

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal in order to ensure that all sections have been satisfactorily addressed.

INTRODUCTION

I. Program Description

Describe the degree program under consideration, including its level, emphases (including tracks or specializations), and the total number of credit hours.

The Colleges of Public Health and Health Professions and Medicine propose to establish a doctoral program in epidemiology (referred to as “the program”). The program as proposed includes two concentrations from which students select: clinical epidemiology or general epidemiology. Additional concentrations are expected as the program grows. Regardless of concentration selected, the program requires 90 postbaccalaureate credit hours, including rigorous core training to foster competence in (1) epidemiological and biostatistics methods, (2) understanding of contemporary epidemiological issues and challenges, (3) entry level college teaching skills, (4) independent scientific investigation, and (5) professional behavior. Upon successful completion of all program components, culminating in the dissertation defense, program graduates will be awarded the Ph.D. degree in epidemiology. (CIP 51.2308)

READINESS

II. Institutional Mission and Strength

A. Is the proposed program listed in the current State University System Strategic Plan? How do the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan? The request to offer the Ph.D. in Epidemiology is consistent with the strategic plan in a number of respects. One of the core goals in UF’s work plan is to increase the size and quality of graduate programs consistent with the top ten AAU public institutions. Seventy percent of the top 10 research institutions offer a Ph.D. in epidemiology (i.e. University of California at Berkeley and Los Angeles, University of Michigan, University of Washington, University of Minnesota, University of North Carolina at Chapel Hill, University of Illinois). The other top universities actively participate in doctoral level training in epidemiology. For example, the University of California at San Francisco (UCSF) is located in a state system that has three other universities offering the Ph.D., including the University of California at Berkeley, which is in the immediate geographic area. UCSF faculty members participate in the epidemiology Ph.D. program offered by UC-Berkeley’s School of Public Health. UCSF’s Department of Epidemiology and Biostatistics also has substantial epidemiology research, education, and consultation activities that serve the UCSF campus. The University of Wisconsin offers a Ph.D. in population health with a concentration in epidemiology and the University of California at San Diego offers a Ph.D. in public health with a concentration in epidemiology. Therefore, a Ph.D. focusing on epidemiology is consistent with graduate programs offered by top tier research institutions. In addition, the UF College of Public Health and Health Professions (PHHP) is in the application process to become an accredited college of public health. The Council on Education for Public Health requires that colleges seeking accreditation offer 3 Ph.D. programs relevant to basic public health knowledge. Epidemiology not only represents a core public health area but also is the foundation upon which public health as a discipline has been built. We will not be able to compete on a national level for specific epidemiology research and training funds and for students if PHHP and the collaborative Ph.D. program in epidemiology remain unaccredited. Falling short of

accreditation is inconsistent with both the University's goal to become a top tier institution and the overall high quality of graduate education UF offers.

The Ph.D. in Epidemiology is also important to the College of Medicine (COM), particularly within the context of the National Institutes of Health (NIH) Clinical and Translational Science Award (CTSA) initiative. As part of the CTSA, innovative doctoral programs to promote clinical and translational research in health care and community settings are essential. The Ph.D. in Epidemiology, in general, and the concentration in Clinical Epidemiology, in particular, provide an important multidisciplinary educational component for the CTSA initiative.

The epidemiology program, by design, is interdisciplinary, which supports UF's plan to foster "interdisciplinary research and instructional programs" and "coordinate training". The core curriculum is jointly taught by faculty members in PHHP and COM. Therefore, throughout the student's core coursework, students will learn from faculty members in both colleges. In addition, electives include courses taught by faculty members in the Colleges of Dentistry (e.g., oral-facial epidemiology), Pharmacy (e.g., pharmacoepidemiology), and Liberal Arts and Sciences (e.g., advanced statistics), further broadening the opportunity for interdisciplinary learning. Fulfilling a critical research need is also addressed by the Ph.D. design. As noted by national reviews (Council of State and Territorial Epidemiologists, 2004b; Association of Schools of Public Health, 2003), doctoral trained epidemiologists are still sparse compared to available academic, public health practice, and industry employment slots. In addition, the proposed clinical epidemiology concentration has been developed to train experts in the design and conduct of clinical and translational research, thereby adding a critical training dimension that will help address the nationwide shortage of clinical and translational investigators.

The epidemiology degree program will also foster the development of linkages around core topics highlighted in the strategic plan. These include instructional programming and interdisciplinary research on the brain, social and medical issues of aging, chronic disease and disability, children's health and well being, and emerging pathogens (see section B for additional commentary). Overall, the proposed program is consistent with the goal of enhancing graduate programs by offering a Ph.D. program that trains scientists who will create the next generation of epidemiological knowledge to address the numerous complex health problems that confront us.

- B. How does the proposed program specifically relate to existing institutional strengths such as programs of emphasis, other academic programs and/or institutes and centers? The Ph.D. in epidemiology capitalizes on the strengths of the Colleges of Medicine and Public Health and Health Professions and the Health Science Center. For example, the Ph.D. program builds on the infrastructure and academic programs already in place in clinical medicine, epidemiology, biostatistics, health policy research, health services research, and public health. Faculty members already are in place in both colleges to manage and teach at the master's level (master of science in epidemiology with concentrations in health policy and biostatistics in COM and master of public health with concentrations in epidemiology and biostatistics in PHHP). For example, there are currently 43 students in the epidemiology concentration in the PHHP MPH program being mentored by college faculty. In addition, faculty members in COM teach four to five masters-level courses annually in addition to independent study with students throughout the health science center. These master's programs represent feeders for the Ph.D. program. The program is designed to emphasize the complementary expertise of faculty members in COM and PHHP, and several of the faculty members involved in master's level epidemiology and biostatistics teaching in both colleges will participate in the epidemiology Ph.D. program.

Other departments in both colleges also serve as important resources for future collaboration, such as the Department of Aging and Geriatric Research in COM and the Department of Behavioral Science and Community Health in PHHP. Multiple partnerships are already being formed throughout the Health Science Center as part of the epidemiology doctoral program development. For example, faculty members within the Institute for Child Health Policy, which is a Type I university-wide institute, will be participating in the program. Similarly, the College of Pharmacy houses the Department of Pharmacy Health Care Administration, which is comprised of a group of pharmacoepidemiologists who have agreed to participate in the Ph.D. program. The Pharmacy group brings significant expertise in epidemiological methods, particularly in economic and population modeling. In addition, pharmacy graduate students currently take epidemiology electives in PHHP, reflecting this existing collaboration. The College of Dentistry also has two faculty members in the Department of Dental Public Health Services and Research who are trained epidemiologists, and they have agreed to participate in the program by teaching curricular electives and serving as student mentors. We anticipate forming similar alliances with the other Health Science Center colleges as we proceed with program development.

There is significant opportunity for collaboration as the Ph.D. program grows, particularly within specialized training areas, such as genetics, cancer, pediatrics, disability, prevention strategies and screening, rehabilitation, and aging. Again, these focus areas emphasize the respective strengths of PHHP (e.g., rehabilitation, aging and disability) and COM (e.g., genetics, pediatrics). Both colleges already have active linkages or partnerships within existing centers and institutes on the campus relevant to the epidemiology program, such as the McKnight Brain Institute, the Institute on Aging, the Brooks Center, the Institute for Child Health Policy, and the Emerging Pathogens Institute. Collaborations also exist with various entities within the Malcolm Randall Veteran Affairs Hospital system, including the VA Brain Rehabilitation Research, the Rehabilitation Outcomes Research Centers (BRRC and RORC respectively) and the Geriatric Research and Education Clinical Center (GRECC). Competitive research assistantships are available through both the RORC and the Institute for Child Health Policy. In addition, existing linkages with other outside agencies add further strength and opportunity (e.g., the Florida Department of Health, the Alachua and Duval County Health Departments, and the Bureau of Economic and Business Research). We also anticipate future partnerships around specific areas of epidemiological concern. For example, the UF-Shands Cancer Center and UF Genetics Institute offer the opportunity to create a collaborative research and academic training program around cancer and/or genetic epidemiology. An alternative avenue for creating these types of additional concentrations is the Interdisciplinary Program (IDP) in Biomedical Sciences. The IDP program currently offers several concentrations and has plans to expand these concentrations to address various aspects of clinical and translational research. In the next 3 years, completion of the Emerging Pathogens Building will offer a central complex for research and training that clearly intersects with epidemiologic investigation and tracking of disease distribution. Overall, then, the Colleges of PHHP and Medicine and the University of Florida have significant existing strengths that create a firm foundation upon which to create and expand the epidemiology Ph.D. program to rival any program in the country.

- C. Describe the planning process leading up to submission of this proposal. Include a chronology of activities, listing the university personnel directly involved and any external individuals who participated in planning. Provide a timetable of events for the implementation of the proposed program. A Ph.D. in Epidemiology Planning Committee was formed to develop the proposed program. The Committee is currently operational and is co-chaired by Dr. Stephanie Hanson from the College of Public Health and Health Professions and Dr. Betsy Shenkman from the College of Medicine. The Committee includes disciplines that play a key role in epidemiology training

including: epidemiologists, biostatisticians, and health services/health outcomes researchers. In addition to the co-chairs, there are seven committee members – four from the College of Public Health and Health Professions and three from the College of Medicine. The Ph.D. in Epidemiology Planning Committee involved four subcommittees, each with membership from both Colleges. The first subcommittee developed the program mission statement and goals. This subcommittee disbanded after their work was completed. The second subcommittee addressed the question of whether concentrations should be offered and how these concentrations would meet core competencies. This committee completed their discussion of concentrations and disbanded. The third subcommittee is a Curriculum Subcommittee, which will remain active. The Curriculum Subcommittee developed the recommendations for the core course content. The fourth subcommittee is the Administration Subcommittee. The Administration Subcommittee was formed to develop operating principles for shared governance for the joint Ph.D. in Epidemiology. These basic principles have been agreed upon. Figure 1 shows the committee structure and committee members. Figure 2 shows the key events in the planning process.

Figure 1. Committee Structure and Membership

Committee	Committee Members	College Affiliation
Ph.D. in Epidemiology Planning Committee	Stephanie Hanson (co-chair)	PHHP
	Betsy Shenkman (co-chair)	Medicine
	Elena Andresen	PHHP
	Paul Duncan	PHHP
	Wendy London	Medicine
	Mary Peoples-Sheps	PHHP
	Dan Salmon	Medicine
	Alex Wagenaar	Medicine
	Linda Young	PHHP
	Mission Statement and Goals Subcommittee	Stephanie Hanson
Dan Salmon		Medicine
Mary Peoples-Sheps		PHHP
Alex Wagenaar		Medicine
Concentration Subcommittee	Elena Andresen	PHHP
	Paul Duncan	PHHP
	Wendy London	Medicine
	Dan Salmon	Medicine
	Betsy Shenkman	Medicine
	Linda Young	PHHP
Curriculum Subcommittee	Elena Andresen	PHHP
	Kelli Komro	Medicine
	Wendy London	PHHP
	Dan Salmon	Medicine
	Linda Young	PHHP
Administrative Subcommittee	Elena Andresen	PHHP
	Mary Peoples-Sheps	PHHP
	Betsy Shenkman	Medicine

Figure 2. Planning Timetable and Outcomes

Event	Date	Outcome
Initial Planning Meeting	November 2005	The Committee agreed upon a list of topics and questions that had to be addressed related to program design. These topics included: Program Model Core competencies Credit hours Concentrations Prerequisites Administrative needs and structure Admissions/curriculum Operations and Oversight Student committees Student mentoring Website management and marketing
Missions and Goals Subcommittee Meeting	March 1, 2006	The Subcommittee developed a draft mission and goals statement for consideration by the larger planning committee.
Concentration Subcommittee Meeting	March 6, 2006	Subcommittee recommended that concentrations could be offered. COM will offer a concentration in clinical epidemiology. PHHP will offer a general epidemiology concentration. Other concentrations can be offered as the Program expands.
Planning Meeting	April 7, 2006	Agreement reached on mission and goals statement. Agreement reached on admissions requirements
Planning Meeting	May 24, 2006	Discussion was held about the admissions process including whether interviews (telephone and/or in person) would be required. The decision was made to hold interviews as needed but they would not be required. Visits to campus will always be encouraged prior to admission. Extensive discussion focused on course requirements including number and type of prerequisites, core courses, and electives. Discussion to continue.
Planning Meeting	July 14, 2006	Discussion focused on mentors for the students. Each student will have a mentor and will be integrated into a research team with their mentor. A draft course sequence for the clinical epidemiology concentration was provided. Discussion was also held about course structure in terms of traditional semester long courses and modular formats that would allow students to take course modules that would be for fewer credit hours and build upon each other. Further discussion was needed about the assignment of core course teaching between the two colleges. The program administration between the two colleges was not discussed but there was agreement to establish an Administration Subcommittee to discuss the program governance between the two colleges.

Curriculum Subcommittee Meeting	August 2, 2006	The Curriculum Subcommittee met and developed a structure that would equally divide the teaching of core courses between the two colleges to allow students to have opportunity to interact with both faculty member groups. A list of recommended advanced methods courses also was developed.
Administration Subcommittee Meeting	August 7, 2006	The Administration Subcommittee met to discuss how the joint program would be governed between the two colleges. Discussion also was held regarding meeting CEPH accreditation requirements regarding program governance. The Subcommittee recommended an Executive Committee that would be chaired by the Dean of PHHP and co-Chaired by the Dean of COM. The complete committee membership and its functions are described in Section E (anticipated delivery system for the program). The Subcommittee also recommended an Operations Committee that would be co-chaired by the Chair of the Department of Epidemiology and Biostatistics in PHHP and the Chair of the Department of Epidemiology and Health Policy Research in COM. The complete committee membership and its functions are described in Section E. Staffing was also discussed. PHHP will have an administrative assistant/secretarial level person to receive applications and organize materials for review, track application reviews, register students, communicate program directives to the students, update the website. Both Colleges will have a professional staff member for graduate program coordination.
Administration Subcommittee Meeting	August 9, 2006	The Subcommittee agreed that there would be a joint program website with links to both Colleges. There was also agreement that other marketing materials – in addition to the website – would be jointly developed.
Planning Meeting	August 21, 2006	The Curriculum Subcommittee recommendations regarding the core curriculum were presented and it was indicated that COM faculty members were working on the advanced methods and doctoral seminar courses that they would teach. Administration Subcommittee report had been distributed but had not been reviewed in sufficient detail for discussion. The timeline to submit the Program proposal to the BOG for approval was discussed and the timeframe recommended to submit the proposal was October 20, 2006.
Planning Meeting	September 20, 2006	Dean Frank from PHHP and Dean Tisher from COM attended the meeting. Agreement was reached to divide core courses equally so that students have experiences with faculty members from both Colleges. There will be a shared doctoral seminar series – one course taught by each college; a shared journal club series – one course taught by each college; and the epidemiology methods courses would be split between the two colleges so that each college teaches 6 credit hours of epidemiology methods courses for a total of 12 hours of epidemiology methods. For future creation of doctoral level epidemiology courses in which more than one faculty member has interest in teaching,

		<p>agreed to principle that these faculty members will meet to determine what model to recommend to curriculum committee, including consideration of a course series (I & II), co-instruction of a single course, or alternating teaching of a course across terms or years. There also was specific discussion about COM teaching advanced courses and basic and intermediate courses taught in PPHP.</p> <p>The issue of program administration was discussed including CEPH requirements dictating that PPHP has final administrative oversight of the Ph.D. program. There was an agreement that the administrative structure governing the program would be specified in writing and that there would be a memorandum of understanding developed between the two Colleges specifying the structure and embodying the principles of shared governance between the two colleges.</p>
Planning Meeting	October 18, 2006	<p>Proposal draft was discussed and faculty members agreed to send edits to Dr. Hanson for completion. There was follow up discussion on program structure and Colleges reiterated that a staff coordinator in each College for the program would be beneficial to managing day-to-day operational issues. Committee agreed that final planning details could be handled via e-mail, and therefore no further large committee meetings were planned.</p>

III. Program Quality - Reviews and Accreditation

If there have been program reviews, accreditation visits, or internal reviews in the discipline pertinent to the proposed program, or related disciplines, provide all the recommendations and summarize the institution's progress in implementing the recommendations. The Council on Education for Public Health maintains the accreditation for Schools of Public Health. In 2003, the College of Health Professions changed its name to the College of Public Health and Health Professions and began the process to seek accreditation as a college of public health. PPHP is currently developing the required accreditation self-study document, which is due mid-year 2007. An accreditation site visit has been tentatively scheduled for March 3-5, 2008.

The College of Medicine is accredited by the Liaison Committee on Medical Education (LCME). The LCME is the nationally recognized accrediting authority for medical education programs leading to the M.D. in U.S. and Canadian medical schools. The LCME is sponsored by the Association of American Medical Colleges and the American Medical Association. The College of Medicine is scheduled for a LCME site visit in February, 2007.

IV. Curriculum

- A. For all programs, provide a sequenced course of study and list the expected specific learning outcomes and the total number of credit hours for the degree. Degree programs in the science and technology disciplines must discuss how industry-driven competencies were identified and incorporated into the curriculum, as required in FS 1001.02 (6). Also indicate the number of credit hours for the required core courses, other courses, dissertation hours and the total hours for the

degree.

The epidemiology program will require a minimum of 90 semester credits beyond the bachelor's degree. Figure 1 outlines the minimum required credit hour distribution. The requirements include a minimum of 11 credits in epidemiology foundation coursework, which in most cases will be satisfied by a student's master's degree. It is anticipated that students with directly related master's degrees (i.e. master of science in epidemiology or master of public health with a concentration in epidemiology or biostatistics) will represent the majority of Ph.D. program applicants. Graduate School policies will be followed regarding transferring credits from the master's degree to the Ph.D. program. Regardless of master's degree, all students will need to demonstrate that they have successfully completed the 11 credits of foundation courses in order to take more advanced epidemiology coursework. All students must complete a minimum of 37-38 hours of epidemiology core coursework, 15 credits of a concentration, 14-15 credits of general electives (which can be satisfied by master's degree coursework if approved by the supervisory committee), and 12 credits of dissertation work. Students must also complete a teaching experience, which can be fulfilled via a teaching assistantship or other experience requiring college level classroom teaching. The core coursework was designed to incorporate competencies recommended in the report of the 2002 workshop on doctoral education in epidemiology from the American College of Epidemiology (ACE) & Association of Schools of Public Health (ACE/ASPH 2002); and criteria for applied epidemiology competencies (ASPH, 2004; Brownson et al., 2002; CSTE 2004a). These core competencies include two major domains of competence: general skills and knowledge; and research. General skills and knowledge includes the following areas: descriptive epidemiology (data identification and description), biology (competence in disease addressed in dissertation), and basic knowledge of leading problems and history of discipline (e.g. chronic and infectious diseases, injuries, leading causes of death, surveillance systems, cultural/social context of health problems). The research category includes: problem conceptualization, study design, data collection and monitoring, data management, data analysis, interpretation, communication, ethics, and a substantive area (i.e. demonstrate mastery in conducting original research on a specific topic). The specific curricular requirements are included in Figure 1.

Figure 1: EPIDEMIOLOGY Ph.D. PROPOSED CURRICULUM

I. EPIDEMIOLOGY FOUNDATION COURSES: 11 credits		Credits
<i>FOUNDATION IN STATISTICS AND DATA MANAGEMENT</i>		8
STA 6166	Statistical Methods in Research I	3
PHC 6053	Regression Methods for the Health and Life Sciences	3
GMS 6803	Data Management for Epidemiologic & Clinical Research	2
<i>FOUNDATION IN EPIDEMIOLOGY</i>		3
PHC 6002/GMS 6801 OR PHC 6003/GMS 6802	Epidemiology of Infectious Disease/ Epidemiology, Prevention, and Control of Infectious Diseases <u>OR</u> Epidemiology of Chronic Diseases and Disability/Epidemiology, Prevention, and Control of Chronic Diseases	3
II. EPIDEMIOLOGY CORE: 37 –38 credits		
<i>EPIDEMIOLOGICAL METHODS</i>		12
PHC 6000	Epidemiology Methods I	3
PHC 6011	Epidemiology Methods II	3
GMS 6813 OR GMS XXXX	Clinical Trials OR Experimental and Quasi-experimental Research Designs for Community Settings	2
GMS XXXX OR GMS XXXX	Case-Control Studies and Other Case-Based Studies OR Cross-sectional and Longitudinal Research Design	2
Students select one additional course from the list below. (Please note: Students can select an additional course from the 2-credit methods courses above to fulfill this requirement)		2
GMS XXXX	Translational Research Methods	2
GMS XXXX	Meta-Analysis in Clinical, HSR, and Public Health	2
GMS XXXX	Design and Conduct of Clinical Trials II	2
<i>DOCTORAL SEMINAR SERIES</i>		6
GMS 7XXX	Epidemiology Seminar I	3
PHC 7XXX	Epidemiology Seminar II	3
<i>JOURNAL CLUB SERIES</i>		2
PHC 60XX	Epidemiology Literature Review and Critique	1
GMS XXXX	Epidemiology Journal Club	1
<i>ETHICS IN RESEARCH</i>		2
GMS 6931	Ethical and Policy Issues in Clinical Research	2
<i>MEASUREMENT</i>		3-4
GMS XXXX & GMS XXXX OR PHC 6711	Measuring and Analyzing Health Outcomes I & II <u>OR</u> Measurement in Epidemiology and Outcomes Research	4/3

<i>ADVANCED STATISTICS (can be taken post prelim exam): Appropriate courses are discussed with and approved by supervisory committee based on academic needs of student</i>		6
<i>ADVANCED EPIDEMIOLOGY ELECTIVES: All students must select 6 credits of advanced epidemiology coursework from the list below</i>		6
GMS XXXX	Epidemiology of Vaccine Preventable Diseases	3
PHC 6014	Epidemiology, Prevention, & Control of Chronic Diseases II	3
GMS 6815	Cardiovascular Disease Epidemiology	2
GMS 6812	Cancer Epidemiology, Prevention, Early Detection, and Control	3
GMS 6816	Pediatric Epidemiology	2
GMS 6811	Grant Writing Skills in Epidemiology and Clinical Research	2
PHC 6162	Public Health Grant Writing	2
PHC 6441	Health Disparities in the United States	3
PHC 6938	Oral and Craniofacial Epidemiology	3
PHA 6268	Pharmacoepidemiology	3
PHC 6717	Theory & Methods in Public Health Disability Research	3
PHC 6XXX	Social Influences in Public Health	3
<i>TEACHING EXPERIENCE – All students are required to complete a teaching experience, such as a teaching assistantship or practicum; the type of experience is discussed with and approved by supervisory committee (*can be taken for elective credit if agreed to by supervisory committee*)</i>		0*
III. EPIDEMIOLOGY CONCENTRATION: 15 credits (Note: students either select the clinical concentration or select a general track in which they complete additional advanced epidemiology coursework)		
Clinical Epidemiology – requires Clinical Trials I & II listed to fulfill core methods requirement and requires Measuring and Analyzing Health Outcomes I and II to fulfill core measurement requirement. Additional requirements include: GMS 6832 Cost Effectiveness and Cost Benefit Analyses in Health (3); GMS 6811 Grant Writing Skills (3); Seminar in Clinical Epidemiology and Investigation (2); Advanced Electives (5); and Advanced Methods in Epidemiology (2)		
IV. GENERAL ELECTIVES: 14-15 credits (courses listed below are only suggestions; students can elect any 6000 level or higher coursework; can be satisfied with appropriate master’s work with approval of supervisory committee)		
GMS 6817	Epidemic Investigations	2
GMS 6830	Epidemiology and Health Policy	3
GMS 6832	Cost Effectiveness and Cost-Benefit Analysis in Health	3
GMS 6833	Health Care Policy and Vulnerable Populations	3
GMS 6835	Health Policy Issues in Children’s Health	3
GMS 6834	Health Policy and the Formulation of Payment Mechanisms for Health Care	3
GMS XXXX	Clinical and Translational Science Seminar Series	2
GMS XXXX	Design & Analysis of Translational Research in Biomedical Sciences	3
HSA 7106	Seminar in Health Care Access and Utilization	3
HSA 7116	Health Services Organizational Research	3
HSA 7157	Research Foundations of Health Policy	3

HSA 7414	Society, Health, and Medical Care	3
PHC 6716	Survey Research Methods	3
V. DISSERTATION: minimum of 12 credits		
PHC 7980 or GMS 7980	Research for Doctoral Dissertation	var

The overall outcomes expected of all graduates are for them to be able to:

- Apply epidemiological methods to address critical and/or emerging public health issues through the use of:
 - Appropriate epidemiological research designs
 - Advanced statistical analysis methods for health studies
 - Data structures and measurement methods for health research
 - Biological, behavioral and social theory applied to the understanding and prevention of contemporary threats to health and well-being
 - Depth of knowledge in an area of specialization
- Assimilate the history, philosophy, and ethical principles of epidemiology into current research
- Develop grant proposals and manage research projects
- Write scientific papers for publication in peer-reviewed journals, and communicate research results to scientists, policy makers, and the public
- Compete successfully for research and teaching positions in academic institutions, federal or state agencies, or private institutions

B. Describe the admission standards and graduation requirements for the program. The program has adopted the graduate program admission standards of the University of Florida, which at a minimum include (1) a baccalaureate degree from an accredited university or college, (2) a combined verbal-quantitative score of 1000 on the GRE (Please note: we will use revised GRE criteria once implemented), (3) a 3.0 junior-senior level grade point average, and (4) a completed application for Graduate School, including a letter of intent, official transcripts, completed application form, and 3 letters of recommendation. International students whose primary language is not English will have to demonstrate a minimum score of 550 on the paper-based, 213 on the computer-based, or 80 on the web-based version of the TOEFL (Test of English as a Foreign Language). It is expected that almost all students will enter with a master's degree, and transfer of credit will be requested for eligible students based on Graduate School policy. The graduation requirements include: (1) successful completion of all course/curricular requirements; (2) successful passage of all components of the qualifying exam, which students are eligible to take after completion of all foundation and epidemiology core courses; (3) successful completion of a college level teaching experience, (4) successful execution and defense of the dissertation; and (4) appropriate paperwork completion for UF graduation. Students must pass the qualifying exam to advance to candidacy. The supervisory committee for this exam must have a minimum of 4 members, including one faculty member from the College of Medicine, one faculty member from the College of Public Health and Health Professions, one faculty member representing the student's research area, and one external member. The departmental chair over the faculty member

research supervisor of the student has responsibility for appointing the student's supervisory committee. All University of Florida Graduate School policies and procedures will be followed in this program.

C. List the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why? The master of science program in epidemiology is offered through the Department of Epidemiology and Health Policy Research in the College of Medicine. The College of Medicine is accredited by the Liaison Committee on Medical Education (LCME). The LCME is the nationally recognized accrediting authority for medical education programs leading to the M.D. in U.S. and Canadian medical schools. The LCME is sponsored by the Association of American Medical Colleges and the American Medical Association. The College of Medicine is scheduled for a LCME site visit in February, 2007. The College of Public Health and Health Professions offers the master of public health program with a concentration in epidemiology and is currently seeking accreditation as a college of public health through the Council on Education for Public Health, which maintains the accreditation for Schools of Public Health. PHHP is currently developing the required accreditation self-study document, which is due mid-year 2007. An accreditation site visit has been tentatively scheduled for March 3-5, 2008.

C. Provide a one or two sentence description of each required or elective course.

STA 6166 Statistical Methods in Research I

This course provides a foundation in basic statistical concepts for use in research.

PHC 6053 Regression Methods for the Health and Life Sciences

This course introduces a wide range of modern regression methods in carrying out the analyses in standard statistical software.

GMS 6803 Data Management for Epidemiologic & Clinical Research

This course introduces techniques of data management as they apply to epidemiologic and clinical research.

PHC 6002 Epidemiology of Infectious Disease

This course introduces the unique aspects of infectious diseases and epidemiological methods used in their study, prevention, and control.

GMS 6801 Epidemiology, Prevention, and Control of Infectious Diseases

This course teaches the tools necessary to understand and explore infectious disease epidemiology. A variety of important infectious diseases will be examined but not all epidemiology will be taught.

PHC 6003 Epidemiology of Chronic Diseases and Disability

This course is intended to be a survey of the major chronic diseases with emphasis on recent epidemiology research and findings.

GMS 6802 Epidemiology, Prevention, and Control of Chronic Diseases

This course provides a detailed review of epidemiology, prevention, and control of major chronic diseases, risk factors, and methodology.

PHC 6000 Epidemiology Methods I

This course provides an understanding of the methods of epidemiology study designs and their analyses.

PHC 6011 Epidemiology Methods II

This course provides a foundation in applied epidemiological study analysis and experience in peer-review productivity based on secondary data analysis.

GMS 6813 Clinical Trials

This course focuses on various study designs, including phase I-IV, single-arm, crossover, factorial, and sequential multi-stage, plus the means to allocate study participants to appropriate treatment groups using randomization (blocked or stratified) and prognostic factors. In addition, the protection of study participants and the need for equipoise is covered, including regulatory restrictions and the latest patient privacy regulations for the dissemination and use of data associated with the participants in clinical trials. The importance of informed consent and the use of intent-to-treat analysis will also be emphasized.

GMS xxxx Design and Conduct of Clinical Trials II

This course introduces the complex issues surrounding the analysis and interpretation of clinical trials including power and sample size considerations in the context of clinical trials. In addition, analytic methods and their applications to clinical trials will be emphasized.

GMS xxxx Experimental and Quasi-experimental Research Designs for Community Settings

This course provides instruction in group-randomized trials and controlled quasi-experimental trials—longitudinal and time-series experiments where random assignment is not possible, but high levels of internal validity remain attainable.

GMS xxxx Case-Control Studies and Other Case-Based Studies

This course focuses on case-control and other case-based studies including case series, case-cohort, and nested case-control studies. Case-control studies can be extremely efficient study designs and are particularly useful for studying rare diseases. The popularity of case-control studies has recently been increasing as approaches for conducting these studies have improved and the scientific community has given greater credence to the validity of findings based on these study designs.

GMS xxxx Cross-sectional and Longitudinal Research Design

This course provides instruction in design, evaluation, and implementation of cross-sectional and longitudinal research designs focusing on evaluating the strengths and weaknesses of several designs as well as addressing other methodological issues.

GMS xxxx Translational Research Methods

This course introduces the concepts of translational research using both components of the NIH definition, and its application to epidemiology and improved health.

GMS xxxx Meta-Analysis in Clinical, HSR, and Public Health

This course provides instruction in policy-related research method Meta-analysis, the systematic reviewing of strategic summarized research evidence comprehensively and, when appropriate, quantitatively synthesized data from multiple studies.

GMS 70xx Epidemiology Seminar I: Professional & Research Skills in Epidemiology

This course provides a discussion and didactic program in the history, expectations, and careers in epidemiology.

PHC 70xx Epidemiology Seminar II: Critical Evaluation, Research Proposals, and Methods in Epidemiology

This course provides instruction in learning to construct research ideas and develop these into full research proposals.

PHC 60xx Epidemiology Literature Review and Critique

This course is intended to extend understanding of the field of epidemiology and the ability to explore and critique research methods.

GMS xxxx Epidemiology Journal Club

This course extends the understanding of the field of epidemiology and includes practice reviewing and critiquing research studies.

GMS 6931 Ethical and Policy Issues in Clinical Research

Ethical and policy issues related to conduct of clinical research. Basic understanding of regulations that govern human research and introduction to topic of research with animals.

GMS xxxx Measuring and Analyzing Health Outcomes I

This course provides the basic knowledge of health outcomes measures and practical skills in selecting appropriate measures for research.

GMS xxxx Measuring and Analyzing Health Outcomes II

This course provides instruction in the measurement methods currently used in both medical research and in clinical settings.

PHC 6711 Measurement in Epidemiology and Outcomes Research

This course emphasizes the major designs of epidemiology and health services outcomes research and the principles of measurement for these studies, particularly use of primary data collection.

GMS xxxx Epidemiology of Vaccine Preventable Diseases

This class focuses on the epidemiology of vaccine preventable diseases, the impact of immunizations on these diseases, and health services and policy research involved in optimizing the prevention of infectious diseases through vaccination.

PHC 6014 Epidemiology, Prevention, & Control of Chronic Diseases II

This advanced epidemiology course is intended to be a survey of the major chronic diseases with emphasis on recent epidemiology research and findings.

GMS 6832 Cost Effectiveness and Cost-Benefit Analysis in Health

Economic approaches for health care issues including basic cost-benefit and other analyses of imitations.

GMS 6812 Cancer Epidemiology, Prevention, Early Detection, and Control

This course gives a detailed review of epidemiology, early detection, prevention, and control strategies of major cancer sites.

GMS 6815 Cardiovascular Disease Epidemiology

This course is intended to be a survey of the major chronic diseases with emphasis on recent epidemiology research and findings in a series of lectures that will introduce the demographic aspects, causation, and the role of screening in the early detection of chronic diseases.

GMS 6816 Pediatric Epidemiology

This course provides an overview of the epidemiology of some of the leading causes of morbidity and mortality in infants and children including the clinical aspects, descriptive epidemiology and suspected risk factors.

GMS 6817 Epidemic Investigations

This course presents the principles of epidemiology surveillance, epidemic investigation, and field epidemiology.

GMS 6830 Epidemiology and Health Policy

This course reviews general principles of epidemiology and health policy and how epidemiological studies have influenced health policy using examples related to smoking, asthma, and Reyes Syndrome.

GMS 6833 Health Care Policy and Vulnerable Populations

Policy tools used to explore how the health care system can serve vulnerable populations such as the poor, elderly, and children.

GMS 6834 Health Policy and the Formulation of Payment Mechanisms for Health Care

In this course, policy analytic tools are used to analyze payment mechanisms used in health care. Students gain an understanding of the evolution of physician and other provider reimbursement in health care throughout the twentieth century. Basic economic theory related to compensation and its application to the health care delivery system are presented.

GMS 6835 Health Policy Issues in Children's Health

This course uses policy analysis tools to examine critical issues in child health policy such as the development and funding of early intervention programs, the rise of new morbidities of childhood, and the health and insurance status of children in the United States.

GMS 6811 Grant Writing Skills in Epidemiology and Clinical Research

This course provides instruction in the grant process, with a specific focus on National Institutes of Health (NIH) procedures.

PHC 6162 Public Health Grant Writing

This course provides training in problems encountered in the design and execution of population-based studies and community intervention studies in human populations, with a focus on producing a draft NIH /CDC Form.

PHC 6716 Survey Research Methods

This course provides an introduction to population surveys typical in descriptive and analytic epidemiologic research.

PHC 6441 Health Disparities in the United States

This course will review the determinants that influence health outcomes of the most disadvantaged populations in the United States.

PHC 6938 Oral and Craniofacial Epidemiology

This course introduces the epidemiology of oral and craniofacial diseases. The course provides an overview of oral and craniofacial diseases and will discuss special issues related to the principles and methods of epidemiologic research in this field.

PHA 6268 Pharmacoepidemiology

This course provides instruction in recognition of drug safety issues and development of appropriate strategies to optimize the benefit/risks ratio of the product involved.

PHC 6717 Theory & Methods in Public Health Disability Research

This courses emphasis is on the interplay of epidemiology, disability and public health in America, and provides the theoretical framework and applied research methods for disability.

PHC 6xxx Social Influences in Public Health

Social determinants of population health outcomes are the course focus. This course serves as an introduction to methodological approaches to social epidemiology with specific focus on measurement issues. Intervention and policy implications will also be discussed. Examples of social processes covered include social inequalities by social class, race and ethnicity; neighborhood/area effects; discrimination; social capital, networks, and cohesion.

PHC 7980 Research for Doctoral Dissertation**GMS xxxx Clinical and Translational Science Seminar Series**

This seminar series is designed to further the training of students in multi-disciplinary and inter-disciplinary clinical and translational research. Content areas include leading causes of morbidity and mortality in the United States, issues relevant to rural health and diseases such as HIV/AIDS and conditions such as obesity which have significant impact and research needs. The series consists of weekly, two-hour sessions which include researchers from the bench to the community. Specifically, for each topic area, speakers will discuss the clinical, laboratory, and epidemiological and economic aspects of the particular condition along with potential intervention strategies and community outreach activities.

HSA 7106 Seminar in Health Care Access and Utilization

Overview of context and processes in which individuals seek and obtain health care services; distributional issues; equity.

HSA 7116 Health Services Organizational Research

Major perspectives in organization theory and their applications to the health care sector.

HSA 7157 Research Foundations of Health Policy

In-depth examination of U.S. health policy issues concerning cost, quality, and access, and interdisciplinary research methods used to address such issues.

HSA 7414 Society, Health, and Medical Care

Overview of health and medical care as sociocultural phenomena; health care organizations, and health services delivery in social and historical context.

- D. Describe briefly the anticipated delivery system for the proposed program as it may relate to resources e.g., traditional delivery on main campus; traditional delivery at branches or centers; or nontraditional instruction such as instructional technology (distance learning), self-paced instruction, and external degrees. Include an assessment of the potential for delivery of the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to the feasibility of shared courses utilizing distance learning technologies, and joint-use facilities for research or internships. The initial delivery system for this

degree program will predominantly be a traditional graduate education model with delivery on the main campus. This program requires a significant research component under the supervision of an epidemiology faculty member. Therefore, substantial components of this program will always remain at the main campus or affiliated site where research is being conducted as part of program requirements. USF is the closest potential partner for distance learning. They do not offer advanced (doctoral level) epidemiology coursework on line, which is consistent with epidemiology doctoral education nationally. Their distance learning component has focused at the master's level. If appropriate coursework was made available via distance education and USF had increased student capacity, we would be interested in discussing sharing this coursework. We also plan to capitalize on the expertise of diverse Health Science Center faculty members and the professional relationships we have built with faculty members from other universities and agencies to enhance students' classroom exposure to experts in the field. We already bring experts from other universities to present to both faculty members and students at varied research and clinical seminars, and all epidemiology students will have the opportunity to take full advantage of these collaborative efforts.

The core principle used in developing and in the subsequent operation of the shared Ph.D. epidemiology program is that the program will be governed equally by faculty members from the two colleges. All committees and other decision-making structures will have equal representation from the two colleges. In addition, the core courses taught for the Ph.D. program will be shared equally between the two colleges. In keeping with the principles of shared governance and the joint nature of the program, all committee chairs and committee members will focus on reaching consensus for all program decisions.

Both Colleges agree that there shall be an Executive Committee governing the joint Ph.D. in Epidemiology Program with equal membership from both Colleges. The Executive Committee shall be chaired by the Dean of the COPHHP and co-chaired by the Dean of the COM. The Executive Committee members shall also include the Chair of the Department of Epidemiology and Biostatistics in the COPHHP and the Chair of the Department of Epidemiology and Health Policy Research in the COM, a tenured faculty member from each of the preceding departments, and two student representatives. One student representative will be selected from students whose primary mentor is in the COPHHP and one whose primary mentor is in the COM. The Executive Committee will be responsible for administrative oversight of the program (e.g. policy approval, creation of new committees, etc).

During the first year of the Program, an Operations Committee will be formed, which will be co-chaired by the Chair of the Department of Epidemiology and Biostatistics and the Chair of the Department of Epidemiology and Health Policy. Additional Operations Committee members will include: a faculty member from each of the two departments and two student representatives. One student representative will be selected from students whose primary mentor is in the COPHHP and one whose primary mentor is in the COM. The Operations Committee will be responsible for academic/program development (e.g. courses, application process, policy recommendations, etc).

Student representatives on both committees will participate to the extent allowed by University policy and procedure. For example, students will be present for discussions on curricular additions and revisions, website and marketing materials, and admissions criteria. They will not be present for admissions discussions in which other students' academic records are reviewed, for matters pertaining to faculty member conduct and evaluation, or by agreement of the Committee members regarding other sensitive matters in which student presence is deemed inappropriate based on the nature of the particular agenda item.

V. Assessment of Current and Anticipated Faculty

- A. Use DCU Table One to provide information about each existing member who is expected to participate in the proposed program by the fifth year. Append to the table the number of master's theses directed, number of doctoral dissertations directed, and the number and type of professional publications for each faculty member.
- B. Also, use DCU Table One to indicate whether additional faculty members will be needed to initiate the program, their faculty member code (i.e., A, B, C, D, or E as detailed in the lower portion of Table One), their areas of specialization, their proposed ranks, and when they would be hired. Provide in narrative the rationale for this plan; if there is no need for additional faculty, explain. Almost all faculty members are already in place to offer this new doctoral program because of the respective epidemiology and biostatistics curricular and research activities in existence in PPHP and COM. Only two faculty members need to be hired, and these positions will fill existing lines. In order to meet accreditation requirements, the College of Public Health and Health Professions is required to have 5 epidemiology faculty members. PPHP currently has 4 faculty members with Ph.D.'s in epidemiology and, therefore, PPHP plans to hire one additional faculty member with a doctorate in epidemiology prior to implementation of the doctoral program. This position has been budgeted as part of the public health expansion; thus the code used for this .20 faculty member is B. The College of Medicine has an open line on an existing grant and plans to hire a faculty member with expertise in maternal and child health. This individual will dedicate .125 to the program and will be responsible for co-teaching a course on pediatric epidemiology and a course on policy issues in children's health.
- C. Use DCU Table One to estimate each existing and additional faculty member's workload (in percent person-years) that would be devoted to the proposed program by the fifth year of implementation, assuming that the program is approved. (*Note: this total will carry over to DCU Table Four's fifth year summary of faculty member positions.*)
- D. In the case of Ph.D. programs, use DCU Table Two to compare the number of faculty, research productivity and projected number of students to at least three peer programs, two of which must be outside Florida. For those disciplines that are included in the National Research Council (NRC) Research-Doctorate Programs in the United States and the National Science Foundation (NSF), please utilize the data from these two sources. NRC data is available on CD ROM and the NSF data is available on-line at www.nsf.gov/sbe/srs/profiles/. For disciplines that are not included in these two sources, please utilize alternate sources to provide comparable data. Universities may choose to provide additional peer data comparisons that are not available from NRC or NSF, such as percent of graduate students supported by contracts and grants, and total contracts and grants for the most recent year.

VI. Assessment of Current and Anticipated Resources

- A. In narrative form, assess current facilities and resources available for the proposed program in the following categories:
 1. Library volumes (Provide the total number of volumes available in this discipline and related fields.)

The University Library System, made up of 9 libraries, constitutes the largest information resource in the state of Florida. It contains more than 4,000,000 volumes, 1,000,000 government documents, 4,200,000 microforms, and 550,000 maps and images. In addition, the Libraries provide over 425,000 links to online resources, including e-books, databases, government documents, and full texts of journals. The Digital Library Center is developing the UF Digital Collections and contributes to the Publication of Archival, Library & Museum Materials (PALMM) initiative of the State University System. All of the libraries serve all of the university's faculty members and students; however, each has a special mission to be the primary support of specific colleges and degree programs. Six are in the system known as the George A. Smathers Libraries of the University of Florida. The other two (Health Sciences and Legal Information) are attached to their respective administrative units.

The University of Florida Health Science Center (HSC) Library serves as a primary information center for the staff, and students within the Health Science Center. The University of Florida Health Science Center has expanded into the most comprehensive academic health center in the Southeast. The "center" now encompasses six colleges (Medicine, Nursing, Public Health & Health Professions, Veterinary Medicine, Dentistry and Pharmacy), a statewide network of affiliated hospitals and clinics including Shands Hospital as the flagship teaching hospital, and the neighboring Veterans Affairs Medical Center of Gainesville.

The HSC Library is part of the National Network of Libraries of Medicine and has an extensive public computing area that provides access to MEDLINE, CINAHL, Web of Science (Science/Social Science Citation Indexes), Health Reference Center, AIDSLINE, TOXLINE, Dissertation Abstracts International, Journal Citation Reports, the Cochrane suite of Evidence-Based Medicine resources, and multiple additional databases available through Cambridge Scientific Abstracts, EbscoHost and WilsonOmniFiles. Remote library access is provided through a campus-wide fiber optic backbone, proxy and dialup services and a downloadable Virtual Private Network software package. Classes on database searching, catalog instruction and use of bibliographic software packages such as EndNote and RefWorks are taught each semester for UF faculty, staff, and students. These classes can help to improve Library and information searching skills. Some classes are taught through course-integrated instruction while others are offered for the whole UF community. 23 several private study rooms can be reserved for group discussion or private work, as well as the primary student study area--available 24/7--called the "blue room."

The HSC Libraries' collection supports instruction and research for the six HSC colleges. The Collection Management department orders all formats of materials and evaluates the quality and use of the materials received. The HSC Libraries provide public access to electronic resources in the Informatics Lab, located on the second floor. There are approximately 89,660 books and 251,090 journal volumes. There are an estimated 110,000 total number of journal volumes and 30,000 books (monographs). The libraries currently hold 3,432 books on epidemiology.

2. Serials (Provide the total number available in this discipline and related fields, and list those major journals which are available at your institution.)

The University of Florida has an extensive library of reference materials relevant to the epidemiology program. There are 120 journal titles currently listed in the UF libraries covering both core and research aspects of epidemiologic training. The top titles are listed below.

EPIDEMIOLOGY (Medical Library Association Public Health/Health Administration Core Journal List, 2006 edition):

American Journal of Epidemiology
American Journal of Preventive Medicine
American Journal of Public Health
Annals of Epidemiology
Annual Review of Public Health
BMC: Public Health
Emerging Infectious Diseases
Cancer Epidemiology, Biomarkers and Prevention
Emerging Themes in Epidemiology
Epidemiologic Perspectives & Innovations
Epidemiologic Reviews
Epidemiology
European Journal of Epidemiology
International Journal of Epidemiology
Journal of Clinical Epidemiology
Journal of Clinical Pharmacology
Journal of Epidemiology and Community Health
Pharmacoepidemiology and Drug Safety
Morbidity and Mortality Weekly Report
Social Psychiatry and Psychiatric Epidemiology
Social Science and Medicine

3. Describe classroom, teaching laboratory, research laboratory, office, and any other type of space, which is necessary and currently available for the proposed program.

The epidemiology program benefits from Health Science Center educational resources available to the College of Medicine and the College of Public Health and Health Professions. The majority of classroom teaching is scheduled in one of two facilities: the HPNP Complex and the Communicore. The HPNP building is a state-of-the-art teaching facility that opened for student use in 2003. The HPNP is equipped with classrooms and teaching labs ranging in size from 20 seats to 139 seats, plus a 500-seat auditorium and 76-seat distance learning lab. The smaller classrooms have moveable seats and are designed for discussion groups and teaching labs. All HPNP classrooms are equipped with a broad range of audio-visual services, including a podium with an enclosed, networked PC, already attached to one or more ceiling mounted projectors. The Communicore houses classrooms ranging in size from 10 to 179 plus a 520-seat auditorium and two large rooms (165, 179 capacity) for videoconferencing. A series of 15-seat classrooms have moveable seating and are designed for use for discussion groups. The current classroom and laboratory space is sufficient for existing teaching.

The faculty members' office and research space for the PPHP department includes 9 faculty member offices, 2 support staff offices, 1 multipurpose room (Xerox, mail, etc), 3 classroom labs and 5 research labs for a total of 3182 square feet. The department also can access additional college facilities, including research labs based upon external funding, and college conference rooms on several floors of the building. The two other faculty members in the college participating in the program who are outside the department have individual offices as well as space for predoctoral students and postdoctoral fellows.

The Department of Epidemiology and Health Policy Research and the Division of Biostatistics in

the College of Medicine has 42 offices and 47 cubicles, which occupies 7193 square feet. Of these offices, ten offices are assigned to epidemiology, 16 offices are assigned to biostatistics, and ten offices are assigned to health outcomes research. The remaining offices are occupied by professional and technical staff.

In addition, the Department of Epidemiology and Health Policy Research has a 2000 square foot Research Data Coordinating Center (RDCC). The RDCC is a dedicated core facility providing collaborative research support in the areas of data collection, database design, and data management to investigators conducting clinical and translational research throughout the University. The RDCC provides a unique opportunity for students to gain valuable experience with and obtain support for data management.

Faculty members from the Colleges of Pharmacy and Dentistry who are actively participating in the program bring additional space to bear, including faculty member's offices and student space.

4. Equipment, focusing primarily on instructional and research requirements. All students at the University of Florida are required to have access to a computer with minimum specifications for coursework. This access will satisfy the equipment needs for the program outside of classroom and research lab space noted above. Faculty members have access to a wide variety of teaching facilities to meet educational goals. As noted above, standard equipment in each classroom includes a podium and computer access to the web as well as PowerPoint presentations. The Health Science Center provides staff who are capable of diagnosing and repairing common A/V problems on-site and have a cache of commonly used equipment (e.g. DVD players, VCRs, video recorders, etc) available to address A/V needs not met by the equipment already in the classrooms.
5. Fellowships, scholarships, and graduate assistantships (List the number and amount allocated to the academic unit in question for the past year.) Given the Epidemiology Ph.D. program is being offered out of a new department in PHHP, there has been no previous allocation of awards to that specific academic unit. However, the College of PHHP has a proven record of support of its doctoral students. In academic year 2005-2006, graduate assistantship support totaled \$1.46 million for 122 students and predoctoral fellowships totaled \$986,593 for 71 students. In addition, PHHP Epidemiology faculty members provided doctoral stipends for two doctoral students from other programs last year. In 2005-2006, in the College of Medicine Ph.D. programs, there were 333 students and 333 predoctoral fellowships (60 Dean's fellowships, 76 alumni fellowships, and 197 departmental fellowships) for a total of \$7,326,000. In 2005-2006, in the College of Medicine Department of Epidemiology and Health Policy Research, there were two doctoral students and one postdoctoral fellow, for total funding of \$136,801.

It is the intention of the program to secure appropriate funding for students in the new Ph.D. program. Both colleges have committed financial support for students who will be recruited into the inaugural class. Anticipated primary sources of support include research assistantships from externally funded faculty member research, internal and external fellowship opportunities, and teaching assistantships.

6. Internship sites if appropriate N/A

- B. Describe additional facilities and resources required for the initiation of the proposed program (e.g., library volumes, serials, space, assistantships, specialized equipment, other expenses, OPS time, etc.). If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's capital outlay priority list. The provision of new resources will need to be reflected in the budget table (DCU Table Four), and the source of funding indicated. DCU Table Four only includes I&R costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form. It is expected that high enrollment programs in particular would necessitate increased costs in non- I&R activities.

No additional facilities are anticipated for this program. The extensive infrastructure between the two colleges provides adequate instructional support. No new capital expenditures are requested.

ACCOUNTABILITY

VII. Assessment of Need and Demand

- A. What national, state, or local data support the need for more people to be prepared in this program at this level? (This may include national, state, or local plans or reports that support the need for this program; demand for the proposed program which has emanated from a perceived need by agencies or industries in your service area; and summaries of prospective student inquiries.) Indicate potential employment options for graduates for the program. If similar programs (either private or public) exist in the state, provide data that support the need for an additional program. Summarize the outcome of communication with such programs.

Based on the assessments of both practice based (Council of State and Territorial Epidemiologists) and the field's academic accrediting organization (Association of Schools of Public Health), there is a national shortage of epidemiologists, especially at the doctoral level. The Department of Labor's Occupational Outlook Handbook also forecasts growth for the ten-year period between 2002 and 2012 for public health professionals to be faster than average through 2012 for four areas, one of which is epidemiology. The proposed program also is consistent with Institute of Medicine (IOM) recommendations about the need for a greater number of epidemiologists to systematically collect and analyze data on the health of populations, which in turn can be used to formulate stronger health policies in the United States (1995; 2003). In addition, the proposed program, with its concentration in clinical epidemiology, is consistent with the National Institutes of Health (NIH) recommendations about the need to develop and offer model programs to address the growing shortage of experienced clinical investigators in academic medicine (NIH, 2005a). The interdisciplinary model for training clinical investigators is an essential component of the NIH Roadmap initiative (NIH, 2005b). The proposed program also is consistent with the NIH emphasis on community-based research to address disease prevention and health disparities (NIH, 2005c) and the Department of Health and Human Services *Healthy People 2010* initiative (<http://www.healthypeople.gov/>), which is a comprehensive, nationwide agenda for health promotion and disease prevention. The *Healthy People 2010* agenda specifically addresses access to quality services and reductions in health disparities. The epidemiology program is, in part, designed to promote research related to clinical outcomes and quality of care. Coursework within the clinical epidemiology concentration also addresses the inclusion of diverse populations in clinical research.

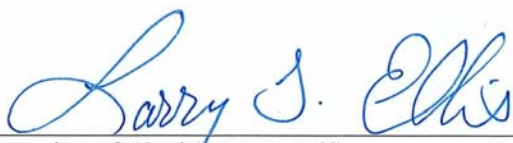
In general, there are significant population needs that will have to be addressed as the

demographics of the United States change. Having a clear understanding of these needs based on empirically sound epidemiological data (tracking over time; impact on disease rates and distribution) is essential to minimizing their impact on the health care system as a whole. For example, people who are 65 years or older now comprise nearly 13% of the population. This proportion will grow to 20% by the year 2025 with the maturation of the “baby boomers,” the 76 million Americans born between 1946 and 1964. Because the aging process is both biologically influenced and socially constructed, this “Age Revolution” involves both biomedical and socio-cultural change (Satariano, 2006). The reasons why so many are living longer have as much to do with lifestyle and social opportunities as with genes and biology. Training epidemiologists prepared to address critical issues in aging (such as changes in the types and distribution of chronic diseases and lifestyle and health care access associated with these diseases) is essential preparation for dealing with the impact this massive aging of the population will create. Similarly, there is growing evidence that childhood life circumstances including exposure to infectious disease and environmental toxins, the presence of chronic illness early, and socioeconomic deprivation have an enduring effect throughout life and contribute to chronic morbidity (Blackwell, et al., 2001). The American Pediatric Society and Society for Pediatric Research (2004) have issued a policy statement supporting the funding of more longitudinal studies examining the role of child health on adult morbidity. These groups note that many diseases usually associated with adulthood actually have their origins in childhood and that improvements in pediatric medicine and health care will not only improve care for children but also will have far-reaching implications for adult health care. Once again, this reflects the growing need for epidemiologists who can provide descriptive and etiologic data to facilitate our understanding of the complexity of changing health status over time, the costs of such changes, and the priorities for efficiently used limited health care resources.

The principal goal of the proposed Ph.D. program is to prepare highly qualified individuals for careers in epidemiology research and/or practice. The training will be conducted in the innovative and interdisciplinary health culture of the Colleges and in collaboration with campus academic and research partners. The training will foster professional development of successful careers closely linked with the most current models of epidemiologic training (i.e., American College of Epidemiology) and produce graduates with strong credentials and productivity in relevant job markets to address the shortage of epidemiology personnel. Our graduates will be highly competitive in four primary settings: academic university-based settings; public health practice; independent research groups and industry settings; and federal and not-for profit agencies that involve research and/or public health planning.

- B. Use DCU Table Three-B to indicate the number of students (headcount and FTE) you expect to major in the proposed program during each of the first five years of implementation, categorizing them according to their primary sources. In the narrative following Table Three, the rationale for enrollment projections should be provided and the estimated headcount to FTE ratio explained. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines, which will likely occur.
- C. For all programs, indicate what steps will be taken to achieve a diverse student body in this program. Please create a place for signature at the end of section (VII) (C) and have your university’s Equal Opportunity officer read, sign, and date this section of the proposal.

We plan to actively participate in discipline-specific and UF activities related to the recruitment and retention of students from underrepresented groups. The University of Florida's Director of Graduate Minority Programs has a well-organized office to assist with recruitment of underrepresented groups, including minority students and women. These activities range from the local to national level. Examples of these activities include involvement in the recruitment of students through participation in discipline-specific conferences and national graduate student fairs, partnership with foundations and organizations, and involvement in the Campus Visitation Program. The partnerships created by the Office of Graduate Minority Programs specifically focus on other organizations whose mission is to support graduate level success of underrepresented groups (e.g. Nat'l institutions, such as the National Consortium for Graduate Degrees for Minorities in Engineering and Sciences, Inc) and on other institutions with high percentages of underrepresented student groups (e.g. FAMU) who are excellent feeders for graduate education. The Campus Visitation program is held twice per year and is intended to provide an opportunity for prospective minority graduate students and school advisers to visit our campus and learn about graduate opportunities, which includes presentations by faculty members about graduate programs. Epidemiology would be pleased to take part in this activity. Qualified students entering the applicant pool through any of these types of mechanisms would be actively recruited. In addition to other college funding opportunities, once admitted, these students would be considered for funding to support minority students through the Health Science Center. Retention efforts are also enhanced by the availability of support services to graduate students, such as the Professional Development Workshop series. These workshops are designed to enhance the educational experience of students who are typically underrepresented in graduate education and include topics such as writing literature reviews, effective reading strategies, summarizing and critiquing readings or lectures, passing qualification examinations, getting manuscripts published, using professional meetings to advance one's career, and acquiring research grants. Opportunities also exist for additional funding should a student from an underrepresented group need longer to complete the degree but is no longer eligible to receive a fellowship, assistantship or other funding from their department or college. Limited tuition assistance and the help of a structured retention program are provided to the student. All of these activities and programs will complement the individual efforts of faculty members to recruit and retain Ph.D. students in epidemiology from underrepresented groups.



University of Florida EEO Officer

January 9, 2007

Date

VIII. Budget

- A. Assuming no special appropriation for initiation of the program, how would resources within the institution be shifted to support the new program? As can be seen in Table 4, the core support for the new program will be derived from current budget allocations to the two departments. The recruitment of epidemiology and biostatistics faculty members in the Colleges of Medicine and PHHP that will impact the Ph.D. program is already underway. Therefore resources should be available to fill these existing lines. It is anticipated that student support will be primarily derived from grant expenditures as the program grows and increased external funding is secured. Student growth in the program is projected based on anticipated support dollars available.
- B. Use DCU Table Four to display dollar estimates of both current and new resources for the

proposed program for the first and the fifth years of the program. In narrative form, identify the source of both current and any new resources to be devoted to the proposed program. If other programs will be negatively impacted by a reallocation of resources for the proposed program, identify the program and provide a justification. The epidemiology program will be funded from current college budgets (Individual college budgets for the program are provided in the appendix). The total cost for the epidemiology program in Year One is \$790,738 and in Year Five \$902,178. The faculty members to be hired in 2007 represent positions on existing lines and therefore are listed in current revenue i.e., the .20 faculty member FTE requested in the first year will be part of a faculty member line already being recruited for part of the public health development; the .125 faculty member FTE will be funded as part of an existing grant. Therefore, no new funding is being requested. The majority of the budgetary increase over time reflects cost of living/salary increases; 93% of the budget in Year Five reflects salary costs of faculty members and staff. The expense line represents ongoing costs associated with providing doctoral students access to the Research Data Coordinating Center for both coursework and dissertation support. Other resources earmarked for the epidemiology program reflect operational expenses associated with marketing and managing the program.

- C. Describe what steps have been taken to obtain information regarding resources available outside the institution (businesses, industrial organizations, governmental entities, etc.). Delineate the external resources that appear to be available to support the proposed program. Current faculty members have a number of external service and research affiliations with potential resources for the proposed program. For example, there are research and doctoral student dissertation support resources at the North Florida/South Georgia VA Rehabilitation Research Center (RORC), where PHHP epidemiology faculty members have research appointments and active grants. In addition, the RORC offers ongoing training activities for mentored scientists including doctoral students in grantsmanship and writing workshops, short courses, and research seminar series. Faculty members within the Department of Epidemiology and Health Policy Research have extramurally funded projects that will be used to provide research opportunities and stipends for graduate students. These funding sources include grants from the Center for Medicare and Medicaid Services and the Maternal Child Health Bureau.
- D. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty member effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty members and teaching assistants) and explain what steps will be taken to mitigate any such impacts. Also discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting edge research, improved labs and library resources). There are no anticipated negative impacts expected on undergraduate education. The majority of students expected to apply to the epidemiology program are master's prepared students. On the other hand, several positive changes are anticipated. It is expected that creation of the epidemiology Ph.D. program will expand the available research opportunities to undergraduates in the health science center for both independent study and honors thesis work. In addition, epidemiology faculty members will bring their expertise to the classroom via opportunities for guest lecturing in the Bachelor of Health Science program as well as through the medical school. There will also be increased opportunity for undergraduates to attend seminars related to contemporary epidemiological issues.
- E. Describe any other projected impacts on related programs, such as required courses in other

departments. Students will be expected to take advanced statistics as part of this degree program. Because students have a variety of potential courses to fulfill this requirement and can take this requirement at various points in their program, the impact on course enrollment is expected to be modest at best.

IX. Productivity

Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student headcounts in major or service courses, degrees granted, external funding attracted; as well as qualitative indicators of excellence. The College of PPHP has exhibited substantial growth over the past several years across productivity measures. For example, grant expenditures for fiscal year 2005-2006 were 16 million and contracts were slightly more than 3 million. Epidemiology departmental faculty members generated approximately one million of these. PPHP expenditures reflect an 800% increase over 10 years ago. Similarly, graduate FTE production has increased three-fold, from 117 FTE in 1996 to 435 FTE in 2005-2006. Graduate/postbac student headcount has risen from 198 to 546 in the same 10-year period. As mentioned previously, there are currently 43 students in the epidemiology concentration in the MPH program; in addition, students from other colleges have benefited from the availability of epidemiology coursework. For example, 110 students representing 7 colleges took the Epidemiology in Public Health course in Fall, 2006. The College of Medicine also provides epidemiology course offerings benefiting students from different disciplines in the health science center. In addition the College of Medicine has a strong record of acquisition of external funding; the Department of Epidemiology and Health Policy Research has been awarded approximately \$14 million in each of the last three years.

Faculty members in both colleges are involved in a broad range of University, State, National, and both public and private service activities. Faculty members serve as board and committee members of professional societies and journals, provide scientific reviews of grants and grant programs at University and national levels, and serve as reviewers for state and national professional societies meetings. Examples of faculty member advisory functions at the national level include service to the Institute of Medicine, National Institutes of Health, Agency for Healthcare Research and Quality, and the Centers for Disease Control and Prevention. Faculty members also serve in College and University standing and ad hoc academic committees, provide professional skills and humanitarian efforts to local community programs, and provide professional input regarding policy issues, such as maternal/child health needs and access to care for underrepresented groups.

DCU TABLE ONE
FACULTY MEMBER PARTICIPATION IN PROPOSED DEGREE PROGRAM
BY FIFTH YEAR

Faculty Member CODE	Faculty Member Name or "New Hire"	Academic Discipline/Specialty	Rank	(For Existing Faculty Only)		Initial Date for Participation in Proposed Program	5 th Year Workload in Proposed Program (Portion of Person-year)
				Contract Status (Tenure status or equivalent)	Highest Degree Held		
A	Elena Andresen	Epidemiology	Professor	Tenured	Ph.D.	Fall, 2007	0.20
A	Nabih Asal	Epidemiology	Professor	Tenured	Ph.D.	Fall, 2007	0.20
A	Amy Dailey	Epidemiology	Assistant	Tenure Track	Ph.D.	Fall, 2007	0.20
A	Robert Cook	Epidemiology	Associate	Tenure Track	M.D.	Fall, 2007	0.05
B	New Hire	Epidemiology	Assistant	Tenure Track	Ph.D.	Fall, 2007	0.20
A	Michael Daniels	Biostatistics	Associate	Tenured	Ph.D.	Fall, 2007	0.10
A	Linda Young	Biostatistics	Professor	Tenured	Ph.D.	Fall, 2007	0.05
A	Yongsung Joo	Biostatistics	Assistant	Tenure Track	Ph.D.	Fall, 2007	0.05
A	Babette Brumback	Biostatistics	Associate	Tenure Track	Ph.D.	Fall, 2007	0.15
A	Deborah Burr	Biostatistics	Associate	Tenure Track	Ph.D.	Fall, 2007	0.05
A	Abraham Hartzema	Health Outcome Research	Professor	Tenured	Ph.D.	Fall, 2007	0.15
A	Sherrilene Classen	Occupational Therapy	Assistant	Tenure Track	Ph.D.	Fall, 2007	0.05
A	Neale Chumbler	Health Services Research, Management, Policy	Assistant	Tenure Track	Ph.D.	Fall, 2007	0.05
A	Scott Tomar	Public Health Dentistry	Professor	Tenured	DMD, Dr. PH	Fall, 2007	0.05
A	Lorena Baccaglioni	Epidemiology/ Dentistry	Assistant	Tenure Track	Ph.D., DDS	Fall, 2007	0.05
A	Doug Ried	Pharmacy Care Admin	Professor	Tenured	Ph.D.	Fall, 2007	0.05
A	Almut Winterstein	Pharmacy Care Admin	Assistant	Non-Tenured	Ph.D.	Fall, 2007	0.05
A	Rebecca Beyth	Aging, Medicine	Associate	Tenured	M.D.	Fall, 2007	0.05
A	Alex Wagenaar	Epidemiology/ Community Trials	Professor	Tenured	Ph.D.	2007-2008	0.125
A	Kelli Komro	Epidemiology/ Community Trials	Associate Professor	Tenured	Ph.D.	2007-2008	0.125
A	Dan Salmon	Epidemiology/ Infectious Disease	Associate Professor	Tenure Track	Ph.D.	2007-2008	0.125
D	Stephanie Staras	Epidemiology/ Infectious Disease	Research Assistant Professor	Research Track	Ph.D.	2007-2008	0.125
A	Mildred Molina-Maldonado	Health Outcomes/ Racial and Ethnic Disparities	Assistant Professor	Tenure Track	Ph.D.	2007-2008	0.125
A	Elizabeth Shenkman	Health Outcomes/	Professor	Tenured	Ph.D.	2007-2008	0.125

		Maternal-Child Health					
D	I-Chan Huang	Health Outcomes/Measurement	Assistant Professor	Tenure Track	Ph.D.	2007-2008	0.125
D	June Nogle	Social Demography/Child Health	Research Associate Professor	Research Track	Ph.D.	2007-2008	0.125
A	Bruce Vogel	Economist/Health Economics	Associate Professor	Tenured	Ph.D.	2007-2008	0.125
A	Joe Terza	Economist/Health Economics	Professor	Tenure Track	Ph.D.	2007-2008	0.125
A	Keith Muller	Biostatistician/	Professor	Tenured	Ph.D.	2007-2008	0.125
A	Myron Chang	Biostatistician/	Professor	Tenured	Ph.D.	2007-2008	0.10
D	Jon Shuster	Biostatistician/Clinical Trials	Research Professor	Research Track	Ph.D.	2007-2008	0.05
A	Sam Wu	Biostatistician/	Assistant Professor	Tenure Track	Ph.D.	2007-2008	0.125
A	Jing Cheng	Biostatistician/	Assistant Professor	Tenure track	Ph.D.	2007-2008	0.125
A	Wei Hou	Biostatistician/	Assistant Professor	Tenure track	Ph.D.	2007-2008	0.125
D	Wendy London	Biostatistician/Clinical Trials	Research Associate Professor	Research Track	Ph.D.	2007-2008	0.05
B	TBN	Epidemiology	Associate or Assistant	Tenure Track	Ph.D.	2007-2008	0.125
E	TBN	Epidemiology/Maternal Child Health	Research Assistant Professor	Research Track	Ph.D.	2007-2008	0.125
B	TBN	Biostatistician	Associate or Assistant	Tenure Track	Ph.D.	2007-2008	0.125
B	TBN	Biostatistician	Associate or Assistant	Tenure Track	Ph.D.	2007-2008	0.125
Faculty Member CODE	Corresponding Faculty Member Position Category in TABLE 3 for the Fifth Year		Proposed Source of Funding for Faculty				TOTAL 5th Year Workload by Budget Classification

A	Current General Revenue	Existing Faculty Members – Regular Line	3.025
B	Current General Revenue	New Faculty Members – To be Hired on Existing Vacant Line	0.575
C	New General Revenue	New Faculty Members – To be Hired on a New Line	
D	Contracts and Grants	Existing Faculty Members– Funded on Contracts and Grants	0.475
E	Contracts and Grants	New Faculty Members– To Be Hired on Contracts and Grants	0.125

Overall Total for 5th Year	4.200
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Revised 1/13/2007 10:29 AM

FACULTY	AREA	TITLE	MASTERS THESES	PH.D. THESES	COLLAB PUB	METH PUBS
Andresen	Epidemiology	Professor	15	5	51	16
Asal	Epidemiology	Professor	10	11	55	-
Baccaglioni	Epidemiology/ Dentistry	Assistant	-	-	21	-
Beyth	Aging & Geriatrics	Associate	3	-	39	-
Brumback	Biostatistics	Associate	1	1	4	15
Burr	Biostatistics	Associate	1	1	17	7
Chang	Biostatistician/Oncology Design	Professor	25	4	35	40
Cheng	Biostatistics/Selection Bias	Assist Professor	-	-	2	2
Chumbler	Health Services Research, Management, Policy	Assistant	-	6	55	-
Classen	Occupational Therapy	Assistant	4	5	11	1
Cook	Epidemiology	Associate	2	3	33	3
Dailey	Epidemiology	Assistant	-	0	5	-
Daniels	Biostatistics	Associate	-	4	12	31
Hartzema	Health Outcome Research	Professor	-	28	65	-
Herndon	Economics/Health Outcomes	Research Associate Professor	3	-	8	-
Hou	Biostatistics/Cancer Genomics	Assist Professor	-	-	8	7
Huang	Risk adjustment, quality of life research	Assist Professor	-	1	-	12
Joo, Yongsung	Biostatistics	Assistant	-	-	3	3
Komro	Social & Community Epidemiology	Associate Professor	17	8	42	-
London	Biostatistics/Oncologic Trials	Research Associate Professor	-	1	49	3
Maldonado- Molina	Social & Community Epidemiology	Assist Professor	-	1	7	-
Muller	Biostatistics/Imaging Design	Professor	4	15	38	9
Nogle	Social Demography/Health Outcomes	Research Associate Professor	-	-	10	-
Ried	Pharmacy Care Admin	Professor	7	13	55	9
Salmon	Infectious Disease/Vaccine Epidemiology	Associate Professor	5	1	13	-
Shenkman	Child Health Services and Outcomes Research	Professor	5	3	32	-
Shuster	Biostatistics/Clinical Trials	Research Professor	1	2	213	41
Staras	Infectious Disease/Women's	Research Assist Professor	-	-	2	-

	Health					
TBN	Epidemiology	Assistant				
Terza	Health Economics, Econometrics	Professor	-	1	22	6
Tomar	Public Health Dentistry	Professor	10	-	61	-
Vogel	Economics/Health Outcomes	Associate Professor	-	6	20	-
Wagenaar	Social & Community Epidemiology	Professor	33	6	156	-
Winterstein, Almut	Pharmacy Care Admin	CI Assistant	-	5	24	-
Wu	Biostatistics/Rehab Analysis	Assist Professor	-	1	16	12
Young	Biostatistics	Professor	16	3	43	45
Total			162	135	1227	262

DCU TABLE TWO PEER COMPARISON DATA

Select at least three peer programs, two of which must be outside Florida, offering the proposed Ph.D. In identifying peers select programs in the same or similar field which are comparable to yours, perhaps located in institutions with missions analogous to yours, except that they already offer a Ph.D. Specify your criteria for selecting the peers. Utilizing data from the National Research Council (NRC) and National Science Foundation (NSF), provide comparative data for the department that will house the new program or core faculty members who will participate in the new program, and comparative data for the projected student headcount. If the discipline proposed is not included in these sources, obtain comparable data from other sources. *Universities may choose to provide additional data comparisons that are not available from NRC or NSF, such as percent of graduate students supported by contracts and grants, and total contracts and grants for the most recent year.* We selected peer institutions that offered an accredited program in epidemiology. The University of South Florida was selected because it is the only other program in the SUS offering an accredited program. The University of Iowa was selected because it is a fairly young public health school that has successfully undergone the accreditation process. The University of Alabama – Birmingham was selected because it is an established accredited program in the AAU.

NRC DATA	Your University & Program	Peer University 1 & Program	Peer University 2 & Program	Peer University 3 & Program
Total Program Faculty members	34	13	11	13
% Supported	85	100	50	92
% with Publications	100	100	100	10
Publications/Faculty Members	3.44	2.85	3.50	4.21
Total Graduate Students	28 (year 2011)	21 (year 2006)	15 (year 2005)	21 (year 2005)

NSF DATA	Your University & Program	Peer University 1 & Program	Peer University 2 & Program	Peer University 3 & Program
R&D Expenditures (most recent three years in NSF data)	UF	USF	University of Alabama at Birmingham	University of Iowa
Year 1 Total	9.84 mill	1.15 mill	5.0 mill (est.)	12 mill
Year 2 Total	10.99 mill	1.65 mill	5.0 mill (est.)	13.5 mill
Year 3 Total	12.12 mill	1.56 mill	5.20 mill	15 mill

DEFINITIONS

- Total Faculty:** Total headcount of ranked faculty members (professor, associate or assistant professor) participating in the program; full-time or part-time.
- % Supported:** Percentage of Total Program Faculty members with external research support. If not using NRC data, specify time period and sources. For visual and performing arts faculty, include any external grants, commissions, and performance fees.
- % with Publications:** Percentage of Total Program Faculty members publishing refereed journal articles. If not using NRC data specify time period. If this is a discipline in which books, music or other creative activity are a more important indicator of scholarly activity, you may include them, but justify doing so.
- Publications/Faculty:** The ratio of the total number of program publications to the number of Total Program Faculty. If not using NRC data, specify time period.
- Total Students:** The number of full and part-time graduate students enrolled. For the proposed program list projected headcount in the fifth year. Specify the year for peer data.
- R&D Expenditures:** Separately budgeted R&D current fund expenditures designed to produce specific research outcomes and either funded by an agency external to an academic institution or separately budgeted by an internal unit of the institution.

DCU TABLE THREE-B
NUMBER OF ANTICIPATED MAJORS FROM POTENTIAL SOURCES*

GRADUATE DEGREE PROGRAM

ACADEMIC YEAR	YEAR 1		YEAR 2		YEAR 3		YEAR 4		YEAR 5	
Source of Students (Non-Duplicated Count in Any Given Year)	HC	FTE	HC	FTE	HC	FTE	HC	FTE	HC	FTE
Individuals drawn from agencies/industries in your service area (e.g., older returning students)	1	.75	2	1.50	2	1.50	2	1.31	2	1.13
Students who transfer from other graduate programs within the university										
Individuals who have recently graduated from preceding degree programs at this university**	3	2.25	4	3.00	7	5.25	8	5.43	9	6.00
Individuals who graduated from preceding degree programs at other Florida public universities			3	2.25	3	2.25	3	2.25	4	2.44
Individuals who graduated from preceding degree programs at non-public Florida institutions										
Additional in-state residents**										
Additional out-of-state residents**			2	1.50	5	3.75	7	5.25	7	4.88
Additional foreign residents**					2	1.50	5	3.75	6	4.50
Other (Explain)**										
TOTAL	4	3.00	11	8.25	19	14.25	25	17.99	28	18.95

* List projected yearly cumulative ENROLLMENTS instead of admissions.

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** Do not include individuals counted in any PRIOR category in a given COLUMN.

*** If numbers appear in this category, they should go DOWN in later years.

Explanation of Headcount and FTE

When the program is first established, we believe the University of Florida Master of Science in Epidemiology and the Master of Public Health programs will represent the primary pool for Ph.D. applicants. Therefore, initial headcount is weighted heavily towards these existing UF programs as feeders to the Ph.D. program. We anticipate these programs will represent a stable source of applicants over time, as well. As the program grows, however, we anticipate the applicant pool to diversify substantially as is typical with Ph.D.

program evolution. The FTE figures we have presented are based on the standard graduate student FTE ratio of .75 per year per student assuming students will have an assistantship and will graduate in 4 years. There is a slight reduction in the ratio in the fourth year based on the assumption that students will need fewer than 24 credit hours to complete graduation requirements.

DCU TABLE FOUR COSTS FOR PROPOSED PROGRAM

INSTRUCTION & RESEARCH	FIRST YEAR				FIFTH YEAR			
	General Revenue		Contracts & Grants	Summary	General Revenue		Contracts & Grants	Summary
	Current	New			Current	New		

POSITIONS (Person-years)								
Faculty	3.60	0.00	0.60	4.20	3.60	0.00	0.60	4.20
A & P	1.15	0.00	0.00	1.15	1.15	0.00	0.00	1.15
USPS	0.25	0.00	0.00	0.25	0.25	0.00	0.00	0.25
TOTAL	5.00	0.00	0.60	5.60	5.00	0.00	0.60	5.60

* Cells should relate directly to faculty member numbers in Table 2

SALARY RATE								
Faculty	447,645	0.00	55,403	503,048	514,671	0.00	64,814	579,485
A & P	59,371	0.00	0.00	59,371	69,456	0.00	0.00	69,456
USPS	8,000	0.00	0.00	8,000	9,275	0.00	0.00	9,275
TOTAL	515,016	0.00	55,403	570,419	593,402	0.00	64,814	658,216

I & R EXPENSES								
Salaries and Benefits	661,189	0.00	71,658	732,847	759,447	0.00	83,830	843,277
Other Personnel Services	8,891	0.00	0.00	8,891	10,401	0.00	0.00	10,401
Expenses	25,000	0.00	0.00	25,000	28,500	0.00	0.00	28,500
Operating Capital Outlay	9,000	0.00	0.00	9,000	5,000	0.00	0.00	5,000
Electronic Data Processing	15,000	0.00	0.00	15,000	15,000	0.00	0.00	15,000
Library Resources	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Special Categories	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL I & R	719,080	0.00	71,658	790,738	818,348	0.00	83,830	902,178

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MEDICINE DCU TABLE FOUR
COSTS FOR PROPOSED PROGRAM

INSTRUCTION & RESEARCH	FIRST YEAR				FIFTH YEAR			
	General Revenue		Contracts & Grants	Summary	General Revenue		Contracts & Grants	Summary
	Current	New			Current	New		
POSITIONS (Person-years)								
Faculty	1.85	0	0.60	2.45	1.85	0	0.60	2.45
A & P	1.15	0	0	1.15	1.15	0	0	1.15
USPS		0	0	0	0	0	0	0
TOTAL	3.00	0	0.60	3.60	3.00	0	0.60	3.60
* Cells should relate directly to faculty member numbers in Table 2								
SALARY RATE								
Faculty	244,484	0	55,403	299,887	286,012	0	64,814	350,826
A & P	59,371	0	0	59,371	69,456	0	0	69,456
USPS	0	0	0	0	0	0	0	0
TOTAL	303,855	0	55,403	359,258	355,468	0	64,814	420,282
I & R EXPENSES								
Salaries and Benefits	390,936	0	71,658	462,594	457,340	0	83,830	541,170
Other Personnel Services	8,891	0	0	8,891	10,401	0	0	10,401
Expenses	20,000	0	0	20,000	20,000	0	0	20,000
Operating Capital Outlay	5,000	0	0	5,000	5,000	0	0	5,000
Electronic Data Processing	15,000	0	0	15,000	15,000	0	0	15,000
Library Resources	0	0	0	0	0	0	0	0
Special Categories	0	0	0	0	0	0	0	0
TOTAL I & R	439,827	0	71,658	511,485	507,741	0	83,830	591,571

PHHP EPIDEMIOLOGY DCU TABLE FOUR

COSTS FOR PROPOSED PROGRAM

INSTRUCTION & RESEARCH	FIRST YEAR				FIFTH YEAR			
	General Revenue		Contracts & Grants	Summary	General Revenue		Contracts & Grants	Summary
	Current	New			Current	New		
POSITIONS (Person-years)								
Faculty	1.75			1.75	1.75			1.75
A & P								
USPS	0.25			0.25	0.25			0.25
TOTAL	2.00			2.00	2.00			2.00
SALARY RATE								
Faculty	203,161			203,161	228,659			228,659
A & P								
USPS	8,000			8,000	9,275			9,275
TOTAL	211,161			211,161	237,934			237,934
I & R EXPENSES								
Salaries and Benefits	270,253			270,253	302,107			302,107
Other Personnel Services								
Expenses	5,000			5,000	8,500			8,500
Operating Capital Outlay	4,000			4,000				
Electronic Data Processing								
Library Resources								
Special Categories								
TOTAL I & R	279,253			279,253	310,607			310,607