

REQUEST FOR PROPOSALS
2019 Cohort - Water Institute Graduate Fellows Program

The University of Florida Water Institute is soliciting proposals for the 2019 Water Institute Graduate Fellows (WIGF) program. This program will fund an interdisciplinary cohort of PhD-level Graduate Fellows to conduct integrative research, in collaboration with their advisors and other members of the team, in an emerging area of water science, broadly interpreted to include social, natural, and engineering sciences. For a complete description of the WIGF program see Appendix A.

The following have committed Graduate School Funding Awards (GSFAs) to support doctoral students in the Water Institute Graduate Fellows program:

- College of Agricultural and Life Sciences 2 GSFAs
- College of Liberal Arts and Sciences 2 GSFAs
- School of Natural Resources and Environment 1 GSFA

Other Colleges/Schools affiliated with the Water Institute may provide additional Graduate School Funding Awards on a case-by-case basis.

The Water Institute leverages investments in the WIGF program by facilitating integrative activities to support development of the cohorts into cohesive interdisciplinary cadres of professional researchers. The Water Institute provides group facilitation; assistance with design, funding (up to \$25,000), execution and evaluation of integrative activities; and proposal-writing assistance for development of external funding for research by the Fellows. Cohort participation in WIGF program evaluation is expected.

Proposal Requirements

Diverse group of faculty: Proposals must include at least 5 Water Institute Affiliate Faculty who are eligible to advise students in participating Colleges/Schools (CALs, CLAS, SNRE). Faculty who are currently major advisors of 2017 WIGF Fellows are not eligible to participate in the 2019 WIGF cohort.

Inclusion of faculty members from other Colleges and professional schools affiliated with the Water Institute is encouraged because of demonstrated benefits to doctoral students and their faculty advisors of participation in such an interdisciplinary program. The Water Institute Director would be pleased to participate in meetings with faculty and Deans from other colleges to assess their interest in joining the WIGF program.

Comprehensive interdisciplinary theme: Proposals must describe a comprehensive interdisciplinary theme in an existing or emerging area of water science that will serve as the foundation for Graduate Fellow activities and is appropriate for doctoral-level research. The proposal should describe major individual research efforts for each of the Graduate Fellows and how they would be integrated to form the thematic basis for the interdisciplinary project.

Research efforts should be described in sufficient detail for reviewers to assess their disciplinary scientific merit and relevance to the interdisciplinary project theme. Please keep in mind, however, that proposals should be written in a manner appropriate for an interdisciplinary review panel. The proposal should describe existing funding available to support the proposed research, and specific plans to obtain additional external funding for Graduate Fellow research expenses.

Strong collaborative interactions: In addition to describing individual and collaborative research within the proposed theme, the proposal must describe activities that will enhance the cohort's integration and help them develop skills to work in a collaborative interdisciplinary environment. Collaborative and research activities should be integrated and designed to enhance trans-disciplinary competencies such as fostering the ability to work in diverse teams; creating a system of communication and exchange that keeps cohort engaged; providing instruction in ethics and the responsible conduct of research; and/or providing training in communication of the substance and importance of research to disciplinary experts, interdisciplinary collaborators, and lay audiences. Examples of potential integrative group activities include joint field experiences; development and team teaching of undergraduate courses; group projects with external stakeholders; participation in training programs focused on skill-building in interdisciplinary teamwork, leadership, communication and information sharing; joint paper writing, joint proposal writing, and organization and participation in interdisciplinary seminar series (i.e. Water Institute Distinguished Scholar Seminar series) and conferences (i.e. Biennial Water Institute Symposium).

Submission Guidelines

Proposals must be submitted electronically to the Water Institute (wgraham@ufl.edu) by **Monday, September 24, 2018** and should consist of the following:

- **Cover Page** signed by the PI and Co-PIs, with project title, faculty team and their affiliations.
- **Interdisciplinary Research Theme** (6 pages max) including description integrative interdisciplinary theme; background data and information to support theme; disciplinary and collaborative research questions and methods; and existing and potential sources of external funding for proposed Graduate Fellow research.
- **Proposed Integrative Activities** (3-page max) including a description of overall team-building approach, philosophy and previous experience working in interdisciplinary teams; and a detailed description of the suite of integrative activities, with individual goals, timeline, budget (up to \$25,000), and proposed involvement of Water Institute staff for each activity.
- **Project Timeline** (1 page max) including timeline for student recruitment and selection, group proposal development, research and integrative activities, as well as the role and contribution of each member of the faculty team.
- **References** (2 pages max).
- **Curriculum Vitae** for the PI and Co-PIs (each 2-page max).
- **Statement of Unit-level Support** (Department or School) for the proposal and an indication of any specific teaching requirements that may be required of Graduate Fellows.

Submit proposals via email to the Water Institute (wgraham@ufl.edu) in Microsoft Word or pdf format. Documents must be single-spaced with 1-inch margins and at least 12-point font.

Proposals will be reviewed by the WI Faculty Advisory Committee and other faculty (internal or external to the University of Florida) with experience in interdisciplinary graduate research and education, using criteria outlined in Appendix B. Every effort will be made to notify Principal Investigators of awards by **Friday, October 26, 2018**.

For Additional Information

Faculty teams are encouraged to talk and/or meet with the Water Institute to answer any questions about the Request for Proposals or the Water Institute Graduate Fellows Program.

To do so, contact Wendy Graham, Water Institute Director (wgraham@ufl.edu)

Appendix A

2019 Water Institute Graduate Fellows Program Description

An important component of the Water Institute's Strategic Plan is to recruit and train outstanding graduate students to pursue careers in water-related science, engineering, policy, planning, and management, with an interdisciplinary focus. To help meet this goal, the UF Water Institute in 2010 established an innovative education and research initiative - the Water Institute Graduate Fellows (WIGF) program - with financial support from the Colleges of Agricultural and Life Sciences and Liberal Arts and Sciences and Directors of the Schools of Natural Resources and Environment and Engineering School of Sustainable Infrastructure and Environment.

The WIGF program is intended to meet the challenges of educating contemporary PhD-level scientists and engineers. A primary goal is to ensure interdisciplinary exposure and also provide appropriate depth of knowledge in chosen disciplines. The WIGF program supports institutionalization of the doctoral student cohort model developed as part of the UF Adaptive Management of Water Wetlands and Watersheds IGERT program, and will further develop a supportive environment for integrative research, training, and education in water-related sciences and engineering at UF.

The WIGF program funds interdisciplinary teams of doctoral-level Graduate Fellows to conduct integrative research, in collaboration with their major advisor, in emerging areas of water sciences and to participate in interdisciplinary graduate education and training activities. The program supports biennial cohorts of up to 6 PhD students by providing them with Graduate Research Fellowships that provide stipend and tuition for 4 years. The Water Institute also provides support for integrative activities to further the team's development into a cohesive interdisciplinary cadre of student and faculty researchers.

Proposal Review

The WI Faculty Advisory Committee (FAC) guides the WIGF program. The FAC reviews and selects the winning proposal, and in conjunction with the faculty members involved in the selected proposal, develops doctoral student recruiting plans and materials.

Doctoral Student Recruitment

The Water Institute advertises the Graduate Research Fellowships nationally, seeking top doctoral-student candidates to work with faculty on the selected proposal. A Graduate Fellow's selection committee, comprised of the faculty members associated with the successful proposal and select members of the FAC, reviews applicants and makes final selections. In selecting applicants, the selection committee works closely with the proposed major advisors and appropriate administrators to insure that applicants meet departmental, college, and university requirements. Special attention is given in the recruitment and selection process to increasing diversity and including members of underrepresented groups.

Evaluation

The Water Institute conducts annual evaluations of program effectiveness and needs using online surveys and other evaluation instruments. Results of these evaluations are shared with the appropriate WIGF cohort and the FAC to continually improve the WIGF program.

Criteria for Evaluating Long-Term Program Success

The goal of the Water Institute Graduate Fellows program is to produce professionals with a strong holistic understanding of the biophysical, technological, ecological, social and economic challenges to sustaining water resources. The success of the WIGF program is measured by:

- Quality and diversity of Graduate Fellows
- Level of participation of Graduate Fellows and their major advisors in interdisciplinary team-building activities
- Relevance and quality of Graduate Fellow research
- Number and quality of external proposals prepared, submitted and funded by WIGF cohorts
- Numbers and quality of peer-reviewed publications, white papers and presentations at professional meetings by Graduate Fellows
- Professional placement of Graduate Fellows

Appendix B

Proposal Evaluation Criteria - 2019 Water Institute Graduate Fellows Program

Interdisciplinary Research Theme (35%)

- Importance of the proposed research to advancing knowledge and understanding of an emerging area of water science
- Background data and information provided to support proposed research; proposed research appropriate for doctoral-level study
- Coherence of the interdisciplinary theme as a focus for program participants; description of integration of individual research efforts
- Evidence of creative research fostering interdisciplinary collaborations and outputs

Plan for Proposed Integrative Activities (30%)

- Team-building approach, philosophy and experience clearly described and encouraging strong collaborative interactions
- Provides opportunities for the cohort to engage in joint efforts to enrich collaborative learning
- Effectively provides for development of professional and personal skills, increased ability to work in diverse teams, improved communication skills, and enhanced ethical conduct of research

Faculty Team (15%)

- Diversity of faculty team, description of roles of individual team members
- Faculty experience and expertise appropriate to proposed interdisciplinary-research theme and integrative activities
- Commitment of the participating faculty to goals of the WIGF program
- Evidence of Departmental support and clarification of specific departmental requirements

Partnership with the Water Institute (10%)

- Defines expectations from and contributions to WI
- Creatively leverages and contributes to WI strategic mission and activities

Administrative Plan and Organizational Structure (10%)

- Assures effective participation by project members
- Existing and potential sources of external funding strong and clearly described
- Timeline for student recruitment, selection, enrollment, etc. well described