Diné College to tribally adapt the Basic Certificate in Public Health Preparedness in an effort to address the distinct geographic, political and cultural aspects of the Navajo Nation. Diné College successfully trained 101 community health representatives via the tribal adaptation of the Basic Certificate in Public Health Preparedness, with eighty six (86) receiving certificates. Additionally, this course is offered as a four-credit course at Diné College. This activity addressed the need to train first responders and paraprofessionals in public health preparedness in tribal nations.

The Student Aid for Field Epidemiological Response (SAFER) Team, a graduate student response team, has been involved in outbreak investigations and surveillance activities with state and local health departments throughout Arizona. They have responded to forty-four (44) public health outbreaks. SAFER conducts contact tracing for infectious diseases such as measles, norovirus, and H1N1 Influenza. They have provided surveillance and syndromic support at the National Football League (NFL) Super Bowl XLII, National Basketball Association (NBA) All-Star Game and President Obama's Commencement Address at Arizona State University (ASU). Maricopa County Department of Public Health (MCDPH) has been a key supporter of SAFER.

- **Global Health Institute:** The Global Health Institute (GHI) is our newest center and is dedicated to promoting the health of individuals and communities in Arizona and globally through excellence in education, research & service. The Global Health Institute is dedicated to finding evidence-based solutions to global health problems through the education and training of tomorrow's global health leaders. GHI is an active partnership that promotes collaboration between the UA and partner universities and organizations. GHI emphasizes the importance of education, well-designed research, evidence-based practice, and interventions that translate to sustained positive community changes. The goal of the new Global Health Institute is to provide a focal point for public health education, scholarship, research, advocacy, and

leadership training for university of Arizona and global partner universities. The GHI will work closely with domestic and international partners to provide opportunities for educational programs and degrees, educational exchange and collaborative research, training, and public health projects. The GHI will be an effective, strong, and innovative player in the struggle to address current global health challenges.

- **Workforce/Continuing Education Program:** The public health workforce development/continuing education component of MEZCOPH ensures current public health and health care professionals access to education and training opportunities to strengthen the competencies of the public health workforce. Public Health Workforce development is critical to building a strong public health infrastructure within Arizona. Workforce development is a key area of practice based teaching, service and outreach.

Several training curricula have been developed and delivered to public health professionals and agencies throughout the state including:

- Academy Without Walls: a three session training series for public health professionals;
- Collaborative Leadership: a six session or two day training series;
- Into Public Health: a seven session training series in the fundamentals of public health practice currently being adapted for online use;
- Introduction to Public Health: a half-day workshop that provides participants with an orientation to the field of public health; and
- Tribal Public Health Emergency Preparedness: a three half-day training series in basic public health emergency preparedness for tribal communities.

The College has participated in a Tribal Academic Practice Partnership in 2007- 2008, funded by ASPH. The project was developed with the Tohono O'odham Nation, the Navajo Nation and the San Carlos Apache Tribe. Three internships were identified in their respective departments of health and human services for MPH and doctoral students that addressed priority health needs identified by each tribe and exposed students, faculty and practice partners to a cross cultural learning experience. This created the opportunity for enhanced working relationships between MEZCOPH faculty/AP and tribal health department personnel, provided the infrastructure for students to work with tribal health departments and technical assistance and service to the tribal health departments.

Public Health Seminars are presented monthly at the College and open to public and community partners and the College has partnered each year to plan and present at the Arizona Public Health Association's Spring and Fall conferences and the Rural Health Association's Annual Conference. These conferences typically reach over 500 participants each year with up-to-date information on public health and rural health programs. Numerous pre-session trainings have been offered through these venues.

An additional important area for workforce development is Leadership Development. The Southwest Public Health Leadership Institute funded by the Centers for Disease Control and Prevention (CDC) has continued to provide leadership development opportunities to public health professionals for the past five years. In 2007, the Institute was awarded funding from the CDC for the development of a new regional leadership program for public health leaders working in the United States and Mexico border region. *Leaders Across Borders* is an advanced leadership development program designed for public health, health care, and other leaders working to improve the health of communities on the US/Mexico border. The program, launched in October 2009, will be held annually and open to individuals and teams from the US and Mexico. *Leaders across Borders* is the result of a collaboration between the US/Mexico Border Health Commission, PAHO/WHO, the Arizona Office of Border Health, COLSON, El Colegio de Frontera Norte and Mexico's National Institute of Public Health.

MEZCOPH has also delivered several certificate programs that provided graduate credit for health professionals. The Maternal and Child Health Certificate and the Bi-National Certificate in Public Health are not recognized by the Graduate College.

These programs include:

- **Maternal and Child Health Certificate.** This program has had more than 68 public health professionals complete this program over an eight year period. This HRSA Maternal and Child Health Bureau (MCHB) funded program has focused on the MCH workforce within a 10-state Rocky Mountain Region. These MCH workers have been from tribal health departments, Indian Health Service units, and county and state health offices. The MCH program, with a commitment of new funds from MCHB is now expanding to provide an on-line program that will include the United South and Eastern Tribes, Inc. (USET). USET includes twenty-five federally recognized Tribes in 10 states. The MCH certificate program will include 10 trainees each year over the next five years from USET members.
- **Bi-National Certificate in Public Health.** This program developed six one-week long courses for the *Diplomado en Salud Publica*. The faculty were from COLSON and MEZCOPH. The topics for the courses included: Introduction to Public Health, Epidemiology, Health Administration, Environmental and Occupational Health, Migration: Binational Public Health Collaboration at the Sonora-Arizona Border and Planning and Evaluating Successful Interventions in Public Health. Sixty people from the U.S. and Mexico participated in one or more of the courses. Thirty Mexican public health professionals participated in at least four courses and thus received the overall certificate. With additional funding from ADHS and the Arizona Outreach Office of the U.S.-Mexico Commission, the *Diplomado* courses were also made available to the Spanish speaking public health workforce in Arizona. A final workshop was developed and implemented with the public health workforce in Sonora, “Reaching Out to Vulnerable Population on the Sonora-Arizona Border.”
- **The Arizona Clinical Research Training Program.** This is a graduate certificate program that prepares clinician scientists for the complexities of clinical research through high-quality didactic instruction and mentored research experiences. This innovative training program integrates the knowledge and expertise of faculty and staff within AHSC and other UA departments. The multidisciplinary approach provides opportunities for program scholars to acquire fundamental clinical research skills in a collaborative learning environment. This program is disestablished as of fall 2010.
- **Graduate Certificate in Public Health.** This program is a flexible and convenient graduate program designed for working professionals. It consists of the five core MPH courses (15 units). Students in this program have the option of taking all the classes on-line or take some on-line with some as in-person classes. A student may change from the Graduate Certificate in Public Health to the Master of Public Health degree program by submitting an application to the MPH program. Applicants will be considered for admission into the program along with all other candidates applying for the upcoming fall semester. All five M.P.H. core courses will be allowed to transfer to the MPH degree program if the student’s performance is consistent with admission requirements.
- **Global Health and Development Certificate.** This graduate certificate program was recently approved by the Graduate College and will begin in fall 2010. It is designed to prepare participants with the basic skills necessary to function effectively in global health practice. It will cover several critical issues in global health, including but not limited to epidemiology and disease control, health systems management, disabilities, gender and health, refugee and migrant health, food and nutrition,

evidence-based policy and practice, project design, monitoring and evaluation, and environment and health. This Certificate is especially designed with two groups of participants in mind: a) individuals with a passion for global health, but without appropriate academic training in global health; b) health professionals who need to update and enhance their skills, but do not have the time or flexibility to undertake a strictly campus-based, academic degree program.

Service Learning Program: In 2006 the College in partnership with the Arizona Area Health Education Program initiated a strong commitment to providing graduate level service learning courses for our MPH students. The program was developed to create opportunities for MPH and DrPH students at the College to participate in service learning courses for academic credit that increase their knowledge and understanding of public health issues in rural and underserved communities in Arizona and to create opportunities for faculty and academic professionals to partner with community based organizations to meet the public health needs of their communities.

Service learning utilizes a method of experiential education that allows for students to actively participate with communities in response to their identified needs and concerns. It is a vehicle for strengthening partnerships between health profession schools and communities. It builds a strong commitment to community service and social responsibility in health professions schools, students and faculty and equips health professionals with community-oriented competencies necessary to practice in today's changing world. Service learning also encourages civic responsibility of students and enhances their knowledge of service provision in the community.

We have developed and/or adapted four service learning courses for our students and each service learning course includes specific service learning activities that are accompanied by structured individual and group reflection. The courses are one week long and take place in the community. Students receive one graduate academic credit. Course work is planned and implemented collaboratively with community based organizations. Our courses include a rural/tribal Maternal and Child Health Field course that is implemented in northern Arizona, an urban Maternal and Child Health Field course that is implemented in Tucson, a Rural/mining community service learning course that is implemented in Globe and a border health service learning course that has been implemented in Douglas and Nogales. Each of the courses includes various community based partners and the activities are structured to meet the needs of the partnering community organizations. A fifth service learning course allows students to work individually with directors of rural hospitals.

I.2. How do these activities reflect the goal (s) described in section A and the particular needs of Arizona?

Community engagement, practice and service are integral components of the overall mission of the College: *to promote the health of individuals and communities with a special emphasis on diverse populations and the Southwest.* The College's Community Engagement, Practice and Service goal is *to advance community engagement, practice, and service in public health.*

In keeping with the overall mission of the college and the specific goal related to academic outreach, community engagement serves as our framework for building a strong synergistic relationship between research, instruction and practice. Community outreach, practice and service are embedded in our research activities, our instructional activities and our practice activities. Students and faculty are engaging with communities through their classroom activities, their involvement in specific research and their direct outreach, practice and service. Our work has focused on four areas that are key to meeting the needs of our state:

Key Area	Activity
Service Area I	Working to eliminate health disparities
Service Area II	Building and strengthening collaboration with regional public health systems
Service Area III	Targeting <i>Healthy Arizona 2010</i> focus areas and leading health indicators
Service Area IV	Strengthening public health preparedness

As seen in the descriptive area of our centers and programs, we have a strong emphasis on all four of these service areas and these activities are directly reflective of our overall outreach goal.

I.3. What evidence is available to document the quality and effects of these activities?

MEZCOPH's commitment to outreach is guided by the Community Engagement, Practice and Service Committee (CEPAS), one of the 10 standing committees established in our College by-laws. The CEPAS Committee is co-chaired by Jill Guernsey de Zapien, Associate Dean for Community Programs, and Lisa Staten, Associate Professor and Director of the Canyon Ranch Center for Prevention and Health Promotion. The committee includes representatives from MEZCOPH faculty, academic professionals, and staff.

The CEPAS Committee is the central point for coordination and policy development for all outreach, practice, and service activities within the college. The Committee recommends to the larger College our specific objectives in meeting our overall goal and monitors our success through data that is provided on an annual basis by all of our faculty and staff. Outreach objectives for the College include:

1. *Ensure that no fewer than 50% of Faculty and Appointed Professionals are involved in community outreach, practice and service activities that focus on four categories: Eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 Goals and public health preparedness.*
2. *Ensure that no fewer than 75% of the MPH student internships are community-based and focused on community outreach, practice and service activities that emphasize eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and public health preparedness.*
3. *Ensure engagement, practice and service in all Arizona counties and a markedly expanding presence in Phoenix and Maricopa County.*
4. *Ensure that no fewer than 50% of Faculty and Academic Professionals are involved in the delivery of workforce development/continuing education activities to diverse audiences in the Southwest and Mexico.*

CEPAS examines on an annual basis the data to understand both our strengths and challenges in the arena of community engagement and outreach. Data from 2008 provides a strong picture of a continued trend of meeting our goals. In relation to involvement of faculty and appointed personnel in community outreach and service, we have seen a slight increase with 54% involvement, still above our objective of 50%. Our student internships continue to be our best indicator of student involvement in the community with 97% of internships community based and focusing on community outreach practice and service activities that emphasize eliminating health disparities, building and strengthening collaborations, targeting Arizona Health People 2010 goals and public health preparedness. While we have seen a slight decrease in the numbers of projects throughout Arizona, the College continues to have collaborations in all fifteen of Arizona's counties and we continue to work to increase our presence in Phoenix and Maricopa County. We have seen a slight decline in

faculty and academic professionals involvement in workforce development but remain close (48%) to our target of 50 %. (See **Appendix I.3.** for data on all four objectives over the past three years.)

In addition to examining data on an annual basis, CEPAS is presently implementing a survey with our community partners to have a better understanding of the strengths and challenges to our collaborative work. This survey focuses specifically on projects that have been implemented since 2007 and will provide important feedback on how to strengthen our community collaborations. (See **Appendix I.3.1** for the survey instrument.)

J. COLLABORATION WITH OTHER UNITS

J.1. What are the other departments, schools and/or colleges to which your unit contributes and/or with which it collaborates most frequently? Describe the nature of those efforts and an assessment of successes and disappointments.

Undergraduate Program

Collaboration with other units begins within MEZCOPH. The previous undergraduate program was primarily housed within one section in the college and it did not actively engage faculty from all six sections. These faculty members now contribute to the direction, administration and policies of the program. The Director of the program is a member of the MEZCOPH Education Committee that includes the six section chairs within the college.

Although it is still too early to tell, we believe that we will be able to enhance our collaborations with other departments on campus as the program grows. Currently, students in various programs are taking classes in our major, this includes those in various ethnic studies programs, nutrition, and international studies as they need to address health promotion and disease prevention among their studies.

The UA Campus Health, Division of Health Promotion works collaboratively with the public health program providing internship opportunities for the public health majors. Their staff of health educators also serves as guest speakers for many courses.

Graduate Programs

The graduate public health courses are popular throughout the campus. This was highlighted in **Section F.4**. Since the last program review, we have developed several dual degree programs in collaboration with faculty in other colleges, including Mexican American Studies, Latin American Studies, Law and Business. We are working with the Near Eastern Studies, and the Department College of Mining and Geological Engineering to create additional dual degree programs.

So far the collaborations that we have had with other programs have gone well. We do not seem to have problems with scheduling courses. Students have been able to graduate in 3 years with the dual degree programs. However, the most current concern is space and the sizes of our classes. Our biostatistics and epidemiology courses are getting larger and soon we may not have the capacity to include non-degree students in them. The alternative will be to allow them to take the online versions. We are somewhat concerned about having students take these courses if they are not paying the same fees as our students. As we move from a program fee to differential tuition for MEZCOPH students, it will be possible for non-MEZCOPH students to pay less for the same class as a MEZCOPH student. We don't have a way to rectify this yet, but again having students take these courses on-line may be one way. However, the problem then becomes that registered students in existing programs may need to pay the outreach college one tuition and the bursar's office another tuition for their courses. This would add a financial burden to students in other programs. We believe that having identified this problem early will allow us to find a solution before it starts affecting students.

We collaborate with other Departments, Centers, IDPs, and Colleges in teaching and research. The strength of these collaborations, the contributions we make to them, and their contributions to us, vary greatly. Our greatest academic collaborations with other units are through the courses we teach. Students from numerous

disciplines take our introductory courses in biostatistics and in epidemiology. Our Biostatistics program provides several courses that are part of the doctoral Statistics IDP.

We have had strong relationships with the College of Medicine (COM) since the Program's inception and with various Departments and Centers within it. These programs collaborate with sections of the Departments of Family & Community Medicine, Medicine, Pediatrics, OB/GYN, Psychiatry, Ophthalmology, Neurology, Pathology, Physiology, Anatomy & Cell Biology, Microbiology & Immunology, and Surgery. The programs have Regular and Associate faculty members from many of them. We help teach in the medical curriculum, offer medical electives, accept medical students in several of our classes, and lecture to residents and sub-specialty fellows. Several faculty members in the COM help us teach our classes. We participate in many joint research projects and some outreach. We have very strong ties with some of the Centers, and our faculty members often reside in those Centers, especially Cancer (including Cancer Biology), Respiratory, Arthritis, and Hispanic Health. (Several Cancer Center staff, one Respiratory Center physician, and one Arthritis Center faculty member are students of ours.) We have ties as well with the Heart Center, sharing some faculty and students and some research collaborations.

We also have reasonably strong ties with the Departments of Pharmacology-Toxicology and Pharmaceutical Sciences, and with the NIEHS Center (SW Center of Environmental Health Sciences) in the College of Pharmacy, especially their Toxicology Program and the Center on Health Outcomes and Pharm-Economics (HOPE). We have a Regular faculty member in HOPE. We help train students in their educational programs, have had several of them with a doctoral minor in Epidemiology, and we occasionally have an Epidemiology doctoral student with a Health Outcomes/Health Services Research minor. We participate in collaborative research and outreach (especially with the SWEHSC).

We have some reasonably strong ties with certain programs in the College of Nursing, and especially with the Center on Aging shared with the COPH. We participate collaboratively with this Center, and in a new HRSA Geriatric Training Program they received. This Center will also collaborate with the VA in creating a VA Aging Center, in which we are participating.

We have very strong relationships with the Departments of Micro/Vet Sciences, Soil-Water-Environmental Sciences, and Nutrition in the College of Agriculture and Life Sciences. Several of them are Regular or Associate faculty members in our Program. We share students, classes, advising, and perform collaborative research. (Several of our courses were cross-listed, we are looking into why that has changed.) We also have good and long relationships with the Ag-Economics Department, Cooperative Extension Services (CES – see below) and Plant Pathology (environmental education). Ag-Econ has supplied us with a statistician in the past and now with an economist. We are developing a relationship with their Water Center for Environmental education and research.

In the Colleges of Sciences and Social and Behavioral Sciences, we have had long ties with Mathematics/Applied Math (Statistics) that are developing strength again, with Psychology (EGAD, the quantitative and behavioral medicine unit), with Anthropology, with Communications, and with the Udall Policy Center. We share faculty and students in a reciprocal fashion with these Departments and Programs. We are developing ties with the Departments of Ecology-Evolutionary Biology and Geography, and share some faculty and students with them. We would like to develop ties with those in Genetics in these Colleges and at the Health Sciences Center.

Our collaborations within the university have contributed to participating in several research grants together. During the past 2 fiscal years (FY 07-08 and FY 08-09), 17 MEZCOPH faculty members were supported on grants whose principal investigators were from 11 centers/departments that were outside the college. These faculty members were supported from 51 different outside accounts in FY 07-08 and 54 accounts in FY 08-09.

Similarly, 10 MEZCOPH grants supported 12 faculty members over this same time period who were from 5 different departments in FY 07-08 and 6 different departments in FY 0809.

In addition to these relationships, we have had shared PhD students (i.e., Epidemiology minors) from a variety of other programs, namely Audiology and Educational Psychology. These ties will lead hopefully to expand teaching relationships.

In addition, we are presently engaged in various research projects and Outreach programs with rural residents, Native Americans, Southwest Hispanics, Mexicans, and in other international programs. Most notable is our activity in binational studies (with the AZ-Sonora & US-Mexico Task Forces) and local communities (with the COPH, the UA Rural Health Office, CES, ADHS, local health departments, NGOs & CBOs). These are and will provide some needed field epidemiology experiences for our students.

J.2. What changes are contemplated in these collaborative efforts? How will these changes be implemented?

Undergraduate Program

There are plans to continue these relationships and collaborations that currently exist. The faculty in the undergraduate program believes that all of these collaborations can only benefit our majors. These collaborations will continue (1) to provide the means to make our students stronger in the public health content areas; (2) to produce more quality internships for our students, and (3) to enhance the diversity and cultural competence of the students and future health professionals who will address health promotion and disease prevention among multicultural populations.

In addition, we are now moving forward to create general education courses. We have identified some potential courses for this effort and they include courses such as an Introductory Course on Public Health and our course on Personal Health and Wellness. We also are moving forward to work with Arizona's community colleges to create 2+2 programs. Our first effort will be with Paradise Valley Community College.

Graduate Programs

We foresee increasing collaboration through dual degree programs, expanding our course offerings that are appropriate for other departments as well as our students. We will also increase the number of degree programs with other departments as the number of faculty and students increase in our college. We will do this in a stepwise fashion by first adding courses that would be popular with students in other colleges and departments and then moving toward certificate and degree programs. Three areas that are currently being given serious consideration are bioinformatics, public health nutrition and telemedicine. We also look forward to expanding our global outreach programs. These programs will include collaborations with other colleges.

K. RESOURCES

K.1. Provide data showing faculty compensation comparisons with peer institutions, including as many as appropriate of the institutions named in Section C-4.

The best source of faculty compensation comparisons is with the schools of public health that are currently accredited by the Association of Schools of Public Health (ASPH). The most recent faculty salary report is for fiscal year 2008-2009. **Table 25** illustrates 11-month faculty appointments (12th month is vacation) in accredited public institutions.

Table 25: Faculty Compensation Data Comparisons with Peer Institutions						
Mel and Enid Zuckerman College of Public Health Faculty Compensation - Data Comparisons with Peer Institutions External Data Source: ASPH FY2008-2009 Faculty Salary Report (PUBLIC INSTITUTIONS, 11 MONTH APPT) Internal Data Source: UA, Business Intelligence data report (FISCAL BASE SALARIES AS OF 11/03/09)						
Faculty Rank	Source	Number	Mean	Median	25th Percentile	75th Percentile
Assistant Professors	ASPH	377	\$ 87,295	\$ 86,153	\$ 80,040	\$ 93,316
	MEZCOPH	20	\$ 85,794	\$ 82,250	\$ 78,876	\$ 88,065
Associate Professors	ASPH	400	\$ 107,465	\$ 106,376	\$ 94,613	\$ 118,944
	MEZCOPH	10	\$ 105,202	\$ 102,348	\$ 101,247	\$ 108,740
Professors	ASPH	640	\$ 159,233	\$ 154,217	\$ 128,398	\$ 182,722
	MEZCOPH	17	\$ 146,532	\$ 146,098	\$ 139,966	\$ 154,217

The median salaries of MEZCOPH primary faculty are approximately 4.5% below the national levels for all ranks. Hiring and salary freezes imposed by the institution and lack of legislative mandated salary increases have contributed to this “down-slide” over the past several years. Budgetary reductions imposed by the State of Arizona have also taken an annual toll on any available resources that might be used for retention or promotion of faculty and administrators.

K.2. Describe and appraise support services for the unit’s: (a) teaching program, (b) research, creative production, or other scholarly activities, (c) outreach, including professional community service, and (d) administration.

Support Services of Teaching Programs and Teaching Activities

The employees that support the instructional programs and the college’s students are located in the Office of Academic Affairs and in the Office of Student and Alumni Affairs and under the guidance of Associate Dean Douglas Taren and Assistant Dean Chris Tisch. Support staff includes two administrative personnel and three full-time coordinators. In addition, seven section chairs receive partial funding as compensation for their oversight of undergraduate, master and doctorate level programs. All section chairs work with the Associate Dean of Academic Affairs and report to their respective Division Heads.

Table 26 outlines the level of support (all classifications of employees) to the College’s teaching, research, creative activity, outreach, scholarly activity, service and administration. Staffing levels have been reduced in all areas due to budgetary limitations. Over the past 5 years, administrative support employees in the central administrative, academic program, division, and finance areas have been cut back to the most basic levels.

Table 26: Administrative, Service & Research Employee FTE by Office or Department				
Mel and Enid Zuckerman College of Public Health Administrative, Service and Research Employee FTE by Office or Department				
FTE and Classification of Employees				
Office or Department	Administrative Officers	Management Staff	Program Support Staff	Administrative Support Staff
Office of the Dean	1.00	1.00		
Office of the Associate Dean - Academic Affairs				
Associate Dean - Academic Affairs	0.20			1.00
Assistant Dean - Student and Alumni Affairs	1.00			3.90
Undergraduate Public Health Section (HPS)	0.10			
Biostatistics Section Head (EPI/BIO)	0.10			
Environmental and Occupational Health Section Head (CEP)	0.10			
Epidemiology Section Head (EPI/BIO)	0.10			
Family and Child Health Section Head (HPS)	0.10			
Health Behavior and Health Promotion Section Head (HPS)	0.10			
Public Health Policy and Management Section Head (CEP)	0.10			
Public Health Practice (HPS)	0.10			
Office of the Associate Dean - Community Programs	0.45		1.00	0.50
Office of the Associate Dean - Research	0.50			1.00
Development Office		1.00		1.50
Financial Affairs and Physical Resources	1.00	2.00		3.30
Office of Information Technology		1.00	2.00	2.64
Office of Public Affairs		1.00		
Division of Community Environment and Policy	0.20		30.14	1.50
Division of Epidemiology and Biostatistics	0.20		19.85	1.92
Division of Health Promotion Sciences	0.20		61.61	2.98
Rural Health Office	0.20		10.30	3.00

K.3. What are the program’s specific resource needs, e.g. library, laboratory, classrooms, classroom support, office personnel, research assistants, others? Describe the unit’s efforts to find external donors who could help support the mission of the unit.

Program Resources

In January of 2006, the Mel and Enid Zuckerman College of Public Health moved into its new home at Drachman Hall facility on the Arizona Health Science Center complex. Drachman Hall facility provides 21,234 net assignable square feet (nasf) in administrative, service and research space to our college. In addition, the building’s first floor provides 27,785 nasf in shared instructional space.

Instructional space located in the Drachman Hall facility is shared by the colleges of public health, pharmacy and nursing. Classroom usage is monitored by a central room scheduling system. Instructional programs and classes take priority over all other business related scheduling. The building includes 3 large, stadium style classrooms (128 workstations each) and 6 small to medium size classrooms (ranging from 20 to 40 to 60 workstations each). In addition, there are twenty 10-12 person capacity breakout rooms that are used for course instruction and study sessions. The breakout rooms are particularly popular with students wanting a more private and quiet space to study between classes and after hours. Instructional space on the Phoenix campus is shared with the colleges of medicine, pharmacy and public health.

The College also occupies space in 9 facilities totaling 31,949 nasf located on campus, in Tucson, Phoenix and southern Arizona (3 leased and 6 university owned buildings). Six locations (19,846 nasf) are program specific and house community based and service related research projects. Two other locations are devoted to wet and dry laboratory space.

Laboratory research and related support areas are housed in the Medical Research Building (MRB) and Biomedical Research Laboratories (BRL). The MRB facility provides 6,338 nasf in wet laboratory space and houses seven faculty and support staff. The BRL facility provides 5,765 nasf in wet and dry laboratory space. This is a much older facility and is currently undergoing minor renovations. Five or more faculty will be housed in the research laboratory facility.

Students and faculty have access to any of the libraries on campus. In addition, the College has been provided two on-site library liaisons from the Arizona Health Sciences Library to assist classroom instruction on PubMed searching, Ref Works, library resources and public health information on the web. The library liaisons also provide assistance with online literature searching for research and publications and consult individually with faculty and students to enhance searching skills.

Donor Efforts that Support the Mission of the Unit

MEZCOPH continues to seek gifts and endowments through fund-raising efforts and philanthropy. Currently the college has three endowments honoring and providing salary support to faculty and administrator chairs. In addition, there are thirteen restricted gift and endowment accounts that provide scholarship opportunities to our students. The remaining restricted gifts and endowments support the public health mission of the college and are utilized for donor designated activities.

K.4. What changes in program quality might be projected if additional resources were available, and what would be the expected effects of those changes?

Additional outside resources would provide a more stable funding base for the college. Budget cuts have taken its toll on the basic infrastructure. Faculty recruitment has been put on hold due to a state mandated hiring freeze. Hiring freezes in years' past had short breaks that provided windows of opportunity for recruiting activities. The current freeze is in its second year and shows no sign of release from state government and institutional mandates.

Fundraising activities will continue to match donor resources with student related activities and scholarships. Scholarships continue to provide opportunities to those students who need it most and might not otherwise be able to finish their education.

Research training grants and agreements with outside agencies for internship opportunities provide resources to students as part of their education and training. The college will continue to seek out extramural funding that provides student support during the required practicum and career opportunities in the future.

The College is currently seeking out outside resources in the form of partnerships with the newly established Global Health Institute. Partner universities will be assisted in developing their public health programs and/or departments. Educational opportunities will be offered at the undergraduate and graduate level as well as certification and training courses. Revenues generated through these activities will be used to support basic program infrastructure, reciprocal student opportunities, and faculty/staff salaries.

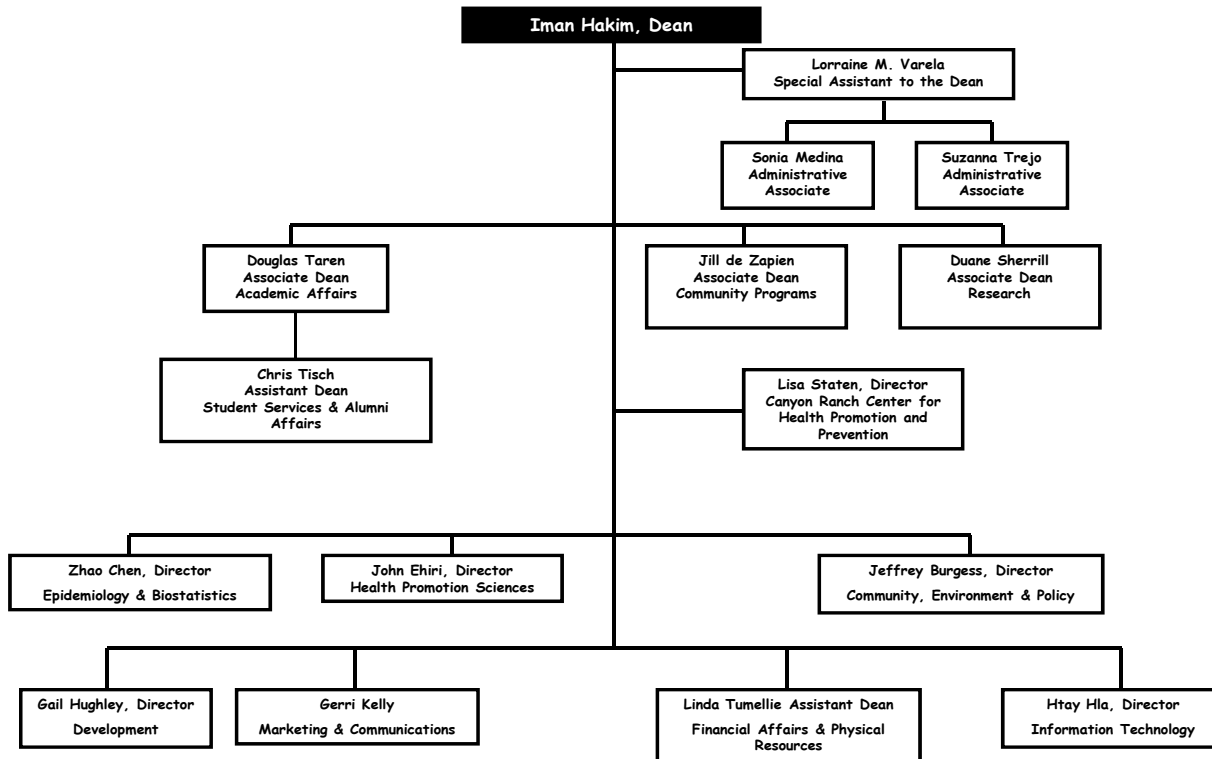
Given these challenges for obtaining additional funds, there is a clear plan for how additional funds will support the academic programs. The top priority is to support students. The top two programmatic priorities for additional funds will be directed toward enhancing the undergraduate program and the expansion of academic offerings in Phoenix. Additional support will be directed toward our newly established Global Health Institute.

L. ADMINISTRATION

L.1. How is this unit organized?

The organization chart below identifies the administrative and reporting lines within MEZCOPH.

Mel and Enid Zuckerman College of Public Health Organizational Chart



12/22/2009

The Dean of the Mel and Enid Zuckerman College of Public Health serves as the chief administrative officer of MEZCOPH and as such is responsible for strategic planning and facilitating growth of the college, the faculty and the student body. Primary responsibilities of the Dean include: providing leadership to faculty in teaching, research, and service; promoting excellence in academic and research programs; promoting diversity and setting standards for diversity; interpreting the College's goals and programs to internal and external constituencies; providing leadership in resource acquisition, resource management, and strategic planning; facilitating faculty and staff development; representing the college and university in statewide and national public health arenas; and creating a positive environment for learning and growth in the college.

MEZCOPH Associate Deans report directly to the Dean. The Associate Deans are: Academic Affairs (Douglas Taren), Community Programs (Jill G. de Zapien) and Research (Duane Sherrill). The Assistant Dean for Student Services and Academic Administration (Chris Tisch) reports to the Associate Dean for Academic Affairs, Dr. Taren. The Assistant Dean for Financial Affairs and Physical Resources (Linda Tumellie) reports to the Dean. The Associate Deans are appointed for 5-year terms, renewable by mutual agreement. The Assistant Deans are administrative professionals on year-to-year contracts.

The Dean also oversees the Development Office (Gail Hughley, Director), the Office for Information Technology (Htay Hla, Director), the Office of Marketing and Communications (Gerri Kelly), and the Canyon Ranch Center for Health Promotion and Prevention (Lisa Staten, Director). In addition, there is a Special Assistant to the Dean (Lorraine Varela) who reports directly to the Dean, and two Administrative Associates who report to the Special Assistant. Each of these administrative directors, including the Special Assistant to the Dean, is responsible for the staff and functions within their defined areas. They also participate in the leadership of the college through their membership on the Dean's Council.

The Associate Dean for Academic Affairs (Dr. Taren) oversees the academic programs offered by the MEZCOPH. These include the Doctorate in Public Health (DrPH), the Doctorate in Biostatistics (PhD), the Master of Science/Doctorate (MS/PhD) in Environmental Health, the Doctorate in Epidemiology (PhD), the Master of Public Health (MPH), the Master of Science in Epidemiology (MS), and the Bachelor of Science major in Public Health (BS).

The academic programs are embedded in a framework of Divisions. The MEZCOPH faculty is organized into Divisions that reflect the nature of their research and practice. The Divisions include Epidemiology and Biostatistics (directed by Zhao Chen), Health Promotion Sciences (directed by John Ehiri), and Community, Environment and Policy (directed by Jeff Burgess).

The Division Directors provide academic, administrative, and scientific leadership of faculty and staff in their divisions. They participate in interdisciplinary coordination of the MEZCOPH through their membership on the Dean's Council. The Division Directors report directly to the Dean. The MEZCOPH Bylaws define the policy for these appointments and all three Division Directors were appointed in accordance with our bylaws. This process begins with the Divisions selecting a slate of candidates, all of whom are acceptable to the members of the Division. That slate is then transmitted to the Dean who makes the final selection.

The function of the Divisions is to serve as administrative units that coordinate teaching, research, and service within their areas of specialization. The units are academic homes for faculty, staff, and students and are the central focus of collegial relationships within the college. Divisions are responsible for specific sections within academic programs, as follows:

Division of Community, Environment and Policy – Director, Jeff Burgess, MD, MPH
Section: Environmental and Health Sciences – Chair, Mary Kay O'Rourke, PhD
Section: Public Health Policy and Management – Interim Chair, Doug Taren, PhD

Division of Epidemiology and Biostatistics – Director, Zhao Chen, PhD, MPH
Section: Epidemiology – Chair, Robin Harris, PhD, MPH
Section: Biostatistics – Chair, Denise Roe, DrPH

Division of Health Promotion Sciences – Director, John Ehiri, PhD, MPH, MSc
Section: Family and Child Health – Chair, Nicky Teufel-Shone, PhD
Section: Health Behavior and Health Promotion – Chair, Lisa Staten, PhD

Faculty are appointed according to MEZCOPH Bylaws in a Division and report to the Division Director. Primary faculty of the College are those faculty members who have been appointed through MEZCOPH Promotion and Tenure guidelines. Secondary faculty are those with joint or adjunct appointments in MEZCOPH. The MEZCOPH Promotion and Tenure Committee governs faculty appointment, promotion, tenure and retention.

All faculty, regardless of rank or appointment in the MEZCOPH, may serve on any standing College committee or subcommittee, with the exception of the Promotion and Tenure Committee. All faculty may vote at faculty meetings. The Dean or designated alternate serves as the presiding officer of all meetings of the faculty and college.

The key planning and policy making body of the college is the Dean’s Council. The purpose of this Council is to assist the Dean in long-range planning, to review and recommend administrative and educational policies, and to propose changes to faculty. Membership is comprised of the Dean, Associate Deans, Assistant Deans, Division Directors, and the administrative directors of the college. Meetings are held monthly. Policy needs, either for development or modification, can be identified within the various committees or by individual faculty, staff or students. Recommendations are then taken to the Dean’s Council for action.

In addition to the Dean’s Council, MEZCOPH has standing committees, which represent all areas of the college, including instruction, community programs and research (See **Table 27**). Either the Dean or the Dean’s Council, as deemed necessary, may establish subcommittees and ad hoc committees or Task Forces in order to address the mission, goals and objectives of the college.

Table 27: MEZCOPH STANDING COMMITTEES 2009-10

COMMITTEE	CHAIR	DESCRIPTION	FREQUENCY/SCHEDULE
Dean’s Council	Dean	Responsible for assisting the Dean with college-wide management including fiscal and personnel decisions, evaluating annual progress towards college goals and objectives.	Monthly/3 rd Wednesday
Executive Council	Dean	Responsible for assisting the Dean with long-range strategic planning.	Once a Semester (February and October)/ 3 rd Wednesday
College-Wide Meeting	Dean	College-wide informational meetings and updates.	Once a Semester (February and October)/1 st Friday
Promotion and Tenure Committee	Lynn Gerald/Robin Harris	Advise the dean before recommendations are forwarded to higher administrative levels concerning all faculty personnel matters. Faculty personnel matters include: hiring, retention, and recommendations for promotion and tenure. Promotion and tenure decisions for faculty members are set by the policies of The University of Arizona, in accordance with ABOR policy. The charge of the P&T Committee is to consider faculty applications for P&T actions and to develop P&T Guidelines	1 st and 3 rd Friday

COMMITTEE	CHAIR	DESCRIPTION	FREQUENCY/SCHEDULE
Education Committee	Rotating Chair	The Education Committee works with the Associate Dean for Academic Affairs to set the education agenda for the College. The Committee evaluates educational effectiveness, provides curriculum oversight to the College, determines the academic standards for applicants and students, and develops academic policies for the College. The Education Committee is advisory to the Associate Dean for Academic Affairs (an ex-officio member of the Committee), the Executive Council, and the Dean.	Monthly/1 st Wednesday
Community, Outreach, Practice & Service (COPAS)	Jill de Zapien	Reviews current College public health service and practice and makes recommendations for improvements. It is advisory to the Associate Dean for Community Programs, the Dean's Council and the Dean.	Monthly/1 st Thursday
Research Advisory Council	Duane Sherrill	Reviews current College research policy and practice and makes recommendations for improvements. The Associate Dean for Research chairs this committee. It is advisory to the Associate Dean for Research, the Dean's Council and the Dean.	Monthly/1 st Thursday
Diversity Committee	Iman Hakim	Proposes policies and procedures to the Dean's Council to promote Millennium/Diversity goals for all in the College.	Monthly/Dates Vary
Evaluation Committee	Lisa Staten	Develops criteria and procedures to evaluate the College's progress towards meeting its mission, goals and objectives, and oversees the process of evaluating all major aspects of the College's operations. The Committee is advisory to the Dean's Council and the Dean.	Monthly/4 th Thursday
Faculty Assembly	Bonnie LaFleur	Addresses issues that are the prerogative and duty of the faculty as defined under UHAP. Such issues would include, but are not limited to, creation of programs, requirements of such programs, representation on the UA Faculty Senate, among others.	Monthly/3 rd Friday

COMMITTEE	CHAIR	DESCRIPTION	FREQUENCY/SCHEDULE
Academic/Admin Professionals Forum	Stephen Michael	Serves as the liaison between the administration, staff, and faculty regarding the role of academic/administrative professional in the College. This council identifies key issues affecting academic professionals and developing strategies for addressing, i.e. career development, orientation and policy determination.	Quarterly/3 rd Tuesday (Jan, Apr, July, Oct)
Staff Advisory Council	Kathy Ott	Serves as the liaison between the administration, appointed personnel, and staff regarding the role of classified staff in the College and promotes opportunities for improvement in staff support.	Quarterly/Dates Vary
Public Health Alliance	Student President	This organization is the student organization of the College. Students from all educational programs of the College are eligible for membership. The officers are selected by the members.	Monthly
Student Affairs	Chris Tisch	Acts as a clearinghouse for issues related to students; plans, facilitates and supports seminars, workshops, etc.; and lobbies/advocates for resolution of student problems. The committee is chaired by the Assistant Dean for Student Services and Alumni Affairs and is advisory to the Associate Dean for Academic Affairs and the Education Committee.	Twice a Semester

L.2. Summarize the program-related aspects of the last unit review(s) and efforts undertaken as a result of the review(s).

The previous unit review had very few issues related to the academic programs. The major concerns related to administrative issues, especially funding and the tri-university collaboration. These issues have been addressed by MEZCOPH and were described in Section B.2 on the Program History.

There were two program related aspects of the last unit review that are presented in this section. There was concern about the narrow focus of our previous undergraduate program. We have provided a comprehensive description of our efforts to renew and expand the undergraduate program in **Section E** of this report. We have a new undergraduate program with the BS major in public health. This program has expanded the involvement of our faculty in undergraduate and we are already attracting students into it.

We have responded to the concern that the program had put restrictions on its growth by limiting the number of students admitted to each area of study and by having a limited offering of our core courses. There currently are no limits to admissions and we now teach the core courses three times per year and one of the offerings is on-line each year.

Finally, we have continued to take advantage of our geographic location. We have implemented a border health institute which includes a popular one-unit field course.

L.3. Describe the classified staff and professional staff in this academic unit. What has been the turnover rate in these positions during each of the previous five years? If high, what steps have been taken to identify and address the problem(s)? What changes are underway or contemplated to strengthen the staff support for the academic program's activities?

The classified staff in the college currently number 83 people and represent a total of 73.66 FTE. In terms of the academic programs, staff members work at the division level supporting sections with student activities and preparing class materials. Staff within the Office of Student Services and Academic Affairs support college-wide activities, recruitment of students, monitor student progress and advise students.

Budget reductions on state allocated funds and loss of research funding have taken their toll on the number of classified staff employed at the MEZCOPH. State budget cuts have been focusing on classified and professional staff for the past few years, leaving administrative and divisional support units short of staff. Large grants and contracts that support research and service staff have also been on the decline for the past 4 to 5 years.

To recap the staff changes from periods FY0405 to FY0809:

FY0405: #classified staff employees (101), total FTE of employees (87.93)

FY0506: #classified staff employees (112), total FTE (93.52)

FY0607: #classified staff employees (97), total FTE (80.95)

FY0708: #classified staff employees (89), total FTE (78.47)

FY0809: #classified staff employees (83), total FTE (73.66)

It is difficult to determine how we can rectify this situation, especially the support for the academic programs. Nonetheless, we are diversifying by engaging donors, expanding distance learning programs and competing for training grants. Support for staff on individual projects do not necessarily provide additional support to the academic programs as these lines are related to research projects; the exception is when they are part of training grants.

There are 29 academic professionals (APs) in the college. These individuals are engaged in the college in a variety of ways as indicated in **Appendix D.1.a and Appendix D.1.b**. APs are engaged as instructors, assistant and associate deans, and assist with administering the research and academic programs. The turnover rate for these individuals has been very minimal over the past five years.

M. DIVERSITY/AFFIRMATIVE ACTION

M.1. What is the gender and race/ethnicity composition of the faculty? Briefly describe the major features of the program's affirmative action plan and its implementation, including efforts underway to attract and retain women and minority faculty and staff.

Demographic data regarding the faculty are listed in **Appendix D.1.a. and Appendix D.1.b.** Of the 47 primary faculty members, 27 (56.2%) are female, and minority faculty represent 22.9% of the faculty compared with 16.3% during our previous academic program review. The Dean of MEZCOPH has a very strong commitment to creating a more diverse faculty.

MEZCOPH follows the Arizona Board of Regents policy as an equal opportunity and affirmative-action employer. The MEZCOPH subscribes to the Office of Federal Contract Compliance Policy recruitment guidelines as implemented at the University of Arizona in 1998. Federal law requires that the UA provide equal employment opportunity to all, without regard to race, color, religion, sex, national origin, age, disability or veteran's status. It is further required by law that we take affirmative action in all employment matters to ensure that our policies and practices are, in fact, non-discriminatory. As a federal contractor this means, among other things, that goals have been established to address any underutilization of women or of minorities.

M.2. Describe the program's efforts toward the recruitment, retention and equity of a diverse staff.

Recruitment of new faculty includes advertisements in selected journal and online resources that are known to target underrepresented faculty groups. In the past year, the college has had four new hires, including an African American male, a Hispanic male, White female and a White male. We are currently in the final negotiations to have another Hispanic male join our faculty. Our retention efforts are to provide as much support as possible to all of our junior faculty and NTE faculty members. This past year, the Associate Dean for Academic Affairs initiated monthly lunches with these faculty members to discuss academic life and issues regarding career development. These sessions include information sharing about mentoring resources, distribution of materials about academic life, invited guests such as the Vice-Provost for Faculty Affairs, or simply support team building conversations to enhance camaraderie within the college.

M.3. Describe the unit's plan for recruitment and retention of students from underrepresented ethnic groups and the degree to which this plan has been realized.

MEZCOPH is fully committed to obtaining a diverse student body. Diversity includes range of experience, part-time status and diverse professional backgrounds, as well as those addressed by university policy. MEZCOPH recruits broadly and considers all aspects of background during the admissions process. Admissions are based on academic records, the student's commitment to public health, and furtherance of the mission of the MEZCOPH.

Special measures taken by the MEZCOPH to achieve a diverse student body have included participation in high school minority student recruitment events and programs, such as Outstanding High School Senior Day; MedStart, a six-week health career exploration and academic enrichment summer program for high school juniors; and the federally funded Health Careers Opportunity Program (HCOP). At the undergraduate level, the college participates in the Fostering and Achieving Cultural Equity and Sensitivity (FACES) in Health

Professions organization, which is a statewide student group. The FACES student clubs meet regularly throughout the year and host an annual conference on health professions and cultural competence. MEZCOPH faculty and graduate students play a part in the Minority Medical Education Program (MMEP), a rigorous six-week academic summer program that supports premedical students, by making presentations to the students on public health and epidemiology issues. At the graduate level, MEZCOPH minority recruitment efforts include participation in the NIH Initiative for Minority Student Development (NIH/IMSD), the McNair Scholars Program and the National Student Exchange. MEZCOPH partners with the Office of Minority Affairs (OMA) in the Arizona Health Sciences Center to identify new opportunities to support and increase our minority student population. Through the OMA, the MEZCOPH works with the Mathematics, Engineering, and Science Achievement (MESA) Program, ENGaging LATIn Communities for Education (ENLACE) Program, the American Indians in Science and Engineering (AISES), and the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS).

The college fosters an environment that embraces and supports cultural diversity. As a result, the graduate programs enjoy a reputation of being one of the few graduate programs on the campus of the UA and nationally that consistently attracts, admits and graduates significant numbers of Native American students.

On an annual basis, MEZCOPH tracks the number and percent of students who enter the program. For 2008, our data indicated that the proportion of minority students who matriculated into the college was greater than the percent who applied. This indicates that minority students preferentially chose to attend MEZCOPH compared with other students.

The result of our efforts is that the percent of underrepresented minorities in the undergraduate program has remained around 50% for the past five years. The percent of underrepresented minorities in the graduate programs is near 20% each year. These results indicate that we are reaching out and obtaining a diverse student body. It would be good to have our graduate program grow in such a way that as we get more students we get proportionately more underrepresented minorities into the program.

In comparison with 41 schools of public health that reported data for 2008, MEZCOPH ranked second highest for the percent of American Indian graduates, had the sixth greatest percent of Hispanic graduates and was in the top third for the greatest percent of total minority graduates.

M.4. Describe steps taken to create a welcoming and supporting climate inclusive of diversity in the unit.

Having a welcoming and supporting climate inclusive of diversity is primarily a basis of the moral character of the members within the unit. MEZCOPH since its start 10 years ago, has had employees who value diversity as it is a critical issue with meeting the college's mission to eliminate health disparities within the nation and worldwide. The college has also tried to foster a college community by developing employee groups for staff, academic professionals and faculty. Each of these groups has their own forums to discuss issues regarding their roles in the college. The college sponsors college-wide events to build collegiality among its members including holiday meals and an annual picnic. A testament to the value for inclusiveness is the annual social justice conference that MEZCOPH sponsors each year. This conference has won the Peter Likins Inclusiveness Award twice in the past three years.

N. DEPARTMENT DATA PROFILES

The data reports for this section are found in **Appendix N**.

PHL Undergraduate Graduation GPA (Appendix N.1)

The graduation GPA tends to be greater in the undergraduate program compared with FY 02-03 and 03-04 while the UA average graduation rate has remained about the same over the past seven years. It is now equal or slightly greater than the UA. Part of this improvement is due to having students enter the program more prepared. We also believe that increasing the GPA required to enter the program from 2.25 to 2.50 will also result in greater average graduation GPAs.

PHL Undergraduate Time to Graduation (Appendix N.2)

The average time to graduation has remained just below 5 years for the past 3 years. Prior to FY 06-07 the time to graduation was greater than 5 years. Although the number of graduates has been stable over the past 4 years, we believe that with the new undergraduate program and by working with students earlier, we will be able to decrease the time to graduation even more. Although not an official goal, we hope to reduce the average time to graduation to near 4.5 years.

PHL Completed Majors per Faculty FTE (Appendix N.3)

The number of undergraduate majors per faculty member FTE for undergraduate program has decreased from its peak in FY 04-05. A major part of this decline is due to the moratorium that was put onto admissions to the undergraduate program. We believe that this ratio will significantly increase over the next 5 years as we have created a new public health major and are accepting students once again into the program. The number of graduate majors per faculty FTE also significantly decreased starting in FY 06-07. However, this decrease is due to having moved more than 20 NTE faculty members to TE faculty positions. At the same time, a national application process occurred and competition for admissions significantly increased nationally for position. We believe that this is a temporary situation as indicated by the 38% increase for FY 08-09 compared with FY 07-08. Furthermore, we believe that more students will apply to the MPH program as we initiated a new undergraduate program and more doctoral programs.

PHL Completed Majors (Appendix N.4)

The number of completed undergraduate majors has remained the same, just over 50 per year, for the past 3 years, but we believe that this number will significantly increase over the next several years as we expand the BS in public health. The number of pre-public health students is already nearing 100 students and we have not had the program in place a complete academic year. The epidemiology program has had 43 graduates over the past 7 years and the MPH program has had 432 graduates over the same time period. All of these numbers will increase over the next few years as the college enters its second decade of existence and is identified as an established college of public health rather than a new school of public health.

PHL Freshman Admission Scores (Appendix N.5)

The scores have been about the same as the UA but there is more variability each year due to a significantly smaller sample size. These values may change as we start accepting students into the public health major and we have increased the minimum GPA to be in the program.

PHL FTE Enrollment (Appendix N.6)

The undergraduate FTE enrollment peaked in FY05-06 just before we put a moratorium on enrollment. The outcome of this moratorium was a significant decrease in student FTE for FY08-09. We believe that this will increase now that there is not a moratorium. The graduate student FTE numbers have steadily increased since

FY02-03. There was a slight leveling off of these numbers in the past 2 years, but we believe that the creation of new programs, including graduate certificate programs, will increase graduate FTE numbers too.

PHL Graduate Certificates (Appendix N.7)

The number of certificate students is misleading. The Arizona Clinical Research and Training Program had several students who completed the program through FY07-08. The decrease in numbers for FY08-09 is due to having the program's funding stopped, and the loss of several faculty members who taught in the program. However, the program is being resurrected due to the health sciences center efforts to obtain a CTSA and due to the fact that we have acquired faculty members who are able to teach in the program. The public health certificate program is new and in the past year we have had 7 graduates from the program. The number of students entering this program may also increase as we expand our presence in Phoenix and with more on-line offerings. However, the issue that certificate students are not eligible for financial aid even though non-degree seeking students can get aid may make students decide just to take courses and not be officially in the program.

PHL Majors by Classification (Appendix N.8)

The number of undergraduates in the pre-health program indicates that we are not reaching freshman and other underclassman. Most of the pre-health education majors (now public health) were third and fourth year students. This indicates that few students were identifying health education as their degree early in their studies. Most were entering the program during their final year of studies. This suggests the program needs to work more closely with high schools, and at orientation to get pre-public health students into the program. We also need to work with community colleges and students to get them to identify as majors in the sophomore year. This will greatly shorten the time to graduation.

PHL Majors by Ethnicity(Appendix N.9)

The percent of underrepresented minorities in the undergraduate program has remained around 50% for the past five years. The percent of underrepresented minorities in the graduate programs is near 20% each year. These results indicate that we are reaching out and obtaining a diverse student body. It would be good to have our graduate program grow in such a way that as we get more students we get proportionately more underrepresented minorities into the program.

PHL Majors by Gender (Appendix N.10)

The public health programs are dominated by female students. Three quarters of the students are women. Recruitment efforts to recruit men need to increase. This may be easier to do at the undergraduate level as the major changes from health education to public health. In the graduate program, all the areas of studies may be able to benefit by focusing recruitment on men. However, each area of study will have to develop separate marketing approaches to attract students.

PHL Majors by Residency (Appendix N.11)

The undergraduate program has had more than 85% of its students be from Arizona over the past several years. The graduate program averages around 70%. However, we have noticed a greater number of inquiries from out of state students for the graduate program and we believe that over time as the program grows, the increase in the number of students will be from out of state.

PHL Majors by Honors (Appendix N.12)

The proportion of students in the UA Honors program is slightly less for the undergraduate program compared with the rest of the university. However, the proportion has been inconsistent due to the smaller size of the student body. This proportion may increase as the undergraduate program raises its entry requirements and is identified more as a program.

PHL Major per Completed Major (Appendix N.13)

The proportion of PHL majors to graduates decreased significantly for FY08-09 due to the moratorium on admissions to the undergraduate from over 4.0 to 2.3. This proportion will increase as more students enter the new major as the moratorium has been stopped. The graduate ratio has generally been greater than 3. This ratio dropped in the last year due to an increase in the number of students who graduated. Over the next years, the number of enrolled graduates should increase and the proportion who graduates should make the ratio of students to graduates again about 3.0.

The ratio of majors to graduates for MEZCOPH has been greater than 4 until this past year with the moratorium. This is greater than the ratio for nursing. Overall this indicates that the pipeline for the number of graduates is secure compared with these other two professionals schools. In terms of graduate students, the ratio has averaged just above 3 over the past several years and is slightly less than pharmacy and just below that for nursing (Appendix N.21). It is somewhat difficult to interpret these values due to the fact that the numbers are less stable year to year because of smaller student body. However, even in FY 08-09 the ratio of 2.6 indicates that there are sufficient students in the graduate pipeline who will graduate.

PHL Majors per Faculty (Appendix N.14)

The number of enrolled majors to instruction faculty for undergraduates was about at 21.55 during the peak of the program and dropped to 7.24 during the last year. However, these numbers are a bit misleading as we did not have faculty dedicated to the undergraduate program in fall 2008, but only people teaching courses as needed. Nonetheless, this number will increase and we believe it will be greater than the 21.55 peak of 2008 within the next 3 years. The ratio for graduate students is also a bit misleading as the number of faculty in the college did not actually change in fall 2006 but many of them obtained TE position. This is one reason there was almost a 50% decrease in the graduate majors per faculty. This proportion may increase slightly over the next couple of years as the graduate programs grow.

PHL Majors (Appendix N.15)

The number of degrees conferred by MEZCOPH has remained relatively stable over the past five years. The only significant drop has been with the number of undergraduate majors. This will increase once again as we move forward with growing our undergraduate program.

PHL Minors (Appendix N.16)

The number of students who are taking minors from MEZCOPH is slowly increasing, mostly in Epidemiology as it is the program with the greatest time in existence. However, Minors in biostatistics are already present, even though the program only began in fall 2007. Also, the number of minors in public health is at 5 for the past 2 years. This will also increase as the program becomes more known on campus.

PHL Personnel (Appendix N.17)

There was a decrease in the total number of personnel in the college with about 8% fewer employees in 2008 compared with 2005. The number of state funded instructional faculty has increased significantly since our last academic program review and basically doubled due to an increase in state funds starting in 2005 and increasing through 2006. The FTE for instructional faculty has remained about the same in 2007 and 2008. This increased in faculty FTE has brought the proportion of faculty FTE to professional FTE to about 0.9 which is approximately 3 times greater than the ratio in 2004, but in terms of funds the increase has doubled to about 0.7 for FTE faculty compared with state funds for staff and professionals. This indicates that there currently are less staff and professionals that support research and education compared with the number of faculty. How much lower this can go within a small college is of concern as the basic needs to run the college are currently at a bare minimum.

PHL PhD Recipient Minors and Time to Degree (Appendix N.18)

Students from a variety of studies are getting minors in Epidemiology, and 10 fields of study are represented among the 19 minors. The PD completion rate is 100% within six years, but this only represents two full time students given the current method of analysis. Overall, these data and other tables indicate that the PhD program is stable and works with students to complete their degrees.

PHL SCH per Faculty FTE (Appendix N.19)

The undergraduate student credit hours (SCH) decreased slightly in 2008-09 but not as much as would have been expected given the moratorium on admissions to the program. This occurs because most of the SCHs are for upper division classes and students who were pre-health education were still allowed to enter the program. The graduate SCHs have remained at about 3,400 hours for the last three years of data provided. The SCH per faculty FTE decreased in FY 06-07 due to having more faculty move to TE positions as can be seen with the change going from 7.5 in FY 04-05 to 16.71 in FY 08-09. This should position the college to increase the total number of SCH over the next several years as the undergraduate program grows.

MEZCOPH has a SCH to faculty ratio that is similar to Pharmacy prior to our moratorium on admissions to the undergraduate program. However, it is significantly less than the college of nursing mainly due to the fact that MEZCOPH has traditionally been a graduate school and the SCH per faculty members has been less for these students. This may increase over the years with the growth of the undergraduate program but it is not expected to reach the level of the nursing school. (Appendix N.21)

PHL State Expenditures per Degree (Appendix N.20)

The state expenditure per degree was lowest in FY02-03 (\$26,087) and increased until FY06-07 (\$47,781). However, in FY08-09 the amount decreased by nearly 20% to \$39,791. This decrease was due to an increase in the number of completed majors and also due to some reduction in state expenditures.

Interestingly, **Appendix N.21** indicates the number of SCH per faculty is about the same with Pharmacy, state expenditures per degree for MEZCOPH is nearly one third of that for Pharmacy in FY 08-09 (\$39,791 vs. \$104,758). However, the state expenditure per degree is only about \$10,000 more in MEZCOPH (~33%) compared with nursing even though the ratio for undergraduate degrees to graduate degrees was about 7.6 times greater for nursing compared with public health. This indicates higher costs for graduate education (as also seen with Pharmacy) but proportionately, the costs per degree for MEZCOPH would have been expected to be much greater than nursing given that it has more graduate students who complete degrees compared with undergraduates in FY 08-09 while nursing has more undergraduate students compared with graduate students. However, this also indicates that the online teaching that is now established in Nursing is paying off for their graduate program and undergraduate nursing education is expensive given the clinical nature of instruction.

Summary

The data on MEZCOPH students and expenditures provide the following picture of the college's academic programs.

- 1) It has a diverse student body that is well prepared for both undergraduate and graduate studies. It now has room to grow with regards to SCHs since the UA has invested in supporting additional TE faculty lines.
- 2) Students are graduating on time and this could be improved by having more undergraduates declare their major earlier in their studies (e.g. during or after their second year).
- 3) The state expenditures per degree seem reasonable and will decrease over time as the undergraduate program grows.
- 4) There continues to be a good pipeline of students at the undergraduate and graduate levels to expect more than sufficient graduation numbers per program.

Appendices

2010 ACADEMIC PROGRAM REVIEW SELF-STUDY

MEL AND ENID ZUCKERMAN COLLEGE OF PUBLIC HEALTH



Mel and Enid Zuckerman
College of Public Health

March 2010



Annual Report for Academic Year 2008-2009

GENERAL FRAMEWORK

Public Health is synonymous with improving the human condition within Arizona and beyond. Each academic unit within the Mel and Enid Zuckerman College of Public Health (MEZCOPH) works to decrease health disparities by engaging communities within the state, nation and world through scientific inquiry, teaching and community engagement. MEZCOPH has already established itself as a leading school of public health with its focus on the Southwest and its orientation on community engagement for health promotion and disease prevention. MEZCOPH started a new global initiative and is working on building a strong global presence and collaboration as part of a "Global Health Institute." MEZCOPH has established several research and academic centers that include our Canyon Ranch Center for Prevention and Health Promotion, The Center for Health Equality, the Arizona Center for Public Health Preparedness, The Rural Health Office, and one of 12 federally funded maternal and child health training programs. MEZCOPH is currently working on the establishment of the "Global Health Institute (GHI)."

Studies by the Association of Schools of Public Health (ASPH) estimate that there will be a 23% turnover in the public health workforce within the next 4 years and 250,000 additional public health workers are needed by 2020. At the same time, there are currently 42 accredited schools in the nation with approximately 20 new schools under development. These trends suggest that over the next five years there will be a greater need for more public health workers and a more competitive market for students. In addition, research funds over the next several years will be tighter than in the past due to stagnant budgets for federal agencies and state funding is also at greater risk as the economy staggers and the potential for a recession is present. The framework for the metrics provided as part of this five-year strategic plan focuses on how MEZCOPH can determine the quality of its programs and plan for its growth to meet the increasing competition for students and extramural funds and deliver competent graduates to meet the need in the public health workforce locally, nationally & globally.

Student access will be achieved by increasing the number of students' scholarships, increasing enrollment, and developing online classes that will be easily accessible to a diverse body of students statewide, nationally and globally. Building our endowment will improve our ability to provide increasing number of students' scholarships. To engage and graduate highly qualified and competent students, MEZCOPH is developing new technologies and retooling programs to expand outreach through online and service learning classes. Students' excellence and success will be enhanced by improving and expanding our educational programs that respond to these trends. Refocusing our undergraduate education will provide an educated citizenry regarding public health issues. It will also significantly remedy the public health workforce shortage that is present in Arizona and the Nation. Our public health undergraduate degree will be an outstanding pre-professional degree that prepares students to enter graduate education in the fields of medicine, nursing, public health, pharmacy and other health related careers. Furthermore, to be one of the outstanding schools of public health, MEZCOPH must create doctoral programs within all five of the foundation areas of public health. These doctoral students will be the future of public health and take leadership positions within academics and public health practice. One

undertaking for MEZCOPH will be to increase the number of minority doctoral students by “growing our own” student base with a larger pipeline of students from undergraduate to doctoral programs.

Enhancing faculty success through achievements in research, scholarship, and creative expression is based on the principle that the MEZCOPH faculty has to be engaged in outstanding research that is transferred to our teaching and service missions. Faculty members need to apply their abilities to decrease health disparities. The faculty success metrics were developed to directly address the amount of funding the unit receives to insure the scholarly activity and public health impact necessary for faculty promotion and tenure. Thus, we will assess the level of national recognition and creative and research endeavors that are conducted by MEZCOPH faculty members. We will also use metrics that can measure how faculty members increase their training and national recognition in a manner that can lead to increased extramural funding. MEZCOPH is determined to enrich its educational environment by recruiting and retaining a diverse faculty with outstanding achievements.

Community engagement and outreach defines the very core of public health. With the community as the site for implementation of the public health discipline, MEZCOPH must have effective partnerships and linkages with community agencies, organizations and the broader general community. Our success in building and strengthening these partnerships is directly related to those resources which are devoted to supporting College endeavors in the elimination of health disparities, building and strengthening collaboration, targeting healthy Arizona Goals and strengthening public health preparedness. Additionally, in Arizona, nationally and globally, up to 80% of the public health workforce has no formal public health training, and our College must play a very special role in continuing education activities for the public health community in Arizona. This outreach requires resources to support our on-line public health certificate program as well as on-site continuing education activities throughout with a special emphasis on Pima and Maricopa Counties. We will use metrics that measure the involvement of faculty, academic professionals and students in these endeavors. Building our endowment will improve our ability to provide AZ with the best people and community programs.

Improving productivity and increasing efficiency have always been key factors in MEZCOPH strategic planning. In response to the statewide need for public health education, MEZCOPH created the graduate certificate in public health that is delivered online for easy access and effectiveness and in response to the worldwide need for public health education and training, MEZCOPH is creating the “Global Health Institute (GHI)” to foster global partnerships with key universities and develop innovative education and evidence-based research and community programs. MEZCOPH developed a business plan for the GHI that will generate revenues and will allow MEZCOPH to reward faculty innovations.

METRICS WITHIN THE KEY DIRECTIVES

Expanding Access and Enhancing Educational Excellence

Demonstrating Increased Student Access & Success (academic year 2008-2009): MEZCOPH has been able to increase enrollment and respond to the need to transform and at the same time expand its academic offerings with regards to its graduate and undergraduate programs in Tucson and Phoenix. It also has maintained a diverse student body and its alumni have found jobs within a depressed economy.

1. Students' scholarships: In 2008, 22 students were given a total of \$45,700 and in 2009, 44 students were given a total of \$94,000 from named scholarships, the Community Advisory Board endowment, and the MEZCOPH general scholarship fund.

2. Enrollment: MEZCOPH has successfully increased the MPH students' enrollment by 30% and almost tripled the number of enrolled doctorate students this fall (2009) compared with 2008.
3. Student Diversity: MEZCOPH continues to be successful in admitting a diverse and well-qualified student body, exceeding its goal of ensuring that 40% of matriculated graduate students represent racial and ethnic groups, as measured by underrepresented US minorities and international students. At the undergraduate level, representation of diversity within the MEZCOPH student body has exceeded 40% for the past five years.
4. Engage and graduate students who can contribute to the State, Nation & World: In 2008, 69% of funded projects involved one or more student participants and 32% of publications (articles, books, monographs, presentations) included one or more student authors.
5. Implementing new Environmental Health Sciences MS/PhD program: Our new program was approved by ABOR earlier this year. We will be recruiting MS/PhD applicants during the 2009 academic year for program initiation in the fall of 2010.
6. Undergraduate program: A new BS major in public health was developed and approved this past year by ABOR. At the beginning of the 2009 academic year, there were already 43 new students who identified themselves as pre-public health majors. This was done without much promotion and given this past performance, we believe that by the next academic year, the number of students will increase and MEZCOPH will meet its goals of matriculating 100 new students into the major by 2013.
7. Phoenix program: The MEZCOPH Education Committee also has approved expanding the Master of Public Health Program to Phoenix. A curriculum in Public Health Practice has been designed and students will be accepted into the program beginning in spring 2010.
8. MEZCOPH administers an alumni survey one year post graduation. Our data show that MEZCOPH graduate program alumni continue to experience postgraduate success. Of the College's 133 graduates in Academic Year 07/08, in the year since graduation, 83.5% have either secured employment in public health positions or are pursuing further academic training; 10.5% continue to actively look for a job and 6% are currently "lost to follow up."

Future Planned Goals & Activities

- Health Care Quality Program: Together with representatives from the Colleges of Medicine, Nursing, and Pharmacy, we are developing an inter-professional health care quality improvement and safety four-course certificate/MPH track within the MEZCOPH Public Health Policy and Management section. The courses will provide students with an overview of the theories and methodologies of health care quality improvement and will give them an in-depth understanding, coupled with hands-on applications, of how to use quality tools and techniques to improve health care in a variety of settings.
- Currently, five of our six academic sections in MEZCOPH offer a doctoral program. A sixth doctoral program is being planned and a proposal will be developed once we have added an additional faculty member to our Health Behavior and Health Promotion Section.

Increasing Achievements in Research, Scholarship, and Creative Expression (calendar year 2008)

A: *Leading the nation in research and outreach activities that are critical to our state's future*

- Our data show that in 2008 77% of MEZCOPH tenured, tenure-eligible and non-tenure eligible faculty were principal investigators on at least one grant or contract resulting in 2.9 peer reviewed publications per faculty. Forty eight percent of the funded grants and contracts focused on community health disparities, diverse populations, or the Southwest.
- *Canyon Ranch Center for Prevention and Health Promotion:* Our CDC designated Prevention Research Center was funded for the 3rd term (2009-1014) for a total of \$3.95 million. The Center research activities are focused on alleviating health disparities in AZ border communities with programs focused on chronic disease prevention through community advocacy and the dissemination of effective interventions targeting obesity and diabetes prevention.
- *Firefighters:* Effective September 1, 2009, we will begin a four-year project implementing risk management strategies within the Tucson Fire Department, which will hopefully lead to a reduction in their workplace injuries and create a model program, which can be adopted nationally. This research is supported by a \$1.35 million R01 grant from the National Institute for Occupational Safety and Health. Additional funding is pending to compare firefighter injuries on an international basis in order to help inform the development of best practices.

B: *Build on our national leadership in interdisciplinary and collaborative research.*

- *Rural Health Office:* We are completing the first stage of the "Arizona Rural Health Workforce Provider Data System." Provider types such as physicians, nurse practitioners, dentists, dental hygienists, registered nurses, and others will be enumerated for rural towns in collaboration with the various state AHECs. We will also conduct the "Binational Assessment of U.S.-Mexico Border Health Research" on both sides of the border in collaboration with the College of Medicine, Pan American Health Organization, and Consortium for North American Higher Education Collaboration. We will plan and execute the "Arizona Rural Health Conference" in August 2010.
- *Building Healthy Neighborhoods:* MEZCOPH collaborated with the Drachman Institute at the College of Architecture and the Center for Applied Sociology at the UA, to assist neighborhoods in the Tucson Empowerment Zone to examine and address policies and challenges related to the built environment vis a vis healthy behaviors including physical activity and nutrition.
- MEZCOPH faculty are key investigators in different collaborative grants across UA such as the "National Children Cohort Study" in collaboration with the College of Medicine and CALS and the statewide project "First Things First" in collaboration with the College of Education.

Planned Faculty recruitment (Translational Medicine Initiatives)

- We plan to recruit a faculty biostatistician who has expertise in genetic studies to help further our achievements in research. Increasingly genetic information is becoming available for population-based research and clinical research. Understanding the needs of the UA research community, MEZCOPH will recruit a biostatistician to support genetic studies and to train students in this area.
- We also are planning to increase our capacity for research and teaching in translational medicine. A molecular/genetic epidemiologist will be sought to add to our faculty in order to enhance our ability in

developing translational research programs on major and merging health problems, such as obesity, osteoporosis, sarcopenia, respiratory diseases, cardiovascular diseases and cancer.

Expanding Community Engagement and Workforce Impact

MEZCOPH continues to collect data on an annual basis to guide us in understanding both our strengths and challenges in the arena of community engagement and outreach. This past year's data provides a strong picture of continuing the trend of meeting our goals as stated in our strategic plan.

A. Provide research-based services to the people of Arizona

1. In relation to involvement of faculty and appointed personnel in community outreach and service, we have seen a slight increase with 54% faculty involvement.
2. Our student internships continue to be our best indicator of student involvement in the community with 97% of internships community based and focusing on community outreach practice and service activities that emphasize eliminating health disparities, building and strengthening collaborations, targeting Arizona Health People 2010 goals and public health preparedness. While we have seen a slight decrease in the numbers of projects throughout Arizona, the College continues to have collaborations in all 15 of Arizona's counties and we continue to work to increase our presence in Phoenix and Maricopa County. We have seen a slight decline in faculty and academic professionals involvement in workforce development but remain close (48%) to our target of 50%.
3. Beyond these individual metrics, over the past year the College has had a unique opportunity to expand our community engagement in a very significant initiative. In partnership with Arizona Area Health Education Centers (AHEC), we have established the College of Public Health Rural Health Professions Program. This program has supported the development and implementation of four graduate service learning courses and one rural health practicum. These week long courses immerse our faculty and students in partnership with community organizations in strong collaborations about specific real world public health issues in the community. The courses have resulted in inspiring our students, faculty, and community partners to realize the power of collaboration in meeting the many meaningful public health challenges and making a difference throughout our state.
4. MEZCOPH is well known for its community engaged programs such as, but not limited to, Pima County Community Health Task Force, Arizona Community Health Outreach Worker Network, Rural Women's Health Initiative, and Su Voz Vale - Your Voice Counts: Environmental Scan of Sexual Assault Services/Needs in Pima County.

B: Foster the transfer of technological and research innovations

1. *Firefighters*: MEZCOPH has a new program launching in September 2009 with the National Fire Chief's Association that provides an educational in-service for emergency healthcare responders, complete with pre and post test, and completion certificate. The program is expected to be utilized nationwide.
2. *Mining*: As part of the MEZCOPH component within the recently established Institute for Mineral Resources funded by Science Foundation Arizona, we are holding a Workshop "Health and Minerals in a Sustainable World" on October 17, 2009, in Drachman Hall, Room A118, 8:30am-3pm for all faculty and graduate students interested in community and environmental health and safety. They will

engage with industry and NGO representatives about grand challenges in sustainable mining including worker and community needs and exposures.

3. *Arizona Center for Public Health Preparedness (AzCPHP)*: This year the center is formalizing a new partnership with the U.S. Federal Public Defenders at the Tucson Federal Courthouse to enhance their role as a non-traditional public health partner in response to the H1NI outbreak, which began in April of 2009. AzCPHP will provide technical assistance with their continuity of operations planning, in addition to tailoring a training program for their department that focuses on Best Practices for Handling a Disease Outbreak. AzCPHP also will be expanding our current online Epidemiology Series in collaboration with the Arizona Department of Health Services, and the target audience is new state epidemiologists and county professionals that fulfill epidemiology job roles. Additionally, the center will work with the Phoenix Federal Bureau of Investigations to develop an online Forensic Epidemiology course.
4. *Rural Health*: MEZCOPH received a HRSA-funded Rural Hospital Flexibility grant for in the amount of \$506,413, which allows for assistance to 14 critical access hospitals (CAH) in rural and remote areas of Arizona through the provision of performance improvement opportunities and initiatives. Specific activities for 2009-2010 will include training programs for CAH personnel on methods for conducting successful quality improvement projects, designing an infection monitoring protocol, and rolling out new infection monitoring protocols. Initiatives will include promoting and supporting CAH applications for Level IV trauma designation, supporting an online system for rural ambulance quality improvement, implementing two studies that assess the economic impact of critical access hospitals, providing grant-writing training related to health information technology advancement in CAHs, and sponsoring a Western Region conference of Rural Hospital Flexibility programs in Tucson. In addition, MEZCOPH Received HRSA-funded Small Hospital Improvement Grant in the amount of \$161,087 to distribute equally to eligible small rural hospitals in Arizona. This project allows the hospitals to strengthen quality improvement efforts.

Planned activities

1. Launching the Global Health Institute (Fall 2009).
2. Successfully compete for renewal of our current HRSA/MCHB Maternal and Child Health training grant (\$1.8 million).
3. Develop a 2-3-week summer institute in global health that will bring mid to senior health professionals from the US and around the world to Arizona annually for intensive training in global public health (Summer 2010).
4. Build our endowment and broaden our donors' support to improve our ability to provide AZ with the best people & programs.

Improving Productivity and Increasing Efficiency

MEZCOPH is working on developing innovative, high demand programs and certificates by streamlining curricula to ensure the best use of faculty while creating incentives for teaching innovations through strategic deployments of tuition revenues. Planning is in place for the following programs:

1. An online Graduate Certificate in Global Health will start in the fall of 2010. The certificate will be administered through the UA Outreach College as part of the MEZCOPH "Global Health Institute," and is expected to generate revenue to support the GHI and the College's mission and activities.

2. Two public health informatics classes will be developed and taught next year. These two courses will be part of a certificate in the area of public health informatics. These courses will be offered online in the next 1-2 years serving as a tool for student recruitment and as a venue for training professionals in public health agencies and biomedical units statewide and globally. The certificate will be administered through the UA Outreach College as part of the MEZCOPH “Global Health Institute,” and is expected to generate revenue to support the GHI and the College’s mission and activities.
3. Several MOAs are being developed between MEZCOPH and global partners under the umbrella of the GHI. The successful collaboration is expected to generate revenue to support the GHI and the College’s mission and activities.

APPENDIX C.1. Faculty Survey Forms

1. Undergraduate Public Health Program Questionnaire

* 1. Program Quality.

	Poor	Fair	Good	Very Good	Superior
What is the overall quality of the Program?	j0	j0	j0	j0	j0

Comments:

* 2. Resources.

	Poor	Not very good	Adequate	Good	Superior
The library, equipment and support staff available to the students are:	j0	j0	j0	j0	j0

Comments:

* 3. Teaching Loads.

	Minimal	Light	Appropriate	Heavy	Excessive
How appropriate are the teaching loads for the faculty members in the undergraduate program?	j0	j0	j0	j0	j0

Comment:

* 4. Comparability.

	Poorly	Not Well	Similarly	Well	Very Well
How does the undergraduate program measure up to comparable programs at peer institutions?	j0	j0	j0	j0	j0

Comment:

* 5. Faculty Contributions.

	Very weak	Weak	Acceptable	Strong	Very Strong
5a. How strong are the MEZCOPH faculty in research contributions?	jn	jn	jn	jn	jn
5b. How strong are the MEZCOPH faculty in teaching performance?	jn	jn	jn	jn	jn
5c. How strong are the MEZCOPH faculty in service to the state and nation?	jn	jn	jn	jn	jn
5d. How strong are the MEZCOPH faculty in awards and honors?	jn	jn	jn	jn	jn

Comment:

* 6. Applicants.

	Poorly qualified	Less qualified than necessary	Adequately qualified	Well qualified	Very well qualified
How qualified are the program's applicants?	jn	jn	jn	jn	jn

Comment:

* 7. Students.

	Very weak	Weak	Acceptable	Strong	Very strong
How strong are the program's students academically?	jn	jn	jn	jn	jn

Comment:

8. Describe and explain areas in which the program needs to improve?

9. Please list courses you think should be included in the program?

10. Please list courses you think should be deleted from the program?

11. Please provide any additional comments that you think will assist with improving the program?

* 12. How long have you been associated with the program?

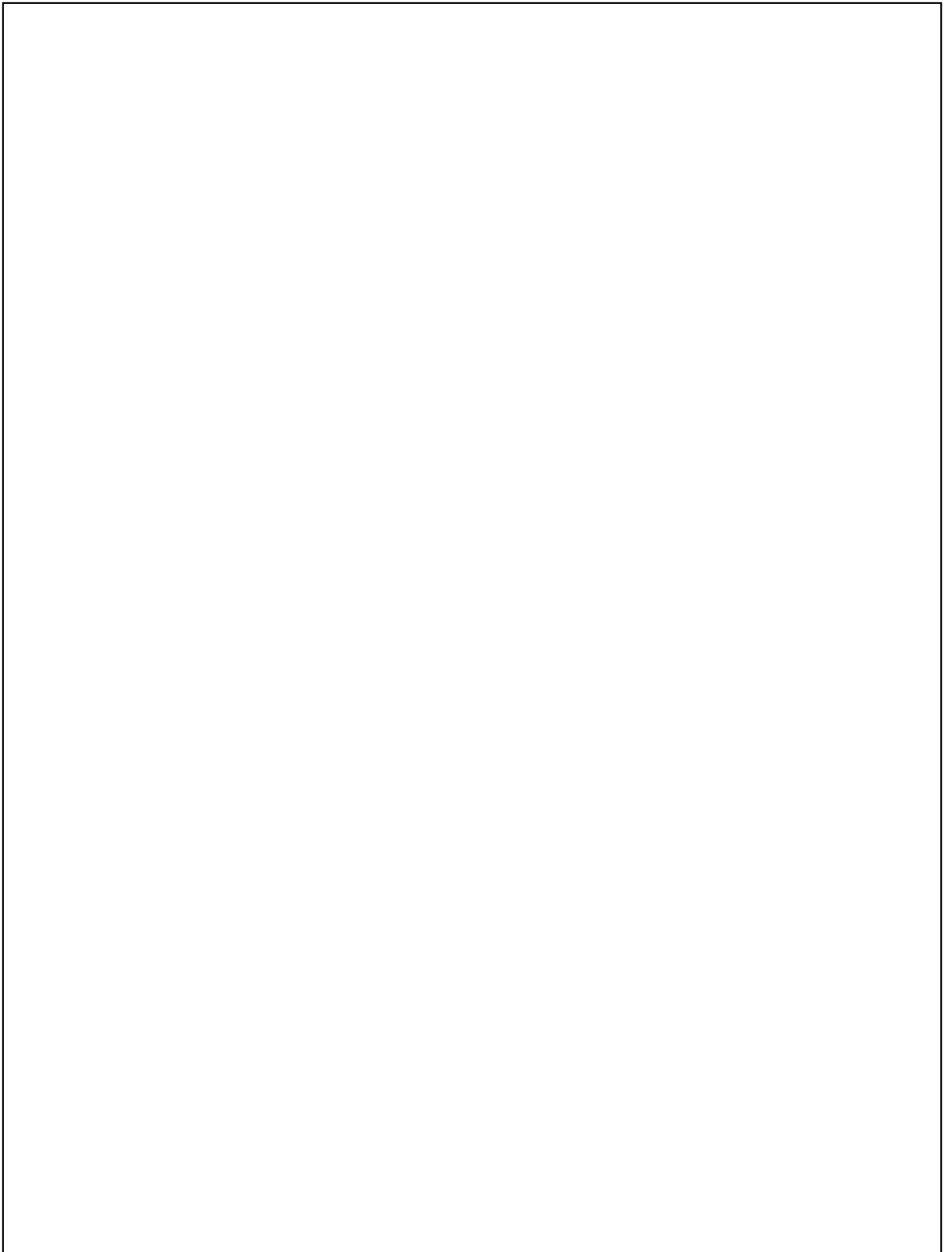
< 1 year

1-2 years

3-5 years

5-10 years

> 10 years



MPH Education Program

1. MPH Program Questionnaire

* 1. Program Quality.

	Poor	Fair	Good	Very Good	Superior
What is the overall quality of the Program?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

* 2. Resources.

	Poor	Not very good	Adequate	Good	Superior
The library, equipment and support staff available to the students are:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comments:

* 3. Teaching Loads.

	Minimal	Light	Appropriate	Heavy	Excessive
How appropriate are the teaching loads of the MPH faculty?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment:

* 4. Comparability.

	Poorly	Not Well	Similarly	Well	Very Well
How does the MPH program measure up to comparable MPH programs at peer institutions?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment:

MPH Education Program

* 5. Faculty Contributions.

	Very weak	Weak	Acceptable	Strong	Very Strong
5a. How strong are the MEZCOPH faculty in research contributions?	jq	jq	jq	jq	jq
5b. How strong are the MEZCOPH faculty in teaching performance?	jq	jq	jq	jq	jq
5c. How strong are the MEZCOPH faculty in service to the state and nation?	jq	jq	jq	jq	jq
5d. How strong are the MEZCOPH faculty in awards and honors?	jq	jq	jq	jq	jq

Comment:

* 6. Applicants.

	Poorly qualified	Less qualified than necessary	Adequately qualified	Well qualified	Very well qualified
How qualified are the program's applicants?	jq	jq	jq	jq	jq

Comment:

* 7. Students.

	Very weak	Weak	Acceptable	Strong	Very strong
How strong are the program's students academically?	jq	jq	jq	jq	jq

Comment:

8. Describe and explain areas in which the program needs to improve?

9. Please list courses you think should be included in the program?

10. Please list courses you think should be deleted from the program?

MPH Education Program

11. Please provide any additional comments that you think will assist with improving the program?

* 12. How long have you been associated with the program?

< 1 year

1-2 years

3-5 years

5-10 years

> 10 years

DrPH Education Program

1. DrPH Program Questionnaire

* 1. Program Quality.

	Poor	Fair	Good	Very Good	Superior
What is the overall quality of the Program?	jñ	jñ	jñ	jñ	jñ

Comments:

* 2. Resources.

	Poor	Not very good	Adequate	Good	Superior
The library, equipment and support staff available to the students are:	jñ	jñ	jñ	jñ	jñ

Comments:

* 3. Teaching Loads.

	Minimal	Light	Appropriate	Heavy	Excessive
How appropriate are the teaching loads of the DrPH faculty?	jñ	jñ	jñ	jñ	jñ

Comment:

* 4. Comparability.

	Poorly	Not Well	Similarly	Well	Very Well
How does the DrPH program measure up to comparable DrPH programs at peer institutions?	jñ	jñ	jñ	jñ	jñ

Comment:

DrPH Education Program

* 5. Faculty Contributions.

	Very weak	Weak	Acceptable	Strong	Very Strong
5a. How strong are the MEZCOPH faculty in research contributions?	jq	jq	jq	jq	jq
5b. How strong are the MEZCOPH faculty in teaching performance?	jq	jq	jq	jq	jq
5c. How strong are the MEZCOPH faculty in service to the state and nation?	jq	jq	jq	jq	jq
5d. How strong are the MEZCOPH faculty in awards and honors?	jq	jq	jq	jq	jq

Comment:

* 6. Applicants.

	Poorly qualified	Less qualified than necessary	Adequately qualified	Well qualified	Very well qualified
How qualified are the program's applicants?	jq	jq	jq	jq	jq

Comment:

* 7. Students.

	Very weak	Weak	Acceptable	Strong	Very strong
How strong are the program's students academically?	jq	jq	jq	jq	jq

Comment:

8. Describe and explain areas in which the program needs to improve?

9. Please list courses you think should be included in the program?

10. Please list courses you think should be deleted from the program?

DrPH Education Program

11. Please provide any additional comments that you think will assist with improving the program?

* 12. How long have you been associated with the program?

< 1 year

1-2 years

3-5 years

5-10 years

> 10 years

MS-PhD Epi Program

1. MS-PhD Epi Program Questionnaire

* 1. Program Quality.

	Poor	Fair	Good	Very Good	Superior
What is the overall quality of the Program?	jñ	jñ	jñ	jñ	jñ

Comments:

* 2. Resources.

	Poor	Not very good	Adequate	Good	Superior
The library, equipment and support staff available to the students are:	jñ	jñ	jñ	jñ	jñ

Comments:

* 3. Teaching Loads.

	Minimal	Light	Appropriate	Heavy	Excessive
How appropriate are the teaching loads of the MS-PhD Epi faculty?	jñ	jñ	jñ	jñ	jñ

Comment:

* 4. Comparability.

	Poorly	Not Well	Similarly	Well	Very Well
How does the MS-PhD Epi program measure up to comparable Epi programs at peer institutions?	jñ	jñ	jñ	jñ	jñ

Comment:

MS-PhD Epi Program

* 5. Faculty Contributions.

	Very weak	Weak	Acceptable	Strong	Very Strong
5a. How strong are the MEZCOPH faculty in research contributions?	jq	jq	jq	jq	jq
5b. How strong are the MEZCOPH faculty in teaching performance?	jq	jq	jq	jq	jq
5c. How strong are the MEZCOPH faculty in service to the state and nation?	jq	jq	jq	jq	jq
5d. How strong are the MEZCOPH faculty in awards and honors?	jq	jq	jq	jq	jq

Comment:

* 6. Applicants.

	Poorly qualified	Less qualified than necessary	Adequately qualified	Well qualified	Very well qualified
How qualified are the program's applicants?	jq	jq	jq	jq	jq

Comment:

* 7. Students.

	Very weak	Weak	Acceptable	Strong	Very strong
How strong are the program's students academically?	jq	jq	jq	jq	jq

Comment:

8. Describe and explain areas in which the program needs to improve?

9. Please list courses you think should be included in the program?

10. Please list courses you think should be deleted from the program?

MS-PhD Epi Program

11. Please provide any additional comments that you think will assist with improving the program?

* 12. How long have you been associated with the program?

< 1 year

1-2 years

3-5 years

5-10 years

> 10 years

PhD Biostatistics Program

1. PhD Biostatistics Program Questionnaire

* 1. Program Quality.

	Poor	Fair	Good	Very Good	Superior
What is the overall quality of the Program?	jñ	jñ	jñ	jñ	jñ

Comments:

* 2. Resources.

	Poor	Not very good	Adequate	Good	Superior
The library, equipment and support staff available to the students are:	jñ	jñ	jñ	jñ	jñ

Comments:

* 3. Teaching Loads.

	Minimal	Light	Appropriate	Heavy	Excessive
How appropriate are the teaching loads of the PhD Biostatistics faculty?	jñ	jñ	jñ	jñ	jñ

Comment:

* 4. Comparability.

	Poorly	Not Well	Similarly	Well	Very Well
How does the PhD Biostatistics program measure up to comparable Biostatistics programs at peer institutions?	jñ	jñ	jñ	jñ	jñ

Comment:

PhD Biostatistics Program

* 5. Faculty Contributions.

	Very weak	Weak	Acceptable	Strong	Very Strong
5a. How strong are the MEZCOPH faculty in research contributions?	jq	jq	jq	jq	jq
5b. How strong are the MEZCOPH faculty in teaching performance?	jq	jq	jq	jq	jq
5c. How strong are the MEZCOPH faculty in service to the state and nation?	jq	jq	jq	jq	jq
5d. How strong are the MEZCOPH faculty in awards and honors?	jq	jq	jq	jq	jq

Comment:

* 6. Applicants.

	Poorly qualified	Less qualified than necessary	Adequately qualified	Well qualified	Very well qualified
How qualified are the program's applicants?	jq	jq	jq	jq	jq

Comment:

* 7. Students.

	Very weak	Weak	Acceptable	Strong	Very strong
How strong are the program's students academically?	jq	jq	jq	jq	jq

Comment:

8. Describe and explain areas in which the program needs to improve?

9. Please list courses you think should be included in the program?

10. Please list courses you think should be deleted from the program?

PhD Biostatistics Program

11. Please provide any additional comments that you think will assist with improving the program?

* 12. How long have you been associated with the program?

< 1 year

1-2 years

3-5 years

5-10 years

> 10 years

Appendix D.1.a.
Faculty with Primary Appointment in MEZCOPH
Degrees and Disciplinary Areas

Name	Division	Rank	Tenure Status	FTE	Earned Degree 1 & Its University		Earned Degree 2 & Its University		Disciplinary Area	Gender	Ethnicity
Barker, Gail	Comm,Env & Policy	Asst. Prof	NTE	0.49	MBA	U of Phoenix	PhD	Kennedy Western University	Health Administration	F	White
Beamer, Paloma	Comm Env & Policy	Asst. Prof	TE	1.00	MS	Stanford University	PhD	Stanford University	Environmental Health & Engr	F	Hispanic/Latina
Bergsma, Lynda	Hlth Prom Sciences	Asst. Prof.	TE	1.00	Med	U of Arizona	PhD	U of Arizona	Higher Ed & Sociology	F	White
Burgess, Jeff	Comm,Env & Policy	Prof.	Tenured	1.00	MS	U of Arizona	MD	U of Washington	Environmental Health	M	White
Carmona, Richard	Hlth Prom Sciences	Prof.	NTE	0.10	MD	U of California San Francisco	MPH	U of Arizona	Medicine, Health Policy	M	Hispanic/Latino
Chen, Zhao	Epi & Biostat	Prof.	Tenured	1.00	MPH	U of Arizona	PhD	U of Arizona	Anthropology		Asian
Coe, M. Kathryn	Hlth Prom Sciences	Assoc. Prof.	Tenured	1.00	MA	Arizona State University	PhD	Arizona State University	Anthropology	F	White
Cutshaw, Christina A.	Hlth Prom Sciences	Asst. Prof	TE	1.00	MHS	Johns Hopkins	PhD	Johns Hopkins	Child Mental Health	F	White
Duncan, Burris R.	Hlth Prom Sciences	Prof	NTE	0.48	BA	U of Washington St. Louis	MD	U of Kansas	Medicine	M	White
Ehiri, John	Hlth Prom Sciences	Prof	Tenured	1.00	MPH	U of Glasgow Scotland	PhD	U of Glasgow Scotland	Maternal & Child Health	M	Black/ Afr American
Eisenberg, Merrill	Comm,Env & Policy	Asst. Prof.	TE	1.00	MA	U of Nevada	PhD	U of Connecticut	Anthropology	F	White
Eng, Howard	Comm,Env & Policy	Asst. Prof.	NTE	1.00	MS	U of Arizona	DrPH	U of Texas	Community Health	M	Asian
Enright, Paul L.	Epi & Biostat	Prof	NTE	0.50	BA	Loma Linda University	MD	Loma Linda University	Medicine	M	White
Ernst, Kacey	Epi & Biostat	Asst. Prof	TE	1.00	MPH	U. of Michigan	PhD	U of Michigan	Epidemiology	F	White
Foote, Janet A.	Epi & Biostat	Asst. Prof	NTE	1.00	BS	U of California Davis	PhD	U of Arizona	Epidemiology	F	White
Gerald, Joe	Comm Env & Policy	Asst. Prof	NTE	1.00	MD	U of Southern Alabama	PhD	U of Alabama Birmingham	Medicine	M	White
Gerald, Lynn	Hlth Prom Sciences	Prof	Tenured	1.00	MSPH	U of Alabama Birmingham	Phd	University of Alabama Birmingham	Gerontology	F	White
Giacobbi Jr., Peter R.	Hlth Prom Sciences	Asst. Prof	TE	1.00	MS	Miami University	PhD	U of Tennessee	Health Behavior & Health Promotion	M	White
Gray, Norma	Hlth Prom Sciences	Asst. Prof.	TE	0.73	MS	U of Hartford	PhD	U of Arizona	Clinical Psychology	F	White
Guessner, Angelika C.	Epi & Biostat	Prof	NTE	0.82	MS	Ruprecht-Karl Univ Heidelberg	PhD	Ruprecht-Karl Univ Heidelberg Germany	Biostatistics	F	White

Name	Division	Rank	Tenure Status	FTE		Earned Degree 1 & Its University		Earned Degree 2 & Its University	Disciplinary Area	Gender	Ethnicity
						Germany					
Hakim, Iman	Hlth Prom Sciences	Prof.	Tenured	1.00	PhD	Ain-Shams U (Egypt)	MPH	U of Arizona	Public Health	F	Mid-East
Harris, Robin	Epi & Biostat	Assoc. Prof	Tenured	0.85	MPH	U of Texas, Houston	PhD	U of Washington	Epidemiology	F	White
Hart, Lawrence G.	Comm Env & Policy	Prof	Tenured	1.00	MS	U of Utah	PhD	U of Washington Seattle	Public Health Policy	M	White
Hites Jr., Lisle S.	Comm Env & Policy	Asst. Prof	NTE	1.00	MA	U of Southern Mississippi	PhD	Tulane University	Industrial Psychology	M	White
Hsu, Chiu-Hsieh	Epi & Biostat	Asst. Prof	TE	1.00	MS	U of Michigan, Ann Arbor	PhD	University of Michigan	Biostatistics	M	Asian
Hu, Chengcheng	Epi & Biostat	Asst. Prof	TE	1.00	MS	U of Washington Seattle	PhD	U of Washington Seattle	Biostatistics	M	Asian
Jacobs, Elizabeth T.	Epi & Biostat	Asst. Prof	TE	1.00	MS	Purdue University	PhD	U of Arizona	Nutritional Sciences	F	White
Lafleur, Bonnie	Epi & Biostat	Assoc Prof	TE	1.00	MPH	San Diego State	PhD	U of California San Diego	Biostatistics	F	White
Koss, Mary	Hlth Prom Sciences	Prof.	Tenured	1.00	AB	U of Michigan, Ann Arbor	PhD	U of Minnesota, Minneapolis	Psychology	F	White
Martinez, M. Elena	Epi & Biostat	Prof.	Tenured	1.00	MPH	U of Texas, Houston	PhD	U of Texas, Houston	Epidemiology	F	Hispanic/Latina
Meister, Joel	Hlth Prom Sciences	Prof. Emeritus	Emeritus	0.00	MA	U of California, Berkeley	PhD	U of California, Berkeley	Sociology	M	White
O'Rourke, Mary Kay	Comm, Env & Policy	Assoc. Prof.	TE	0.70	MS	U of Arizona	PhD	U of Arizona	Geosciences/Biology	F	White
Peate, Wayne F	Comm Env & Policy	Assoc. Prof	NTE	0.15	MD	Dartmouth	MPH	Harvard School of Public Health	Medicine	M	White
Pettygrove, Sydney	Epi & Biostat	Asst. Prof	NTE	1.00	AB	U of California Berkeley	PhD	Johns Hopkins	Epidemiology	F	White
Renger, Ralph	Comm Env & Policy	Assoc. Prof.	Tenured	1.00	BS	U of Calgary	PhD	U of W Ontario	Motor Learning/Sport Psychology	M	White
Reynolds, Kelly	Comm Env & Policy	Assoc. Prof	TE	1.00	MS	U of Southern Florida	PhD	U of Arizona	Environmental Science & Health	F	White
Roe, Denise	Epi & Biostat	Prof.	Tenured	1.00	MS	U of Colorado	DrPH	U of California, Los Angeles	Biostatistics	F	White
Rosales, Cecilia	Comm Env & Policy	Assoc. Prof	TE	0.90	MD	Univ Autonoma de Ciudad Juarez Mexico	MS	U of Arizona	Medicine & Public Health Policy	F	Hispanic/Latina
Schachter, Kenneth A	Comm Env & Policy	Asst. Prof.	NTE	0.49	MBA	U of Phoenix	MD	U of Connecticut	Medicine	M	White
Schloss, Ernest P.	Comm Env & Policy	Asst. Prof	TE	0.51	PhD	U of Arizona	MA	Prescott College	Educ Administration	M	White
Shahar, Eyal	Epi & Biostat	Prof	Tenured	1.00	MPH	U of Texas Houston	PhD	U of Texas Houston	Epidemiology	M	White

Name	Division	Rank	Tenure Status	FTE	Earned Degree 1 & Its University		Earned Degree 2 & Its University		Disciplinary Area	Gender	Ethnicity
Sherrill, Duane	Epi & Biostat	Prof.	Tenured	1.00	MS	U of Colorado	PhD	U of Colorado	Biometrics	M	White
Staten, Lisa	Hlth Prom Sciences	Assoc. Prof.	Tenured	1.00	MA	U of Colorado	PhD	U of Colorado	Biology Anthropology	F	White
Taren, Douglas	Hlth Prom Sciences	Prof.	Tenured	1.00	MS	U of Arizona	PhD	Cornell	International Nutrition	M	White
Teufel-Shone, Nicolette	Hlth Prom Sciences	Assoc. Prof.	TE	1.00	MA	Northern Arizona University	PhD	U of Colorado	Anthropology/ Nutrition	F	White
Thompson, Carino, Patricia	Epi & Biostats	Asst. Prof	NTE	1.00	PhD	U of Texas			Immunology Microbiology	F	White
Watson, Ronald	Hlth Prom Sciences	Prof.	Tenured	1.00	BS	BYU	PhD	Missouri State U	Biochemistry	M	White
Yuan, Nicole	Hlth Prom Sciences	Asst. Prof.	TE	1.00	MA	Bowling Green State University	PhD	Bowling Green State University	Health Behavior and Health Promotion	F	Asian

Appendix D.1.b.
Faculty with Primary Appointment in MEZCOPH
Areas of Teaching Responsibility, Research Interests, Community Service

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Barker, Gail	Comm Env & Policy	Asst. Prof.	Fundamentals of Health Budgeting & Financial Management	Pathology; Telemedicine Business	Board Member, American Telemedicine Association Member, Southwest Technical Advisory Group Governance Committee
Beamer, Paloma	Comm Env & Policy	Asst. Prof.	Controls of Occupational Exposures; Fundamentals of Industrial & Environmental Health; Applied Exposure Assessment	Route contribution to exposure; Children's environmental health; Dermal absorption; Pesticide exposure	Academic Councilor on the Board of the International Society of Exposure Science Member, Institutional Chemical Safety Committee for the University of Arizona. Member, Advisory Board for the Latino/a Association for Graduate Students in Engineering and Science at the University Member of the Society for Hispanic Professional Engineers and the Society for the Advancement of Chicanos and Native Americans in Science.
Bergsma, Lynda	Health Prom Sciences	Asst. Prof.	Applied Aspects of Program Planning, Implementation & Evaluation; Mass Communications of Public Health	Community-engaged scholarship that examines the effectiveness of health-promotion media literacy education for youth and families, health literacy and health information seeking behavior, rural women's health and rural behavioral health issues	President, Alliance for the Media Literate America (2004-2008) Board Member/Region D Rep (Southwest and Hawaii), National Organization of State office of Rural Health, and member, Regional Conference Planning Committee Co-Chair, Performance Measurement Committee, National Organization of State Offices of Rural Health (2006+) Consultant and Invited Participant, <i>United Nations Alliance of Civilizations, First Annual Forum</i> (Madrid, Spain, 2008) Round Table, National Organization of States Offices of Rural Health (2008)
Burgess, Jeff	Comm Env & Policy	Assoc. Prof.	Occupational & Environmental Health	Respiratory toxicology in firefighters and smoke inhalation victims, reduction of mining-related injuries and exposures, environmental arsenic exposure and hazardous materials exposures including methamphetamine labs	Elected member of the Board of Trustees for the American Academy of Clinical Toxicology. American Board of Medical Specialties certified in occupational and environmental medicine, medical toxicology, and emergency medicine
Carmona, Richard	Health Prom Sciences	Prof.	Guest Lectures	Health Promotion and Policy	17 th Surgeon General of the United States (2002-2006) Chairperson of the Partnership to Fight Chronic Disease, Health and Wellness Chairperson of the George Washington University Strategies to Overcome and Prevent (STOP) Obesity Alliance Honorary chair of the National Foundation for Infectious Diseases' Childhood Influenza Immunization Coalition Member of the Board of Directors of Clorox, Healthline Networks, and the Vascular Disease Foundation

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Chen, Zhao	Epi & Biostat	Prof.	Advanced Epidemiology ; Internship Preparation Class	Ethnicity; Body Composition; Bone Density and Breast Cancer; Nationwide study for women addressing heart disease; cancer; and osteoporosis; Relationship between Mammographic Density and IGF levels	Member of the Neurological Aging and Musculoskeletal Epidemiology Study Section (2005-Now) Reviewer for current medical research and opinion (2005-Now) Member of the International Advisory Board of <i>Current Medical Research and Opinion Journal</i> (2007-Now) Member of the osteoporosis working group in the Cardiovascular Health Study (2007-Now) Reviewer for Susan G. Komen, NBLP (2008)
Coe, M. Kathryn	Health Prom Sciences	Assoc. Prof.	Multicultural Health Beliefs Social and Behavioral Aspects of Public Health	Evolution of social behavior and culture, chronic (cancer) and infectious (parasitic) diseases, community-based participatory methods, underserved populations	Reviewer for following journals: <i>Human Ecology, Ethnicity and Health, Health Care for the Poor and Underserved, Field Methods, Social Science and Medicine & JosseyBass/Wiley</i> (2005-present) Member, Comprehensive Cancer Plan, State of Arizona, Research Committee (2003-present) Member, Flinn Foundation Roadmap Committee on Cancer (2003-present) Reviewer, NIH Small Business Innovation Research and Small Business Technology Transfer Programs (2006-present) Consultant for All Nations Breath of Life Smoking Cessation Program (2007)
Cutshaw, Christina A.	Health Prom Sciences	Asst. Prof.	Public Health Approaches to Mental Disorders in the US; Values, Ethics & Public Policy	Children's mental and physical health, interventions to prevent child maltreatment, social and emotional development in early childhood, dissemination and implementation of evidence-based parenting programs.	Member, Working Group to Create an Evaluation Proposal for Arizona's First Things First (2007) Member, Emerging Issues Subcommittee of the Substance Abuse Epidemiology Work Group (2007-present) Member, Pima County Model Court Workgroup on Reactivated Child Maltreatment Cases (present)
Duncan, Burris R.	Health Prom Sciences	Prof.	Children with Special Health Care Needs	Complementary alternative therapy for children with cerebral palsy. Improvement in the management of individuals with chronic conditions including disabilities and diabetes. Detection of vitamin A deficiency.	Co-Editor, Newsletter for the Section on International Child Health American Academy of Pediatrics Co-Editor, Newsletter for the International Pediatric Association Member, Editorial Board AAP Grand Rounds
Ehiri, John	Health Prom Sciences	Prof.	Global Health	Health Promotion and Disease Prevention, Global health policy and practice; HIV/AIDS, Evidence-based Policy & Practice.	Dr. Ehiri provides technical assistance on maternal and child health issues to national ministries of health, non-governmental organizations, United Nations and bilateral agencies. Member of the Global Health Council, Washington, D.C., USA, Member, Global Academy for Tropical Health (GATH).
Eisenberg, Merrill	Comm Env & Policy	Asst. Prof.	Public Health Policy and Management	Tobacco policy Tobacco education & prevention Program evaluation & assessment Translating research into policy	Member, Board of Directors of the AZ Family Planning Council Member, Board of Directors, Society for Applied Anthropology Reviewer, Health Education Research Journal Member, Editorial Board, Medical Anthropology Quarterly Quality Assurance Committee of Pima County Access Program (PCAP)

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Eng, Howard	Comm Env & Policy	Asst. Prof.	Health Services Administration	Health services and policy research related to access to preventive services, primary care, pharmaceuticals and pharmacy services, hospital services, and emergency medical services, especially for the poor and underserved	Member of Arizona Diabetes Coalition, Surveillance Committee (1995-Present) Member of the Arizona Public Health Association, Managed Care Section (2002-Present) Member of EAZRx Steering Committee (2008-present) Past Editor Board Member for <u>Arizona Health</u>
Enright, Paul L.	Epi & Biostat	Prof.	-----	Investigation of occupational lung disease Pulmonary function testing, airway challenge tests, six-minute walk tests, and office spirometry testing Environmental interventions for children with asthma and sleep-disordered breathing in children and adults.	-----
Ernst, Kacey	Epi & Biostat	Asst. Prof.	Infectious Disease Epidemiology	Examining the links between environment and environmental change and infectious disease transmission; particularly vector-borne diseases.	Member, International Society of Infectious Diseases Member, Interprofessional Exercise on Pandemic Influenza Planning Committee (Arizona) Member, Valley Fever Awareness Planning Committee (Arizona)
Foote, Janet	Epi & Biostat	Asst. Prof.	-----	Interests include a central focus in the role of diet and physical activity in cancer prevention, along with research in the prevention of skin cancer.	Member, Society for Epidemiological Research Member, American Society for Nutrition Science Co-Chair, Arizona Sun Safety Coalition Reviewer, American Journal for Public Health Reviewer, European Journal of Clinical Nutrition
Gerald, Joe	Comm Env & Policy	Asst. Prof.	Healthcare in the US; Public Health Communications	Health outcomes, comparative effectiveness and economic research. His current work investigates the cost-effectiveness of interventions targeting children with asthma.	-----
Gerald, Lynn	Health Prom Sciences	Prof.	Public Health Communications	Clinical and Behavioral Research in Asthma and School Based Health	Member, National Asthma Educator Certification Board Member, Astra Zeneca Asthma Patient Advisory Board Consultant to the National Asthma Education and Prevention Program, School Subcommittee Workgroup. Member of the American Thoracic Society's Behavioral Science Assembly, serving in the past as the Chair of the Long Range Planning Committee and Chair of the Program Committee.
Giacobbi Jr., Peter R.	Health Prom Sciences	Asst. Prof.	Applied Public Health Theory	Applying social-psychological theory to enhance exercise and physical activity behavior. The development of community-based and peer assisted physical activity interventions. Links between psychological stress, emotion, and health.	Member, Association for the Advancement of Applied Sport Psychology Member, North American Society of the Psychology of Sport and Physical Activity Member, American Psychological Association Reviewer, Journal of Sport and Exercise Psychology Editorial Board Member, Journal of Imagery Research and Physical Activity
Gray, Norma	Health Prom Sciences	Asst. Prof.	Adolescent Health; Human Sexuality	Community based participatory research and collaborative development of prevention interventions; health benefits of artistic/creative expression; relationships between physical health, psychological trauma, depression and substance abuse.	Member, La Frontera Center Internal Review Board (AZ) Director, Tucson Indian Center Member, Association of Teachers & Maternal and Child Health Member, American Public Health Association Member, Society for Applied Anthropology Reviewer, Maternal and Child Health Journal

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Gruessner, Angelika C.	Epi & Biostat	Prof.	Data Management and the SAS Programming Language	International Pancreas Transplant Registry	-----
Hakim, Iman	Health Prom Sciences	Prof.	Maternal & Child Health; Global Health	Chemoprevention of lung carcinogenesis using green tea, effects of high tea consumption on smoking-related oxidative stress, Green Tea Intervention for Weight Gain Prevention among Women with Breast Cancer.	Member, American Public Health Association Member, Association of Teachers of Maternal and Child Health Member, American Association for Cancer Research (AACR) Member, American Association for Nutritional Sciences (ASNS) Member, National Lung Cancer Partnership (NLCP) Reviewer for following journals: Cancer Epidemiology, Biomarker & Prevention, Nutrition and Cancer, Journal of Nutrition Reviewer, several NIH study sections
Harris, Robin	Epi & Biostat	Assoc. Prof.	Basic Principles of Epidemiology; Epidemiologic Methods; Chronic Disease Epidemiology	Use of GIS in analyzing environmental cancer risks; Chemoprevention of skin cancer program; Social indicators study: Prevention needs assess: alcohol & drugs; Placebo-controlled; HPV VLP vaccine; Increasing Physical activity in seniors	Member, Society for Epidemiologic Research Reviewer for following journals: American Journal of Epidemiology, Carcinogenesis, Cancer Epidemiology Biomarkers & Prevention, American Journal Clinical Nutrition, Intern Journal Cancer Consultant with Medical Directions, Inc.
Hughes, Alison	Env & Comm Health	Lecturer	Public Health Planning & Evaluation; Health Policy, Leadership & Current Issues	Rural Health Care; Telecommunications Technology in Health Care	Ajo Community Health Center, organized intervention committee to save clinic from closing Founding member & board member AZ Rural Health Association Appointed by Secretary of Health & Human Services to National Advisory Committee on Rural Women's Health Appointed by Secretary of Health & Human Services to National Advisory Committee on Rural Health Chaired Committee on Rural Public Health
Hart, Lawrence G.	Comm Env & Policy	Prof.	Advanced Public Health Policy & Analysis	Rural health, health workforce (physicians, nurses, oral health providers, etc.), rural geographic taxonomies, access to care, rural state and federal policy, and rural health care for the elderly, infant, and underserved	Member, Arizona Rural Health Association Board Member, AcademyHealth annual conference planning committee Reviewer, Journal of Rural Health US Delegate, Annual meeting of International Health Workforce Group
Hites Jr., Lisle S.	Comm Env & Policy	Asst. Prof.	Guest Lecturer for two courses: Program Planning & Eval, Public Health Preparedness	Industrial psychology, occupational health psychology, occupational health and safety	Member, CDC Outcomes Division, Public Health Emergency Preparedness Workgroup Presenter, COPD Coalition Strategic Planning Meeting Co-Chair, National Planning & Evaluation Network Collaboration Group for Center for Public Health Preparedness

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Hsu, Chiu-Hsieh	Epi & Biostat	Asst. Prof.	Biostatistics	Survival Analysis, Missing Data and Modeling Cancer Data	Editorial Board Member, The Open Statistics and Probability Journal Member, ENAR, International Biometrics Society Member, American Statistical Association Reviewer, Statistics in Medicine journal Reviewer, Biostatistics journal
Hu, Chengcheng	Epi & Biostat	Asst. Prof.	Analysis of Categorical Data; Analysis of High Dimensional Data	Design and analysis of clinical trials; high-dimensional data; survival analysis; longitudinal data analysis; skin cancer prevention	Reviewer for following journals: Biometrics, Circulation, American Statistician and Bioinformatics Member, American Statistical Association Member, International Biometric Society (ENAR)
Jacobs, Elizabeth T.	Epi & Biostat	Asst. Prof.	Nutrition Epidemiology	Dietary risk factors for colorectal cancer. In particular, research regarding fiber and colorectal adenoma recurrence in the Wheat Bran Fiber trial, and regarding vitamin D, vitamin D receptor polymorphisms, and colorectal adenoma recurrence.	Member, American Society for Bone & Mineral Research Member, American Association of Cancer Research Editorial Board Member, Cancer Epidemiology, Biomarkers and Prevention Reviewer for following journals: Molecular Nutrition & Food Research, Archives of Dermatological Research, Clinical Gastroenterology, Cancer Chair, Youth University Science Camp-UA
Lafleur, Bonnie	Epi & Biostat	Assoc. Prof.	Biostatistics	Interface between biology and quantitative methods; specifically the application of statistical methods to cancer biology and novel biologic technologies (-omics). Permutation methods, generalized linear and mixed models.	Chair, Strategic Initiatives Subcommittee of the Biometrics Section of the American Statistical Association Member, Governing Board of the American Statistical Association Member, on two Data Safety Monitoring Committees: BIOGEN IDEC, Inc. and Vanderbilt University Reviewer, Journals of Clinical Oncology and Applied Statistics
Koss, Mary	Health Prom Sciences	Prof.	Violence against women; Family Violence	Violence against women; strengthening approaches to families with violence using restorative philosophy, veteran's wellness, measurement of sexual assault.	Member, Editorial Board of several journals: Journal of Applied Social Psychology, Journal of Interpersonal Violence, Violence and Abuse Abstracts, Trauma, Abuse & Violence Member, American Psychological Association Member, International Society for Research on Aggression Invited Participant, National Institute of Justice Sexual Violence Research Workshop Reviewer, World Health Organization-Ethical and Safety Recommendations for Researching & Responding to Sexual Violence in Emergencies Member, Board of Trustees, Arizona Opera
Martinez, M. Elena	Epi & Biostat	Prof.	Cancer Epidemiology & Prevention	Dietary Hetrocyclic Amines; Genetic Susceptibility and Risk of Colorectal Cancer; Four Corners Breast Cancer Study; Colon Cancer Prevention Program Project; Arizona Family Registry for Colorectal Cancer Studies.	Board Member, AZ Governor's Leadership Team for Health Care for Arizonans Conference Co-Chair, American Association for Cancer Research, 2 nd Annual Science of Cancer Health Disparities Board Member, Minorities in Cancer Research Council of the American Association for Cancer Research Associate Editor, Cancer Epidemiology, Biomarkers & Prevention

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
					Associate Editor, Journal of the National Cancer Institute Member, Cancer Research and Prevention Foundation Medical Advisory Board
O'Rourke, Mary Kay	Env & Comm Health	Assoc. Prof.	Environmental & Occupational Health; Environmental Monitoring and Analysis	Environmental research; health response to environmental exposures (Childrens Exposure to Pesticide; NHEXAS, ABS, Valley Fever, and others). Environmental Health; Epidemiology; Immune Diseases; Maternal & Child Health	Member, International Society of Exposure Science Conference Planning Committee Advisor, Drachman Institute HUD Project (Tucson) Member, American Academy of Allergy, Asthma & Immunology Member, US-Mexico Border Health Association Advisory Board Member, University of Arizona Book Series
Peate, Wayne F.	Comm Env & Policy	Assoc. Prof.	-----	Public health preparedness. Occupational injury, illness and exposure prevention	-----
Pettygrove, Sydney	Epi & Biostat	Asst. Prof.	Epidemiology	Arizona Autism Spectrum Surveillance Program; Arizona Muscular Dystrophy Surveillance and Research Program	Member, CDC Scientific Issues Working Group, Autism & Developmental Disabilities Monitoring Network Reviewer, Journal of Diversity in Higher Education Reviewer, CDC, Muscular Dystrophy Surveillance Network
Renger, Ralph	Comm. Env & Policy	Assoc. Prof.	Intro to Logic Modeling; Fundamentals of Evaluation	Advancing the science of evaluation through lessons learned evaluating local, state, federal, and international programs. Lessons learned have advanced the theory (e.g., logic modeling) and assessment	Member, CDC-ASPH All Hands Meeting Planning Committee Member, CDC Coordinating Office of Terrorism Preparedness & Emergency Response Core Curricula Working Group Member, European Evaluation Society; Australasia Evaluation Society; American Evaluation Association Reviewer: Journal of Emergency Management; American Journal of Evaluation; Evaluation & Program Planning
Reynolds, Kelly	Comm Env & Policy	Assoc. Prof.	Environmental and Occupational Health; Industrial Health	Development of novel and integrated methods for tracking disease-causing microbes in the environment. Identifying exposure routes of disease and evaluating health outcomes using risk assessment modeling. Community-acquired MRSA infections, waterborne	Director, "Learn about Germs" website Director, Infectious Disease Hotline Reviewer for following journals: International Journal of Environmental Health Research, Journal of Water and Health, International Association of Food Protection Member, American Water Works Association Member, International Association on Water Quality
Roe, Denise	Epi & Biostat	Prof	Biostatistics for Research; Statistical Consulting	Biometry Core; New Drug Targets for Apoptosis; Apoptosis in Colon Cancer Chemoprevention; Survival Signals for Molecular Target Assess; Colon Cancer Prev. Prog.; EXPORT Center to Reduce Health Disparities among Arizona Hispanics and American Indians	Member, American Statistical Association Member, International Biometric Society Member, American Public Health Association Reviewer for following journals: Journal of Laboratory and Clinical Medicine, Preventive Medicine, American Statistician, Journal of Clinical Oncology
Rosales, Cecilia	Comm Env & Policy	Assoc. Prof.	US-Mexico Border Health Policy; Public Health Policy and Management	Program development and implementation, public health administration and policy and health disparities research related to the Southwest.	Appointed by President George W. Bush to serve on the U.S. Mexico Border Health Commission representing Arizona. Member, Arizona Mexico Commission Member, US Mexico Border Consortium of the Hispanic Serving Center of Excellence Member, Editorial Committee of the Border Health Journal

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Schachter, Kenneth A.	Comm Env & Policy	Asst. Prof.	Public Health Leadership & Management; Public Health Policy & Mngmt	Community-based programs for the prevention and control of diabetes mellitus; Physical activity and nutrition in children	Member, Canyon Ranch Center for Prevention & Health Promotion Community Action Board Reviewer, Arizona Department of Health Services Diabetes Mini-Grant Program
Schloss, Ernest P.	Comm Env & Policy	Asst. Prof.	Strategic Planning; Health Policy & Management	Health care workforce training and development, social network analysis applied to health care, and health care quality improvement especially from the patient perspective	-----
Shahar, Eyal	Epi & Biostat	Prof.	Basic Principles of Epidemiology	Models of causation and epistemology; The role of statistics in causal inference; Causal diagrams; Cardiovascular disease; Sleep-disordered breathing	Associate Editor, American Journal of Epidemiology Editorial Peer Review: American Journal of Epidemiology, Epidemiology, Hypertension, JAMA, Lancet, Preventive Medicine, Stroke, Circulation, American Journal of Cardiology, Mayo Clinic Proceedings, Journal of Dental Research, Annals of Internal Medicine, Archives of Internal Medicine, American Journal of Respiratory and Critical Care Medicine, Controlled Clinical Trials, American Journal of Preventive Medicine, Journal of Clinical Sleep Medicine, and others
Sherrill, Duane	Epi & Biostat	Prof.	Biostatistics	Amblyopia in Astigmatic Children; Multidisciplinary Study of Right Ventricular Dysplasia; Acute Lung Injury Following Smoke Inhalation; Longitudinal Study of Asthma from birth to adolescence.	Member, Data Safety Monitoring Board, Cystic Fibrosis Foundation Member, Nominations Committee for WNAR Reviewer for following journals: Chest, European Respiratory Journal, Journal of Respiratory Critical Care Medicine, Thorax, Pediatrics, Clinical and Experimental Allergy, Journal of Applied Physiology, and Biostatistics in Medicine
Staten, Lisa	Health Prom Sciences	Assoc. Prof.	Sociocultural & Behavioral Aspects of Public Health; Health Education Intervention Methods; Health Ed Leadership Seminar	Women's health, community health, nutrition, health promotion, and chronic disease prevention	Consultant, Colorado Prevention Center Member, Governor's Executive Order on Diabetes Leadership Team Member, Arizona Diabetes Leadership Council Reviewer for following journals: Journal of Healthcare of the Poor and Underserved, Health Education & Behavior, Preventing Chronic Disease, American Journal of Preventive Medicine

Name	Division	Rank	Teaching Responsibility	Research Interests	Examples of Community Service Activities
Taren, Douglas	Health Prom Sciences	Prof.	International Nutrition ; Public Health Nutrition	Maternal and Child Nutrition, Dietary Assessment Methods; Global Health including vitamin A programs, food aid, and mother-to-child HIV transmission	Member, Executive Committee Rocky Mountain Public Health Education Consortium Member, NIH Biostatistical Methods & Research Design Study Section Chair, Association Schools of Public Health MCH Section Member, Editorial Board, Public Health Nutrition Reviewer for following journals: Journal of Nutrition, Public Health Nutrition, Maternal and Child Health Journal, and American Journal of Clinical Nutrition Chair-Elect, Association of Teachers of Maternal and Child Health
Teufel-Shone, Nicolette	Health Prom Sciences	Assoc. Prof.	Sociocultural & Behavioral Aspects of Public Health; MCH programs in rural areas; MCH programs in urban areas	Community-Based Participatory Research; Health Disparities; Disease Prevention through Physical Activity and Food Choice	Member, Executive Board Boys and Girls Club of Peach Springs (Arizona) Advisor, Hualapai Diabetes Program Advisor, Inter-Tribal Council of Arizona Member, American Anthropological Association Member, Society of Applied Anthropology Reviewer for following journals: Medical Anthropology, Preventing Chronic Disease
Thompson Carino, Patricia	Epi & Biostat	Asst. Prof.	-----	Inflammation and immunity, neuromuscular disease, cancer prevention	-----
Watson, Ronald	Health Prom Sciences	Prof.	Drugs in Society; Biology of Public Health	Using alternative medicines/dietary supplements to treat heart disease, asthma, allergy and osteoarthritis	Member International Committee on Alternative & Complementary Medicine of the National Foundation for Alternative Medicine, Subcommittee on Health Member of the Judicial Performance Review Commission for the Arizona Supreme Court Media Consultant in Guide to Experts of the American Society for Nutritional Sciences & American Society for Clinical Nutrition [only expert listed in Arizona] Member of the Council of Healthcare Advisors
Yuan, Nicole	Health Prom Sciences	Asst. Prof.	Contemporary Health Issues and Methods	Interpersonal violence, childhood trauma, addiction, and Native American health	Reviewer, Journal of Applied Social Psychology Member, Sexual Violence Prevention Planning Committee (Arizona) Member, Leadership Team of the Southern Arizona Psychological Association Member, Governing Board, Walter R. McDonald and Associates Member, American Psychological Association Member, Research Society on Alcoholism

Appendix D.1.c.
Joint Faculty
(Faculty with primary appointments in other departments)
Areas of Teaching Responsibility, Research Interests, Community Service

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
Acilkin, Mikel	Epi & Biostat	PhD	Family & Community Medicine	Research Professor	Biostatistics	Biostatistics; data management systems & computer support	Member, Editorial Board, Journal for Scientific Exploration Associate Editor, Journal of Alternative & Complementary Medicine Associate Editor, Kaiser Permanente Journal Member, Biometric Society Member, American Statistical Association
Alberts, David	Epi & Biostat	MD	Medicine	Professor		Skin Cancer Prevention Colon Cancer Prevention Colon Cancer Family Registry	Member, Scientific Advisory Board, Cancer Research Foundation of America Member, Board of Directors, Cancer Research Foundation of America, Alexandria, VA Chairman, Scientific Advisory Board, Pancreatic Cancer Action Network Medical Advisory Board, National Melanoma Foundation, Philadelphia, PA Member, Scientific Advisory Committee, Cancer Genetics Network
Ampel, Neil	Epi & Biostat	MD	Medicine	Professor	Microbiology & Immunology		Research & Treatment Development Study Group, AZ Governors Task Force on AIDS Advisory Committee, Southern Branch, American Lung Association of AZ Member of the Board, American Lung Association of AZ Medical Advisor, Tucson SHANTI Foundation
Betterton, Eric A.	Comm Env & Policy	PhD	Atmospheric Sciences	Professor	Air Pollution: Gases/Aerosols	Atmospheric aerosols aids in evaluation of exposure & disease	-----
Bell, Iris	Epi & Biostat	PhD	Psychiatry	Professor	Complementary & Alternative Medicine in Psychiatry	Health outcomes effectiveness studies of integrative medicine, complementary & alternative medicine	Invited testimony before US House of Representatives Subcommittee on National Security, Veterans Affairs, & International Affairs
Campos-Outcalt, Doug	Comm Env & Policy	PhD	Family & Community Medicine	Professor	Public Health Policy and Administration	Applied public health practice methods, health workforce distribution, public health preparedness and the interface between public health and	Appointed to serve on the National Advisory Council of the Agency for Health Care Policy and Research Member of the Editorial Board of the American Journal of Preventive Medicine.

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
Chisholm-Burns, Marie	Health Prom Sciences	PharmD MPH	Pharmacy Practice & Science	Professor	Pharmacy Practice	Improving medication access; adherence, health outcomes among solid organ transplants	Member, Arizona Cancer Center Board Member, American Society of Transplantation Member, American Association of Colleges of Pharmacy Founder and Director, Medication Access Program (Arizona)
Choi, Christopher	Comm Env & Policy	PhD	Agricultural & Biosystems Engineering	Professor	Advanced Biosystems Transport Phenomena	Transports of microbes in drinking water & experimental & computational fluid dynamics	Member, Organizing Committee of the First World City Water Forum in Korea Co-Organizer, 12 th Water Distribution System Analysis Symposium (Tucson) Reviewer, ASCE Journal of Environmental Engineering, Journal of Water and Health, International Journal of Heat and Mass Transfer
Chorover, Jon	Comm Env & Policy	PhD	Soil, Water & Env Science	Professor	Assessments of pollutants in the environment	Environmental chemistry aids in evaluation of exposure & disease	Associate Editor, Soil Science Society of America Journal Member, Weathering System Sciences Consortium-working Group Member, NSF Critical Zone Exploration Network Member, American Chemical Society Member, International Soil Science Society
Coons, Stephen	Epi & Biostat	PhD	Pharmacy Practice	Professor	Social & Admin Sciences Pharmacy Practice & Science	Quality of life assessment	-----
Dalen, James	Env & Comm Health	MD	Medicine	Prof. Emeritus, Former Dean of Medicine		Pulmonary embolisms	Established & served as Co-chair for ACCP Consensus Conference on Antithrombotic therapy
Dembroski, Theodore	Epi & Biostat	PhD	Psychology	Res. Prof. Sr. Lecturer	Biobehavioral & Cardiovascular Epidemiology	Biobehavioral factors in coronary heart disease, hypertension & sudden cardiac death	-----
Estrada, Antonio	Epi & Biostat	PhD	Mexican American Studies	Prof.	Mexican American Studies, Latino Health	Sociocultural & behavioral aspects of HIV/AIDS; Health & Mental Health of Hispanics; Behavioral epidemiology; Substance abuse	Evaluation for Southern AZ AIDS Foundation; Evaluation for National Alliance for Hispanic Health; Evaluation for El Rio Neighborhood Clinic

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
						epidemiology; Cultural competency in health care	
Ela, Wendell P.	Comm Env & Policy	PhD	Chemical & Env Engr	Professor	Water Treatment System Design; Wastewater Treatment System Design	Water and wastewater treatment, environmental pollution & hazardous waste management aids	Member, American Chemical Society Member, American Society of Civil Engineers Member, American Water Works Association Member, Association of Environmental Engineering & Science Professors Technical Advisor, Bureau of Reclamation, Yuma Desalting Plant
Galgiani, John	Epi & Biostat	MD	Medicine	Prof.	Infectious Diseases	Coccidioidomycosis vaccine; Valley Fever Vaccine Project	Adviser: National Committee for Clinical Laboratory Standards, Subcommittee on Antifungal Susceptibility Tests, Area Committee on Microbiology Western Society for Clinical Investigation Committee on Fungal Infections in AIDS, American Thoracic Society Coccidioidomycosis Study Group (& Secretary)
Gandolfi, A. Jay	Comm Env & Policy	PhD	Pharmacology & Toxicology	Prof	Systems Toxicology & Xenobiotic Metabolism & Disposition	Molecular & Environmental toxicology aids in evaluation of exposure & disease	Member, Society of Toxicology Member, ASPET Reviewer, NIH EPA Committees
Gerba, Charles	Epi & Biostat	PhD	Veterinary Science	Prof. Adjunct Prof	Soil, water & Environmental sciences; Microbiology & immunology Nutritional sciences	New methods for detection of waterborne pathogens, occurrence & fate of pathogens in the environment	-----
Glasby, Constance	Epi & Biostat	DrPH	Transplant Services	Director	Research	-----	-----
Going, Scott	Health Prom Sciences	PhD	Nutritional Sciences	Assoc. Prof. Lecturer	Nutritional sciences Physiology	Healthy nutrition Physical activity Osteoporosis	Board of Directors, AZ Osteoporosis Coalition; Steering Committee, AZ Coalition for Promotion of Physical Activity
Harvey, Erin	Epi & Biostat	PhD	Ophthalmology & Vision Science	Asst Prof	Research	Normal & Abnormal development of vision in infants & young children; examining the prevalence of astigmatism	-----

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
Jones, John Paul	Comm Env & Policy	PhD	School of Geography & Development	Prof	Statistical Techniques in Geography,	-----	Co-Editor, Special Issue of Environment and Planning Member, Editorial Board, The Open Political Science Journal Member, Nominating Committee, Association of American Geographers
Klimecki, Walter T.	Comm Env & Policy	DVM, PhD	Pharmacology & Toxicology	Asst Prof	Genomics Technologies Introduction; Genomic Computational Analysis	Genetic Epidemiology and Molecular biomarker analysis	Member, NIH Drug Development and Delivery SBIR Study Section Member, NIH R03-Lung Tissue Research Study Section Co-Editor, Natural Arsenic in Groundwaters of Latin American Reviewer for following journals: Toxicological Sciences, Toxicology & Applied Pharmacology, Journal of Allergy and Clinical Immunology, Genome Biology, Environmental Health Perspectives
Krupinski, Elizabeth	Comm, Env & Policy	PhD	Radiology	Prof	Measurement & Statistics; Radiology	Telemedicine and TeleHealth programs	Member, American Association of Physicists in Medicine Member, American Association for Women Radiologists Member, American Telemedicine Association Standards & Guidelines Associate Editor, for Telemedicine Journal & e-health
Lance, M Peter	Epi & Biostat	M.D.	Medicine	Prof.		Colon cancer prevention & epidemiology	-----
Lantz, R. Clark	Comm Env & Policy	PhD	Cell Biology & Anatomy	Prof	General & Systems Toxicology	Assessment of pulmonary toxicity from exposure to arsenic	Member, Editorial Board, Epithelial Biology & Pharmacology Member, Editorial Board, Water Quality, Exposure & Health Member, Nominating Committee, American Association of Anatomists Past President, Arizona Imaging Society
Leischow, Scott, J.	Health Prom Sciences	PhD	Family & Community Medicine	Prof	Health Education	Tobacco Cessation & Policy	-----
Lohman, Timothy	Health Prom Sciences	PhD	Physiology	Prof	Physiology Nutritional Sciences	Body composition assessment; Human nutrition & obesity; Youth health-related fitness; Exercise & bone mineral density; Sports nutrition	Member: Steering Committee, AZ Osteoporosis Coalition Chair, AZ Governor's Council on Physical Fitness & Sport; Chair, Public Policy Subcommittee Youth Fitness Advisory Council Chair, AZ Osteoporosis Public Policy
Miller, Marc L.	Comm Env & Policy	JD	College of Law	Prof	Sustainability in Environmental Policy	Environmental law and policy addresses dimensions of the evaluation of & response to exposure & disease	Member, American Law Institute Lead Series Editor, The Edge Book Series (volumes on Environmental Science, Law & Policy Member, Max Planck Institute, Concepts for a European Criminal Justice System Project
Maizes, Victoria	Health Prom Sciences	MD	Integrative Medicine	Asst. Prof.	Clinical Medicine	Integrative Medicine	Board Member, Desert Institute & Sunstone Cancer Wellness Center; Motivational Interviewing Network of Trainers, Institute for the Study of Health & Illness (ISHI)

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
Medgal, Sharon	Comm Env & Policy	PhD	Water Resources Research Center	Professor	Arizona Water Policy	Water policy & management aids in understanding the context of exposure and disease	Elected Member, Central Arizona Water Conservation District Board of Directors Member, National Institutes for Water Resources Member, Tucson Airport Authority
Miller, Joseph	Epi & Biostat	MD	Ophthalmology	Assoc. Prof.	Quantitative Epidemiology	Prevalence of higher order aberrations in the eye among normal subjects & those with surgically modified visual systems	Volunteer Provider, St. Elizabeth's of Hungary Clinic, Tucson Lions Sight & Hearing Foundation Evaluation & Treatment Program, UA "Operation See", Nogales Lions Club & St. Joseph's Hospital, Nogales, AZ (Surgery for Mexican Nationals) Consultant, Indian Health Service, Sells Service Unit Medical Executive Committee, Children's Clinics for Rehabilitative Services, Tucson.
Muramoto, Myra	Health Prom Sciences	MD	Family & Community Medicine	Asst. Prof.	Family Medicine	Addiction recovery & medicine; Nicotine & tobacco research; Nutrition; Geriatric Medicine	Advisory Board, Office of Nutrition Services, AZ Department of Health Services Education Committee, Tai Chi Institute of Tucson (Complementary & Alternative Medicine). Education/Development Committee, Tucson Friends of Wu Style Tai Chi Circle Founding Member of 5-state working group to establish Pacific Center on Health & Tobacco (PCHT) American Legacy Foundation, Emerging Science Scientific Advisory Panel, Member Invited Charter Member & National Steering Committee Member of Professionally Assisted Cessation Therapy (PACT) Invited Charter Member, American Academy of Pediatrics Center for Child Health Research, Tobacco Consortium
Piegorsch, Walter	Epi & Biostat	PhD	Mathematics	Prof	Mathematics & Biostatistics		Member, American Statistical Association; International Biometric Society; International Environmetric Society; and International Statistical Institute Joint Editor, Journal American Statistical Association Section Editor, Encyclopedia of Quantitative Risk Assessment Member, International Advisory Board for Sultan Qaboos University Journal for Science
Pepper, Ian	Comm, Env & Policy	PhD	Soil, Water & Env Sciences	Prof	Environmental Sciences	Microbial systems & public health preparedness	Member, Board of Directors, Tucson Regional Water Council Member, American Academy of Microbiology Member, Water Environment Federation Reviewer for following research panels: American Water Works Association Research Foundation; National Science Foundation; US Department of Agriculture; US Department of Energy and US Environmental Protection Agency

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
Pelletier, Kenneth R.	Health Prom Sciences	PhD	Medicine	Prof	Health Promotion	Corporate Wellness	Member, American Psychological Association Member, American Association for the Advancement of Science Member, American Federation of Television and Radio Artists Member, American Heart Association Contributing Editor, The Newsletter of the American Institute of Stress Consulting Editor, International Journal of Psychosomatics Scientific Council Member, Epidemiology, American Heart Association Founding Professional Member, American Holistic Medical Association, Seattle Washington
Saez, Eduardo	Comm Env & Policy	PhD	Chemical & Env Eng	Prof	---	Environmental transport and trace contaminant remediation aids in evaluation of exposure and disease	-----
Sheppard, Paul R.	Comm Env & Policy	Phd	Laboratory Tree-Ring Research Center	Assoc Prof	---	Urban environments and human health	Member, Society of American Foresters Member, Soil Science Society of America Member, American Quaternary Association Member, Tree Ring Society
Valenzuela, Terence	Epi & Biostat	MD	Surgery	Prof.	Internal Medicine Surgery	Pulmonary embolism; Survival of out-of-hospital cardiac arrest; Paramedic cardiac rhythm interpretation; Cost-effectiveness of early defibrillation	Medical Director, Tucson Fire Department Board of Directors, La Frontera Center, Inc. AZ Emergency Medical Services Council Tucson Emergency Medical Services Council Member, Emergency Medical Service Council, State of AZ, former Vice Chair; former Chair, Medical Standards Subcommittee
Vuturo, Anthony	Env & Comm Health	MD MPH	Family & Community Medicine	Prof. Emeritus	International Comparative Health Systems	Health care delivery; Health care administration; International health, management & administration; Healthy lifestyle promotion	Commissioner, AZ Area Health Education Center Commission, State of AZ AZ Board of Regents, Phoenix Board of Trustees, World Care, Tucson Program Advisory Board, International Longevity Center, Inc., NY, NY Board of Directors, Health Professions Institute, Phoenix; World Care International, Tucson; & Tucson Community Foundation of Southern AZ, Tucson Board of Trustees, Tucson Community Foundation of Southern AZ, Tucson Advisory Board, Morris K. Udall Center for Study of Public Policy, Tucson Trustee: El Rio Community Health Center Foundation 501(C)3 World Care International, Inc. 501(C) 3 Tucson Community Foundation of Southern AZ 501(C)3 President: American Goodwill Mission to China 501(C)3

Name	Division	Degree	Department	Rank	Teaching Responsibility	Research Interests	Community Service Activities (selected)
Walsh, Bruce	Epi & Biostat	PhD	Ecology & Evolutionary Biology	Assoc. Prof.	Molecular & cellular biology; Ecology & evolutionary biology; Plant science	Genetics Study Bioinformatics Study	
Weinstein, Ronald	Comm, Env & Policy	MD	Pathology & Telemedicine	Prof	Telemedicine & Healthcare Policy	Telemedicine & e-Health	Member, Editorial Board, Telemedicine Journal and e-Health Member, Editorial Board, Human Pathology Member, American Association of Pathology Member, International Society for Telemedicine
Weil, Andrew	Health Prom Sciences	MD	Integrative Medicine	Prof.	Internal Medicine	Integrative medicine; Self-healing; Nutrition; Natural medicine	-----
Wormsley, Steven	Comm Env & Policy	PhD	College of Medicine	Lecturer CIO	Telehealth	Molecular & Cellular Biology of Small RNA Complexes; Toxoplasma Parasite Genomics	Member, American Society of Cell Biology Member, American Society for Microbiology

**Appendix D.1.d.
Academic/Administrative Professionals**

Name	Div	Degree	Title	Teaching Responsibility	Research Interest	Community Service Activities
Attakai, Agnes	Health Promotion Sciences	MPA	Director, Health Disparities Outreach & Prevention Education	----	Public Health Policy	Member of the American Indian, Alaska Native and Native Hawaiian Caucus of the American Public Health Association Member, the Native Research Network and the Society for the Advancement of Chicanos and Native Americans in Science Member, Arizona Comprehensive Cancer Control Coalition State Plan committee Member of the US Department of Health and Human Services Office of Women's Health Minority Women's Health Panel of Experts
Brown, Sylvia R.	Epi & Biostat	PhD MPH	Research Scientist	Statistics Using SAS	Medical Surveillance System: Development, coordination & implementation of court-ordered TCE Medical Surveillance Project in cooperation with El Pueblo Clinic AZ GIS/Environmental Epidemiology /Arsenic Project	Medical Surveillance of Southside Tucson citizens
Cameron, Michael	Health Promotion Sciences	MA	Manager, Clinical Services-ASHline	----	Treatment delivery and program evaluation in low-SES populations receiving mental health and substance abuse treatment services through the public behavioral system.	-----
Carlo, Louis G.	Comm Env & Policy	MS	Instructional Technologist/Multimedia Designer	----	-----	-----
De Zapien, Jill	Health Prom Sciences	BA	Assoc Dean, Community Program	Public Health Policy and Advocacy	Effectiveness of comm.-based PH interventions.	Member, Steering Committee of Transborder Consortium on Gender & Health Founding member of Border Health Alliance; coalition of AZ Department of Health Services, Border Health Foundation, UA AzCOPH, Colegio de Sonora, Mexico Family, La Red, & Secretaria de Salud de Sonora Member, Farmworker Advisory Board at Chiricahua Comm Health Center in Elfrida, AZ 4-yr appointment to National Advisory Council on Migrant Health
Driesen, Kevin	Health Prom Sciences	PhD	Asst Research Scientist	----	Applying knowledge of evaluation research, statistics, & epidemiology to social & health problems	Consortium for Higher Education (CONAHEC) AZ-Oaxaca-Durango Chapter, Partners of the Americas

Name	Div	Degree	Title	Teaching Responsibility	Research Interest	Community Service Activities
Drummond, Rebecca	Health Promotion Sciences	MA BS	Program Director, Family Wellness	-----	Gender, Culture, Family & Community Health; Social Justice & Health Equality, Advocacy, University-Community Collaborations, Migration & Human Rights	Chair of the Arizona Public Health Association's School Health Section Board of Directors for the Arizona School Based Health Care Council
Garcia-Downing, Carmen	Comm Env & Policy	MSc BS	Specialist, Indigenous Affairs & Minority health professional career program	-----	Resettlement issues affecting indigenous groups as result of development	Executive Secretary of the International Network on Displacement and Resettlement Member, Native American Democratic Caucus Member, State Democratic Committee Board Member, ACLU Tucson Chapter
Granillo, Brenda	Comm Env & Policy	MS	Program Director, Az Center for Public Health Preparedness	-----	Public Health Preparedness	-----
Hannah, John	Admin	MBA	Web Program Manager	-----	-----	-----
Hla, Htay	Admin	BS, BA	Director, IT & Comp Supp	-----	-----	Member, Arizona AHEC Commission President, SEAHEC
Klein, Loriann	Admin	BA	Coordinator, Personnel & Faculty Status	-----	-----	-----
Hospodar, Joyce	Comm Env & Policy	MBA MPA BS	Senior program coordinator of the Medicare Rural Hospital Flexibility Program (Flex)	-----	strategic planning, marketing, and operations of community-based programs, including efforts that supported the development of new business strategies, improvement of existing programs, and solicitation of external funds for program enhancement/continuation	-----
Hughley, Gail	Admin	MA	Director of Development	-----	-----	-----
Ingram, Maia	Health Promotion Sciences	MPH	Program Director, Community-Based Evaluation	Participatory action research and policy development and public health advocacy	Community Advocacy, Chronic Disease Prevention and Control, Immigration, Partner Violence	Advisor, Arizona Community Health Worker Association Advisor, Campesinos Sin Fronteras

Name	Div	Degree	Title	Teaching Responsibility	Research Interest	Community Service Activities
Kelly, Gerri	Admin	BA	Associate Director, Marketing & Communications	-----	-----	-----
Klein, Loriann	Admin	BA	Coordinator, Personnel	-----	-----	-----
Littau, Sally	Comm Env & Policy	MT BA	Coordinator, Health Research	-----	Inflammatory markers in smoke inhalation victims and respiratory related illnesses	-----
McClelland, Jean	Health Promotion Sciences	MLS BS	Program Director for Community Based Health Information Resources	-----	-----	Member, Arizona Interagency Farmworker Coalition Board of Directors Member, Pima County Community Health Task Force Chair, Arizona Farmworker Health Policy Work Group
Michael, Stephen	Health Promotion Sciences	MS BS	Director, ASHline	-----	Tobacco Interventions, Health Promotion and Disease Prevention, Community Behavioral Health Systems, Integrative Health Approaches	Member, ADHS-TEPP Director, Coalition for Tobacco Free Arizona Past-President, Association for Ambulatory Behavioral Healthcare
Mullins, Jeannette	Admin	MPH BS	Professional Development Coordinator	Health Education Ethical Leadership; Online Course on Intro to Public Health	Assets/needs assessment, program planning, implementation and evaluation, public health infrastructure, education and training, community engagement, collaborative leadership and strengthening tribal health programs	Director, Southwest Public Health Leadership Institute Member, Pima County Community Health Taskforce President, Arizona Public Health Association Member, Governing Council for National Public Health Leadership Society
Peter, Jennifer	Health Promotion Sciences	BA	Coordinator, Community Health Promotion Technical Assistance	Guest Lecturer, Health Program Planning & Evaluation	Rural, Tribal, and Public health infrastructure; Education and training; Collaborative Leadership; Program planning and evaluation; Community Advocacy	Director, Rural Women's Health Initiative Member, Rural People Rural Policy Southwest Network Advisor, La Paz Regional Medical Center Member, National Organization of State Offices of Rural Health
Poplin, Gerald	Comm Env & Policy		Research Specialist Senior	-----	-----	-----
Reinschmidt Kerstin	Health Promotion Sciences	PhD MPH	Research Scientist	Community Health Sciences & Services; Contemporary Community Health Problems	Reducing health disparities; Health promotion and disease prevention; Community-based participatory research; Community Health Workers; Hispanic, border, binational, and minority health; Children and adolescent health; health benefits of dance	Member, Arizona Diabetes Coalition Reviewer for Journal of Health Care for the Poor and Underserved Member, National Latino Behavioral Health Association Member, Arizona Public Health Association

Name	Div	Degree	Title	Teaching Responsibility	Research Interest	Community Service Activities
Sabo, Samantha	Health Promotion Sciences	MPH BS	Program Director, Transborder Initiatives	-----	Family and child health, indigenous peoples, immigration and migration, agricultural workers, participatory action research, evaluation and planning, community health worker (Promotora) workforce development	Member, Arizona Public Health Association, Health Disparities Caucus American Public Health Association, International Health Section
Tabor, Joe	Comm Env & Policy	PhD MPH	Associate Specialist, Rural Health Office	-----	Epidemiology and ecology of valley fever (coccidioidomycosis)	-----
Tisch, Chris	Admin		Asst Dean, Student Services & Academic Admin	-----	-----	American Parkinson Disease Association/Parkinson Disease Society of Southern AZ
Tumelli, Linda R.	Admin		Director, Financial Affairs & Physical Resources	-----	-----	AHSC Academic Facility Space Committee AZ Rural Health Association
Varela, Lorraine	Admin	MS BS	Special Assistant to the Dean	-----	-----	Member, American Public Health Association, Nutritional Sciences Member, School Board, Saints Peter & Paul Catholic School Member, Board of Directors, Western Little League

Appendix D.4.a. Examples of Faculty Intramural Service 2008

Last Name	Service Activity
Barker	Medical Student applicant interviewer
Barker	Member of COM Phoenix Dean's Advisory Committee
Beamer	Recruitment at SHPE
Beamer	Judge for Internship Conference
Beamer	Institutional Chemical Safety Committee
Beamer	Annual Peer Review Committee
Bergsma	Senate Task Force for Student Retention and Advancement
Bergsma	Community Engagement, Practice and Service Committee
Bergsma	Andrew W. Nichols Initiative Committee
Bergsma	Faculty Senate
Burgess	Undergraduate Education Workgroup
Burgess	MEZCOPH Deans Search Committee
Burgess	University of Arizona Campus Emergency Response Team
Burgess	Scientific Advisory Committee
Burgess	HPS Director Search Committee
Burgess	Phoenix Planning Workgroup Member
Burgess	Reviewer, UA Arizona Clinical and Translational Research and Education Consortium Pilot Interdisciplinary Translational Research proposals
Chen	P & T Committee Member
Chen	Student Affairs Committee Member
Chen	Steering committee member for the Integrative Health Sciences Facility Core at the Southwest Environmental Health Science Center, University of Arizona
Chen	Undergraduate Education Working Group, MEZCOPH
Chen	Dean Search Committee for CPH
Chen	University Committee on Academic Freedom and Tenure, University of Arizona
Chen	Member of Graduate Council, Graduate College, University of Arizona
Coe	Search Committee for Dean of MEZCOPH
Coe	Social and Behavioral Sciences Group, AZCC
Coe	Planning committee ACE Dawn of Darwinian Epidemiology Meetings
Coe	Search Committee Canyon Ranch Endowed Chair
Coe	CEPAS Committee
Coe	Member, Health Disparities Institute, AZCC
Coe	HRAA Education Summit Committee
Coe	MEZCOPH Strategic Planning Committee
Coe	P&T committee
Coe	Planning committee for Social Justice & Resiliency conference
Coe	Search Committee, Division Chair. HPS
Coe	Grant writer, Health Sciences HRAA grant
Cutshaw	Scholarship Committee
Cutshaw	Evaluation Committee
Cutshaw	Research Advisory Committee
Cutshaw	DrPH Planning meetings, QE Development

Last Name	Service Activity
Duncan	Presented Durable Medical Equipment Project for Nogales, Mexico
Duncan	Presentation to Global Health Alliance
Eisenberg	UA Life & Work Connections
Eisenberg	PHPM Strategic Planning
Eisenberg	EXPORT Workshop on Qualitative Data
Eng	MEZCOPH DrPH Degree Program Committee
Eng	MD/MPH Dual Degree Advisory Committee, Member
Eng	University of Arizona Mass Clinic Planning Committee
Eng	Asian American Faculty, Staff and Alumni Association
Eng	Outreach and Multicultural Affairs Faculty Advisory Group
Ernst	CEPAS committee member
Ernst	Internship Judge
Ernst	International Affairs Committee
Ernst	Qualifying Exam Committee
Foote	Cancer Prevention & Control Steering Committee
Foote	Skin Institute Development & Executive Board
Giacobbi, Jr.	Search Committee HPS Division Director
Giacobbi, Jr.	Undergraduate Council
Giacobbi, Jr.	Well University
Gray	HPS Asst. Professor Search Committee
Gray	Peer Review Committee - HPS
Gray	Student Affairs Committee
Gray	Research Advisory Committee
Gray	Commission on the Status of Women
Gray	Equity Committee of the CSW
Gray	DrPH Qualifying Exam Committee
Gray	Academic Integrity Committee
Gray	Internship Requirements Review Committee
Harris	R-25 Advisory Board-AZCC
Harris	Education Committee-MEZCOPH
Harris	Institutional Review Board -UA
Harris	Community Health Advancement Partnerships (CHAPS)
Harris	Promotion & Tenure Committee-MEZCOPH
Harris	Arizona Cancer Center member
Hart	AHEC Intra UA Group
Hsu	Graduate Interdisciplinary Program in Statistics
Hsu	Biostatistics Search Committee
Hsu	MPH Student Affairs Committee
Hsu	Biostatistics Concentration Admission Committee
Hsu	GIDP Curriculum Committee
Hsu	EPID & BIO Peer Review Committee
Hsu	Arizona Cancer Center Pilot Research Program
Hughes	CEPAS Committee
Hughes	Nichols Organizing Committee
Hughes	MPH Internship Judge

Last Name	Service Activity
Hughes	Augusto Ortiz Advisory Group
Jacobs	Epidemiology Forum Faculty Advisor
Jacobs	Annual Performance Review Peer Committee
Jacobs	Admissions Committee
Jacobs	Research Advisory Committee
Jacobs	Epidemiology Qualifier Reviewer and Grader
Koss	Regents' and Distinguished Professors Advisory Group
Koss	Search Committee Executive Vice President and Provost
Koss	Promotion and Tenure Committee
Koss	Strategic Planning and Budget Advisory Committee
LaFleur	Chair, GIDP in Statistics Curriculum Committee
LaFleur	Member, GI SPORE Executive Committee
Martinez	Native American Cancer Research Partnership
Martinez	Dean Search Committee member
Martinez	AZCC R25 Post-doctoral Fellowship Executive committee
Martinez	SPORE Program Executive Committee
Martinez	AZCC Directors Committee
Martinez	AZCC ACS Small Grants Review Committee
Martinez	Epidemiology Admissions Committee
Martinez	Promotion and Tenure Committee
ORourke	MEZCOPH Dean Search Committee
ORourke	Section Chair: EOH Concentration of the MPH Program
Pettygrove	MS/PhD Admissions
Pettygrove	COPH Evaluation Meeting
Pettygrove	MPH Admissions
Pettygrove	Qualifying Exam Committee
Renger	Faculty Senate
Renger	Social Sciences Internal Review Board
Renger	Promotion and Tenure Committee
Renger	University of Arizona Campus Emergency Response Team
Renger	Research Advisory Committee
Renger	Reviewer for PHPM DrPH Applications
Renger	Search Committee for Assistant/Associate in Policy and Management
Reynolds	Executive Committee Water Quality Certificate Program
Reynolds	Graduate Interdisciplinary Program Committee on Global Change
Reynolds	Research Advisory Committee
Reynolds	Internship Judge Summer
Reynolds	UA Water Sustainability Program
Reynolds	Institute for Environment and Science
Reynolds	APR Committee
Roe	Search Committee for Director of Statistical Consulting
Roe	Executive Committee, Graduate Interdisciplinary Program in Statistics
Roe	Peer Review Committee, Epidemiology & Biostatistics
Roe	Promotion and Tenure Committee
Rosales	CEPAS Committee

Last Name	Service Activity
Rosales	MEZCOPH Scholarship Committee
Rosales	Global Health Alliance
Rosales	Binational Migration Institute
Schachter	Certificate Program Application Review
Schachter	MEZCOPH Dean Search Committee
Shahar	Ad-hoc promotion/tenure review for full professors
Shahar	COPH representative on Interprofessional Training
Shahar	Research Advisory Committee
Shahar	P&T committee member
Shahar	Admission committee Public Health Certificate Program
Sherrill	Community Advisory Board
Sherrill	APROL Peer Review Committee
Sherrill	Research Advisory Committee
Sherrill	Executive Committee AzCRTP
Sherrill	Arizona Health Sciences Center Search Committees
Sherrill	Admissions committee GIDP Statistics
Sherrill	Clinical and translational sciences (CATS) research center advisory board
Sherrill	Data safety monitoring board, Arthritis Center
Staten	Evaluation Committee
Staten	Community Engagement, Practice and Service (CEPAS) Committee
Staten	Kellogg Community Based Participatory Action Group
Staten	Scientific Advisory Committee for AZCC Behavioral Measurement Shared Service
Staten	HPS Peer Review Committee
Staten	Search Committee HBHP Faculty
Staten	Canyon Ranch Endowed Chair Search Committee
Staten	Education Committee
Taren	NCA Accreditation
Taren	BRAVO Reviewer
Taren	Evaluation Committee
Taren	Community Advisory Board
Taren	Dean's Council
Taren	Research Advisory Committee
Taren	College Academic Administrators Council
Taren	Promotion and Tenure
Taren	Chair, Canyon Ranch Endowed Chair Search Committee
Taren	AHSC Advisory Council
Taren	Education Committee
Taren	University-Peace Corps Fellowship
Taren	Arizona Health Sciences Library Advisory Committee
Taren	Concentration - MPH Admission Committee
Taren	CEPAS
Teufel-Shone	Undergraduate Education Committee, Member
Teufel-Shone	Promotion and Tenure Committee Member, representing HPS
Teufel-Shone	Evaluation Committee Member, representing CEPAS

Last Name	Service Activity
Teufel-Shone	Education Committee Member, representing FCH
Teufel-Shone	CEPAS Member
Teufel-Shone	Section Chair, Family and Child Health
Teufel-Shone	DrPH Qualifying Exam Committee
Teufel-Shone	Search Committee Member
Watson	Dean's council
Watson	Partners in Public Health (PIPH) luncheon committee
Yuan	Canyon Ranch Search Committee
Yuan	HPS Division Faculty APR Review Committee
Yuan	HBHP Search Committee
Yuan	HBHP Student Admissions

Appendix D.4.b. Examples of Faculty Awards 2004-2008

Name	Year	Award	Organization
Anthony	2006	UNC SPH Theta Chapter of Delta Omega Inductee	UNC School of Public Health
Anthony	2007	Outstanding Teaching Award for Graduate Teaching	MEZCOPH
Barker	2008	2007 Excellence in Education	MEZCOPH
Bergsma	2006	Andrew W. Nichols Rural Health Distinguished Service Award	National Organization of State Offices of Rural Health
Bergsma	2007	Rural Health Policy Fellowship	National Rural Health Association
Bergsma	2008	Rural Health Policy Fellowship	National Rural Health Association
Bergsma	2008	Service Award	National Association for Media Literacy Education
Burgess	2005	Jean Spencer Felton Award for Excellence in Scientific Writing	Western Occupational and Environmental Medical Association
Chen	2008	Third place prize winner for the best poster presentation	American College of Epidemiology
Coe	2004	Community Health Research Resource Award.	National Cancer Institute, Center to Reduce Cancer Health Disparities, Special Populations Networks
Coe	2005	Distinguished Visiting Faculty	Medical School, University of Kansas
Eng	2004	In Recognition of Successful Completion of the NRHA / ORHP Rural Voices Program	Office of Rural Health Policy and National Rural Health Association
Eng	2006	Selected as One of "America Top Pharmacists in 2006"	Consumers' Research Council of America
Gray	2005	Health Education Multi-Media Yearly Award	Arizona Public Health Association
Gray	2006	Teaching Award College of Public Health - Awards of Excellence	University of Arizona MEZCOPH
Gray	2006	Recognition of Outstanding Efforts in the Field of Substance Abuse Prevention	Town of Guadalupe, Arizona
Gray	2007	Award of Excellence	SAMHSA & the National Native American Law Enforcement Association
Green	2004	Certificate of Appreciation	AZCC Scientific Review Committee
Green	2004	Certificate of Appreciation	NCI Division of Cancer Prevention
Green	2005	Certificate of Appreciation	NCI Division of Cancer Prevention
Green	2007	Fellow, Society for Clinical Trials	Society for Clinical Trials
Guerra	2004	ATS Grant Award for the project "The Relation of LPS Receptor Complex Polymorphisms to COPD"	American Thoracic Society
Guerra	2005	Grant Award by the American Heart Association for the project "The Relation of Innate Immunity Genes to COPD"	American Heart Association

Name	Year	Award	Organization
Guerra	2005	Parker B. Francis Fellowship in Pulmonary Research	Parker B Francis Foundation
Guerra	2006	Award for Outstanding Grant. This award is given by the AHA/PMA to the top grants funded in every funding cycle	American Heart Association, Pacific / Mountain Affiliate
Guerra	2006	Parker B Francis Fellowship	Parker B Francis Foundation
Hakim	2005	College of Public Health Outstanding Research Award	MEZCOPH
Hughes	2004	Area Director's Merit Award--second year in a row	Indian Health Service
Hughes	2005	Women In Profile	Tucson Chapter, Women In Healthcare
Hughes	2007	The Distinguished Andrew W. Nichols Award for professional achievement	National Organization of State Offices of Rural Health
Hughes	2007	MEZCOPH Andrew W. Nichols Award	MEZCOPH
Hughes	2008	Mimi Morris 2008 Women Making History Award	Arizona Women's Political Caucus
Hughes	2008	Rural Health Professional of the Year 2008	Arizona Rural Health Association
Jacobs	2006	Young Investigator Award	The American Society for Bone and Mineral Research
Koss	2004	Visiting Scholar, Central Queensland University, Mackay, Australia	Central Queensland University
Koss	2004	Election to Committee on Women In Psychology of the American Psychological Association	American Psychological Association
Koss	2004	Mel and Enid Zuckerman Arizona College of Public Health Research Prize	College of Public Health
Koss	2005	Alpha Nu Chapter of Delta Omega, The National Public Health Honorary Society	College of Public Health
Koss	2005	National Advisory Committee on VAW	Department of Health and Human Services
Koss	2006	Vagina Warrior	Network of Student Feminist Activists
Koss	2006	Educator of the Year	Southern Arizona Center Against Sexual Assault
Koss	2006	Regents' Professor	Arizona Board of Regents
Koss	2008	Visionary Award	Ending Violence Against Women Internationally
Koss	2008	Invited Mentor, National Science Foundation Award to the International Association for Research on Aggression	International Association for Research on Aggression
Lebowitz	2004	Letter of Commendation	UA Minority Hlth Disparities Summer Res. Program
Martinez	2007	Research Excellence	MEZCOPH
Martinez	2007	American Society for Preventive Oncology Best Poster Award	ASPO

Name	Year	Award	Organization
Meister	2004	Outstanding Service, Dedication and Commitment to Arizona-Sonora Border Health	Border Information for Action Conference
Meister	2005	University of Arizona Awards of Distinction, Excellence in Service Award, UA Mel and Enid Zuckerman College of Public Health	University of Arizona
ORourke	2005	ISEA Annual Conference Recognition Award	International Society of Exposure Analysis
Payne	2005	Internship Recognition	Wellness Council of Arizona
Peate	2004	Firefighter Award for Community Service	Community
Peate	2005	Community service award	Tucson Fire
Peate	2006	Community service superintendent's award	Tanque Verde Unified School District
Peate	2007	Gold Cactus Pin Award	Arizona School Board Association
Ranger-Moore	2004	MEZCOPH Teaching Award for Excellence	MEZCOPH
Renger	2005	Recognition Award	Health Services and Research Administration
Renger	2008	2008 Indian Health Service Tucson Area Director's Merit Award.	TAIHS
Reynolds	2006	Award of Appreciation	Water Conditioning and Purification International
Reynolds	2007	Award of Appreciation	Water Conditioning and Purification International
Reynolds	2007	Most requested article reprints in journal history.	Water Conditioning and Purification International
Reynolds	2007	First Place Poster- Public Health	Graduate and Professional Student Council Student Showcase
Reynolds	2008	Award of Appreciation	Water Conditioning and Purification International
Reynolds	2008	Honorary Lifetime Member Award	Water Quality Association
Roe	2005	MEZCOPH 2004 Teaching Award	MEZCOPH
Roubideaux MD MPH	2004	2004 Indian Physician of the Year	Association of American Indian Physicians
Schachter	2006	Letter of Commendation for service on Blue Ribbon Investigation Panel	Leslie P. Tolbert, Ph.D., UA Vice President for Research
Shahar	2008	Elected Fellow	American College of Epidemiology
Sherrill	2005	Certificate of appreciation for outstanding leadership	Arizona Clinical Research Training Program
Sherrill	2006	Certificate of Appreciation for Outstanding Leadership	Arizona Clinical Research Training Program
Staten	2004	Annual Award for Outstanding Contributions in the Area of Community Service	Mel and Enid Zuckerman College of Public Health
Swanson	2004	Vision Award	UA Commission on the Status of Women
Taren	2005	Jorge Rodriguez, MD, MPH Memorial Lectureship	Department of Ophthalmology, University of Arizona

Name	Year	Award	Organization
Teufel-Shone	2004	Certificate in Recognition of Support and Contribution	Hualapai Tobacco Program and Hualapai Community Wellness Team
Teufel-Shone	2004	Health Education Multi-Media Award (HEMMY)	Arizona Public Health Association
Teufel-Shone	2006	Recognition of Appreciation	San Juan Medical Foundation and Creators of the Navajo Video "Let the Healing Begin"
Teufel-Shone	2007	Local Impact Award	National Indian Health Board
Teufel-Shone	2007	Fellow (nominated and voted)	Society for Applied Anthropology
Teufel-Shone	2007	Member, Alpha Nu Chapter of Delta Omega, the National Public Health Honorary	Nominated by MEZCOPH
Teufel-Shone	2008	Certificate of Appreciation	Department of Health and Human Services/Indian Health Service
Watson	2004	Plenary lecture and award at the 10th World Congress on Clinical Nutrition at Phuket, Thailand " Pycnogenol and other plant extracts are biomodulators, treating hypertension and asthma	World Congress of Clinical Nutrition

Appendix E.4.d.
Comments from MEZCOPH Graduating Students
Regarding Undergraduate Advising
2008/09

Undergraduates - Please comment on the strengths related to academic advising.
my advisor was very patient and extremely kind
always willing to help and find answers; very accessible; respectful; provide creative solutions
Alan did a great job keeping me on track to graduate on time.
intelligent advisors, willing to help, great recommendations
My academic advisors have been very supporting and great help.
Alan always answered all my questions in a timely manner
Alan could not have been more helpful throughout my college career!
Alan is a great advisor! Caring, interested, full of knowledge, and just great to talk to!
Helpful in all areas not just there to get us out but there to truly advise
Alan is great
Alan was a great advisor and really made comfortable with public health.
My advisor got to know me and my goals so he always offered the best advise for my life
Alan Beaudrie is an amazing advisor. He goes above and beyond advisor requirements.
Advisor was very understanding and helpful
The faculty provided a lot of useful information, and they provided a very friendly atmosphere.
I could come to my advior with anything and he would reply promptly with a helpful answer.
advising is always available
I believe the advising faculty does a wonderful job relating to students
I have always been provided with the right information when needed.
Allen was always there to help you out with whatever needs the student had
Alan is a great advisor.
Alan was the best advisor I ever encountered. Truely cares for the students
The advisor was excellent. Alan was extremely accommodating, caring, and full of helpful knowledge.
Alan was easy to get a hold of and was usually available
Very knowledgeable and always willing to make time
the advisor knows me by name
good advisement
Always available to answer questions, whether in person or by email.
Alan was a great advisor!
Alan Beaudrie is the best advisor on campus
The AIM screen-name approach for quick advising questions has been extremely helpful!
Alan is very supportive and knowledgable in regards to the preperation for a public health career

Undergraduates - Please suggest strategies for improvement related to academic advising.
no improvements needed. everyone was great
none at this time - very impressed with advising
Have a mandatory meeting towards the end of the internships to make sure we are on the right track
availability of classes, more degree checks, better degree checking user interface (SAPR not helpful)
No improvements necessary
N/A
I have no improvements at this time.
None
none
nothing
Allow more required advising appointments
None!
none
I emailed other advisors when mine was out of the office and they never replied
I believe certain advising faculty can at times give off the impression of being impersonal
NONE
none
None he is great
I do not have any suggestions for improvement.
Have a public health student recommendations list for classes and instructors available during advis
none
the advisor was never aware of my particular education and career path.
no need
Encourage early advisement so not everyone is trying to get in at once.
Some teachers are slow to respond to emails.
more knowledge of other campus resources outside of our college
Better office hours from the advisor's part.
No suggestions. Alan is the best.

Appendix F.3.e.1. Alumni Places of Employment and Job Titles

GRADUATION DATE	EMPLOYMENT	JOB TITLE
MPH		
01-May-03	Tech Support/Proj Sector w/Egyptian Ministry of Health/Population Headquarters	Public Health Professional/Physician
01-May-03	Mother in New York	
01-May-03	ADHS	Native American Liaison
01-May-03	WESTAT (An Employee-Owned Research Corporation)	Epidemiologist
01-May-03	Wood Smith Henning & Berman	Attorney - Environmental and Commercial Litigation
01-May-03	Carondelet Foundation	CEO
01-May-03	Phx?	
01-May-03	Dar Al-Kalima Health and Wellness Center	Public Health Coordinator
01-May-03	Native American Cancer Research Partnership	Instructor
01-May-03	University of Arizona-Pediatrics	Pediatric Resident
01-May-03	Berkshire Medical Center	Medical Resident
01-May-03	University of Pennsylvania, Dept of Health Care Systems	Doctoral student
01-May-03	Mariposa Community Health Center	Medical Doctor, Pediatrician
01-May-03	Centers for Disease Control & Prevention; Multnomah Co Hlth Dept	CDC Prevention Specialist
01-May-03	UA Dept of Medicine Education	Medical Doctor, Clinical Asst.
01-May-03	Inter-Tribal Council of Michigan/CDC/OSH	Program Mgr.
01-May-03	USPHS/NPS/attending Univ of Colorado, Denver	Regional Public Health Consultant/pursuing DrPH
01-May-03	Hopi Human Services	Breast and Cerv. Hopi Women's Health
01-May-03	UA College of Medicine	Medical Student (2nd yr)
01-May-03	Partnered for Progress	Health Educator
01-May-03	Not working - just had second child	
01-May-03	Columbia - OBGyn	OB Resident
01-May-03	Scottsdale Healthcare	
01-May-03	School for PA	Physician's Assistant
01-May-03	Camp Heartland	Director, Program Services
01-Aug-03	SAIC-Frederick	Clinical Research Associate II
01-Aug-03	University of Washington	Regulatory Research Coordinator
01-Aug-03	University of Arizona	Research Specialist

GRADUATION DATE	EMPLOYMENT	JOB TITLE
	Respiratory Center	
01-Aug-03	Schaller Anderson (going to St. Lukes Hospital in St. Louis in 7/05)	Healthcare Analyst (Internal Medicine Resident 07/05)
01-Aug-03	UA College of Medicine	Medical Resident
01-Aug-03	United Medical Center	Physician Recruiter
01-Aug-03	University of Washington	Research Coordinator/Doctoral Student - Public Health (Health Services)
01-Aug-03	Old Pueblo Children's Services	
01-Aug-03	Flagstaff Medical Center	Product Line Coord.- Therapy Services/PT
01-Aug-03	Homemaker	
01-Aug-03	Phoenix Indian Medical Center	Public Health Educator
01-Aug-03	Dept of Pharmacy Administration, University of Illinois at Chicago	Assistant Professor
01-Aug-03	Doctor (owns practice)	Physician
01-Aug-03	Health Strategies and Solutions, Inc.	Director
01-Dec-03	Self employed	Health consultant
01-Dec-03	St. Joseph's Hospital	Director, Geriatrics Ctr.
01-Dec-03		Registered Nurse
01-Dec-03		
01-Dec-03	Navajo Nation WIC Program	Breastfeeding Coordinator
01-Dec-03	University of Arizona, Evaluation Research and Development (ERAD)	Research Specialist
01-Dec-03	TRIA Orthopaedic Research Institute	Director, Research and Education
01-Dec-03	Austin High School	High School Teacher
01-Dec-03	Maricopa County Health Dept.	Environmental Specialist
01-Dec-03	Arizona Arthritis Center	Program Coordinator - APART Study
01-Dec-03	Penn State	Doctoral Student
01-Dec-03	CDC	
01-Dec-03	UA/MEZCOPH	Research Scientist
01-Dec-03	StoneWater Mortgage	Sr. Manager, Business Operations Training
01-Dec-03	NAU	Nursing Student
01-Dec-03		
01-Dec-03	Healthsource Community Health Clinic	Physician
01-Dec-03	Arizona State University	Assistant Professor
01-Dec-03	Phx	
01-May-04	UA Internal Medicine	Medicine Resident
01-May-04	Carlsbad Medical Center	Clinical Pharmacist
01-May-04	Arizona Court of Appeals/attending ASU	Law Clerk/degree sought is JD
01-May-04	USPHS - Phoenix Indian	Chief Clinical Dietitian

GRADUATION DATE	EMPLOYMENT	JOB TITLE
	Medical Center	
01-May-04	HIS, Phoenix area	Health Promo/Disease Prevention/Health Edu Coord
01-May-04	University of Arizona	Assistant Professor, Clinical Medicine
01-May-04	WA State Dept of Health	Maternal & Child Health Epidemiologist
01-May-04	Reno, NV Community Hospital - Family Medicine	Chief Resident
01-May-04	Arizona State University	Adjunct Faculty
01-May-04		Medical doctor; family/general practitioner
01-May-04	Colorado State - Epi	Doctoral Student
01-May-04	Red Star Innovations	Consultant/Owner
01-May-04	University of Arizona, Dept. of Physiology	Research Specialist; PhD student in Nutritional Sciences
01-May-04	Pima County Health Department/MEZCOPH Adjunct Lecturer	Program Mgr., Health Planning Serv.
01-May-04	ASU	Physician
01-May-04	St. Joseph's Hospital	Family Medicine Resident
01-May-04		Industrial Hygienist
01-May-04	Applied Materials, Inc.	Safety Engineer
01-May-04	Coconino Co. Health Dept.	Communicable Disease Program Coord.
01-May-04	RTI International	Public Health Analyst, Psychology of Health Behavior
01-May-04	Phx -- Maricopa County	
01-May-04		
01-May-04	M.D. in Phoenix residency	
01-May-04	Pima Prevention Partnership	Evaluator
01-May-04	UA Peds	Program Coordinator
01-May-04		
01-Aug-04	Southwest Urologic Specialists	Family Nurse Practitioner, MPH
01-Aug-04	National Association of Health Education Centers, North Country HealthCare	Director
01-Aug-04	Community Outreach & Advocacy for Refugees (COAR)	Executive Director
01-Aug-04	D.O. program in Florida	student
01-Aug-04	International Medical Corps	Mental Health Monitoring/Evaluation Specialist
01-Aug-04	PA School	student
01-Aug-04	BHP Copper	Health Safety & Engineering Consultant and Risk Specialist

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-Aug-04	Peds in Chicago (Cook County Gen Hosp?)	Residency
01-Aug-04	University of Colorado	Med Student
01-Aug-04	Mel and Enid Zuckerman College of Public Health	DrPh student; Program Director, Transborder Initiatives
01-Aug-04	University of Arizona Campus Health Service	Coordinator, Harm & Risk Reduction
01-Aug-04	UA College of Medicine	Medical Student
01-Aug-04	University of Arizona MEZCOPH Arizona Smokers' Helpline	Outreach and Referral Mgr.
01-Aug-04		
01-Dec-04	University of Arizona, Office of Vice Provost Enrollment Mgmt.	Associate Editor
01-Dec-04	UofA Pediatrics	Resident
01-Dec-04	Mercy Home Care - Trinity Health System	Marketing Manager
01-Dec-04	Self-employed	Fundraising Consultant
01-Dec-04	Phoenix Childrens' Hospital	Resp. Care Educator
01-Dec-04	Living in Oregon -- no job yet	
01-Dec-04	Looking for work	
01-Dec-04	Atlanta, GA ?	
01-Dec-04	ADHS, Div of Public Health Serv, Office of Border Health	Program Manager, EWIDS
01-Dec-04	Health Services Advisory Group, Inc.	Program Manager, State & Corporate Services/External Quality Review
01-Dec-04	Banner Good Samaritan	Nurse
01-Dec-04	UofA	Graduate Student
01-Dec-04	StayWell Health Management	Strategic Account Mgr.
01-Dec-04	Lakes Region Partnership for Public Health/Capital Region Community Prevention Coalition	Community Prevention Evaluator
01-Dec-04	University of Arizona	Epidemiology Doctoral Student
01-Dec-04	Mesa Pediatrics	Pediatrician
01-May-05	ADHS-Children's Rehab Serv, Office for Children w/Special Health Care Needs	Quality Management Specialist
01-May-05	Georgia Tech Research Institute	Industrial Hygiene Consultant
01-May-05	Arizona Health Sciences Center - OB/Gyn Dept	Assistant Professor
01-May-05	Phoenix Children's Hospital	Pediatric Endocrinologist
01-May-05	European Program for Intervention Epidemiology	2 year fellowship
01-May-05	United States Dept of Agric, Animal and Plant Health Inspection Serv, Veterinary Services (USDA-APHIS-VS)	Area Epidemiology Officer

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-May-05	Univ of Texas School of Public Health, Management, Policy and Community Health Dept	Grad Research Asst/pursuing a DrPH in Mgmt, Policy and Community Health Practices
01-May-05	Arizona Health Sciences Center	OB/GYN Resident
01-May-05		
01-May-05	Northern Arizona University	Physical Therapy Student
01-May-05	University of Arizona	Clinical Asst Professor of Family and Community Medicine
01-May-05		
01-May-05	Attending Phoenix Law School	Law Student
01-May-05	University of New Mexico	Asst. Professor, Educational Psychology
01-May-05	St. George's University	Medical Student
01-May-05	unemployed	
01-May-05	University of North Carolina	Doctoral Student; Nutritional Epidemiology
01-May-05	Apache Diabetes Wellness Center	Supervisor, N'Dee Bii Fitness Ctr.
01-May-05	Health Affects	Industrial Hygenist
01-May-05	EAR Foundation of Arizona/attending UA	Program Mgr./pursuing PhD
01-May-05	University of Arizona	Doctoral Student
01-May-05	Oxfam GB	Emergency Preparedness and Response Mgr.
01-May-05	American Red Cross	Donor Services Supervisor
01-May-05		
01-May-05	Arizona Association of Community Health Centers	Director of Women's Health Programs and Grant Admin
01-Aug-05	New Mexico Dept of Health, Behavioral Health Services Division	Program Coordinator, Co-Occurring State Incentive Grant (COSIG)
01-Aug-05	University of California, San Francisco	Assistant Professor
01-Aug-05		
01-Aug-05	Raytheon	Project Manager
01-Aug-05	PhD Candidate	Family and Consumer Resources
01-Aug-05		
01-Aug-05	SW Institute for Research on Women - UA	Research Technician
01-Aug-05		
01-Aug-05		
01-Dec-05	Injury Free Coalition for Kids of Phoenix	Community Education Specialist
01-Dec-05	ADHS, Dept of Mental/Behavioral Health	Policy Analyst
01-Dec-05	Centers for Disease Control and Prevention	Epidemiologist

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-Dec-05	Baylor College of Medicine	
01-Dec-05		
01-Dec-05	City of Chandler	Registered Nurse
01-Dec-05	CODAC Behavioral Health Services	Prevention Trainer
01-Dec-05	University of Arizona Department of Ophthalmology	Research Specialist Sr.
01-Dec-05	ADHS	Hepatitis C Program Mgr.
01-Dec-05	Mohr, Hackette, Pederson, Blakley, Randolph PC	Associate Attorney
01-Dec-05		
01-Dec-05	Scottsdale Healthcare	Sr. Business Analyst - Clinical
01-Dec-05	ADHS, Discharge Data Review, Bureau of Public Health Statistics	Health Planning Coordinator/Policy Advisor
01-Dec-05	PhD Student, Family and Consumer Sciences	Graduate Asst., UA
01-Dec-05	DO School	
01-Dec-05	Maricopa Department of Public Health	Prevention Specialist, Maricopa Co Tobacco Use Prevention Prog.
01-Dec-05		
01-Dec-05	United Nations Development Program	Program Associate, Beautiful Romania Project
01-Dec-05		
01-Dec-05	Johns Hopkins Center for American Indian Health	Program Coordinator
01-Dec-05	Association of Schools of Public Health	Project Manager
01-Dec-05	UNK	
01-Dec-05	University of South Florida	Research Associate/pursuing PhD
01-Dec-05	Med School in New York ?	
01-Dec-05		
01-Dec-05	Pima County Health Dept -- Disease Control	Epidemiologist
01-Dec-05		
01-Dec-05	Westat	Health Information Specialist
01-Dec-05	Banner Thunderbird Medical Ctr	Research Dir
01-Dec-05	State of Arizona	CPS Specialist
01-Dec-05	Southwest Internal Medicine	MD
01-Dec-05		
01-Dec-05	PhD in Nursing Candidate	
01-Dec-05	Arizona Cancer Center	Research Specialist
01-Dec-05	County Health Department	Emergency Response Coordinator
01-Dec-05	UA/MEZCOPH	Research Specialist/Epi PhD Student

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-May-06		
01-May-06	Hospice of the Valley	Triage RN
01-May-06	US Public Health Service, Sells Service Unit	Lieutenant Commander
01-May-06		
01-May-06	Brazilian Government	Representative for State of Ceara
01-May-06		
01-May-06	Asst Secretary for Resources/Technology Office, Office of the Budget	Program Analyst
01-May-06	Oregon Health and Science University	Second year Pediatric Resident
01-May-06	COPH non-degree seeking student	Student
01-May-06		
01-May-06	Injury Fee Coalition for Kids, St. Joseph's Hospital and Medical Center	Program Coordinator
01-May-06	Catholic Relief Services in the Democratic Republic of the Congo	Fellowship
01-May-06	Thomas Jefferson University Dept of Emergency Medicine	Resident, Emergency Medicine
01-May-06	Washington State Department of Health	Statewide Quality Management Coordinator
01-May-06		
01-May-06	UA College of Medicine	Medical Resident
01-May-06		
01-May-06		
01-May-06	Tucson Metropolitan Ministry	Education Coordinator
01-May-06	Co of Los Angeles Dept of Public Health	Health Educator in Organizational Development and Training Prog
01-May-06		
01-May-06	Planned Parenthood of Southern Arizona	Education Program Coord.
01-May-06		
01-May-06	Arizona Department of Health Services	Injury Epidemiologist
01-May-06		
01-May-06	ADHS, Bureau of Epidemiology & Disease Control, Vector Borne and Zoonotic Disease	Epidemiologist
01-May-06	UA MEZCOPH	Assoc. Dir. Of Research and Evaluation
01-May-06		
01-May-06	New Mexico Dept of Health - Infectious Disease Bureau	Health Educator/Data Specialist
01-Aug-06	Benarda Veterinary Hospital	Veterinarian
01-Aug-06	Centro de Investigacion en	Investigador Titular

GRADUATION DATE	EMPLOYMENT	JOB TITLE
	Alimentacion y Desarrollo, A.C.	(Scientific Researcher)
01-Aug-06	UA MEZCOPH	Recruitment & Admissions Coordinator
01-Aug-06	Oregon Health Science University	Nutritional Sciences Doctoral Student
01-Aug-06	DHHS - Indian Health Services	Health Promotion Disease Prevention Specialist
01-Aug-06	UA Medical School	2nd yr Med Student
01-Aug-06	United Methodist Church, Global Ministries Unit	Exec Secretary, Health & Welfare
01-Aug-06	UA, Southwest Institute on Women (SIROW)	Research Technician
01-Aug-06	Ventana Medical Systems	Biostatistician
01-Aug-06	University of Texas-Austin	Student in LCSW
01-Aug-06	Children's Research Center	Assoc. Dir. Of Development
01-Aug-06	Tampa General Hospital	Director, Clinical Research
01-Dec-06	Southwest Autism Research and Resource Center	Asst. Research Study Coordinator
01-Dec-06	Northwestern Memorial Hospital	Emergency Medicine Resident
01-Dec-06	Dona Ana Community College	Instructor, Health Occupations Dual-Credit Program
01-Dec-06		
01-Dec-06	Project Concern Int'l	Deputy Director for Program, Indonosia, India and Africa
01-Dec-06	Centers for Disease Conrol and Prevention	Battelle Memorial Institute Contractor
01-Dec-06	Soil, Water & Environmental Science	Staff
01-Dec-06	Grad student	
01-Dec-06	Ventana Medical Systems	Biostatistician
01-Dec-06	University of Arizona	Non-degree seeking student/EMT
01-Dec-06	Sterling and Associates (consulting firm)	
01-Dec-06	UA	Asst Director - San Xavier Mining Laboratory/pursuing MS Mining Engr degree
01-Dec-06	University of Arizona, Risk Management & Safety	Safety Officer
01-Dec-06		
01-Dec-06		
01-Dec-06	COM - Dept of Family/Community Medicine	Project Director, MethOIDE
01-Dec-06	ADHS - Office of Women's and Children's Health	Injury Epidemiologist

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-Dec-06	Banner Good Samaritan	Psych Resident
01-Dec-06	ASU-School of Health Mgmt. & Policy	Research Associate
01-Dec-06	College of Medicine	Med student
01-May-07	Unemployed - getting married	
01-May-07	A.T. Still University	Masters of Science - Physician Asst.
01-May-07	ADHS, Bureau of Women's & Childrens' Health	Statewide Systems Development Systems Epi
01-May-07		
01-May-07	Peace Corps	
01-May-07	ADHS, Bureau of Epidemiology and Disease Control (TB)	Epidemiologist Specialist II
01-May-07	University of Nevada-Las Vegas	General Surgery Resident
01-May-07	Montefiore Hospital/Albert Einstein in Bronx, NY	Internal Medicine Residency
01-May-07	MEZCOPH/UA Nutritional Sciences	DrPH Student/Program Coordinator
01-May-07	UA	Grad Student
01-May-07	Phoenix Children's Hospital	Pediatric Nurse Practitioner
01-May-07	PCHD	Health Educator
01-May-07	RAND Corporation	Project Associate II
01-May-07	UA College of Medicine	Clinical Asst. Professor
01-May-07	Pursuing further education	
01-May-07	Pima Prevention Partnership	Evaluator
01-May-07	Arizona Respiratory Ctr (UA)	Research Specialist
01-May-07	Bearing Point Consulting	Public Health Consultant
01-May-07	Pima Prevention Partnership	Evaluator
01-May-07	CA Coalition Against Sexual Assault	Prevention Specialist Coordinator
01-May-07	Dare Family Services, Inc.	Program Manager
01-May-07	University of California-San Francisco	Internal Medicine Resident
01-May-07	Mom	
01-May-07	UA Arizona Respiratory Center/PhD Candidate in Biostats	Research Technician
01-May-07	Tulane School of Medicine, Office of Community Affairs and Health Policy	Community Health Policy and Research Specialist/pursuing PhD in D.O. program
01-May-07	AT Still University	
01-May-07	UA Emergency Medicine/Pediatrics Program	Resident (Intern year)
01-Aug-07	UA College of Medicine	Medical Student
01-Aug-07		
01-Aug-07	UA Grad College/AMERICorps/pursuing a DrPh degree at MEZCOPH	Development and Outreach Coordinator
01-Aug-07	DrPH program - MEZCOPH	DrPH Student
01-Aug-07	Northern Arizona University	Program Coordinator

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-Aug-07		
01-Aug-07	Pueblo City and County Health Dept	Public Health Planner
01-Aug-07	Oregon Health and Science University	DMD (dentistry)
01-Aug-07	Moving to New Jersey for job	
01-Aug-07	Pima Prevention Partnership	Evaluator, Research and Evaluation Dept.
01-Aug-07	Pima Prevention Partnership	Evaluator
01-Aug-07	Wyman Worldwide Health Partners in Rwanda	Director, Comprehensive Community Health Initiative Program (CCHIPS)
01-Aug-07	The Clark Group, LLC	Science and Policy Analyst
01-Aug-07	SDC	Research Biostatistician
01-Aug-07	UA College of Medicine	Medical Student
01-Aug-07	Ross University Medical Program	Student
01-Dec-07	Pima County, Pima Health System	Case Manager
01-Dec-07	Haiti	Obstetrician
01-Dec-07	SACASA	Program Supervisor, Comm Prevention Ed & Outreach
01-Dec-07	DrPH Program - MEZCOPH	DrPH Student
01-Dec-07	UA Native Nations Institute	Manager, Leadership & Mgmt Programs
01-Dec-07	Inter Tribal Council of Arizona, Inc. Epidemiology Ctr.	Epidemiologist
01-Dec-07	UA Ophthalmology	Assoc Research Scientist
01-Dec-07	Kazakhstan Institute for Public Health Development	Scientific Consultant
01-Dec-07	UCLA	PhD program/Graduate Student Researcher (GSR)
01-Dec-07		
01-Dec-07	Canyon Ranch Institute	Program Manager - Planning and Evaluation
01-May-08	Kazakhstan's National Research Ctr, Surgical Dept	Physician
01-May-08	Working on outcomes analyses on a consulting basis	Consultant
01-May-08	Health & Environment Border Network	Executive Coordinator
01-May-08	Texas Health and Human Services	Surveillance Specialist II
01-May-08	New York Presbyterian Hospital at Columbia	Urology Resident Physician
01-May-08	Arizona Dept of Health Services	Infectious Disease Epidemiologist
01-May-08	Michigan State Medical School	Med Student
01-May-08	Arizona State University	Faculty Associate

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-May-08	Northrup Grumman	Operations Research Manager
01-May-08	University Medical Center	Telemedicine Research Fellow
01-May-08	MEZCOPH	Evaluator
01-May-08	Google	Program Manager
01-May-08	University of Arizona	MD student
01-May-08	ADHS	Border Infectious Disease Surveillance Epidemiologist
01-May-08	Mountain Park Health Center	Cancer Screening Navigator
01-May-08	Program Coordinator; Pre-med at UA	Southern Arizona Center for Sexual Assault
01-May-08	Looking for job	
01-May-08	Cardno Emerging Markets	Sr. Development Specialist
01-May-08	TASC Inc.	Systems Engineer
01-May-08	UA	Project Coord/Research Specialist
01-May-08	Latino Student Fund	Education Program Mgr.
01-May-08	UA Southwest Institute for Research on Women	Program Coordinator
01-May-08	University of Washington	PhD in Infectious Disease Epi
01-May-08	Colorado Covering Kids and Families (CKF)	Field Coordinator
01-May-08	UA MEZCOPH Community Evaluation & Policy	Research Specialist
01-May-08	ADHS	HIV Incidence/Surveillance Epidemiologist
01-Aug-08	Michigan State Medical School	Med Student
01-Aug-08	UA College of Medicine	Student
01-Aug-08	Not employed; seeking employment or pursuing futher education	
01-Aug-08	Providence Service Corporation	Quality Mgt. Analyst
01-Aug-08	Nursing school	
01-Aug-08		
01-Aug-08	University of North Carolina	PhD student in Nutritional Biochemistry
01-Aug-08		Phlebolomist
01-Aug-08	Stanford University	Medical Resident
01-Aug-08	U.S. Mexico Border Commission	Program Coordinator
01-Aug-08	Not employed; seeking employment	
01-Aug-08	New York City	Special Educator
01-Aug-08	UA College of Medicine	Student
01-Aug-08	Northern Plains Healthy Start	Data Manager
01-Aug-08	UA Law School	Student
01-Dec-08	Africa	Consultant

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-Dec-08	Carolinas Healthcare System	Sr. Research Analyst
01-Dec-08	UA College of Medicine	Medical Student
01-Dec-08	UA College of Medicine	Medical student
01-Dec-08	UA - Arizona Genomics Institute	Research Specialist, Senior
01-Dec-08	Native Images (non-profit behavioral health)	Executive Director
01-Dec-08	Community Food Resource Center of the Community Food Bank	Child Nutrition Programs Coordinator
01-Dec-08	Community Partnership of Southern Arizona	Health Promotion & Wellness Specialist
01-Dec-08	University of Arizona Center on Aging	Instructional Specialist, Coordinator
01-Dec-08	Contra Costa County, Mental Health Administration	Health Services Planner/Evaluator
01-Dec-08	Carefx	Business Analyst
01-Dec-08	Ventana Medical Systems	Biostatistician
01-Dec-08		Medical Doctor, Occupational Health
01-Dec-08	Pacific North West University Med School	Doctor of Osteopathic Medicine Student
MS Epidemiology		
01-May-03	Residency in Rochester?	Resident
01-May-03	PhD Program	
01-May-03	University of Oklahoma	Resident
01-Aug-03	National Cancer Institute	Epidemiology Research Asst.
01-Aug-03	Maricopa County Dept. of Public Health	Epidemiologist
01-Dec-03	UA/ARC	Research Specialist/pursuing PHD
01-May-04	Virginia Commonwealth University	Research Administrator
01-May-04	Nutritional Sciences	Research Specialist
01-Aug-04	Looking for job in NY City	
01-May-05	College of Public Health	EPI Doctoral Student
01-May-06	MEZCOPH Epidemiology Program AHSC Initiative for Women's Health	Doctoral Student Clinical Lecturer
01-May-06		
01-Dec-06	MEZCOPH PhD Student	Epi Doctoral Student
01-May-07	UA Dept of Emergency Medicine	Associate Professor
01-Dec-07	University of Arizona Respiratory Center	University Associate Research
01-May-08	University of Utah School of Medicine/VA Salt Lake City	Research Associate/Research Health Science Specialist
01-Aug-08	Pinal County Public Health Services District	Public Health Data Analyst

GRADUATION DATE	EMPLOYMENT	JOB TITLE
01-Aug-08	ADHS Office of HIV/AIDS STD Hepatitis C Services	HIV Incidence Surveillance Data Mgr
01-Aug-08	UA Cancer Center	Asst. Scientific Investigator
PhD Epidemiology		
01-Aug-03	UA Respiratory Sciences Center/MEZCOPH	Asst. Prof, Pub Hlth & Medicine
01-Dec-03	Bristol Meyers- Belgium	Pharmaco-epidemiologist
01-May-04	VA - Infectious Disease Control	Infection Control Coordinator
01-May-04	H. Lee Moffitt Cancer Ctr./Research Institute	Research Assistant Professor
01-Aug-04	SAVAHCS/University of Arizona	Cardiologist/Dir., Cardiac Cath Lab/Prof. Of Medicine
01-Dec-04	ASU-College of Nursing & Healthcare Innovation	Asst. Prof./Southwest Borderlands Scholar
01-May-06	Carle Foundation Hospital	Infection Control Practitioner
01-Dec-06	Oregon Health & Science Univ, Bone & Mineral Unit	Sr. Research Associate
01-Dec-07	Wisconsin Dept of Health Services, Bureau of Environmental & Occupational Health	Consultant Statistician
01-May-08		
01-May-08	Naval Health Research Center	Staff Epidemiologist
01-May-08	Exponent Health Science Center for Epi, Biostat & Comp Biology	Senior Scientist
01-May-08	unemployed	
01-Aug-08	The Boeing Company	Health Services Mgr., Southern Region
01-Dec-08	Arizona Cancer Center	post doc
01-Dec-08	Soil, Water and Environmental Science	Research Associate
01-Dec-08	Soil, Water & Enviornmental Science	Staff
01-Dec-08	Moffitt Cancer Center, Tampa	post doc fellow

Appendix G.1
Academic Program Objectives

Undergraduate Public Health Program Level Competencies

At the end of undergraduate program students must demonstrate all of the competencies listed below:

1. Describe the historical development of public health systems and their role in society.
2. Use epidemiological principles to describe and analyze causes of disease and illness.
3. Use basic biostatistical approaches and other modern methodological frameworks to design and test hypotheses.
4. Appropriately incorporate determinants of health (environmental, social, cultural, behavioral and biological) when studying the causation of disease and access to health services.
5. Provide a biological description for the major causes of communicable and non-communicable diseases and their pathology.
6. Provide an environmental description for the major causes of communicable and non-communicable diseases and their pathology.
7. Write appropriately for an entry level position in the field of public health.
8. Explain basic concepts of public health administration and its affect on society.
9. Describe an ecological approach to how sex and drugs play a role in public health.
10. Analyze how personal health, community health and sexuality are related.
11. Construct and evaluate a community level intervention that addresses a current public health issue.
12. Describe and compare health care issues between low-income, middle-income and high-income countries.
13. Distinguish between the roles that morals, ethics and law have on public health.
14. Integrate public health theories into practice.
15. Identify individual and community behavioral health theories and their use in public health practice.

MPH Program

At the end of MPH program students must demonstrate all of the competencies listed below:

ANALYTICAL SKILLS:
Defines a problem
Determines appropriate uses and limitations of data
Selects and defines variables relevant to defined public health problems
Evaluates the integrity and comparability of data and identifies gaps in data sources
Understands how the data illuminates ethical, political, scientific, economic, and overall public health issues
Understanding basic research designs used in public health
Makes relevant inferences from data
COMMUNICATION SKILLS:
Communicates effectively both in writing and orally (unless a handicap precludes one of those forms of communication)
Interpreting and presenting accurately and effectively demographic, statistical, and scientific information for professional and lay audiences adapting and translating public health concepts to individuals and communities
Soliciting input from individuals and organizations
Advocating and marketing for public health programs and resources, including political lobbying, grant writing, collaboration building, and networking
Leading and participating in groups to address specific issues, including ability to work in teams, span organizational boundaries, and cross systems
Using all types of media to communicate important public health information
Demonstrating cultural competency in all of the above and community development
Competencies
POLICY DEVELOPMENT/PROGRAM PLANNING SKILLS:
Assess and interpret information to develop relevant policy options
States policy options and writes clear and concise policy statements
Articulating the health, fiscal, administrative, legal, social, political, and ethical implications of each policy option
Deciding on the appropriate course of action and writing a clear and concise policy statement and implementation plan
Translates policy into organizational plans, structures, and programs
Identifying public health laws, regulations, and policies related to specific programs
Developing mechanisms to monitor and evaluate programs for their effectiveness and quality
CULTURAL SKILLS:
Understanding the current forces contributing to cultural diversity in the Southwest
Interacting competently, respectfully, and professionally with persons from diverse backgrounds
Identifying and examining the role of cultural, social, ethnic, religious, spiritual, and behavioral factors in determining disease prevention health promoting behavior, and health service organizational and delivery
Developing and adapting approaches to public health problems that take into account cultural differences
Determining health related consequences of social structure
Understands the dynamic forces contributing to cultural diversity

BASIC PUBLIC HEALTH SCIENCE SKILLS:

Defining, assessing, and understanding the health status of population, determinants of health and illness, factors contributing to health promotion and disease prevention, and factors influencing the use of health services

Understanding research methods in all basic public health sciences

Applying the basic public health sciences including behavioral and social sciences, biostatistics, epidemiology, environmental public health, and prevention of chronic and infectious diseases and injuries

Understanding of the historical development and structure of state. Local, and federal public health agencies

FINANCIAL PLANNING AND MANAGEMENT SKILLS:

Developing and presenting a budget

Managing programs within budgetary constraints

Developing strategies for determining priorities

Monitoring program

Preparing proposals for funding from internal and external sources

Applying basic human relations skills to the management of organizations and the resolution of conflicts

Managing personnel

Understanding the theory of organizational structure and its relation to professional practice

Conducts cost-effectiveness, cost benefit, and cost utility analyses

Negotiates and develops contracts and other documents for the provision of population-based services

Doctor of Public Health Learning Objectives

At the end of DrPH program students must demonstrate all of the competencies listed below:

- To possess the foundational knowledge of public health practice

The DrPH program will provide intensive education and training in the social, cultural, political and scientific history of public health from an organizational and policy perspective. Graduates of this program will be able to apply the fundamentals as well as the most current evidence to public health practice and policy.

- To master the skills needed for applied research, evaluation, data analysis, policy analysis and decision-making.

Students will receive advanced systematic training in epidemiological and community-based research methods, biostatistical analysis, environmental health sciences, prevention sciences and behavioral sciences. Graduates of this program will have a strong base of skills in these areas and will be able to apply the major theories and methods from these areas to public health research, evaluation, analysis and decision-making.

- To develop specialty area expertise

Graduates of the DrPH program will have a strong knowledge foundation, skill set, and professional experience in one of the following concentration areas: Public Health Policy and Management or Maternal and Child Health. This will enable them to further develop their practical expertise in the selected public health area and assume leadership roles in these fields.

- To be able to effectively engage communities

Graduates of the DrPH program will be able to apply the theories and methods of community engagement in public health practice and research. This includes the knowledge and skills needed to initiate and maintain community involvement and participation in public health practice and research through effective communication with communities and through the development of consensus with community partners for conducting effective public health programs.

- To be able to identify and obtain resources for public health programs

Graduates of the DrPH program will have a broad base of knowledge of potential funding sources for public health programs. They will have the skills needed to identify available resources and to prepare successful grant applications to obtain support from both public and private funding agencies for public health programs.

- To possess the leadership and management skills needed to become effective leaders in public health practice.

Graduates of this DrPH program will have the knowledge and skills needed for effective financial planning, organizational management, active policy development, and strategic and program planning in public health practice. The DrPH program will prepare its graduates for middle and high-level leadership roles in public health programs in the United States or internationally.

- To be able to interact with both diverse individuals and communities to produce or impact an intended public health outcome.

Graduates of the DrPH program will be able to develop public health programs and strategies responsive to the diverse cultural values and traditions of the communities being served. They will know how professional ethics and practices relate to equity and accountability to ensure that the culture-specific needs of diverse communities are addressed to eliminate health disparities in a culturally competent manner.

PhD Biostatistics Program

At the end of doctoral training students must demonstrate all of the competencies listed below:

- Be able to describe the roles biostatistics serves in the discipline of public health.
- Describe basic concepts of probability, random variation and commonly used statistical probability distributions.
- 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.
- Communicate understanding of the assumptions necessary for a given statistical procedure as well as the ability to determine if the assumptions are met for a given data set.
- Suggest preferred methodological alternatives to commonly used statistical methods when assumptions are not met.
- Recognize strengths and weaknesses of proposed approaches, including alternative designs, data sources, and analytical methods.
- Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions.
- Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question.
- Demonstrate the use of statistical theory in being able to develop or modify a statistical procedure to fit the needs of a unique data set.
- Quantitatively address a health problem by appropriate definition, study design, data collection, data management, biostatistical analysis, and interpretation of results for a variety of experimental and observational studies.
- Convey the solid theoretical training necessary for the development and study of new statistical methods; and/or adapt existing methods to new/unique problems.
- Demonstrate the ability to communicate effectively in writing reports, giving oral presentations, and teaching basic statistical material in a formal classroom setting.
- Be capable of assuming positions of leadership in a career in academia, research institutes, government, and/or industry.
- Contribute to the body of knowledge in their field of Biostatistics.

Epidemiology Program

At the end of doctoral training students must demonstrate all of the competencies listed below:

Demonstrate ability to describe a public health problem in terms of magnitude, person, time and place

Calculate basic epidemiology measures, with an understanding of basic terminology and definitions

Exhibit knowledge of the strengths and limitations of different study designs

Make appropriate inferences from epidemiological data

Communicate epidemiologic information to lay and professional audiences using various media

Demonstrate knowledge working with community and people of diverse background in order to address public health needs

Demonstrate knowledge to construct a successful grant application

Observe ethical and legal principles pertinent to the collection, maintenance, use, and dissemination of epidemiologic data

Evaluate the strengths and limits of epidemiological literature utilizing epidemiological principles

Demonstrate basic knowledge of the leading public health problems and history of the discipline

Demonstrate knowledge of research methods & data collection methods

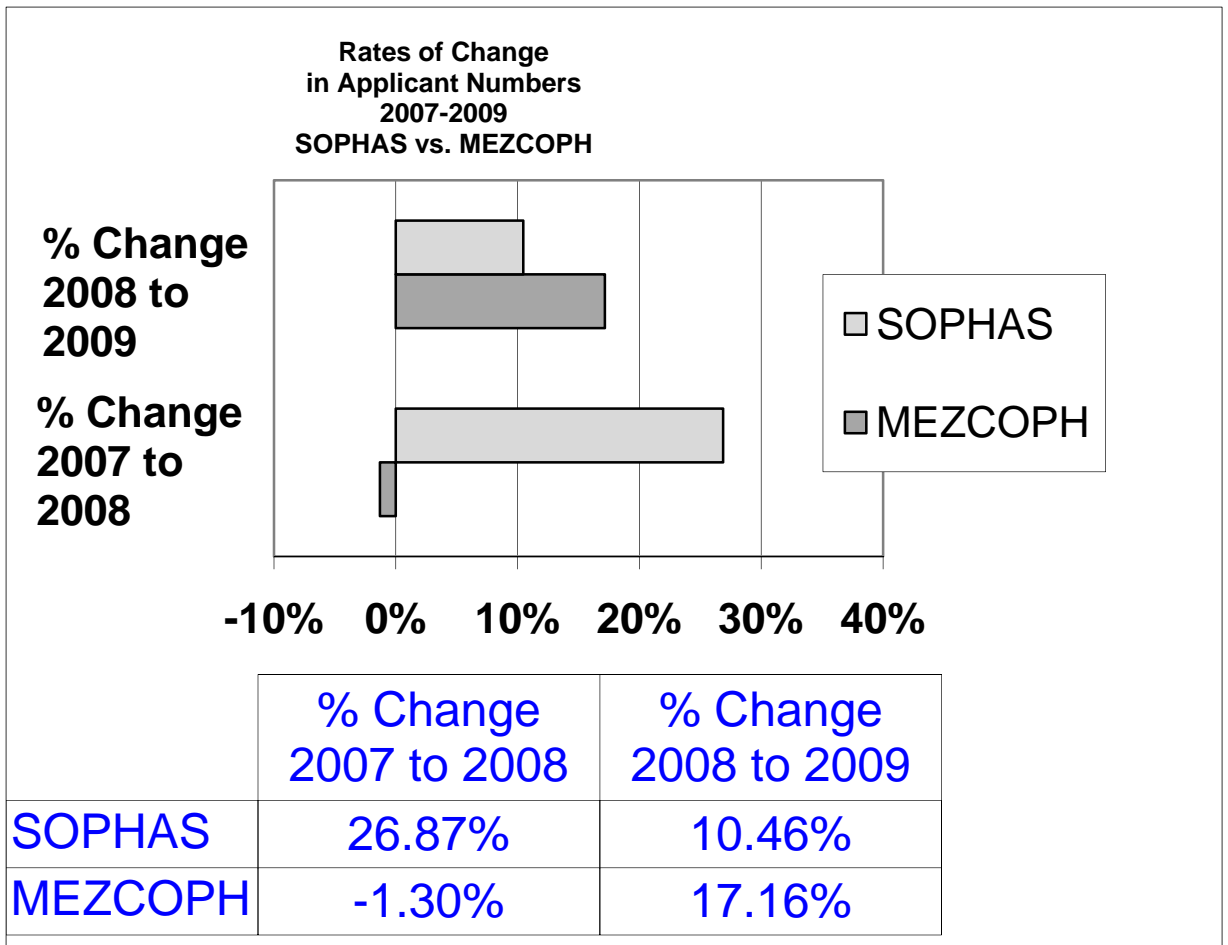
Perform appropriate epidemiology data analysis

Appendix G.5.
MEZCOPH
Educational Objectives

Academic Year 2008/2009
Performance

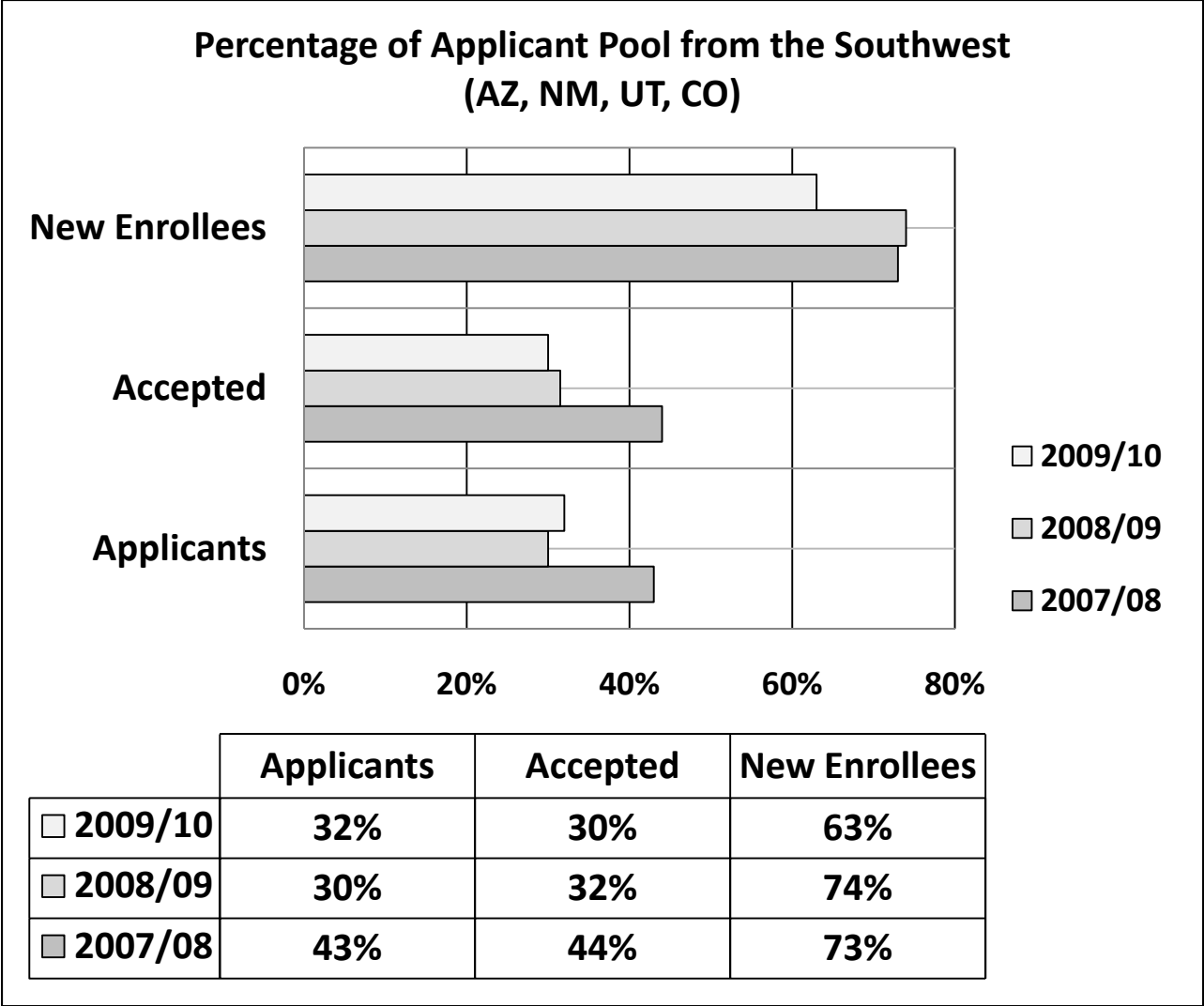


Objective 1.1: Increase the number of applicants to our graduate degree programs at a rate comparable to annual increase in number of applicants to SOPHAS pool.



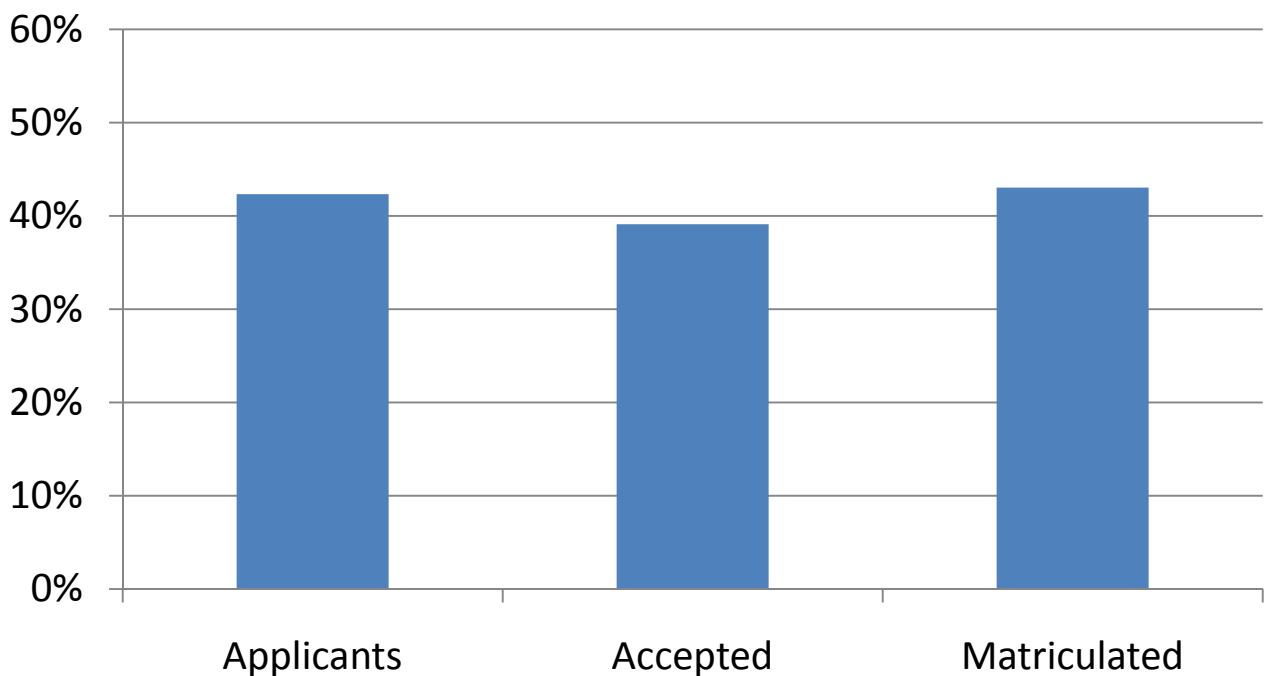
Objective 1.1 was met.

Objective 1.2 : 33% of applicants, 33% of accepted, and 33% of matriculated students will be from the Southwest.



Objective 1.2 was met.

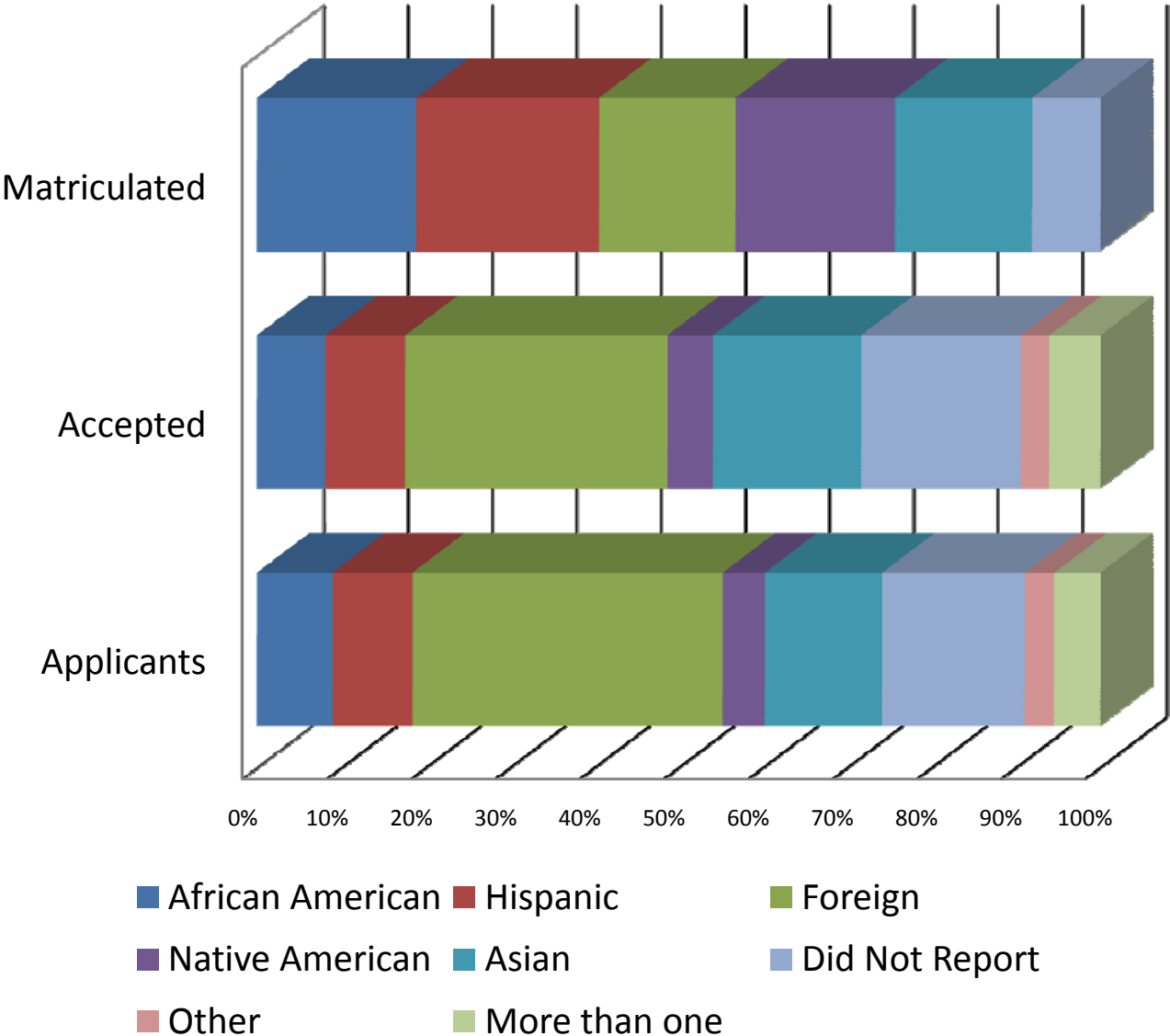
Objective 1.3: At the graduate level, ensure that 40% of applicants, accepted, and matriculated students will represent a diversity of racial and ethnic groups, as measured by underrepresented US minorities and international students.



Objective 1.3 was met.

Fall 2009 Admissions

Ethnic Breakdown of Non-White Applicants, Accepted and Matriculated Students

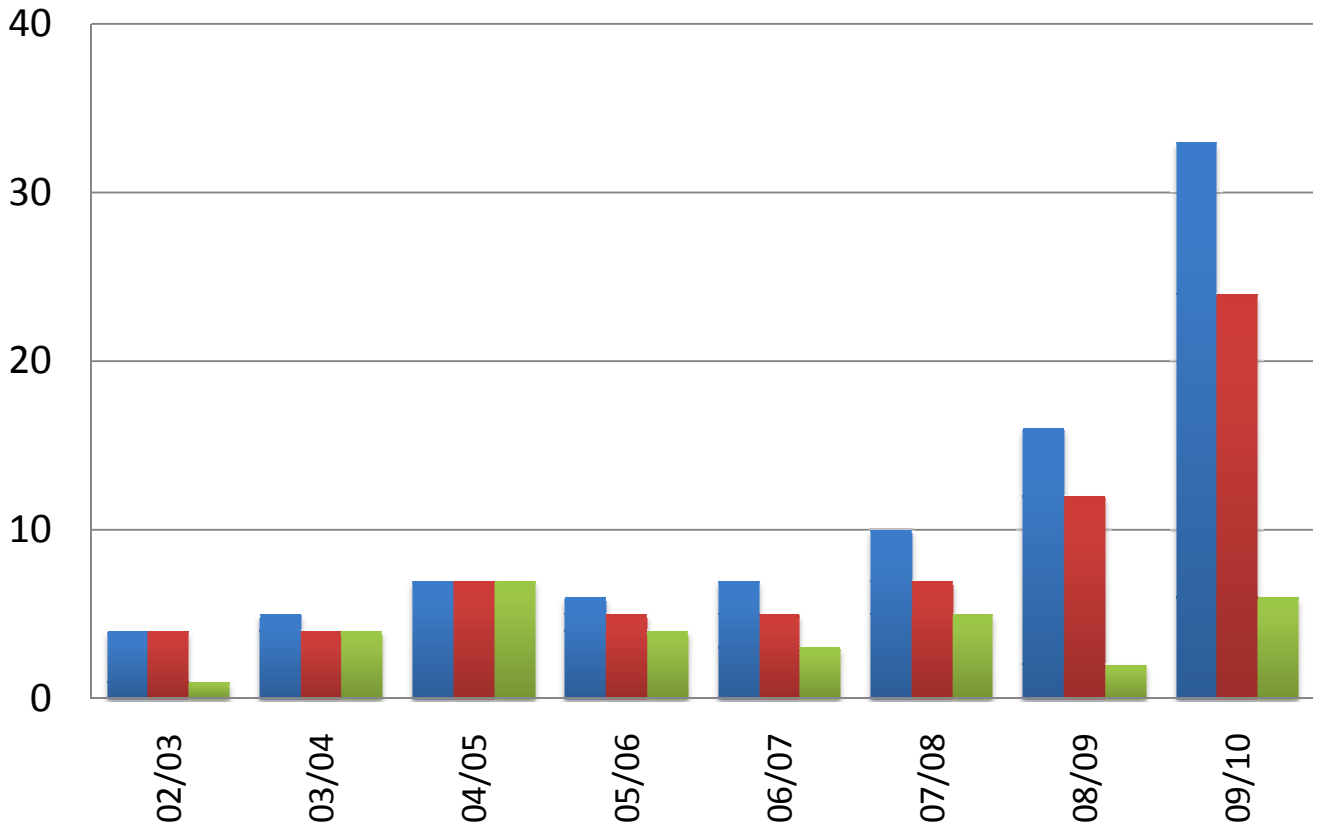


Objective 1.4: In each Section, increase the percentage of accepted students who matriculate.

This objective was met.

Admission Statistics

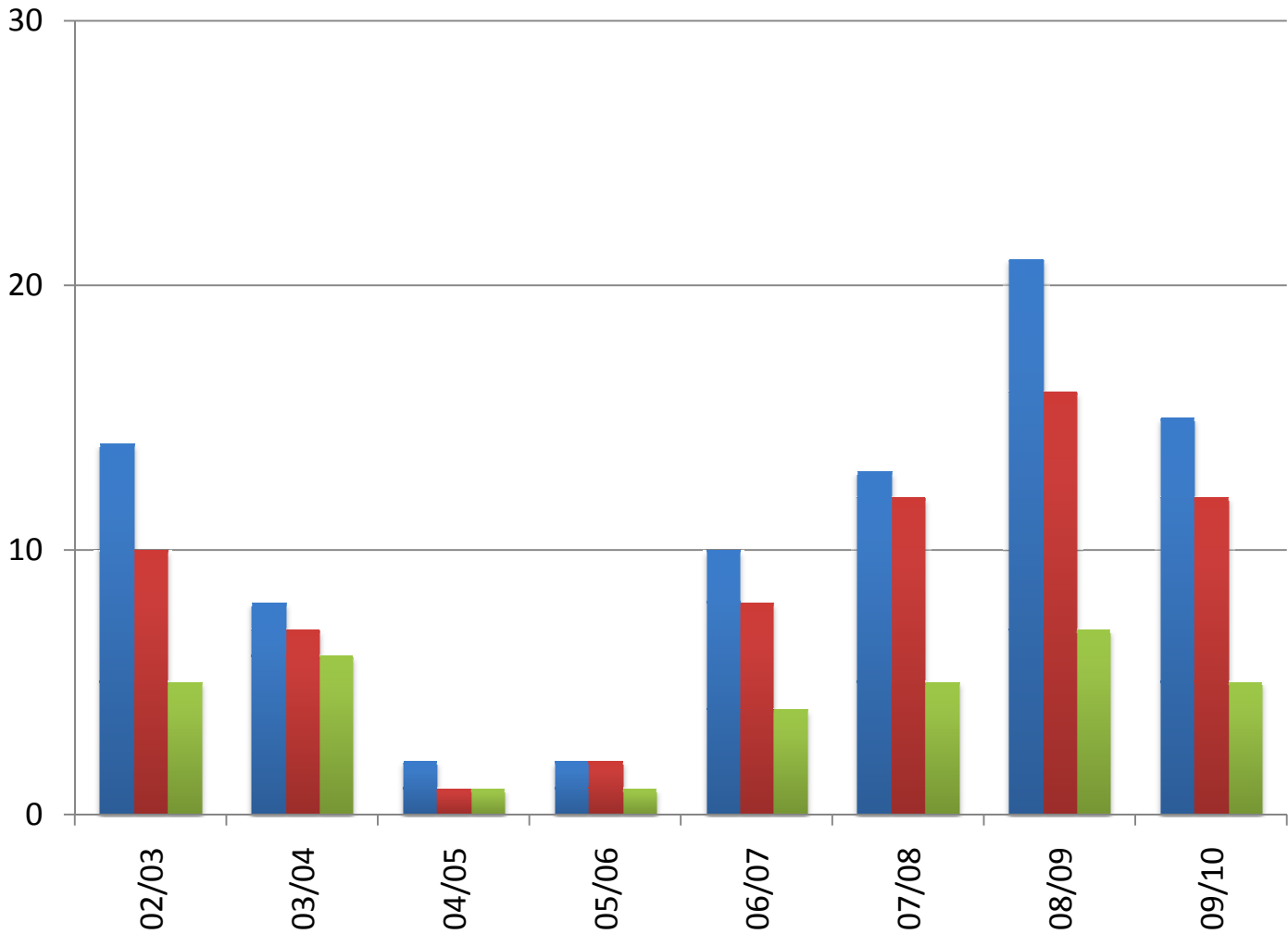
Biostatistics Section



	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Applicants	4	5	7	6	7	10	16	32
Admitted	4	4	7	5	5	7	12	25
Enrolled	1	4	7	4	3	5	2	6

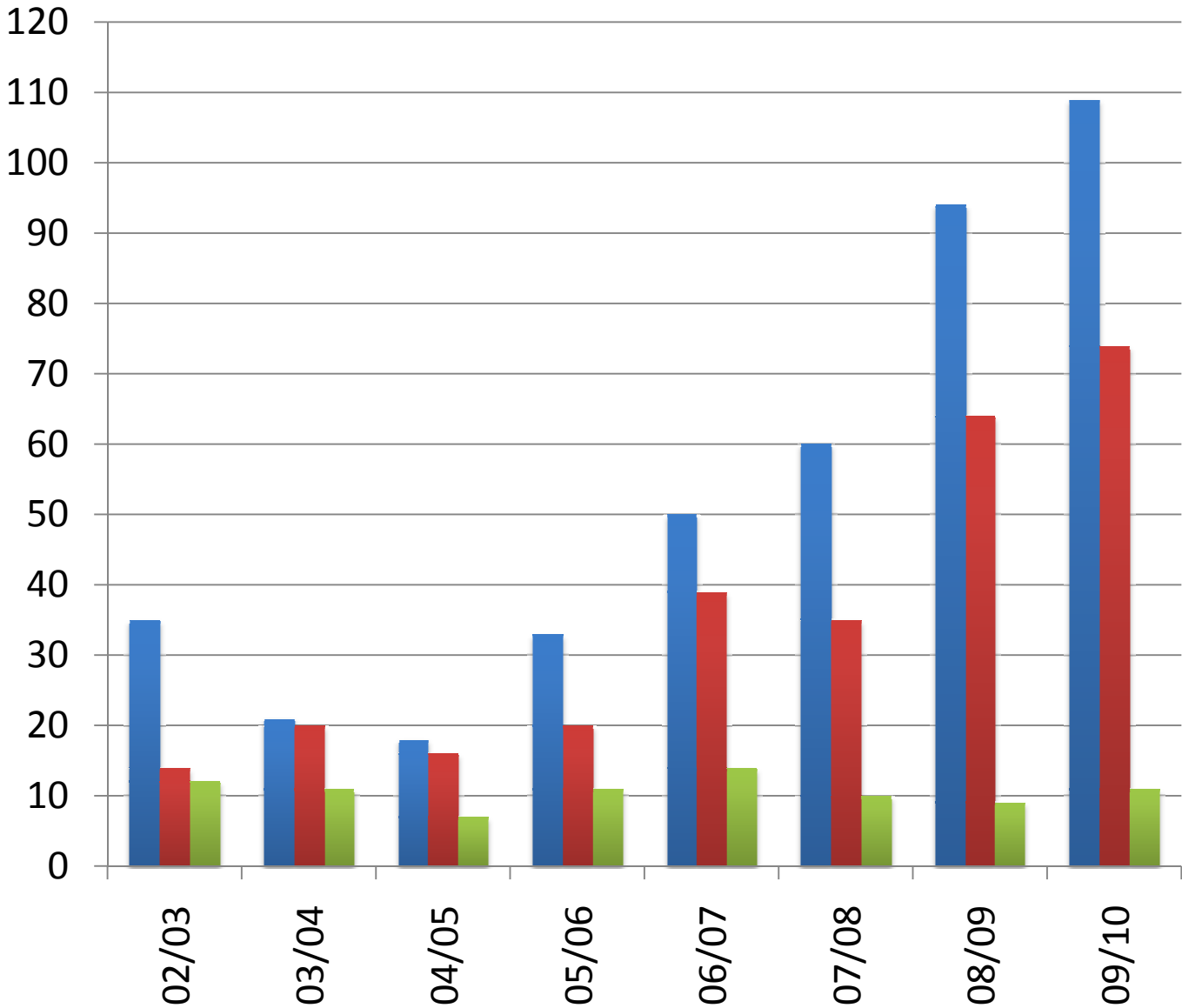
Admissions Statistics

EOH Section



	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Applicants	14	8	2	2	10	13	21	15
Admitted	10	7	1	2	8	12	16	12
Enrolled	5	6	1	1	4	5	7	5

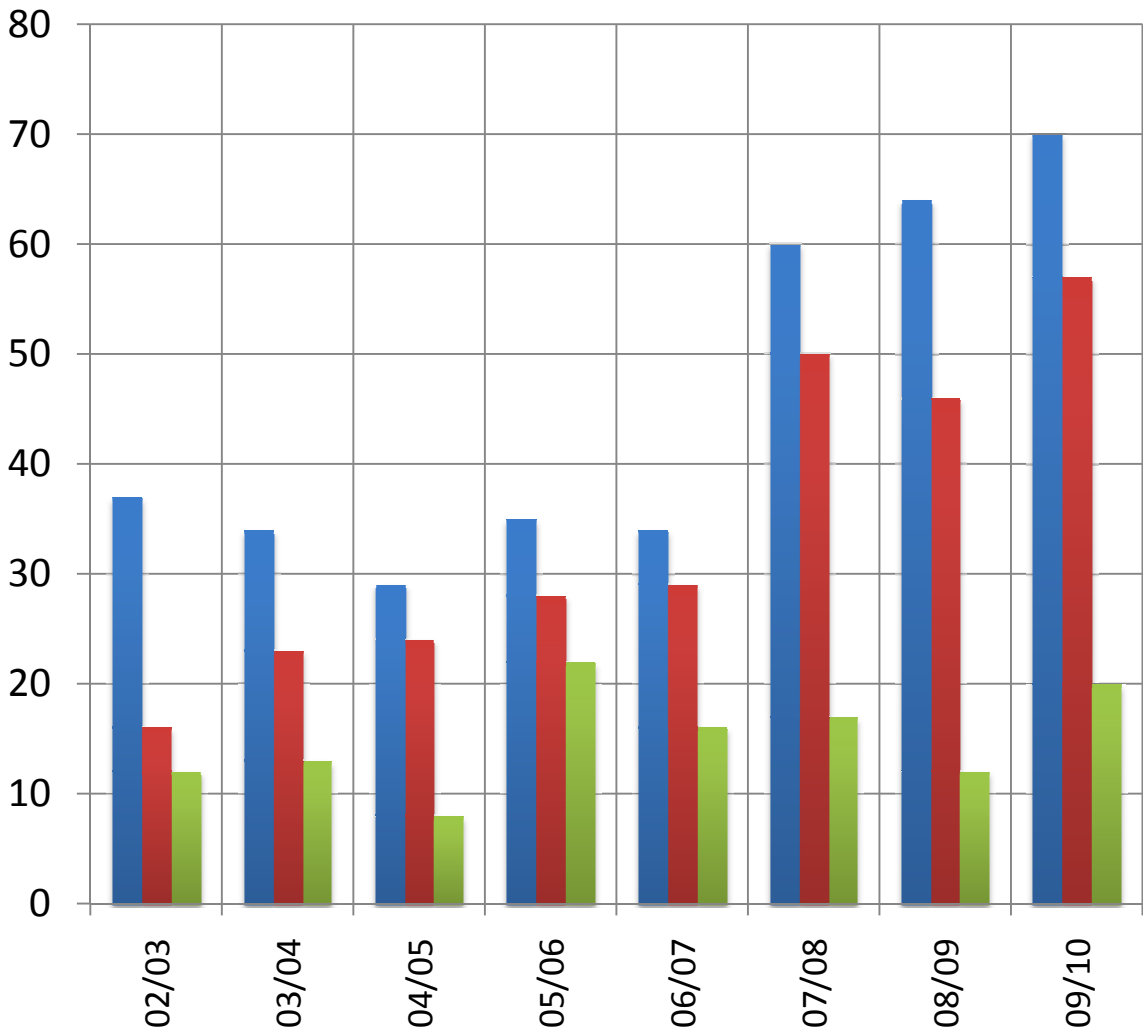
Admissions Statistics - Epidemiology



	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Applicants	35	21	18	33	50	60	94	109
Admitted	14	20	16	20	39	35	64	74
Enrolled	12	11	7	11	14	10	9	11

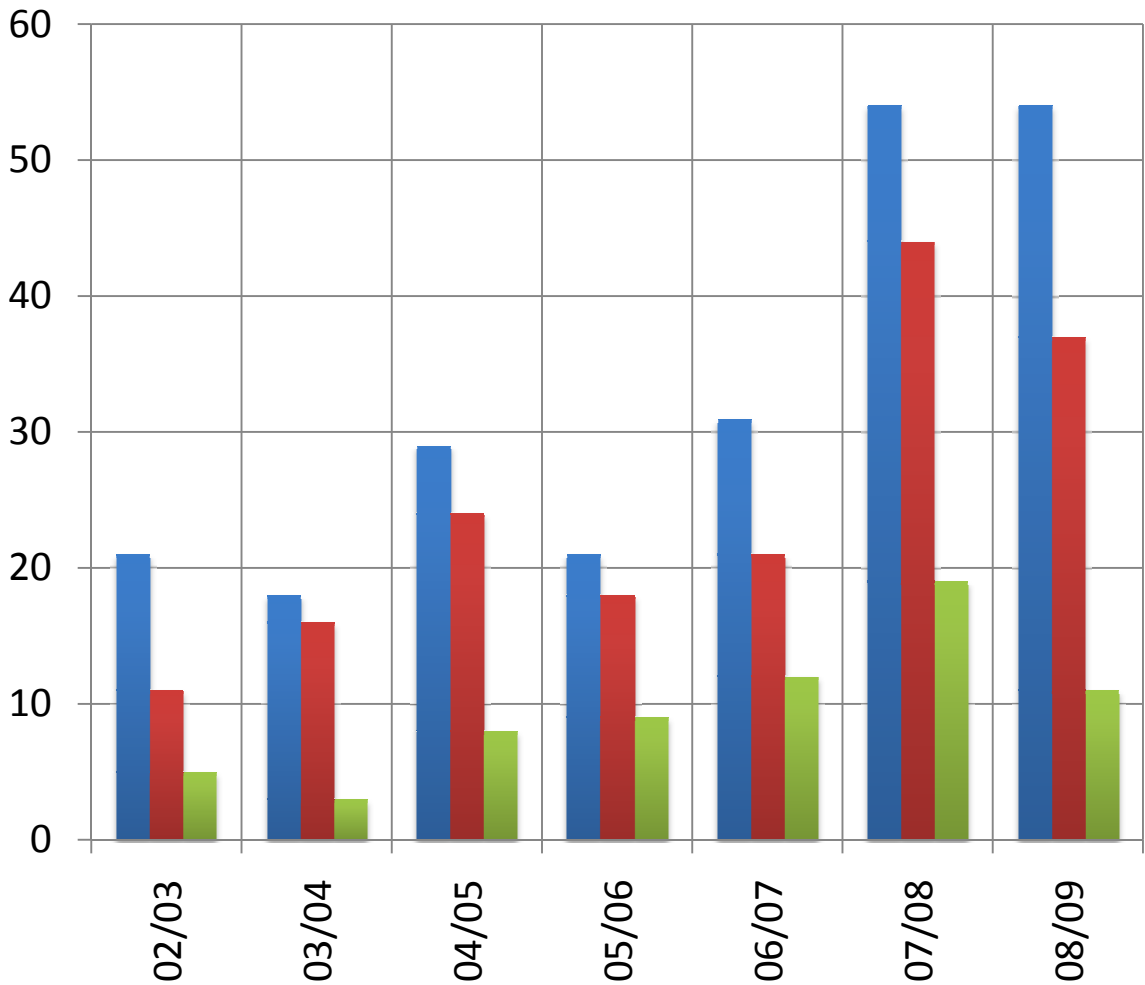
Admissions Statistics

Family and Child Health



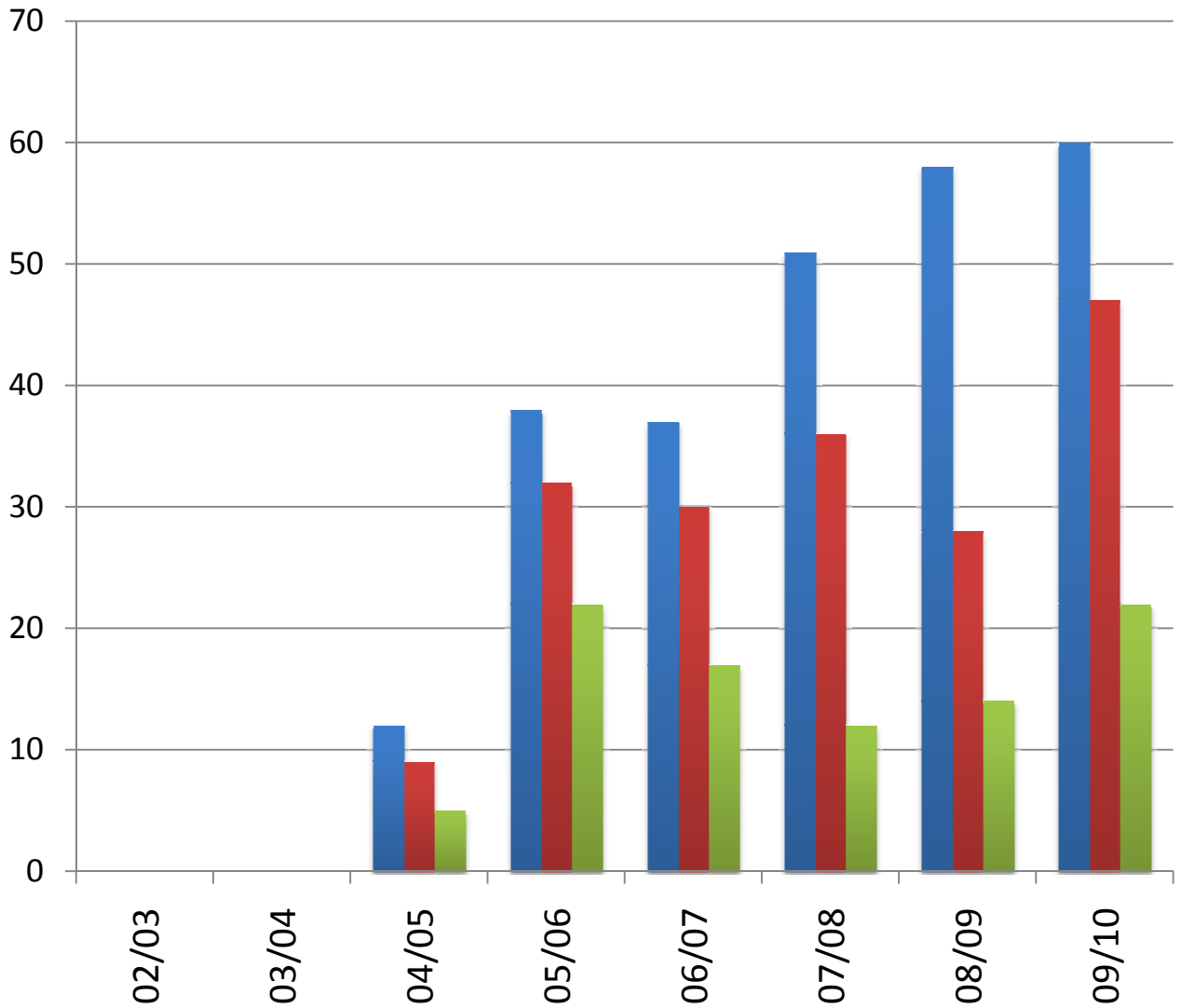
	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Applicants	37	34	29	35	34	60	64	70
Admitted	16	23	24	28	29	50	46	57
Enrolled	12	13	8	22	16	17	12	20

Admissions Statistics - HBHP



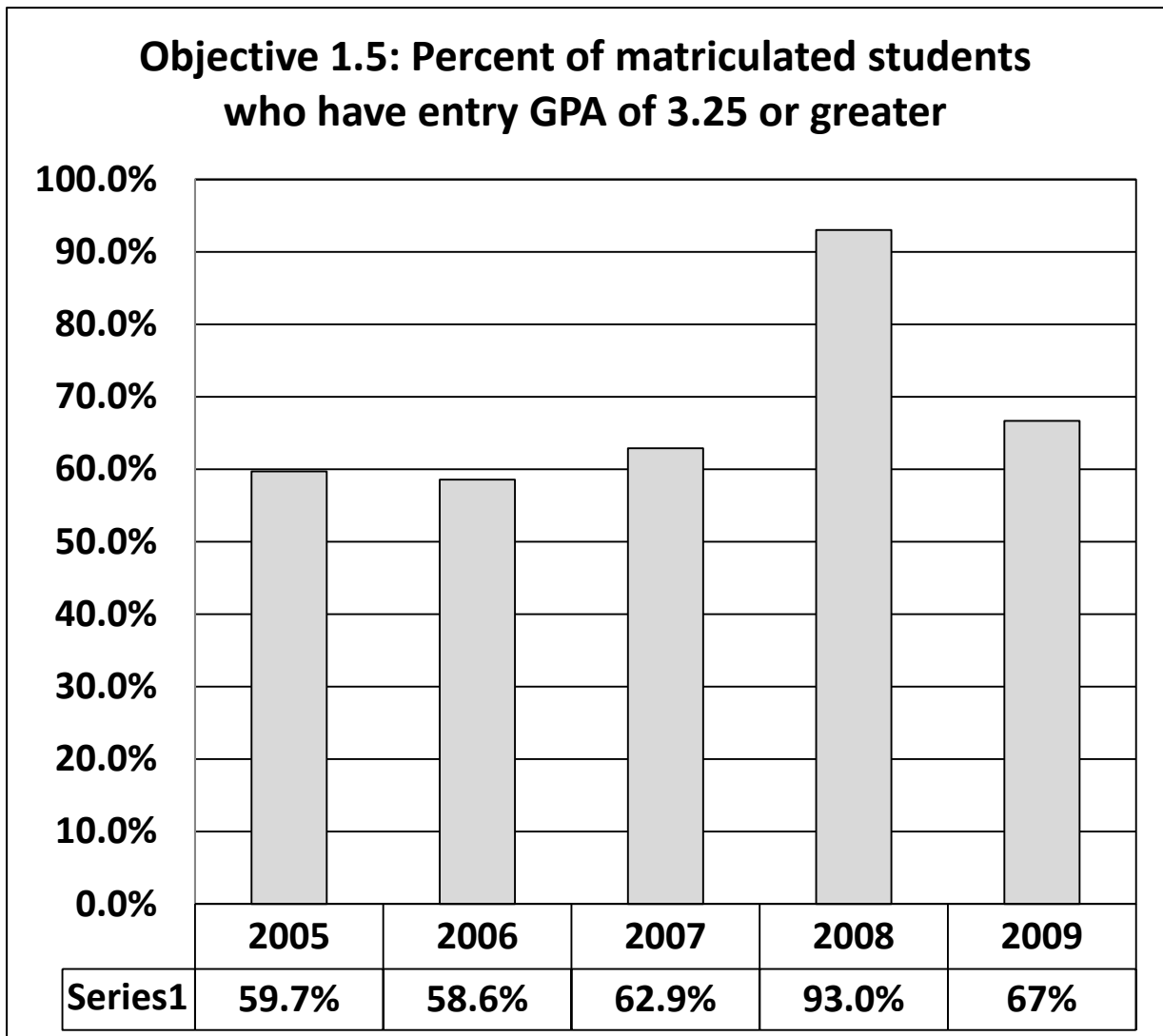
	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Applicants	21	18	29	21	31	54	54	67
Admitted	11	16	24	18	21	44	37	56
Enrolled	5	3	8	9	12	19	11	16

Admissions Statistics PHPM



	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Applicants			12	38	37	51	58	60
Admitted			9	32	30	36	28	47
Enrolled			5	22	17	12	14	22

Objective 1.5: Increase the percentage of matriculated students who have an entry GPA of ≥ 3.25 .



Objective 1.5 was partially met.

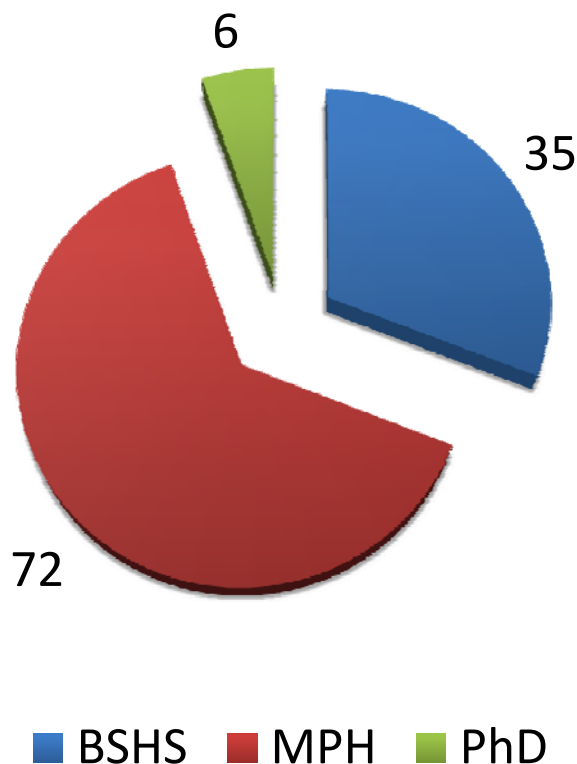
Objective 1.6: Annually review Instructional Goal 1 objectives and develop yearly recruitment plan based on past year performance.

Recruitment Plan was written and implemented to target Hispanic and Native American populations and events.

Objective 1.6 was met.

Where Did the Data Come From?

The majority of the following data was gathered via Student Exit Survey was completed by students graduating in December 2008, May 2009, and August 2009. Breakdown by degree type is as follows:



Objective 2.1: Ensure 67% of students participate in experiential/applied learning opportunities beyond internships, theses and dissertations as measured by the number of students who take field-based courses, laboratories, service learning courses, and participate in experiential activities within courses and independent studies prior to graduation

For 2008/09 year, 71% of graduating students participated in experiential learning opportunities beyond internships and theses and dissertations.
(76% -Grad students; 69% undergrads)

Objective 2.1 is met.

Objective 2.2: Ensure 67% of all students work with community based programs prior to graduation.

There is an issue with the manner in which this question was asked on survey instrument which will be addressed.

For the 2008/09 year, 90% of MPH graduates worked with community based programs prior to graduation.

Objective 2.2 is met.

Objective 2.3: Ensure 33% of MPH students are involved with research teams prior to graduation.

For 2008/09 year, 31% of graduating MPH students were involved with research teams prior to graduation.

Objective 2.3 is essentially met.

Objective 2.4: Ensure 33% of public health graduate students are involved in public health instruction prior to graduation.

For the 2008/09 year, 36% of public health graduate students were involved in public health instruction prior to graduation.

Objective 2.4 was met.

Objective 2.5: Ensure that each section reviews their academic programs identifying their strengths and weaknesses and including how they addressed their academic programs' learning competencies. Reviews will be performed at 3 year intervals.

The process for section reviews is on going within the Education Committee.

Objective 2.5 is currently met.

Objective 3.1: Graduate 85% of all graduate students within the allowable time to degree, as determined by the UA Graduate College.

85% of graduate students who entered their programs in Fall 2003 (master's level) and Fall 1999 (doctoral level) graduated within the allowable time to degree. One additional master's level student who entered in 2003 will finish this semester.

Objective 3.1 was met.

Objective 3.2: Ensure 25% of graduate students present at established professional meetings and conferences (not including internship conference) prior to graduation.

For the 2008/09 year, 46% of graduates presented at established professional meetings.

Objective 3.2 was met.

Objective 3.3: Ensure 67% of students are members of public health professional organizations prior to graduation.

For the 2008/09 year, 57% of graduate students were members of public health professional organizations.

Objective 3.3 was not met and we will work with students to get them more engaged with professional groups.

Objective 3.4: Ensure 33% of students provide extramural service to community organizations prior to graduation.

For the 2008/09 year, 32% of all graduating students provided extramural service to community organizations prior to graduation.

Objective 3.4 was essentially met.

Objective 3.5: Ensure 67% of MS and doctoral students are authors or coauthors of peer reviewed papers prior to graduation.

For the 2008/09 year, 100% of the graduating MS and doctoral students were authors or co-authors of peer reviewed papers.

Authored or Co-Authored:	%	Publish Status
Policy brief	33% (2)	
White Paper	17% (1)	
Poster	83% (5)	
Peer Reviewed Manuscript	100% (6)	4 Published; 1 In Press; 1 No
Non Peer Reviewed Manuscript	33% (2)	1 Yes, 1 No

Objective 3.5 was met.

Objective 3.6: Ensure 33% of MPH students are authors or coauthors of peer reviewed or non peer reviewed scholarly work prior to graduation.

For the year 2008/09, 46% of graduating students were authors or coauthors of peer reviewed or non peer reviewed scholarly work prior to graduation.

Authored or Co-Authored:	#	Publish Status
Policy brief	5	
White Paper	3	
Poster	23	
Peer Reviewed Manuscript	19	12 In Press; 6 Yes; 1 No
Non Peer Reviewed Manuscript	7	3 Yes; 3 No

Objective 3.6 was met.

Objective 3.7: Provide and maintain opportunities for students to develop leadership skills through membership on internal and external committees, clubs and events.

Opportunities for students to serve on internal committees and clubs are shared with students via the listserv. External opportunities are advertised when available, as well. New opportunities for students to build leadership skills are developed on a regular basis.

Objective 3.7 was met.

Objective 3.8: Provide leadership training for student leaders through courses, short-term workshops, and special leadership development events.

CPH 322 Health Education Ethical Leadership
CPH 567 Public Health Leadership and Mgt
CPH596E Health Education Behavioral Leadership

ASPH Student Leadership Symposium
Applied Tailored Leadership Adventure for Success (ATLAS)
Annual Retreats for Student Club Officers
Others????

Objective 3.8 was met.

Objective 3.9: Ensure 67% of graduate students are funded through assistantships, scholarships, and grants prior to graduation.

For the 2008/09 year, 76% of graduate students are funded through assistantships, scholarships, and grants prior to graduation.

Objective 3.9 was met.

Objective 3.10: Ensure 33% of graduate students apply for external funding awards, (meeting support scholarships, scholarships, fellowships, etc.) prior to graduation.

For 2008/09 year, 52% of graduate students applied for external funding awards prior to graduation.

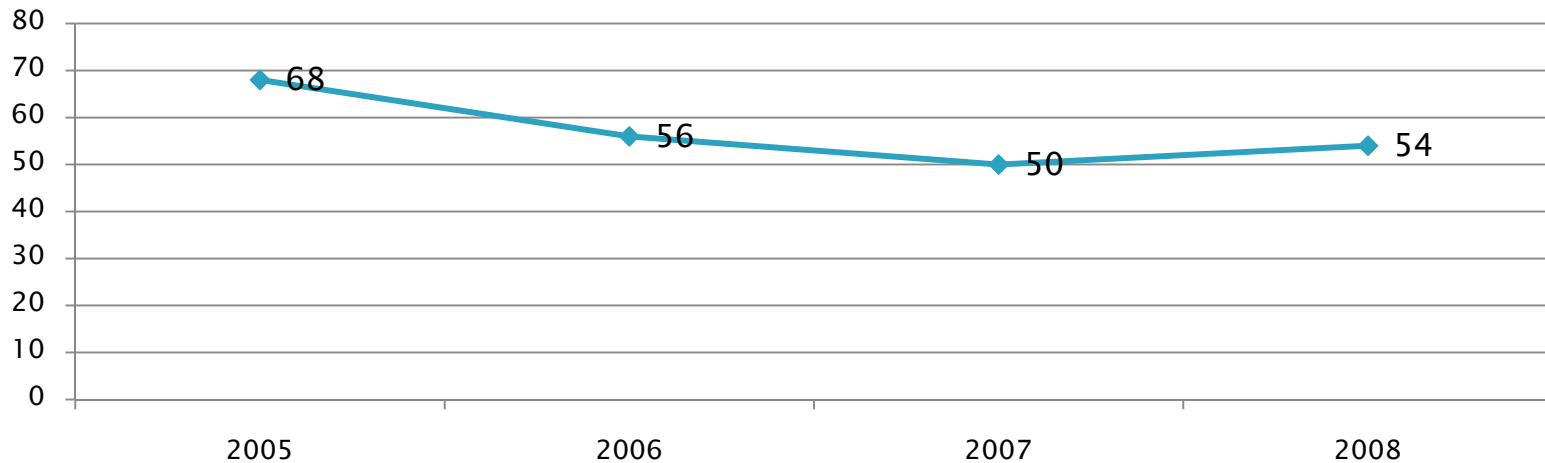
Objective 3.10 was met.

Appendix I.3. Outreach Data and Objectives

Objective 1.1.

Ensure that no fewer than 50% of faculty and academic professionals are involved in community outreach, practice and service activities that focus on four categories: eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and Public Health Preparedness

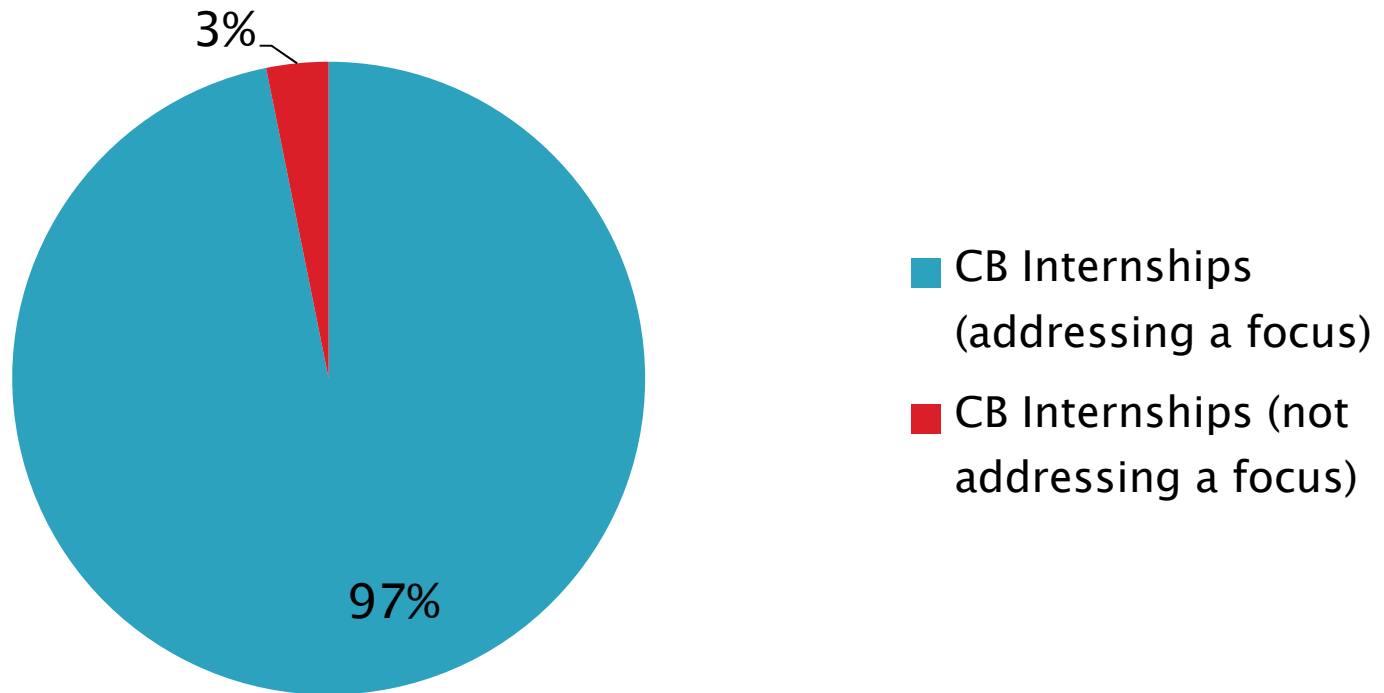
Percentage of Faculty and APs involved in focus areas



	2005	2006	2007	2008
N= total faculty and APs who completed APROL based on roster	60	55	52	52
Count of faculty involved in activities focusing on the 4 categories based on roster	41	31	26	28
Objective target	50	50	50	50
Percent of Faculty/APs	68	56	50	54
Ratio of met objective to target	137%	113%	100%	108%

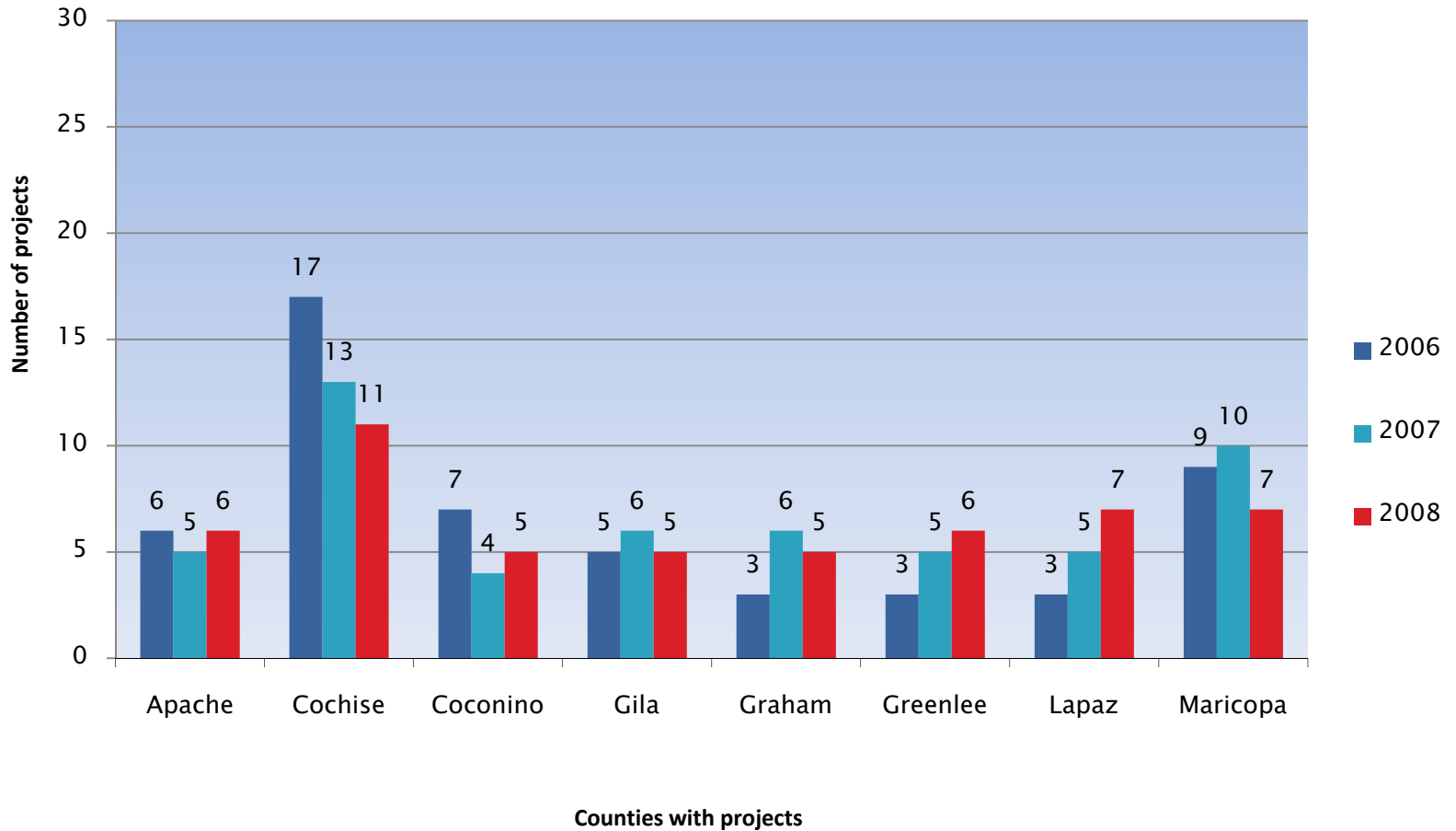
Objective 1.2.

Ensure that no fewer than 75% of the MPH student internships are community-based and focused on community outreach, practice and service activities that emphasize eliminating health disparities, building and strengthening collaborations, targeting Arizona Healthy People 2010 goals and Public Health Preparedness.



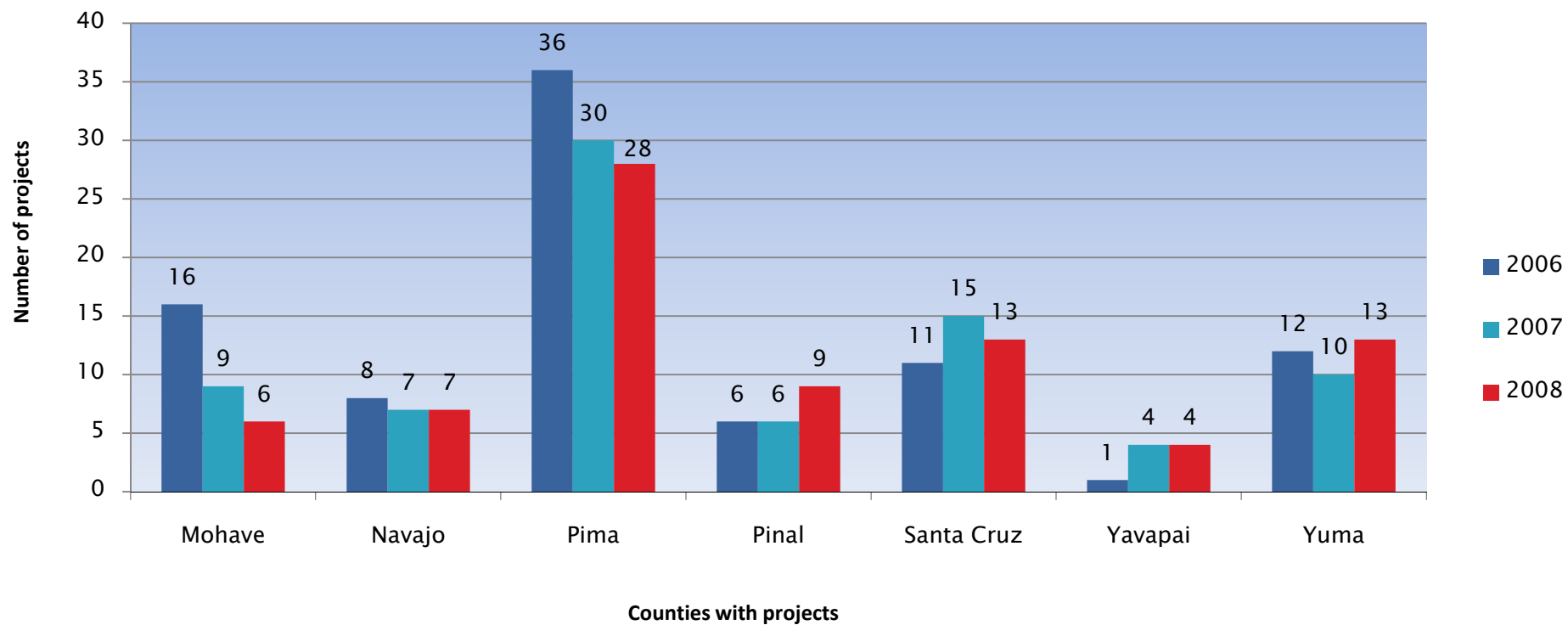
CEPAS Objective 1.3.1

Geographic Reach: Maintain engagement, practice and service presence in all 15 counties at least at 2006 levels.



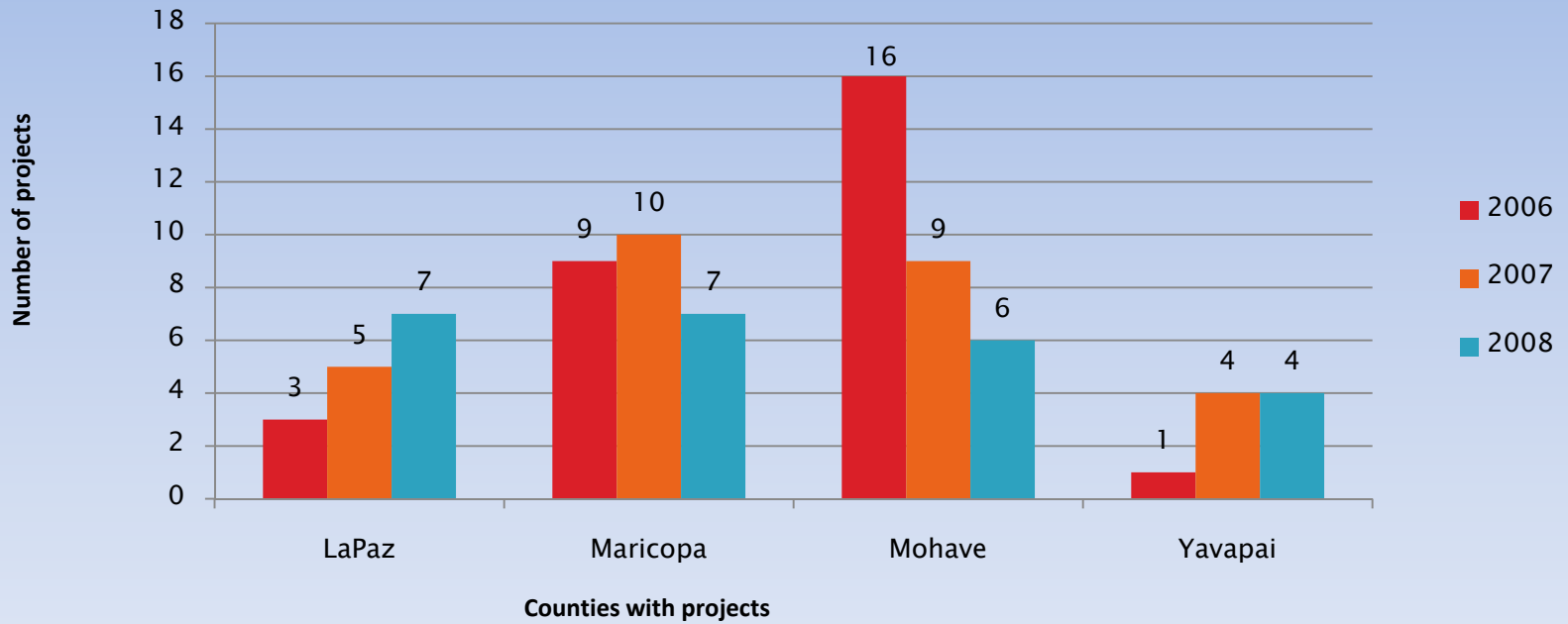
CEPAS Objective 1.3.1

Geographic Reach: Maintain engagement, practice and service presence in all 15 counties at least at 2006 levels.



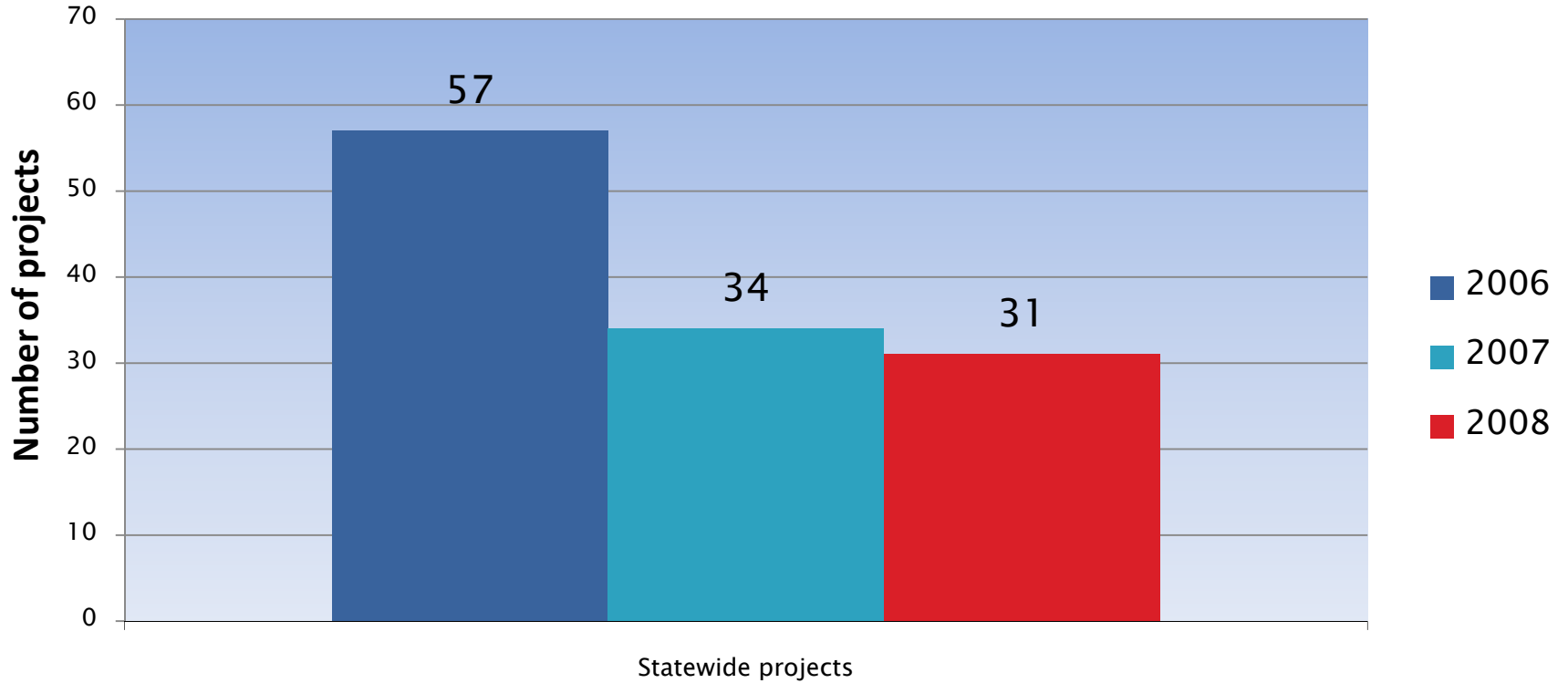
Objective 1.3.2. Geographic Reach:

Increase engagement, practice and service presence in Maricopa, La Paz, Yavapai and Mohave Counties



CEPAS Objective 1.3.1

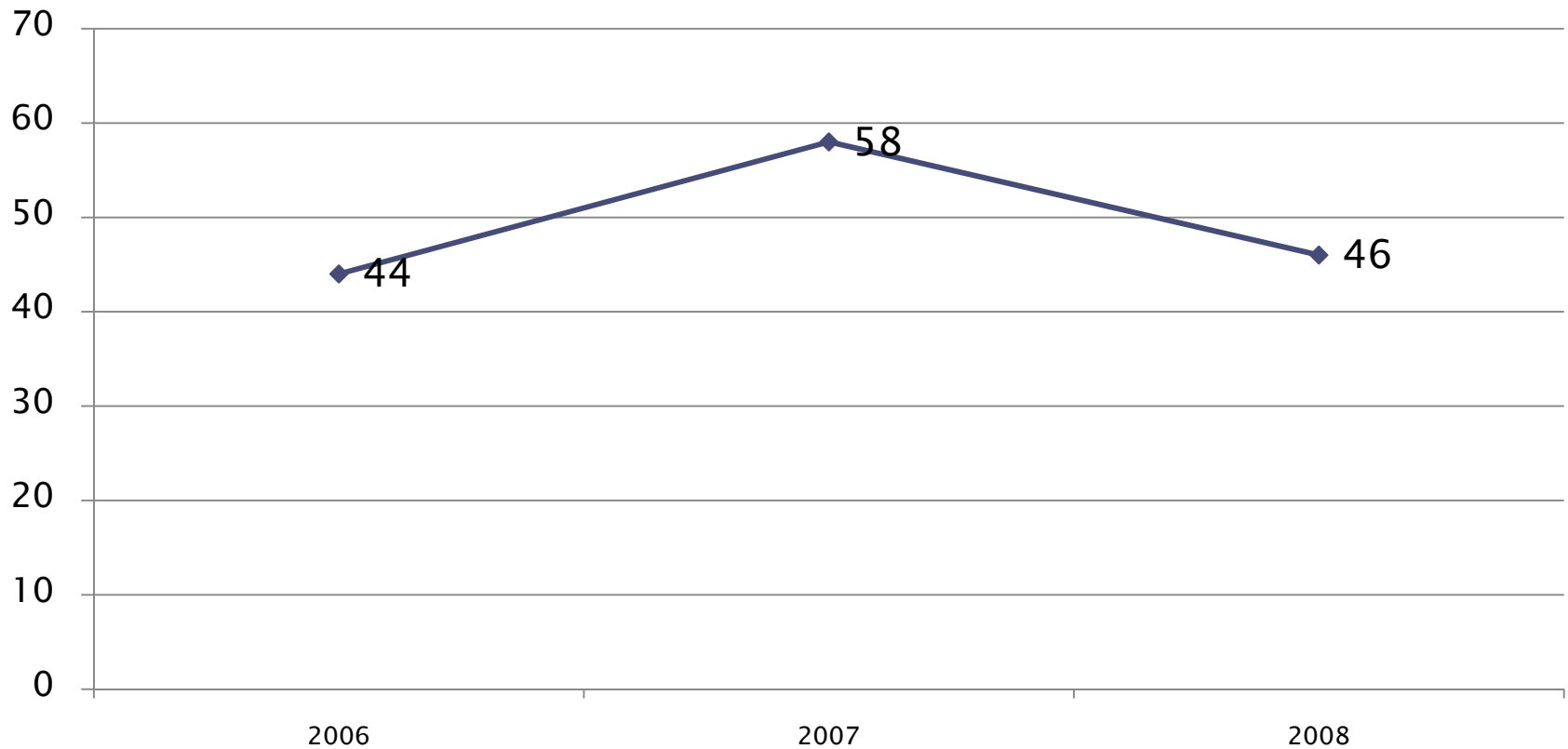
Geographic Reach: Maintain engagement, practice and service presence in all 15 counties at least at 2006 levels. (Statewide Projects)



Objective 1.4.

Ensure that no fewer than 50% of faculty and academic professionals are involved in the delivery of workforce development/continuing education activities to diverse audiences.

Percentage of Faculty/AP engaging in CE/WD



Objective 1.4.

Ensure that no fewer than 50% of faculty and academic professionals are involved in the delivery of workforce development/continuing education activities to diverse audiences.

	2006	2007	2008
Total faculty/AP performing WFD/CE activities	24	30	25
Total faculty and AP's	55	52	52
Percentage involved in WFD/CE activities	44	58	46
Objective target	50	50	50
Percentage of target met	87%	115%	92%

Number of Workforce Development/Continuing Education Offerings and
Participants Served

	2006	2007	2008
Number of WFD/CE activities	66	58	40
Number of Participants	1483	3675	2856

Project Identification Code: _____

Part One:

The following has been previously completed by the Project Director at the UA Mel and Enid Zuckerman College of Public Health.

Project Name:

Project Director:

Partnership Type: Community Agency/Organization
(Check One) Coalition Other (Specify)

Project Time Period:
(Start (MM/Year/End Date (MM/Year))

Project Initiated By: The UA Mel and Enid Zuckerman College of Public Health
(Check One) The community, agency/organization, or coalition.
 Jointly initiated by the MEZCOPH and the community, agency/organization, or coalition.
 Other (please describe):

Project Focus: Health promotion/disease prevention project
(Check all that apply) Intervention or research-based project
 Direct technical assistance
 Community capacity building or skill building
 Education/training Needs assessment
 Policy development Program evaluation
 Data collection/analysis Other (please describe):

What populations Caucasian American Indian Rural
does the project Hispanic Asian/Pacific Islander Other:
serve? (Check all that African American Low Income
apply)

Where did the Project take
place? Include city,
county, state.

List of Project Partners
(Full Agency Name (no
abbreviations),
Department or Division, if
appropriate):

Project Partner Representative
for this Questionnaire (Name,
Title, Agency; Email, Fax #, or
Mailing Address):

Part Two:

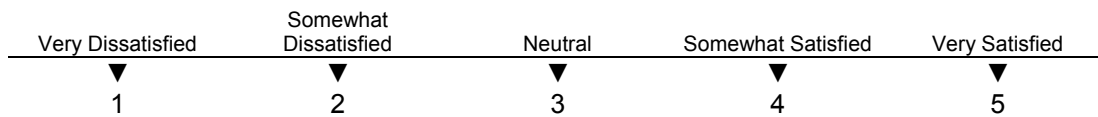
Project Identification Code: _____

The following questions are to be completed by the Project Partner Representative.

Instructions:

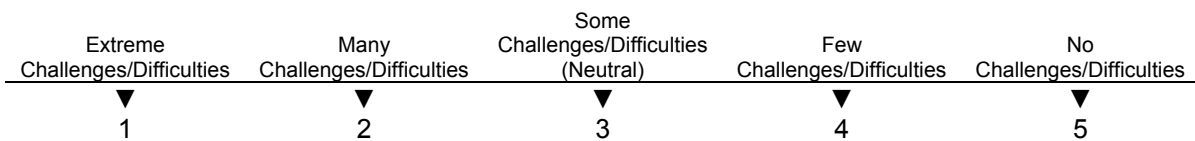
Please review Part One of the questionnaire to recall the specific project and project time period pertinent to this survey. Then, please answer each question below as completely and honestly as you can. You will notice that some of the questions ask you to think back to the time when the project was occurring if it has concluded (or might still be going on), while other questions ask you to think about the project's impact (if any) on your work and the way you feel now about the partnership.

1. **How would you rate your satisfaction or dissatisfaction regarding the collaboration or process of this specific project?** (Please circle your answer using the 5-point scale, where 1 is Very Dissatisfied and 5 is Very Satisfied.)



Why? (Please write your short answer in the space provided.)

2. **Please rate the challenges or difficulties that occurred during this specific project?** (Please circle your answer using the 5-point scale, where 1 is Extreme Challenges or Difficulties and 5 is No Challenges or Difficulties.)



Why? (Please write your short answer in the space provided.)

3. **Have there been any ongoing activities (expected or unexpected) in your community, agency/ organization, or coalition as a result of this project?** (Please write your short answer in the space provided.)

6. Please rate your likelihood of continuing a relationship with the UA Zuckerman College of Public Health. (Please circle your answer using the 5-point scale, where 1 is Very Unlikely and 5 is Very Likely.)

Very Unlikely	Somewhat Unlikely	Possibly	Somewhat Likely	Very Likely	Not Sure
▼	▼	▼	▼	▼	▼
1	2	3	4	5	6

Why? (Please write your short answer in the space provided.)

B. Is there any aspect of this project that you would especially like to sustain in your community, agency/organization, or coalition? (Please mark only one box.)

Yes (please describe): _____

No _____

7. Is there anything else about this project/program, or your partnership with the UA Zuckerman College of Public Health that you would like to add? (Please write your response in the space provided.)

Thank you for taking the time to answer these questions.

Appendix N.1

PUBLIC HEALTH, GRADUATION GPA FOR BACCALAUREATE MAJORS COMPLETED*, 2002 - 2008

GPA = Grade Point Average

FISCAL YEAR: AUG, DEC, MAY	COLLEGE OF PUBLIC HEALTH		UNIVERSITY OF ARIZONA	
	UNDERGRAD MAJORS COMPLETED	AVERAGE GRADUATION GPA	UNDERGRAD MAJORS COMPLETED	AVERAGE GRADUATION GPA
FY 08-09	53	3.237	5,914	3.183
FY 07-08	56	3.015	2,412	3.084
FY 06-07	51	3.057	5,569	3.199
FY 05-06	47	3.079	5,613	3.177
FY 04-05	40	3.112	5,749	3.182
FY 03-04	28	2.972	5,302	3.171
FY 02-03	33	2.914	5,349	3.142

*Completed Majors may not be not equivalent to Degrees Awarded.

Appendix N.2

PUBLIC HEALTH, BACCALAUREATE - TIME TO GRADUATION, 2002 - 2008

(Average number of years for first-year, full-time freshmen to complete their degree)

FISCAL YEAR	COLLEGE OF PUBLIC HEALTH*		UNIVERSITY OF ARIZONA	
	NUMBER OF GRADUATES	AVERAGE YEARS TO DEGREE	NUMBER OF GRADUATES	AVERAGE YEARS TO DEGREE
FY08-09	23	4.674	3,009	4.378
FY07-08	38	4.789	2,771	4.490
FY06-07	22	4.705	3,319	4.593
FY05-06	22	5.011	3,069	4.674
FY04-05	14	5.179	3,179	4.716
FY03-04	11	5.000	2,954	4.759
FY02-03	16	4.688	2,936	4.702

Appendix N.3

PUBLIC HEALTH, COMPLETED MAJORS*/ INSTRUCTIONAL FACULTY, 2002 - 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

Faculty FTE - State Funds - Fall	FISCAL YEAR (Aug/Dec/May)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Instructional Faculty + Dept Head FTE	7.20	7.40	7.47	11.83	16.53	15.97	16.71
Undergraduate Completed Majors	33	28	40	47.33	51	56	53
Completed Undergraduate Majors per Faculty FTE	4.58	3.78	5.35	4.00	3.09	3.51	3.17
Graduate Completed Majors	57	71	60	77	63	60	87
Completed Graduate Majors per Faculty FTE	7.92	9.59	8.03	6.51	3.81	3.76	5.21

*Completed Majors may not be equivalent to degrees awarded.

Appendix N.4

PUBLIC HEALTH, COMPLETED MAJORS, 2002 - 2008

(Completed Majors may not be equivalent to Degrees Awarded)

MAJORS COMPLETED	FISCAL YEAR (Aug/Dec/May)							Grand Total
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09	
Biostatistics (BIOS)								
Doctorate	N/A	N/A	N/A	N/A	N/A	0	0	0
Epidemiology (EPI)								
Masters	4	5	1	3	2	1	5	21
Doctorate	1	4	2	2	1	5	7	22
Total EPI	5	9	3	5	3	6	12	43
Health Education (HLTH)								
Baccalaureate	33	28	40	47.33	51	56	53	308.33
Public Health (PHL)								
Masters	52	62	57	72	60	54	75	432
Doctorate	N/A	N/A	N/A	N/A	0	0	0	0
Total PHL	52	62	57	72	60	54	75	432
Total Undergraduates								
	33	28	40	47.33	51	56	53	308.33
Total Graduate Students								
	57	71	60	77	63	60	87	475
TOTAL MAJORS								
	90	99	100	124.33	114	116	140	783.33

*An Interdisciplinary Studies Subject Area is recorded as 0.33 completed major

Appendix N.5

PUBLIC HEALTH, INCOMING FRESHMAN SAT/ACT SCORES, 2002 - 2008

TERM	PRE-HEALTH EDUCATION*			UNIVERSITY OF ARIZONA		
	FRESHMAN COUNT	AVERAGE COMPOSITE SCORES		FRESHMAN COUNT	AVERAGE COMPOSITE SCORES	
		ACT	SAT		ACT	SAT
Fall 08	3	19.3	1,050	8,017	23.6	1,096
Fall 07	34	22.6	1,059	7,959	23.5	1,102
Fall 06	38	22.5	975	7,233	23.4	1,106
Fall 05	24	23.5	1,067	7,415	23.5	1,121
Fall 04	14	21.1	965	7,269	23.7	1,118
Fall 03	16	19.5	945	7,625	23.6	1,115
Fall 02	9	22.8	1,045	7,343	23.4	1,099

Appendix N.6

PUBLIC HEALTH, STUDENT FULL TIME EQUIVALENT (FTE) ENROLLMENT, 2002 - 2008

FTE Enrollment by Course Level	FISCAL YEAR (Fall + Spring)*						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Undergraduate	185.19	130.44	202.54	243.01	224.53	231.48	179.34
Graduate	170.22	191.95	264.25	286.15	332.29	346.93	342.92
Total FTE Enrollment	355.41	322.39	466.79	529.16	556.81	578.41	522.26

*Count at Fall and Spring Census Dates

Appendix N.7

PUBLIC HEALTH, COMPLETED GRADUATE CERTIFICATES, 2005 - 2008

GRADUATE CERTIFICATES OFFERED	FISCAL YEAR (Aug/Dec/May)				TOTAL CERTIFICATES AWARDED
	FY 05-06	FY 06-07	FY 07-08	FY 08-09	
Arizona Clinical Research Training Program (ACR)	1	4	3	0	8
Public Health (PHL)	0	0	0	0	0
Total Certificates Awarded	1	4	3	0	8

Appendix N.8

PUBLIC HEALTH, MAJORS BY CLASSIFICATION, 2002 - 2008

UNDERGRADUATES BY CLASSIFICATION	TERM*						
	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Pre-Health Education (PRHE)							
First Time Freshmen	8	12	8	17	26	20	N/A
Other First Year	4	6	13	1	3	3	3
Second Year	12	24	20	31	33	41	11
Third Year	20	34	46	61	61	45	21
Fourth Year and Beyond	31	32	46	47	55	60	29
Total PRHE	75	108	133	157	178	169	64
Health Education (HLTH)							
First Time Freshmen	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other First Year	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Second Year	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Third Year	0	3	0	0	1	2	7
Fourth Year and Beyond	31	21	28	45	56	60	52
Total HLTH	31	24	28	45	57	62	59

*Count as of Fall Census Date

Appendix N.9

PUBLIC HEALTH, ENROLLED MAJORS BY ETHNICITY, 2002 - 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

DEGREE LEVEL	ETHNICITY	ENROLLED MAJORS BY TERM*						
		Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Baccalaureate	African American	13	15	16	17	24	19	11
	Asian American	4	4	6	17	25	21	11
	Hispanic	24	30	49	56	61	58	34
	Native American	10	15	16	10	10	13	7
	Non-resident/International	2	1	3	2	2	5	2
	Unknown / Other	1	5	4	11	14	12	6
	White	52	62	67	88	99	102	50
Baccalaureate Total		106	132	161	201	235	230	121
Underrepresented Minorities (African American, Asian American, Hispanic, Native American)		51	64	87	100	120	111	63
Percent Underrepresented Minorities		48.1%	48.5%	54.0%	49.8%	51.1%	48.3%	52.1%
Masters	African American	3	4	6	8	8	6	9
	Asian American	7	13	13	19	23	16	11
	Hispanic	24	26	27	19	19	22	20
	Native American	10	11	9	12	13	13	13
	Non-resident/International	17	16	12	10	10	14	12
	Unknown / Other	2	2	4	9	13	38	38
	White	87	93	97	102	93	74	74
Masters Total		140	148	149	152	148	161	112
Doctorate	African American	2	3	3	4	3	4	3
	Asian American	0	0	0	2	1	3	2
	Hispanic	4	5	4	3	4	5	5
	Native American	0	1	1	1	1	1	2
	Non-resident/International	3	7	6	6	5	4	5
	Unknown / Other	1	1	0	1	1	5	5
	White	18	20	19	23	23	26	27
Doctorate Total		26	34	30	36	35	44	46
Graduate Total		166	182	179	188	183	205	158
Underrepresented Minorities (African American, Asian American, Hispanic, Native American)		30	35	35	29	28	35	32
Percent Underrepresented Minorities		18.1%	19.2%	19.6%	15.4%	15.3%	17.1%	20.3%

*Count at the Fall Census Date

Appendix N.10

PUBLIC HEALTH, MAJORS BY GENDER, 2002 – 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

DEGREE LEVEL	GENDER	TERM*						
		Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Baccalaureate	Female	86	111	128	159	179	180	94
Masters		100	114	126	138	133	141	134
Doctorate		15	24	22	28	27	34	34
	Total Female	201	249	276	325	339	355	262
Baccalaureate	Male	20	21	33	42	56	50	27
Masters		50	51	42	41	46	42	43
Doctorate		13	13	11	12	11	14	15
	Total Male	83	85	86	95	113	106	85
Baccalaureate	Total Enrolled	106	132	161	201	235	230	121
	Total Female	86	111	128	159	179	180	94
Baccalaureate	Percent Female	81.1%	84.1%	79.5%	79.1%	76.2%	78.3%	77.7%
Graduate	Total Enrolled	178	202	201	219	217	231	226
	Total Female	115	138	148	166	160	175	168
Graduate	Percent Female	64.6%	68.3%	73.6%	75.8%	73.7%	75.8%	74.3%

*Count as of Fall Census Date

Appendix N.11

PUBLIC HEALTH, MAJORS BY RESIDENCY, 2002 - 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

DEGREE LEVEL	RESIDENCY	TERM*						
		Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Baccalaureate	In-State	94	111	134	169	192	191	106
Masters		107	126	130	133	135	126	125
Doctorate		17	21	19	25	23	31	31
	Total In-State	218	258	283	327	350	348	262
Baccalaureate	Out-of-State	12	21	27	32	43	39	15
Masters		43	39	38	46	44	57	52
Doctorate		11	16	14	15	15	17	18
	Total Out-of-State	66	76	79	93	102	113	85
Baccalaureate	Total Enrolled	106	132	161	201	235	230	121
	Total In-State	94	111	134	169	192	191	106
Baccalaureate	Percent In-State	88.7%	84.1%	83.2%	84.1%	81.7%	83.0%	87.6%
Graduate	Total Enrolled	178	202	201	219	217	231	226
	Total In-State	124	147	149	158	158	157	156
Graduate	Percent In-State	69.7%	72.8%	74.1%	72.1%	72.8%	68.0%	69.0%

*Count as of Fall Census Date

Appendix N.12

PUBLIC HEALTH, MAJORS IN THE HONORS PROGRAM, 2002 - 2008

TERM*	PRE-HEALTH EDUCATION				HEALTH EDUCATION				UNIVERSITY OF ARIZONA			
	TOTAL UNDER-GRADUATES	NON-HONORS STUDENTS	ACTIVE HONORS STUDENTS	% HONORS	TOTAL UNDER-GRADUATES	NON-HONORS STUDENTS	ACTIVE HONORS STUDENTS	% HONORS	TOTAL UNDER-GRADUATES	NON-HONORS STUDENTS	ACTIVE HONORS STUDENTS	% HONORS
Fall 08	64	57	7	10.9%	59	51	8	13.6%	29,714	26,034	3,690	12.4%
Fall 07	168	148	20	11.9%	62	60	2	3.2%	29,035	24,941	4,094	14.1%
Fall 06	178	164	14	7.9%	57	55	2	3.5%	28,442	24,569	3,873	13.6%
Fall 05	157	148	9	5.7%	45	40	5	11.1%	28,462	24,443	4,019	14.1%
Fall 04	133	124	9	6.8%	28	25	3	10.7%	28,368	24,140	4,228	14.9%
Fall 03	107	94	13	12.1%	24	21	3	12.5%	28,482	24,386	4,096	14.4%
Fall 02	75	64	11	14.7%	31	30	1	3.2%	28,278	24,140	4,138	14.6%

*Count as of Fall Census Date

Appendix N.13

PUBLIC HEALTH, MAJORS/ COMPLETED MAJOR*, 2002 - 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

MAJORS BY DEGREE LEVEL	FISCAL YEAR (Aug/Dec/May)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Undergraduate Enrolled Majors - Fall Census Date	106	132	161	201	235	230	121
Undergraduate Completed Majors** - Fiscal Year	33	28	40	47.33	51	56	53
Enrolled Undergraduate Majors per Completed Major	3.21	4.71	4.03	4.25	4.61	4.11	2.28
Graduate Enrolled Majors - Fall Census Date	178	202	201	219	217	231	226
Graduate Completed Majors - Fiscal Year	57	71	60	77	63	60	87
Enrolled Graduate Majors per Completed Major	3.12	2.85	3.35	2.84	3.44	3.85	2.60

*Completed majors may not be equivalent to degrees awarded.

**An Interdisciplinary Studies subject area = 0.33 completed major.

Appendix N.14

PUBLIC HEALTH, ENROLLED MAJORS/ INSTRUCTIONAL FACULTY, 2002 - 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

Personnel FTE - State Funds - Fall	TERM*						
	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Instructional Faculty + Dept Head FTE	7.20	7.40	7.47	11.83	16.53	15.97	16.71
Undergraduate Majors - Fall	106	132	161	201	235	230	121
Undergraduate Majors per Faculty	14.72	17.84	21.55	16.99	14.22	14.40	7.24
Graduate Majors - Fall	178	202	201	219	217	231	226
Graduate Majors per Faculty	24.72	27.30	26.91	18.51	13.13	14.46	13.52

*Enrollment at Fall Census Date.

Appendix N.15

PUBLIC HEALTH MAJORS, 2002 - 2008

MAJORS BY DEGREE LEVEL	TERM*						
	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Biostatistics (BIOS)							
Doctorate	N/A	N/A	N/A	N/A	N/A	3	5
Epidemiology (EPI)							
Masters	12	8	7	6	3	5	1
Doctorate	23	30	26	34	34	34	30
Total EPI	35	38	33	40	37	39	31
Health Education (HLTH)							
Baccalaureate	31	24	28	44	57	61	57
Pre-Health Education (PRHE)							
Undergraduate	75	108	133	157	178	169	64
Public Health (PHL)							
Masters	138	157	161	173	176	178	176
Doctorate	5	7	7	6	4	11	14
Total PHL	143	164	168	179	180	189	190
Total Undergraduates							
	106	132	161	201	235	230	121
Total Graduate Students							
	178	202	201	219	217	231	226
TOTAL MAJORS							
	284	334	362	420	452	461	347

*Count as of Fall Census Date.

Appendix N.16

PUBLIC HEALTH, ENROLLED MINORS, 2002 - 2008

MINORS BY DEGREE LEVEL	TERM*						
	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Biostatistics (BIOS)							
Doctorate	N/A	N/A	N/A	N/A	N/A	0	2
Epidemiology (EPI)							
Doctorate	6	7	6	9	9	11	10
Public Health (PHL)							
Masters	0	0	0	0	0	1	1
Doctorate	2	3	3	3	2	5	5
Total Minors							
	8	10	9	12	11	17	18

*Count at Fall Census Date

Appendix N.17

PUBLIC HEALTH, PERSONNEL FTE, 2002 - 2008
(and Grad Assistants)

PERSONNEL Full Time Equivalent (FTE)	TERM*						
	Fall 02	Fall 03	Fall 04	Fall 05	Fall 06	Fall 07	Fall 08
Personnel - All funds							
Dept Heads and Directors (academic)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Instructional Faculty	18.22	17.96	18.21	24.91	26.68	25.85	27.88
Other Faculty	6.12	6.43	6.14	4.86	3.28	2.00	2.26
Professional	20.70	23.78	25.97	24.77	21.1	19.65	20.93
Staff	103.52	101.19	85.72	74.12	71.55	65.96	64.12
Graduate Assistants - Teaching	0.50	2.08	3.00	4.58	6.75	5.50	7.00
Graduate Assistants - Research	5.83	6.76	6.25	9.58	8.5	6.99	9.25
TOTAL	154.89	158.20	145.29	142.82	137.86	125.95	131.44
Personnel - State funds							
Dept Heads and Directors (academic)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Instructional Faculty	7.20	7.40	7.47	11.83	16.53	15.97	16.71
Other Faculty	3.00	3.05	1.69	1.12	1.05	0.48	0.14
Professional	4.20	5.41	5.73	4.82	5.38	4.25	5.61
Staff	19.84	21.26	16.7	15.92	21.07	21.52	18.23
Graduate Assistants -Teaching	0.50	2.08	0.00	4.58	4.75	5.00	5.50
Graduate Assistants - Research	0.50	0.63	0.25	0.75	1.25	0.25	0.25
TOTAL STATE	35.24	39.83	31.84	39.02	50.03	47.47	46.44
Total Instructional Faculty**	7.20	7.40	7.47	11.83	16.53	15.97	16.71
Faculty FTE** per Staff - State funds	0.36	0.35	0.45	0.74	0.78	0.74	0.92
Total Staff & Professional FTE - State funds	24.04	26.67	22.43	20.74	26.45	25.77	23.84
Faculty FTE** per Staff/Professional - State funds	0.30	0.28	0.33	0.57	0.62	0.62	0.70

*Count as of Fall Census Date

**Instructional Faculty includes Department Head and Instructional Faculty only (tenured, tenure-track, and permanently funded lecturers) on State funds.

Appendix N.18

Public Health - Epidemiology Program

PhD Recipient Minors

EPI MINORS	FISCAL YEAR (Aug/Dec/May)							Total	%
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09		
Biostatistics						1	1	2	11%
Cancer Biology		1				1	1	3	16%
Educational Psychology	1							1	5%
Epidemiology			1		1		1	3	16%
Genetics		1						1	5%
Pathobiology							1	1	5%
Pharmaceutical Sciences		1				1	1	3	16%
Pharmacology & Toxicology			1			1		2	11%
Psychology		1						1	5%
Soil, Water & Environmental Science							2	2	11%
Total Minors	1	4	2	0	1	4	7	19	100%

source: IIW Degrees Awarded

PhD 6 - yr Completion Rates¹

Male

Female

All

Students in Entering Cohorts	Completions	Rate
0	0	
2	2	100%
2	2	100%

source: The University of Arizona NRC Study

PhD Median Time to Degree²

Years	n
4.00	1

source: The University of Arizona NRC Study

1. Calculated using the National Research Council Assessment of Research Doctorate Programs methodology. The rate is based on 5 entering cohorts of PhD students who were full-time every semester, academic years 1996-2000.

2. Calculated using the National Research Council Assessment of Research Doctorate Programs methodology. Median Time to Degree is based on doctoral degrees awarded in academic years 2003, 2004 and 2005 for students who were full-time every semester.

Appendix N.19

PUBLIC HEALTH, STUDENT CREDIT HOURS/ INSTRUCTIONAL FACULTY, 2002 - 2008

Student Credit Hours (SCH) - Fall + Spring Census Date	FISCAL YEAR (Fall + Spring)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Undergraduate SCH	2,342.54	1,596.42	2,465.17	2,989.33	2,746.54	2,801.88	2,173.45
Graduate SCH	1,702.23	1,919.45	2,642.47	2,861.47	3,322.85	3,469.31	3,429.21
Total SCH	4,044.77	3,515.87	5,107.64	5,850.80	6,069.39	6,271.19	5,602.66
Instructional Faculty + Head (Fall FTE) State Funds	7.20	7.40	7.47	11.83	16.53	15.97	16.71
SCH per Faculty FTE	561.77	475.12	683.75	494.57	367.17	392.69	335.29

Appendix N.20

PUBLIC HEALTH, STATE EXPENDITURE/ COMPLETED MAJOR*, 2002 - 2008

(Includes BIOS, EPI, HLTH, and PHL Majors)

	FISCAL YEAR (Aug/Dec/May)						
	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09
Completed Majors	90.00	99.00	100.00	124.33	114.00	116.00	140.00
State Expenditure per Completed Major	26,087.82	30,899.72	36,668.77	43,029.73	47,781.07	47,110.11	39,791.12

*Completed Majors may not be equivalent to Degrees Awarded.

APPENDIX N.21

NURSING, MAJORS/ COMPLETED MAJOR*, 2002 - 2008

(Includes GERO and NURS Majors)

MAJORS BY DEGREE LEVEL	FISCAL YEAR (Aug/Dec/May)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Undergraduate Enrolled Majors - Fall Census Date	247	291	303	304	313	340	365
Undergraduate Completed Majors - Fiscal Year	93	95	137	154	151.33	164	178
Enrolled UG Majors per Completed Major	2.66	3.06	2.21	1.97	2.07	2.07	2.05
Graduate Enrolled Majors - Fall Census Date	141	139	152	157	152	151	142
Graduate Completed Majors - Fiscal Year	29	33	33	33	29	43	42
Enrolled Graduate Majors per Completed Major	4.86	4.21	4.61	4.76	5.24	3.51	3.38

*Completed majors may not be equivalent to degrees awarded.

NURSING, STUDENT CREDIT HOURS/ INSTRUCTIONAL FACULTY, 2002 - 2008

Student Credit Hours (SCH) - Fall + Spring Census Date	FISCAL YEAR (Fall + Spring)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Undergraduate SCH	6,066.56	7,934.41	7,823.60	7,978.13	8,183.53	8,882.66	8,740.55
Graduate SCH	2,153.97	2,120.04	2,100.14	2,319.12	2,094.99	2,218.85	2,426.13
Total SCH	8,220.53	10,054.45	9,923.74	10,297.25	10,278.52	11,101.51	11,166.68
Instructional Faculty + Head (Fall FTE) State Funds	24.00	22.85	20.44	19.42	19.77	20.60	18.60
SCH per Faculty FTE	342.52	440.02	485.51	530.24	519.90	538.91	600.36

NURSING, STATE EXPENDITURE/ COMPLETED MAJOR*, 2002 - 2008

(Includes GERO and NURS Majors)

	FISCAL YEAR (Aug/Dec/May)						
	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09
Completed Majors	122.00	128.00	170.00	187.00	180.33	207.00	220.00
State Expenditure per Completed Major	40,339.91	48,347.86	32,876.77	36,095.16	36,160.53	32,283.40	28,650.15

*Completed Majors may not be equivalent to Degrees Awarded.

PHARMACY, MAJORS/ COMPLETED MAJOR*, 2002 - 2008

(Includes PHSC, PCOL, and PHMY Majors)

MAJORS BY DEGREE LEVEL	FISCAL YEAR (Aug/Dec/May)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Graduate Enrolled Majors - Fall Census Date	352	366	387	392	415	421	430
Graduate Completed Majors - Fiscal Year	78	68	86	83	93	94	97
Enrolled Graduate Majors per Completed Major	4.51	5.38	4.50	4.72	4.46	4.48	4.43

*Completed majors may not be equivalent to degrees awarded.

PHARMACY, STUDENT CREDIT HOURS/ INSTRUCTIONAL FACULTY, 2002 - 2008

Student Credit Hours (SCH) - Fall + Spring Census Date	FISCAL YEAR (Fall + Spring)						
	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07	FY 07-08	FY 08-09
Undergraduate SCH	5,096.17	6,020.00	3,961.13	473.36	402.38	471.28	683.38
Graduate SCH	3,468.04	2,723.53	6,484.42	10,390.09	10,791.52	11,407.16	12,259.15
Total SCH	8,564.21	8,743.53	10,445.55	10,863.45	11,193.90	11,878.44	12,942.53
Instructional Faculty + Head (Fall FTE) State Funds	32.38	30.55	26.01	29.32	30.31	29.74	33.64
SCH per Faculty FTE	264.49	286.20	401.60	370.51	369.31	399.41	384.74

PHARMACY, STATE EXPENDITURE/ COMPLETED MAJOR*, 2002 - 2008
(Includes PHSC, PCOL, PHMY
Majors)

	FISCAL YEAR (Aug/Dec/May)						
	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08	FY08-09
Completed Majors	78	68	86	83	93	94	97
State Expenditure per Completed Major	65,343.03	73,459.19	63,528.54	72,450.83	74,693.52	89,331.96	104,758.45

*Completed Majors may not be equivalent to Degrees Awarded.