

# REQUEST FOR PROPOSALS 2021 Cohort - Water Institute Graduate Fellows Program

The University of Florida Water Institute is soliciting proposals for the 2021 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
 College of Liberal Arts and Sciences
 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 to pursue external funding for research to be conducted by Fellows. Cohort participation in WIGF program evaluation is expected.

## **Proposal Requirements**

<u>Diverse group of faculty</u>: 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 2019 WIGF Fellows are not eligible to participate in the 2021 WIGF cohort. In addition to disciplinary diversity, we seek faculty teams that are diverse across career stage, campus location, and include individuals that are underrepresented in their disciplines.

Inclusion of faculty members from other Colleges and Professional Schools (outside of CALS, CLAS, SNRE) affiliated with the Water Institute is encouraged. The Water Institute Director is available 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. The proposal should describe graduate fellow recruitment and retention strategies, 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 transdisciplinary 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 (<u>water-institute@ufl.edu</u>) by **Wednesday, September 23, 2020** and should consist of the following:

- Cover Page signed by the PI and Co-PIs, with project title, faculty team and their affiliations.
- <u>Interdisciplinary Research Theme</u> (6 pages max) including description of integrative interdisciplinary theme; background data and information to support theme; disciplinary and collaborative research questions and methods; fellow recruitment and retention strategies; and existing and potential sources of external funding for proposed Graduate Fellow research.
- <u>Proposed Integrative Activities</u> (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.
- <u>Project Timeline</u> (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).

- <u>Personnel</u> including a description of the roles of individual team members, a description of the diversity characteristics of the team, and curriculum vita for each team member (each 2-page max).
- <u>Statement of Unit-level Support</u> (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 (<u>water-institute@ufl.edu</u>) 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 **Monday, October 26, 2020**.

#### 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

## 2021 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 researches in water-related disciplines. A primary goal is to ensure interdisciplinary exposure and also provide appropriate depth of knowledge in chosen disciplines. The WIGF program is intended to provide a supportive environment for integrative research, training, and education in water-related disciplines 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 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 ensure 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 WIGF PI must submit a report on financial expenditures and accomplishments on an annual basis, which will be reviewed together with the Water Institute staff at annual "check in meetings". Additionally, the Water Institute will conduct annual online surveys with students and faculty as part of the evaluation process. Results of these evaluations will be shared with the WIGF cohort to continually improve effectiveness of 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:

- Qualifications 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

# <u>Interdisciplinary Research Theme (35%)</u>

- 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 (disciplinary, career stage, campus location, and underrepresented groups), 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
- Plans and timeline for student recruitment, selection, enrollment, etc. well described