

3.0 Creation, Application and Advancement of Knowledge

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

The University of Florida is a member institution of the Association of American Universities (AAU), a group comprised of 62 leading research institutions of higher education in the United States and Canada. The University's commitment to research is clear in its mission statement:

Research and scholarship are integral to the education process and to the expansion of our understanding of the natural world, the intellect and the senses.

<http://www.registrar.ufl.edu/catalog0506/administration/mission.html>.

Consistent with the University, the College of Public Health and Health Professions is committed to promoting high quality research aimed at enhancing the health of populations, communities and individuals. We set the following goal and objectives to guide our work:

Goal 2: Address priority health needs by conducting quality research and disseminating the findings

Objectives:

- 2.1 Compete successfully for research funding, thus contributing to greater national prominence
- 2.2 Promote collaborative research within the College and across the University
- 2.3 Produce and disseminate new knowledge that contributes to the health of communities and individuals

Research and scholarship play prominent roles in the activities of the faculty and students of the College. Over the past three years, total research grants and contract awards have increased from \$15.8 million in fiscal year 2011 to \$22.7 million in fiscal year 2013¹. The College's primary faculty (n = 135²) per capita research grant and contract funding in fiscal year 2013 averaged \$168,244. Among faculty with new funding in fiscal year 2013 (n= 37), the per capita average was \$239,624. With research funding from the National Institutes of Health at \$11.6 million in CY 2012, the College ranks among the top 20 accredited schools of public health with respect to NIH funding.³

¹ This figure does not include external funding for service and workforce development projects.

² Primary faculty in 2012-13 = 135. Primary faculty in fall 2013 = 141, as shown in Table 4.1.a.1.

³ Blue Ridge Institute for Medical Research

http://www.brimr.org/NIH_Awards/2012/NIH_Awards_2012.htm

Required Documentation

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

All tenured and tenure-track faculty of the College are expected to engage in research and scholarly activities aimed at advancing knowledge that will enhance human health and well-being. The tenure and promotion policies of both the University and the College detail the expectations for research and scholarly activities for promotion within the tenure track. These policies are briefly described below. More detail may be found at the following websites:

- University of Florida Tenure and Promotion Guidelines:
<http://www.aa.ufl.edu/Data/Sites/18/userfiles/48/tp-guidelines-2012-13-final.pdf>
- College of Public Health and Health Professions Tenure and Promotion Guidelines:
<http://facstaff.phhp.ufl.edu/services/humanresources/Faculty/PHHPTenurePromotionGuidelinesSept03-posted2-2013.pdf>.

University Oversight of Research

Administrative oversight for all research activities at the University of Florida resides in the Office of Research, which is directed by the Vice President for Research. The Office of Research houses the Division of Sponsored Programs (DSP), Research Compliance departments, Program Development, Research Communications, and the Office of Technology Licensing.

DSP provides institutional approval for all extramural proposal submissions, accepts and administers grant awards, and negotiates contracts and other research-related agreements on behalf of the University of Florida. The major University-wide functions of the DSP include 1) proposal processing and pre-award services and 2) award administration.

Proposal Processing and Pre-award Services within DSP reviews, approves and submits all proposal documents to external sponsors. It negotiates research agreements with external sponsors and sub-recipient organizations, including agreements where no money is changing hands. This department serves as a campus resource for guidance and answers to questions relating to proposals, budgeting and contract negotiations. It also provides UF authorized approval and signature on anything related to research and training activities.

The Award Administration Department within DSP prepares and issues the [Notification of Acceptance \(NOA\)](#), the official internal award document that sets post-award activity into motion. It reviews and approves award modifications, as well as prepares and issues sub-awards and sub-contracts to outside parties (sub-recipients). This department approves internally or submits to sponsors, requests for pre-award costs, temporary projects, no cost extensions, carryover of unobligated balances, changes in scope of work, change of PI and key personnel, CAS exemptions, rebudgeting, and relinquishments. It

also serves as a campus resource for guidance and answers to questions relating to awards and provides UF authorized approval and signature on anything related to research and training activities.

The Research Compliance departments assure that the University of Florida consistently conducts research in compliance with established federal, state and local rules, regulations, policies and procedures. This includes financial, safety and human/animal subjects compliance.

The Division of Research Program Development identifies and [publishes new funding opportunities](#) for faculty seeking funding. It coordinates the annual [Research Opportunity Seed Fund](#) program, as well as the selection of UF's nominees to [limited application programs](#). This division assists in planning and coordinating large interdisciplinary research initiatives and in preparing grants involving multiple schools, colleges, divisions or institutions to support new research programs at UF.

The Office of Research Communications promotes research and graduate education to both internal and external audiences through such vehicles as the [Explore](#) research magazine. The office also provides editorial and graphic design services to other research units.

The Office of Technology Licensing (OTL) works with UF employee inventors with potentially patentable or copyrightable technologies and facilitates the transfer of technologies created at UF to the commercial sector for public benefit.

University Support for Research

University support for research is provided by the University of Florida Research Foundation (UFRF) and the UF Office of Research. UF established the UFRF, a not-for-profit, direct support organization, in June 1986 to promote, encourage and provide assistance to the research activities of University faculty, staff and students. UFRF provides a means by which research can be conducted flexibly and efficiently and by which discoveries, inventions, processes and work products of UF faculty, staff and students can be transferred from the laboratory to the public. Funds generated by licensing such discoveries are used to enhance research at the University of Florida.

In addition to the services described above, the Office of Research distributes all indirect costs back to the colleges after the allocation of certain central costs and the cost for supporting sponsored research. This return also includes the annual formula returns to investigators (10%), departments (7.5%), and centers (7.5%). In addition, the Office of Research uses a combination of carry-forward funds and earnings from the UF Research Foundation to fund the following internal support programs:

UF Research Foundation Awards

[Research Foundation Professorships](#): Thirty-three new awards annually recognize faculty research contributions and provide incentives for continued excellence in research. Each professorship is awarded for a three-year period

and includes a \$5,000 annual salary supplement and a \$3,000 research grant. Associate and full professors who are tenured and who have been on the UF faculty for at least five years are eligible to be nominated by their department chairs. Recipients of the professorship are selected by their colleges. In the past five years, The following PHHP faculty members have received Research Foundation Professorships:

2013	Robert L. Cook, MD, MPH	Epidemiology
2012	Michael Marsiske, PhD	Clinical and Health Psychology
2011	David Janicke, PhD	Clinical and Health Psychology
2010	Jeffrey Harman, PhD	Health Services Research, Management and Policy
2009	Steven A. Kautz, PhD	Physical Therapy

[Matching Funds for New Training Grants](#): To aid faculty in their efforts to secure more training grants for graduate education, the Office of Research provides an institutional match (usually in the form of additional tuition payments) and a letter of support for all new training grants that are submitted to external agencies. Matches from colleges are considered in determining the level of support from the Office of Research.

Research Opportunity Seed Fund

This University-wide program provides funding (up to \$100,000 for each proposal for a total of \$1 million) for new, faculty-initiated research programs that are multi/interdisciplinary and that have the expectation and a reasonable plan for becoming externally-funded programs. The program is a campus-wide competition that gives multi-college applications heavier weighting than single college applications in its proposal evaluation structure to encourage interdisciplinary research activities. The College is usually successful in receiving an Opportunity Award in each cycle.

Graduate Student Travel Funds

Travel funds are available to doctoral level students and students in other terminal degree programs who are invited to give major talks, are in their final year of their programs and are presenting work at a national meeting, or have a unique research or collaborative opportunity at an off-site location. These one-time awards are limited to \$400 per trip and require a dollar for dollar match from the college and/or department.

Graduate Student Council Travel Grants

These reimbursement-based grants may be used to cover travel-related expenses for presenting research or participating in professional development at a professional conference. Reimbursement may cover conference registration, transportation and lodging. Grants are provided to half-fund travel; the maximum grant is \$350.

Grinter Fellowships These fellowships are used by UF colleges to recruit the highest quality graduate students. The Office of Research provides \$630,000

annually to fund Grinter Fellows in the College of Liberal Arts and Sciences, the Health Science Center colleges and the Colleges of Architecture, Business Administration, Education, Fine Arts, Health and Human Performance, and Journalism and Communications.

In addition to the UFRF and UF Office of Research support, the University supports research through the following other award programs. Each bullet is a link to a description of the program.

- Clinical and Translational Science Institute (CTSI) Awards
- International Center – Internationalizing the Curriculum Awards
- Center for Latin American Studies – Field Research Grants for Graduate Students
- Center for European Studies Funding Opportunities (e.g. course development, travel grants)
- UF Water Institute Program Initiation Fund
- Emerging Pathogens Institute (EPI) Seed Funding and Resubmission Support
- The Florida High Tech Corridor Council Matching Funds Research Program at the University of Florida
- UF Center for the Humanities and the Public Sphere Grant and Fellowship Opportunities
- W. Martin Smith Interdisciplinary Patient Quality and Safety Awards (IPQSA) Program

Faculty Enhancement Opportunity Awards (FEOs)

The University has also established faculty Enhancement Opportunity Awards (FEOs) to advance the academic/professional/scholarly abilities of faculty members. These awards are similar in intent to sabbaticals. However, FEOs are more flexible in nature and duration than traditional sabbaticals. FEO funds are expended primarily for salary/benefit offset, travel costs and/or fees for conferences or similar learning experiences.

Regulations Supporting Ethical Research Practices

The Office of Research is responsible for ensuring that research conducted at the University of Florida is carried out in compliance with established federal, state and local rules, regulations, policies, and procedures. All research involving human participants is reviewed by the University through its Institutional Review Boards (IRBs) to ensure that the participants' welfare and rights are protected as mandated by federal regulations. Research involving human participants may not be conducted without prior IRB approval.

All persons (faculty, staff and students) involved in human participant research are required to complete three trainings on the proper conduct of research: 1) HIPAA for Research (annual), 2) Local IRB video (every three years), and 3) either CITI or NIH Extramural Training (every three years). The trainings are online and compliance is monitored. All researchers are required to read the following documents and to

demonstrate (certification by testing) an understanding of the principles and policies contained in them in the HIPAA for Research training.

Belmont Report. The Office of Human Research Protections (OHRP) considers it unethical for anyone involved in human participant research not to have read the Belmont Report. It describes and explains the ethical principles that should be followed by such investigators: respect for persons, beneficence and justice:

<http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>.

Code of Federal Regulations. All human participant researchers must read 45 CFR 46. This document is the federal regulation that describes the authority and responsibility of Institutional Review Boards in protecting research participants:

<http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html>.

IRB Policies and Procedures. All researchers must read and follow the IRB Policies and Procedures: <http://irb.ufl.edu/docs/irb01ppmanual.doc>.

Researcher Responsibilities. All researchers must read and observe these responsibilities: <http://irb.ufl.edu/researcherresponsibilities.htm>.

HIPAA for Researchers. Researchers are required to demonstrate awareness of the privacy safeguards for research participation as detailed by the Health Insurance Portability and Accountability Act (HIPAA):

<http://privacy.health.ufl.edu/training/ResearchPrivacy/online.shtml>

College of Public Health and Health Professions Research Policies and Practices

As previously noted, a key focus of the mission of the College is to conduct and disseminate timely research that is responsive to priority health needs at local, state, national and international levels. The PHHP Office of Research is dedicated to fostering the scientific advancement and novel ideas of our College's researchers and providing helpful information, guidance and assistance in navigating the overall administration of those projects.

The office is led by the Associate Dean for Research and Planning, Dr. Linda Cottler. Staff members include two research program coordinators, a statistical research coordinator, four senior grants specialists, and two grants assistants. The staff has an average of 20 years of experience in grants management and are sought after to be involved in University-wide strategic planning committees because of their expertise.

The PHHP Office of Research is a customer service oriented team that serves to:

- Support the faculty in all research pre-award activity to increase the College's level of research funding of all types. The Office informs faculty and students of individual and collaborative funding opportunities and supports faculty and staff throughout the grant process, from grant development to submission.
- Support the faculty in all post-award activity, including compliance issues, ethical issues, fiscal and report management. Each faculty member has his/her own

- grants specialist who oversees the award from submission through research completion.
- Contribute to the development of the faculty and students' research skills through facilitation of research-related educational and service activities, such as research mentorship and leadership modeling, internal peer review of grant writing, and review of grant administration and compliance procedures and regulations (e.g., research ethics, human and animal biohazards, HIPAA, conflict of interest, and misconduct in research).
 - Facilitate and ensure compliance with all relevant grant application and administration processes.
 - Disseminate information and hear viewpoints of faculty during Town Hall Meetings with faculty and staff, and focus groups with faculty led by Associate Dean Cottler.

Specific activities in which the College engages in support of these aims include:

- Junior faculty members are assigned a mentor or a mentorship committee to provide guidance in the initiation and the development of their programs of research.
- Junior faculty members in the tenure track are provided with assigned time (25% minimum) for departmental research (i.e., unfunded by external sponsors).
- The College provides tenure-track junior faculty members with laboratory space to conduct research activities, according to the needs of their research programs.
- A grant-writing workgroup, led by senior faculty members Linda Cottler, PhD, MPH, and David Fuller, PhD, assists faculty members in preparing grant applications. The group meets biweekly to assist faculty members with the various facets of grant preparation, ranging from concept development to response to reviewers' critiques. The intent of the workgroup is to provide a supportive and collegial environment to assist faculty in negotiating each stage of the grant process.
- The College provides for consultation with outside experts to review grant applications prior to their submission to external agencies. Outside experts are provided a \$500 consulting fee to provide written reviews of grant proposals.
- The College ensures that all faculty, staff and students complete the rigorous training offered at the University-level related to the proper conduct of research. Certifications of training completion (and renewal) are maintained in each department and reviewed on an annual basis.

All grant proposals that involve faculty or students of the College are reviewed and approved at four levels prior to their submission to external agencies. This includes approval by the department chair, a grant specialist, the College's Associate Dean for Research and Planning, and the director of the UF Division of Sponsored Programs.

The PHHP Office of Research coordinates the College's annual Research Day, which provides opportunities for students at all levels in the College to present their research and compete for research awards. At this event, we invite a keynote speaker to discuss a cutting edge topic. In 2012-13, Dr. Sandro Galea, Chair of Epidemiology at Columbia

University, presented, to a standing room only crowd, the role of public health in an era of personalized medicine. The Office also coordinates the College's Research Committee, composed of one elected faculty member per department and one doctoral student, which was developed to act for the faculty in matters relating to College and University research activities and awards. Specific duties include:

- Coordination and/or grant proposal review for specific activities and events, such as the UF Research Opportunity Fund, the Brooks Research Development Grants, and legislatively supported requests.
- Proposal review of and recommendation for recipients of specific University and College research grants and awards, including the graduate student mini-grants and PPHP Research Day awards.
- Provision of input on proposed or new PPHP, University and community research opportunities
- Periodic assessment of available research opportunities and recommendations for revisions, deletions, and/or additions to current research activities, awards and policies.

As noted in Criterion 1.4, the College has embraced a collaborative research program, entitled the Public Health-Health Professions Model Program Demonstration Projects. Its purpose is to support demonstration projects that are multidisciplinary and demonstrate the unique benefits of collaborative efforts between faculty and students in public health and those in health professions. The awards are designed to support new ideas and/or new collaborative partnerships, rather than existing ones. Initially, this initiative focused on faculty collaborations. As they became more established, the focus has shifted to student collaborations with faculty mentorship. To be competitive, proposals must be multidisciplinary and must involve students and faculty mentors from at least two departments or units within PPHP, with one representing a public health discipline and the other a health professions discipline. Up to \$10,000 in support for the projects is provided by the College.

Overall, the emphasis on collaborative research within the College has contributed to an increase in funded research projects with collaborators in other departments. The percentage increased from 64.7% in fiscal year 2011 to 69.6% in fiscal year 2013.

Collaborative Research across the University

As indicated in Criterion 1.1, collaboration in research is integral to the vision and mission of the College. PPHP faculty members are encouraged to participate in collaborative research with faculty from any college, center or institute across the University. In fiscal year 2013, 43.3% of funded research projects involved collaborations across University units.

Faculty members are actively involved in research projects coordinated through the Clinical and Translational Science Institute, the Emerging Pathogens Institute, the UF Health Cancer Center, and other multidisciplinary centers and institutes. In addition, Health Street, a community outreach effort developed by Dr. Linda Cottler, Co-Director

of the Community Engagement Research Program with the UF CTSA (the CTSI), serves the community by assessing needs and concerns from the community, linking individuals to medical and social services based on those needs and navigating people to opportunities to participate in health research. This program has assessed over 4,000 people in the Alachua County area; 70% of the participants are underrepresented populations. Students across the College and the University are getting involved in community engaged research through this program; studies are also moving out of the University walls and more into the community as a part of this program. Thus, the College has become a major link between the University and the community.

In 2011 the College of Public Health and Health Professions opened a public health field laboratory in Gressier, Haiti that allows researchers from several UF colleges to work with colleagues at the Haiti Ministry of Public Health and Population to quickly identify and contain infectious disease outbreaks. The lab is currently being used to conduct research on cholera, malaria, and aquatic pathology and toxicology, and a BSL3 facility for research on tuberculosis is under development. The Department of Epidemiology has recently joined the effort to emphasize a focus on non-communicable diseases in collaboration with Haitian partners from the National School of Medicine and Pharmacy in Port au Prince. Most research projects in Haiti are conducted through elementary schools; thus requiring collaboration with the local communities as well as the Ministry of Public Health and Population.

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

The development of a strong program of community-based research represents an important focus of the College. In addition to strong community involvement in HealthStreet and in the Haiti projects, the College is also home to the Florida Center for Medicaid and the Uninsured, which is dedicated to the improvement of health care delivery in Florida and the United States through multidisciplinary collaboration of academic and policy-making experts. The Florida Agency for Health Care Administration (AHCA) provides core funding for this center.

The mission of the Center is to conduct research, policy analysis and education on issues related to access, quality and cost of health care for underserved populations. Critical to the mission is the timely dissemination of information to policy makers, providers and advocates. The Center serves as a resource to the Agency for Health Care Administration for the study of issues pertaining to state health policy. In this regard, the Center engages in a contractual arrangement with AHCA to research issues that pertain to the development of policy options for Florida Medicaid and implementation of some provisions of the Affordable Care Act. The dissemination of data, findings and policy options to stakeholders is another key element of the Center's work. In addition to publication in major health services research journals, the Center produces and distributes its work in forms that appeal to policymakers. These include policy papers, issue briefs and fact sheets, which may be viewed at <http://fcmu.phhp.ufl.edu/publications/>. The

Center also holds periodic meetings and forums that engage Florida’s lawmakers, their staff and other advocates in meaningful health policy debates.

The College is also home to two NIH Fogarty International Training Programs. The Department of Epidemiology, in partnership with the National Institute of Mental Health and Neurosciences, Bangalore, India, is conducting additional work and training in the resource-poor Northeast Region of India —Sikkim and Assam. A study has been submitted to the Government of India to understand the risk factors for completed suicides in Sikkim — the area with the highest rate of suicide in India. The Department of Environmental and Global Health is partnering with Mongolian agencies to train multidisciplinary teams that will develop prevention and control techniques to mitigate zoonotic disease problems in Mongolia, using a One Health approach.

Research projects that are community-based are identified in Table 3.1.c.1. As shown in the table, 28.9 % of externally funded projects were conducted in or with community members.

3.1.c A list of current research activity of all primary faculty identified in Criterion 4.1.a, including amount and source of funds, for each of the last three years. These data must be presented in table format and include at least the following information organized by department, specialty area or other organizational unit as appropriate to the school: a) principal investigator, b) project name, c) period of funding, d) source of funding, e) amount of total award, f) amount of current year’s award, g) whether research is community based, and h) whether research provides for student involvement. See Data template 3.1.1; only research funding should be reported here. Extramural funding for service or training/continuing education grants should be reported in Template 3.2.2 (funded service) or Template 3.3.1 (funded training/workforce development), respectively.

Table 3.1.c.1 details the funded research activity of primary faculty in fiscal years 2011, 2012, and 2013. In addition to externally funded research, the College has acquired external funding for research training for junior faculty and students. These grants are listed in Table 3.1.c.2. Both tables are in the Resource File.

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

The outcome measures we have selected to monitor progress towards our research objectives are in Table 3.1.d.1 with corresponding five year targets. All research productivity measures are clearly important to the College. This particular set of outcome measures highlights areas of special emphasis.

Research productivity in the College has been growing steadily over the years, with a notable two-fold increase in external funding to faculty in the Public Health departments. This increase is consistent with a corresponding increase in the number of Public Health faculty in the College. The percent of tenured and tenure-track primary faculty who serve on funded research grants or contracts has also been increasing, and collaborative research within and outside the College continues to expand. The productivity of our tenured and tenure track faculty with regard to peer-reviewed publications and presentations remains steady and appropriate in light of teaching and service responsibilities and the range of publication/presentation norms across disciplines.

With regard to community-based research, there has been an increase in the number of grants submitted with an emphasis on CEnR. PCORI grant submissions have been a focus of our investigators, and CDC and other grants have been submitted as well, all with a focus on community engagement. With our HealthStreet program, we have developed a deeper understanding of the needs and concerns of our citizens and added this outreach component to many different grant submissions. Community engagement took another step in 2012-13 with the introduction of *Public Health Minute*, a public radio program developed by Dr. William Latimer, Chair of Clinical and Health Psychology. *Public Health Minute* is a venue for disseminating key advances in public health research to the public.

Table 3.1.d.1 Research Outcome Measures

Outcome Measures	Target	FY 2011	FY 2012	FY 2013
Research awards (amounts from grants and contracts) for primary faculty				
PH	\$14,500,000	\$6,077,719	\$8,519,825	\$13,393,273
HP	\$10,500,000	\$9,756,809	\$10,779,891	\$9,319,730
PHHP	\$25,000,000	\$15,834,528	\$19,299,716	\$22,713,003
Percent of tenured or tenure-track primary faculty who serve as investigators on funded research grants or contracts	90.0%	76.5%	81.7%	89.9%
Percent of funded research projects that are community-based	40.0%	24.6 %	32.3%	28.9%
Percent of funded research projects that involve collaborations across colleges, centers, and institutes at UF	45.0%	42.3 %	46.2%	43.4%
Percent of tenured or tenure-track primary faculty involved in funded research projects with named collaborators in other departments within the College	70.0%	64.7%	62.0%	69.6%
Number of peer-reviewed articles per tenured or tenure track primary faculty	5.0	4.9	4.6	4.7
Number of conference presentations per tenured or tenure track primary faculty	6.0	5.4	4.8	5.6

Outcome Measures	Target	FY 2011	FY 2012	FY 2013
Percent of students involved in faculty research	60.0%	NA	55.3%	58.3%

PH: Public Health departments

HP: Health Professions departments

Tenured or tenure-track faculty: N=68 2010-11, N=71 2011-12, N=69 2012-13

Data sources: Division of Sponsored Projects (DSP) database, principal investigators of funded research projects, FAR database, student surveys.

3.1.e Description of student involvement in research.

The College actively promotes the involvement of undergraduate and graduate students in research through a wide variety of mechanisms. These are described below:

Undergraduate Honors Program

Bachelor of Health Science students are offered the opportunity to participate in the College's honors program to become eligible to graduate magna or summa cum laude. In addition to specific GPA requirements, students must successfully complete an honors seminar (HSC 4969) and thesis course (HSC 4970). The Honors Seminar is completed during the junior year. This seminar focuses on current research in the College, research methods and appropriate hypothesis generation. It prepares students to develop an honors thesis project, which they complete in their senior year under the supervision of a faculty member. The honors thesis project includes a literature review, development of specific research hypotheses, determination of appropriate methods, data analyses (primary or secondary), and interpretation and discussion of findings. All students in the honors program must submit and present a research poster of their study at the College's annual Research Day. In addition, students expected to graduate summa cum laude must complete a written thesis of their project. During academic year 2012-13, 35 students successfully completed the College's undergraduate honors program.

Research Required for Degree

Each PhD degree program offered by our College has specific research requirements. All candidates for Doctor of Philosophy degrees (Biostatistics, Communication Sciences and Disorders, Epidemiology, Health Services Research, Psychology, Public Health, and Rehabilitation Science) are required to complete a minimum of 12 credits of research and a research-based doctoral dissertation.

Assistantships

A limited number of research and graduate assistantships (typically 10-20 hours per week) that involve participation in research projects are available to students in the College. The availability of assistantships varies by department. Assistantships are commonly provided to graduate students pursuing doctoral degrees.

Graduate Student Research Grants

The College's Office of Research holds an annual competition in which graduate students are eligible to submit proposals for small grants (e.g., up to \$1,000) to support research

for which they serve as the primary investigator. Over the last two years, \$10,000 has been distributed to support graduate student research through this program.

College of Public Health and Health Professions Annual Research Day

Each spring the College hosts a research fair that highlights the research accomplishments of the graduate and undergraduate students in the College. All students conducting research are encouraged to submit and present a research poster at the fair. In 2012-13, 126 students presented a poster and 10 received a monetary award for their work, judged by the Research Committee. Another nine received top honors, a monetary award and gave a three- minute PowerPoint presentation. The top awardee presented a PowerPoint and also won the best presentation award along with a monetary award.

Student Participation in Faculty Research

Wherever possible, the College creates opportunities for students to participate in faculty research projects. Students often have paid positions as research assistants; however, they also may receive course credit for supervised or independent research that is based on a larger project of a faculty member. In addition, the College and individual departments support student research through a number of operational activities, such as funding for poster development and student travel.

As Table 3.1.d.1 shows, the 2012-13 student survey revealed that 58.3% of students were involved in faculty research in some capacity.

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

This criterion is met.

Strengths:

1. The College has a very active research portfolio that has grown steadily during the past decade to nearly \$23 million in 2012-13.
2. Research is developed and conducted within requirements and guidelines established by the University and the College.
3. The University and the College provide numerous mechanisms to support research activities, especially for junior faculty members.
4. The College has been successful in securing external support for junior faculty and student research training.
5. The number of specialists in the PPHP research grants core has increased.
6. Collaborative research within the College, with other colleges, institutes, and centers across the University, and with agencies in the community (including state and federal agencies) is strongly encouraged.
7. The majority of students engage in research activities.

Weaknesses:

1. The College has a limited number of program of project, training and center grants
2. While research productivity is growing steadily, visibility and recognition of research productivity and quality could be enhanced.

Plans:

1. Encourage submission of grant applications in each cycle.
2. Encourage submissions of program of project, training and center grant applications.
3. Continue to provide specialized training for grants specialists.
4. Promote visibility of the College's research productivity and quality by:
 - Increasing the number of prominent researchers invited to the College
 - Encouraging publications and presentations at scientific meetings
 - Developing and implementing plans for assuring national ranking of all departments