

#### **E4. Faculty Scholarship**

**The school has policies and practices in place to support faculty involvement in scholarly activities. As many faculty as possible are involved in research and scholarly activity in some form, whether funded or unfunded. Ongoing participation in research and scholarly activity ensures that faculty are relevant and current in their field of expertise, that their work is peer reviewed and that they are content experts.**

**The types and extent of faculty research align with university and school missions and relate to the types of degrees offered.**

**Faculty integrate research and scholarship with their instructional activities. Research allows faculty to bring real-world examples into the classroom to update and inspire teaching and provides opportunities for students to engage in research activities, if desired or appropriate for the degree program.**

Since 1985, the University of Florida has been a member of the Association of American Universities (AAU), a group comprising 65 leading research institutions of higher education in the United States and Canada. As highlighted in the [mission of UF Research](#) “The University of Florida strives to be the internationally recognized leader among research universities in creating new knowledge and technologies, performing research with impact, spawning new economic opportunities, and educating the next generation of leaders.” Consistent with UF Research’s mission, 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.

Research and scholarship play prominent roles in the activities of the faculty and students of the college. The college ranks ninth in NIH funding among schools of public health at public universities. In FY2020, investigators in the college were awarded \$44.9 million (\$35.8 million after transfers of sub-awards to collaborating investigators in other colleges and institutions). Among the university’s 16 colleges, PHHP ranked sixth in awards in FY 2020. Research productivity in the college has grown steadily since the last CEPH self-study in 2013, when total grants and awards were \$22.7 million.

##### **1) Describe the school or program’s definition of and expectations regarding faculty research and scholarly activity.**

All tenured and tenure-track faculty, as well as those non-tenure track faculty who are assigned research effort, 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. Regardless of track or focus (teaching, practice or research), scholarship includes the generation of new knowledge, new ideas to minimize or ameliorate public health problems, dissemination of findings and contributions to public health policy. Faculty focus on problems of significant public health concern locally, regionally, nationally and globally. These initiatives, in turn, offer opportunities for students to become involved. The expectations for each faculty member are conveyed in several ways:

- For new faculty: Department chairs discuss thresholds for engagement in teaching, research, practice (if applicable) and service with the dean, and offer letters clearly enumerate these criteria. New faculty are invited to a two-day, university-wide onboarding event that describes the university promotion and tenure process.
- For active faculty: Faculty enumerate the particulars towards their progress in multiple ways. The annual Faculty Activity Report details grants submitted and received, papers, books and chapters published, in press and submitted (along with the impact factor of the journal), presentations, professional service and other accomplishments. The chair may modify

assignments based on this report. Chairs meet annually with faculty to discuss progress and effort, including effort for research, which may range from none to 95%, depending upon the faculty member's track. On average, for a faculty member who is on the tenure track or whose mission includes teaching, research effort would be approximately 50% research, with the balance split between teaching and service. In general, every faculty member is expected to teach at least one course per year. Assignments are determined individually for each faculty member. In addition to annual meetings, faculty have semi-annual check-ins with the chair and ongoing regular meetings with their faculty mentors to review their progress towards their goals. Faculty are encouraged to attend annual college retreats focused on activities of interest that affect promotion and tenure, and to attend annual promotion and tenure information sessions to help clarify definitions and expectations.

## 2) Describe available university and school or program support for research and scholarly activities.

Support for research and scholarly activities is presented as (A) university infrastructure support; (B) UF sponsored research support; (C) UF centers and institutes and (D) college-wide research support.

A) University Infrastructure Support: Support for research comes from multiple sources at UF and includes the Office of the Senior Vice President for Health Affairs of the AHC, UF Research and UF's Research Foundation:

- The Office of the Senior Vice President for Health Affairs oversees the colleges in the AHC. An associate VP for research oversees the McKnight Brain Institute, Institute on Aging, UF Health Cancer Center, Inter-Professional Education, Institute for Child Health Policy, the Genetics Institute, the Emerging Pathogens Institute, the Clinical and Translational Science Institute (CTSI) and the AHC associate deans for research and education.
- UF Research has administrative oversight for all research activities at the University of Florida. It is directed by the vice president for research and houses the [Division of Sponsored Programs](#) (DSP) and other offices, programs and services to enhance and supplement research and provide infrastructure support as described below. The DSP facilitates UF's approval process for all extramural proposal submissions, accepts and administers grant awards, grant accounting, award closeout, forms and templates and negotiates contracts and other research-related agreements on the behalf of the university. Additional divisions supported by UF Research include:
  - [Division of Research Program Development](#): identifies funding opportunities for faculty, manages internal funding programs, coordinates UF applicant selection for limited submission programs and helps plan and coordinate large, interdisciplinary research initiatives.
  - [UF Research Integrity](#): assists faculty, staff and students to conduct research in compliance with applicable research regulatory requirements and institutional policies, including disclosures of international venues and export controls as well as promoting compliance while facilitating research.
  - [Division of Contracts and Grants](#): provides services while protecting the university's interests in the most efficient and responsible manner possible.
  - [Division of Research Operations and Services](#): facilitates research within applicable regulatory requirements through collaboration with faculty, staff, students and other units around campus to not only ensure compliance but also to streamline and simplify required processes and improve efficiency. The Institutional Review Boards (IRBs) and Animal Care Services are within this division. The division ensures research is carried out in compliance with established federal, state and local rules, regulations, policies, and procedures. To

ensure that the participants' welfare and rights are protected as mandated by federal regulations, all research involving human participants is reviewed by the university through its IRBs.

- Other UF Office of Research offices are available as resources:
  - [UF Innovate](#) supports an innovation ecosystem at UF that moves research discoveries from the laboratory to the market, fostering a resilient economy and making the world a better place.
  - [Business Operations](#) within UF Research include the Business Office, Information Services and Personnel and Administrative Services.
  - [Explore Research at the University of Florida](#) promotes UF 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.
  - [UF Research Foundation](#), a not-for-profit, direct support organization, promotes, encourages and provides assistance to the research activities of university faculty, staff and students.

B. UF Sponsored Research Support: In addition to the services described above, the Office of Research distributes indirect costs back to the colleges after the allocation of certain central costs. These include returns to investigators (10%), departments (7.5%), and centers (7.5%). Listed below are other opportunities for research support available to UF faculty:

- Distinguished Professor/Curator: This award acknowledges an exceptional record of achievement in the areas of teaching, research and publication, and professional and public service that is recognized both nationally and internationally. The final decision is made by the president with the advice of the academic personnel board. PHHP has had one recipient in the past three years: Dr. Krista Vandeborne (Physical Therapy).
- UF Research Foundation Professorships: These annual awards recognize faculty research contributions. Each professorship is awarded for a three-year period and generally 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 colleges. In recent years, PHHP faculty who have received this award include Dr. Tara Sabo-Attwood (Environmental and Global Health 2020), Dr. Ronald Cohen (Clinical and Health Psychology 2019), Dr. Michael Robinson (Clinical and Health Psychology 2018) and Dr. Ira Longini (Biostatistics 2017).
- Research Opportunity Seed Funds: This annual seed grant program targets interdisciplinary, faculty-initiated new research initiatives with potential support up to \$100,000 over two years. The following PHHP faculty have received this award over the past three years: Dr. Joseph Bisesi (Environmental and Global Health 2020), Dr. Russell Hepple (Physical Therapy 2020), Dr. Andrew Judge (Physical Therapy 2020), Dr. Russell Hepple (Physical Therapy 2019), Dr. David Fuller (Physical Therapy 2018) and Dr. Jinying Zhao (Epidemiology 2017).
- Excellence Awards for Assistant Professors: The Provost's Office offers the Excellence Awards for assistant professors recognizing excellence in research. Each award is a one-time allocation of \$5,000 in support of research. Recent awardees have included Dr. Natalie Dean (Biostatistics 2020), Dr. Kathryn Ross (Clinical and Health Psychology 2019) and Dr. David Fedele (Clinical and Health Psychology 2017).
- Faculty Enhancement Opportunity (FEO) Awards: This award advances the academic/professional/scholarly abilities of faculty members in the AHC. The award is approximately \$40,000 and is sponsored by the President's Office. PHHP has typically won approximately two per year to support meetings, career development, research initiatives not

otherwise able to be funded, sabbaticals and other initiatives. Recent awardees include: Dr. Song Liang (Environmental and Global Health 2019), Dr. Mattia Prosperi (Epidemiology 2019), Dr. Krishna Vaddiparti (Epidemiology 2019), Dr. David Fedele (Clinical and Health Psychology 2017), Dr. Tara Sabo-Attwood (Environmental and Global Health 2017), Dr. Catherine Striley (Epidemiology 2017) and Dr. Duane Dede (Clinical and Health Psychology 2016).

- Moonshot Initiative: The UF Office of Research, with the Office of the Provost, launched a new competition to fund select projects designed to help solve critical problems affecting people, places, or the planet. Called “moonshot” proposals, they describe ground-breaking projects that will likely significantly shift fundamental knowledge with great potential for a long-term impact. Projects are expected to assemble expertise involving participation of multiple colleges or units. The proposals receive up to \$250,000 per year for three years. Two rounds of proposals have been funded to date. PPHP investigators are involved in several of the proposals.
- TARGET Initiative: Sponsored by the UF Office of Research, TARGET was initiated in 2019 to allow funded investigators to visit project officers in Washington, D.C. at the NIH, National Science Foundation or other major agency. Two teams of four to five faculty, headed by a team lead, organize one and a half day visits to the NIH to attend the public portion of Council, followed by visits to select project officers. Additionally, the teams meet with congressional staff to inform them of the research they are doing. This effort is intended to increase visibility of UF research.
- Southeastern Conference (SEC) Visiting Faculty Travel Grant Program: The Southeastern Conference Academic Consortium award is available for up to \$2,500 to enhance faculty collaboration that stimulates scholarly initiatives among SEC universities. The faculty member contacts a host and arranges visits. Dr. Mattia Prosperi in the Department of Epidemiology received this grant in 2017-2018.
- Office of Research Graduate Student Travel Funds, Graduate School Travel Funds and Graduate Student Council Travel Grants: Highest award priority for these grants is given 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 awards require matching funds from the department and/or college. Students in PPHP are routinely successful in obtaining these funds each semester.

#### C. UF Centers and Institutes:

- UF has approximately [180 approved centers and institutes](#) that serve to enhance the university’s teaching and research functions by facilitating interdisciplinary cooperation and providing campus research instrumentation facilities and services. Centers and institutes solicit members who are allowed to designate up to 7.5% of the IDCs from their grant expenditures (which would otherwise go to the college). These funds are then expected to be used to support graduate student research, travel to conferences to report findings, shared equipment not otherwise available and other research related activities. PPHP has been awarded eight [centers and institutes](#).
- Other centers and institutes that receive additional UF, state and/or NIH funds and are considered major resources to the campus include: the [Clinical Translational Science Institute](#), [Emerging Pathogens Institute](#), [McKnight Brain Institute](#), [Institute on Aging](#), [Diabetes Institute](#), [Center for Addiction Research and Education](#), [UF Health Cancer Center](#), [Center for Arts in Medicine](#), [Florida Blue Center for Health Care Quality](#) and [Southern HIV and Alcohol Research Consortium](#). These major programs give significant support to investigators in the college; in fact, several faculty have major roles or direct these centers and institutes, thus giving PPHP students and junior faculty needed resources to conduct innovative research or disseminate their findings.

- The CTSI at UF is one of over 60 NIH NCATS-funded hubs to support research that enhances bench to community research. One of the hallmark efforts of a CTS award is research support. UF is fortunate to have such a hub and it participates with other hubs on a number of initiatives from cancer to cognitive impairment to opioid misuse. Some of the research related resources are:
  - The [CTSI Service Center](#) provides numerous services to investigators to support research. Services include: study design, data management and software training, assistance navigating regulations, participant recruitment and assistance conducting and providing translational technologies.
  - [CTSI Pilot Project Awards](#) support research across UF's broad range of scientific disciplines. Areas include translational pilot projects designed to impact practice-based health care, hospital care or the translational research process. The CTSI Learning Health System Program Translational Pilot Award is being offered for the first time in 2020 for specific Translational Pilot Awards that use a "learning health system" approach to align research and clinical operations in order to improve health outcomes and advance health equity using informatics, stakeholder engagement, implementation science and other methodologies to address one or more priority areas at UF Health. The CTSI Precision Health Initiative Pilot Funding Opportunity supports the development of methods, interventions or integrative models with the potential to advance precision health.
  - CTSI [KL2 Career Development Awards](#) provide junior faculty with two years of financial support and research training to develop the skills necessary to build a well-funded, collaborative career in clinical/ translational research.
  - The [CTSI Translational Workforce Development Program](#) provides educational opportunities that facilitate the training of clinical and basic science investigators, clinical trialists, laboratory technicians, study coordinators and other related personnel required to establish and support multi- and interdisciplinary clinical and translational researchers and research teams.
  - The [UF Health Cancer Center](#) is another UF designated center with significant state-allocated resources for collaborative research. [Pilot awards](#) are available in various areas including population science.

#### D. College-wide Research Support:

- A key focus 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 PPHP Office of Research is dedicated to fostering the scientific advancement and novel ideas of the college's researchers and providing helpful information, guidance and assistance in navigating the overall administration of those projects. An administrator leads the PPHP Research Grants Core office; in addition, there are six senior research administrators, and two research administration assistants. Staff members have an average of 15 years of experience in grants management. The PPHP Office of Research is a customer service-oriented team that:
  - Supports the faculty in all research pre- and post-awards to increase the college's level of research funding of all types. The office supports faculty and staff throughout the grant process, from grant development to submission.
  - Manages compliance and ethical issues, as well as fiscal and project management reporting.
  - Contributes to the development of the faculty and students' research skills through research mentorship and leadership modeling, internal peer review of grant writing, 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).
- 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.
  - The college provides tenure-track junior faculty members with laboratory space to conduct research activities, according to the needs of their research programs.
  - The monthly Aims grant-writing workgroup, led by the associate dean for research, assists faculty members in preparing grant aims. The workgroup provides a supportive and collegial environment to assist faculty in negotiating each stage of the grant process.
  - The college offers faculty consultation with outside experts who provide written reviews of grant applications prior to their submission to external agencies. 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.
  - 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, the college invites a keynote speaker to discuss cutting edge, innovative topics. The office also coordinates the college's Research Committee, composed of one elected faculty member per department and one doctoral student. The committee was developed to act for the faculty in matters relating to college and university research activities and awards.
- The college currently has six active Ruth L. Kirschstein Institutional National Research Service Awards (T32): three in the Department of Epidemiology, two in the department of Physical Therapy and one in the Department of Clinical and Health Psychology. These grants are funded by organizations such as the National Institute on Drug Abuse (NIDA), the National Institute on Alcohol Abuse and Alcoholism (NIAAA), the National Human Genome Research Institute (NHGRI), the National Heart, Lung, and Blood Institute (NHLBI) and the National Institute of Child Health and Human Development (NICHD). During these years, these grants have funded a range of 20 to 22 predoctoral students and six to eight postdoctoral researchers. This year, PHHP T32 awards have eight predoctoral and 22 postdoctoral slots.

### **3) Describe and provide three to five examples of faculty research activities and how faculty integrate research and scholarly activities and experience into their instruction of students.**

In PHHP, the blending of research and scholarly activities occurs in multiple ways and through faculty of all ranks and in all departments. The curriculum includes research experiences that range from methods and research design and developing assessments to writing grants and articles, interpreting data and disseminating information. In the time of COVID-19, many PHHP faculty have joined or led teams of investigators looking at the treatment of, testing for and assessment of the consequences of COVID-19 and are using those experiences in the classroom. The following are just some examples of how faculty integrate research and scholarly activities into their instruction of students.

- Dr. Tara Sabo-Atwood, Associate Professor and Chair of the Department of Environmental and Global Health, teaches PHC 6313 Environmental Health Concepts in Public Health. She introduces students to ongoing research projects as case studies. Through these case studies, she covers core environmental health concepts such as air pollution monitoring. Learning about these case studies leads to research opportunities for students that further allow them to engage in hands-on activities such as data collection, analysis and dissemination. These projects are typically multidisciplinary, providing students the opportunity to engage with a team of academic researchers and community partners. As an example, several graduate students are working on a project to engage children and families with "green space" for health benefits. The project involves measuring air quality and working with physicians, USDA Forestry personnel, the Gainesville Parks and Recreation Department and the Department of Health. The data have provided foundational information that has been incorporated into grant proposals and a hospital recommendation report. This project was a direct result of Dr. Sabo-Attwood participating in

a year-long highly competitive leadership program (Executive Leadership in Academic Medicine). Additionally, Dr. Sabo-Attwood was instrumental in overseeing more than 30 faculty, staff and students in conducting COVID-19 testing on campus during the early months of the pandemic.

- Dr. Ashby Walker, Assistant Professor in the Department of Health Services Research, Management and Policy, is a sociologist and Director for Health Equity Initiatives at the University of Florida Diabetes Institute. Dr. Walker's research as a medical sociologist focuses on Type 1 and Type 2 diabetes and the role that social capital plays in determining health outcomes. She is the principal investigator for several funded studies that promote health equity for vulnerable populations with diabetes, including the All for ONE! Program, a novel service-learning intervention using college students with Type 1 diabetes as mentors for vulnerable teens with Type 1 diabetes. Dr. Walker is the recipient of five teaching, mentoring and curriculum development awards. She incorporates her research into her teaching for PHC 6405 Theoretical Foundations of Public Health and PHC 6403 Adolescence, Risk Taking and Health. She spearheads a highly innovative curriculum where undergraduate and graduate students living with diabetes take a directed research course about diabetes that exposes them to the major research on diabetes at UF and to career pathways in diabetes research. She recently published on her integration of research into teaching in Medical Science Educator and was chosen by The ADA's Diabetes Forecast Magazine (with a readership of over 6 million) as one of the 2019 "[People to Know](#)" for her integration of research into student curriculum.
- Dr. Ira Longini, Professor of Biostatistics, and Dr. Natalie Dean, Assistant Professor of Biostatistics, are currently working on the assessment of vaccine efficacy for COVID 19. They are also working on further analysis of the effectiveness of the VSV Ebola vaccine on both the protection of vaccinated individuals and the overall protection of vaccinated populations. Students are involved in funded research, through NIH and the World Health Organization (WHO), in this area to assess better methods for estimation of vaccine efficacy for the Ebola vaccine and a host of other vaccines that are in development for the control of emerging infectious diseases, including the current COVID-19 pandemic. Both Drs. Longini and Dean integrate these research and scholarly activities and experiences into their instruction in their methods and modeling courses, including PHC 6937 Analytic Methods for Infectious Diseases and PHC 6059 Introduction to Applied Survival Analysis. In addition, students get involved in their active research on the transmission and control of dengue and other arboviruses in the Americas. Drs. Longini and Dean have a recently-funded NIH grant for a cluster-randomized clinical trial on the use of indoor residual spraying to control arbovirus transmission in Yucatan, Mexico, which includes design and analysis of this trial. The research is expanding to the assessment of dengue and Zika vaccines, as well as more advanced mosquito control with Wolbachia. They integrate these experiences with their courses as well.
- Dr. Sarah McKune, Assistant Professor in the Department of Environmental and Global Health, teaches PHC 6764 Global Health and Development I. In this course, she introduces students to key concepts in global health, particularly as they relate to and contribute to the Sustainable Development Goals. At the beginning of the semester, students are invited to join a select number of Dr. McKune's ongoing research projects. Examples of student work on existing research projects include grant proposal development, training module development and design, survey instrument development, adaptation of existing instruments to specific context/use, index development, secondary data analysis and publications. Specific examples include analysis of secondary data collected through a Bill and Melinda Gates Foundation award in Ethiopia; development of training materials for a USAID funded health education and behavior change project in Burkina Faso; and contribution to a publication on the importance of human nutritional outcomes in livestock development projects in low and middle-income countries. Student involvement in research through Dr. McKune's class has fostered student publications, ongoing research involvement in Dr. McKune's and other faculty research labs, and student interest in global health career trajectories. In addition, it has served as a

recruitment opportunity for students outside the public health program, many of whom go on to complete an MPH or a Graduate Certificate in Public Health.

- Dr. Linda B. Cottler is Associate Dean for Research and Dean's Professor of Epidemiology. In her PHC 7902 Scientific Writing Course, she teaches students the art of writing a research paper. Dr. Cottler is familiar with nearly all of the mentors' projects/datasets and integrates these activities into the coursework by discussing in detail the methodological aspects of all types of studies so that students learn lessons about qualitative to quantitative studies, and how to clearly write methods and results. Students in the course are required to submit a first authored publication, which means they explore various databases, develop hypotheses and perform data analyses from studies they are working on. The course discusses every aspect of journal writing from the title and abstract through all components including responding to editors' critiques. The course facilitates student involvement in scholarly activity in all areas, including ethical aspects of the college's research.

**4) Describe and provide three to five examples of student opportunities for involvement in faculty research and scholarly activities.**

Nearly 90% of the faculty are involved in research, and most involve their students in their research and scholarly activities, including publications in peer-reviewed journals. As shown in table B5-1.1, these percentages have been increasing over the past three years. Faculty submit at least one grant per year with nearly 75% of faculty submitting grants as PI: as a result, our students are highly involved in faculty research and scholarly activity.

- **Research Involvement with Real World Crises:** Students are involved in a number of research areas with immediate public health impact such as Ebola and COVID-19 as well as the opioid crisis and HIV infection. A team of faculty in Environmental and Global Health, including Drs. John Lednicky, Tara Sabo-Attwood, Sarah McKune, Eric Nelson and Anthony Maurelli, have paired with investigators from the College of Medicine and initiated COVID-19 testing, with student participation, in several regions and with several populations in Florida. They include older adults living in a local retirement community, underrepresented populations in Gainesville and Jacksonville and at P.K. Yonge, a UF K to 12 laboratory school. Ms. Jerne Shapiro in the Department of Epidemiology has been leading students in campus COVID-19 contact tracing initiatives through a unique partnership with the Alachua County Health Department. Dr. Robert Cook, a professor in the Department of Epidemiology, has involved students in the State of Florida study on medical marijuana. In addition, students across the college are involved in numerous studies with professors focusing on other real world crises, including pain, mental distress, food insecurity and others.
- **Involvement in Community Engaged Research:** HealthStreet, a community outreach effort developed by Dr. Linda Cottler, serves the community by assessing needs and concerns, 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 12,000 people primarily in North Central Florida and the Panhandle; 70% of the participants are underrepresented populations. Students across the college and the university get involved in community-engaged research through this program; some interview participants for baseline and follow-up interviews, some are involved in communications, while others are involved in administration and data management. Students must apply to work in this program and 25 are selected each semester to join the research team. Students take the lead in developing research hypotheses, and analyzing and writing up their data. Doctoral students also become involved by helping lead projects through a mentoring mosaic approach, writing articles and using data for their theses. Every 12 months, approximately 20 papers are published using HealthStreet data with students listed as co-authors or first authors.
- **Research Focused on Novel Methods in Data Science and Health Policy:** Master's and doctoral students are involved in faculty research and scholarly work in novel methods in

data science. Dr. Arch Mainous III, a professor in Health Services Research, Management and Policy, recently involved Master of Health Administration (MHA) students in a study that examined the value of Fitbits and other mobile fitness trackers on health outcomes like glucose, blood pressure and cholesterol. MHA students were involved because of the potential impact of the research on using these devices in health systems to manage and prevent disease. This project showed how evidence-based decision making acquired the data and yielded a peer-reviewed publication, a presentation at an international meeting and a feature on NBC's Today show. Another faculty member, Dr. Mattia Proserpi in the Department of Epidemiology, leads the [Data Intelligence Systems Lab](#) (DISL), promoting interdisciplinary team science, education and scholarly activities. Research activities include both theoretical and applied studies aimed at developing prediction models of future health and life aided by technology and data intelligence. Students are encouraged to participate in all scholarly activity and to engage in active contributions (e.g. research studies and presentations). Several prior and current students have attended, contributed and become part of the scientific team for the International Bioinformatics Workshop as well as other educational and training events.

- Research Focused on Conditions and Concerns that Affect College Students: The Student Health Epidemiological Analysis and Research (SHEAR) group consists of master's and doctoral level students from four departments (Biostatistics, Clinical and Health Psychology, Epidemiology and Health Education and Behavior) in the Colleges of Public Health and Health Professions, Medicine, and Health and Human Performance. It serves as a catalyst for public health-related surveillance of conditions and concerns that affect students at the University of Florida. SHEAR has faculty and clinical supervisors (Drs. Linda Cottler and Catherine Striley, Epidemiology; Dr. Shaun Boren, Director of the Student Affairs Office of Assessment and Research; and Dr. Jay Clugston, Departments of Community Health & Family Medicine and Neurology) who serve on its research committee. SHEAR works with a variety of data types from different sources on campus, including electronic medical records from the Student Health Care Center, extramural activities data from UF RecSports, and academic outcomes data from the Division of Student Affairs. SHEAR members have published four articles in peer-reviewed journals, presented their work at local research meetings as well as internationally recognized conferences (including the American Public Health Association), and currently have eight other papers in progress.

##### **5) Describe the role of research and scholarly activity in decisions about faculty advancement.**

[University of Florida Tenure and Promotion Guidelines](#) state that all tenure track faculty must have a minimum of 10% of their effort assigned to research.

[PHHP Tenure and Promotion Guidelines](#) clarify expectations for research. Noted below are the guidelines by rank for tenure and non-tenure track faculty.

For Research Distinction for Promotion to Associate Professor on the Tenure Track:

- The candidate must demonstrate attainment of or substantial progress toward achievement of a national reputation for his/her research. Distinction is defined by demonstration of independent scientific discovery and scholarship through the following three primary indicators:
  - Publications of peer-reviewed scientific articles in authoritative scholarly journals: The quality and impact of published articles are more important than the number published. Calculation of the candidate's publication h-index, providing the number of citations or citing the publication's impact factor may be added to the listing of publications as a means to demonstrate the candidate's impact in his/her field. The citation of the candidate's research as the basis for decisions and conclusions in governmental reports, clinical guidelines and authoritative reviews, represents an important indicator of the impact of the candidate's research and scholarly accomplishments. Success in the publication of peer-reviewed scientific articles should be judged relative to the productivity of faculty in the same or similar

disciplines in like departments or programs at peer institutions (e.g., public universities that are members of the Association of American Universities [AAU]).

- Success in attaining significant grant support: Serving as a principal investigator for extramurally funded research is a key consideration in determining whether a faculty member is making progress toward achieving distinction in research at a national level. Success in attaining grant support is judged relative to the productivity of faculty in the same or similar disciplines in like departments or programs at peer institutions (e.g., public universities that are members of the Association of American Universities [AAU]). Wherever possible, comparisons and evaluations are based on information from empirical databases. UF uses the Academic Analytics database as a guidepost for departments. The associate dean for research compiles reports once a year for department chairs to consider in individual annual evaluations.
- Judgments of nationally recognized experts: Letters of evaluation from nationally recognized experts are solicited. External reviews by these experts stating that the candidate has made significant progress toward achieving a national reputation based on excellence in research represents an important indicator of distinction. Secondly, there are other activities indicating a national reputation including invited publications, service as peer reviewer for scholarly publications or editorial board members, reviewer of abstract submissions to relevant external conferences, grant reviewer, membership and/or leadership in national scientific societies/committees, invitations to chair sessions and present findings at national meetings, being awarded patents and awards of excellence including serving in a leadership role in a program project or center grant.

For Research Distinction for Promotion to Professor on the Tenure Track:

- Promotion to professor in the tenure track requires attainment of distinction in teaching and research beyond what is expected of promotion to associate professor. The candidate must demonstrate attainment of a national and/or international reputation for his/her research. Distinction for promotion to professor is defined by demonstration of sustained independent scientific discovery and scholarship through the following three primary indicators:
  - Publication of peer-reviewed scientific articles in authoritative scholarly journals: As noted previously, quality and impact of published articles are more important than the number published and this is determined through the h-index, number of citations, or citing the publication's impact factor. Success in the publication of peer-reviewed scientific articles is judged relative to the productivity of faculty in the same or similar disciplines in like departments or programs at peer institutions (e.g., public universities that are members of the Association of American Universities [AAU]).
  - Success in attaining significant, sustained grant support: Serving as a principal investigator for significant, sustained extramurally funded research is a key consideration in determining whether a faculty member has achieved distinction in research at a national level. Success is judged relative to the productivity of faculty in the same or similar disciplines in like departments or programs at peer institutions (e.g., public universities that are members of the Association of American Universities [AAU]). Wherever possible, comparisons and evaluations are based on information from empirical databases.
  - Judgments of nationally or internationally recognized experts: Letters of evaluation from nationally or internationally recognized experts will indicate that the candidate has achieved a national and/or international reputation based on excellence in research. This is the essential indicator of distinction. Secondary but important indicators of progress toward achieving a national or international reputation include participation in the same activities as noted above with the distinction of international prominence.

For Research Distinction for Promotion to Associate Professor on the Non-Tenure Track:

- A candidate with a primary mission in research may be promoted to research associate professor or associate research scientist with the demonstration of significant progress toward distinction in research as documented by the following types of accomplishments: publication of peer-reviewed articles in authoritative scholarly journals, participation as a co-investigator (or PI) in attaining significant grant support, publication of review articles, presentation of research findings, participation in national advisory committees for research foundations, federal funding agencies or other authoritative bodies, and award of patents for scientific inventions.

For Research Distinction for Promotion to Professor on the Non-Tenure Track:

- Promotion to research professor and research scientist requires demonstration of a sustained record of achievement beyond the level of research associate professor, and associate research scientist. A candidate with a primary mission in research may be promoted to research professor or research scientist with the demonstration of sustained distinction in research as documented by the following types of accomplishments: sustained record of peer-reviewed articles in authoritative scholarly journals, sustained participation as co-investigator (or PI) in attaining and sustaining significant grant support, publication of review articles, chapters, books and other forms of enduring scholarly work and communications, presentation of research findings at invited meetings of scientific societies, participation in national advisory committees for research foundations, federal funding agencies or other authoritative bodies, and award of patents for scientific inventions. Demonstration of the candidate's reputation within his/her discipline should be documented through participation as peer reviewer of grants, abstracts and manuscripts; service on editorial boards; leadership within leading national scientific societies of the candidate's field; and chair or moderator of sessions for presenting original research at national meetings. These criteria are further detailed in the tenure and promotion document.

**6) Select at least three of the following measures that are meaningful to the school or program and demonstrate its success in research and scholarly activities. Provide a target for each measure and data from the last three years in the format of Template E4-1. In addition to at least three from the list that follows, the school or program may add measures that are significant to its own mission and context. Schools should focus data and descriptions on faculty associated with the school's public health degree programs.**

- **Percent of faculty (specify primary instructional or total faculty) participating in research activities**
- Number of faculty-initiated IRB applications
- Number of students advised
- Number of community-based research projects
- **Number of articles published in peer-reviewed journals**
- **Total research funding**
- Number of citation references
- Presentations at professional meetings
- Support for development and mentoring of new faculty
- **Number of grant submissions**

The college monitors research progress monthly by department and has set its targets to coincide with the Annual Research Report. This process has been in place for the past four years. As shown below, the public health faculty are doing an exceptional job with grant awards and participation in research activities. Approximately 95% of faculty participated in research in 2019-2020. Faculty published an average of 5.7 articles per year in peer-reviewed journals and tracked the impact of each of the journals in which they published. Articles are published in *Nature*, *Science* and other highly impactful journals. Total research funding has steadily increased. This past year, approximately 68% of faculty submitted an average of 2.7 grant proposals as PIs.

<b>Table E4-1: Outcome Measures for Faculty Research and Scholarly Activities</b>				
<b>Outcome Measures for PH Faculty</b>	<b>Target by 2022</b>	<b>2017-2018</b>	<b>2018-2019</b>	<b>2019-2020</b>
Total Research Funding of Primary Faculty (amounts from grants and contracts)	\$40,000,000	\$36,221,869	\$39,109,169	\$44,983,094
Percent of faculty participating in research activities <sup>1</sup>	90%	50/57= 88%	57/65=88%	63/66=95%
Number of articles published in peer reviewed journals	6 per year on average	5 per year on average (range 0 to 19)	5 per year on average (range 0 to 20)	5.87 per year average (range 0 to 20)
Percent of faculty publishing articles in peer reviewed journals	90%	88%	88%	85%
Number of articles authored by PPHP faculty that were published in high impact journals	20%	IF 5-10 = 51 IF >10 = 35	IF 5-10 = 62 IF >10 = 29	IF 5-10 = 73 IF >10 = 32
Number of grant submissions as PI	1.5 per person per year	(n=57) 1.8 per person	(n=65) 1.7 per person	(n=66) 2.7 per person
Percent of faculty submitting grants as PI	75%	72%	70%	68%
Number of grants received -as PI -as Co-I	75 100	53 104	72 117	70 118
Percent of faculty who received a grant -as PI -as Co-I	55% 60%	49% 63%	58% 55%	52% 58%
Number of national/international meetings hosted by departments or at the college level	18	16	16	14
Number of presentations by national and international leaders at college seminars/lecture series/meetings	132	124	174	95

<sup>1</sup>has submitted a grant as PI or Co-I or received a grant as PI or Co-I

**7) If applicable, assess strengths and weaknesses related to this criterion and plans for improvement in this area.**

As noted above, the university and college have provided substantial resources to support faculty and students in their research and scholarly activities, resulting in tangible increases in research productivity with respect to peer-reviewed publications and research grant awards. The increased productivity has enhanced the university's reputation and ranking. Since the last accreditation visit, UF has risen in the rankings of U.S. News & World Report from #14 among public universities to #6, and the college has risen from #12 to #9 in NIH funding for schools of public health at public universities. The rise in the college's research productivity has been the result of multiple factors, including the planned recruitment of tenured and tenure track faculty with strong research skills, the development of grant writing skills among junior faculty via the college's ongoing grants workshop, the provision of support for internal and external reviews of grant applications prior to agency submission, the allocation of resources to support student involvement in research, and a strong commitment to research growth from leadership in the college and the university.

Strengths:

- PPHP is very strong in research, with faculty at the cutting edge of their disciplines and students who are well prepared in research through their courses of study, the mentorship they receive from faculty, and their involvement in conducting research studies addressing problems of enormous significance.
- The college and the university have taken a proactive approach to growing its research enterprise through targeted faculty recruitments and strong support for research activities.
- Renowned research experts at UF attract excellent students, who in turn receive excellent research training that addresses real world public health issues.

Weaknesses:

- National and international visibility and recognition of PPHP research productivity can be improved further.

Plans for improvement:

- Encourage submission of grant applications in each cycle that are both internally and externally reviewed.
- Continue to provide specialized training for our grants specialists.
- Invite distinguished researchers to UF for lectures and seminars.
- Encourage participation at APHA and ASPPH meetings.
- Develop and implement plans for assuring national ranking of all departments.
- Continue to encourage faculty members to publish in journals with high impact factors and/or the journals that are held in the highest regard in their specific fields.
- Continue to work closely with the Departments of Health, both locally and at the state level, on time sensitive critical issues, such as infectious disease research, including vaccine research, research on willingness to be tested and other factors related to COVID-19.