

Request for Proposals 2013 Water Institute Graduate Fellows Program

The UF Water Institute is soliciting proposals for the 2013 **Water Institute Graduate Fellows (WIGF) Program** that will fund the second interdisciplinary faculty-graduate fellow team to conduct integrative research in an emerging area of water science, broadly interpreted to include the social, natural, and engineering sciences. For a more complete description of the goals, structure, and evaluation of the WIGF program see Appendix A.

The Deans of the UF Colleges of Agricultural and Life Sciences and Liberal Arts and Sciences, and the Directors of the School of Natural Resources and the Engineering School of Sustainable Infrastructure and Environment have committed funding for Graduate Research Fellowships in support of this program. This funding will provide a \$25,000 per year stipend plus tuition waiver for 4 years to a cohort of 4-6 Ph. D. students. The Water Institute will leverage this investment by facilitating integrative activities to support their development into a cohesive interdisciplinary cadre of professional researchers. The Water Institute will provide a Research Coordinator for group facilitation; assistance with design, funding (maximum \$25,000), execution and evaluation of integrative activities; and proposal-writing assistance for development of external funding for the project. Participation and collaboration with the external evaluation of the WIGF program being conducted by the Center for Public Issues Education in Agriculture and Natural Resources will be expected (See Evaluation Section in Appendix A.)

Funding from other Colleges/Departments affiliated with the Water Institute through the provision of additional Graduate Research Fellowships to the cohort may be provided on a case by case basis.

Proposal requirements:

Diverse group of faculty: Proposals must involve a diverse group of at least 4 Water Institute affiliated faculty members: up to two from the College of Agricultural and Life Sciences, up to two from the College of Liberal Arts and Sciences, up to one from the School of Natural Resources and up one from the Engineering School of Sustainable Infrastructure and Environment. Participation of additional faculty members from other Colleges/Departments affiliated with the Water Institute is encouraged. No faculty member that is currently participating in the 2011 WIGF cohort may participate in a proposed 2013 cohort.

Comprehensive interdisciplinary theme: Proposals must describe a comprehensive interdisciplinary theme in an emerging area of water science appropriate for doctoral-level research that will serve as the foundation for graduate fellow activities. The proposal should describe the 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. The 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 existing funding available to support the proposed research, and specific plans to obtain external funding for research expenses.

Strong collaborative interactions: In addition to describing individual and collaborative research within the proposed theme, the proposal must describe proposed activities that will enhance the faculty-graduate fellow cohort's integration and help them develop skills to work in a collaborative interdisciplinary environment. These activities should be integrated with the research activities and be designed to enhance trans-disciplinary competencies i.e. foster the ability to work in diverse teams; create a system of communication and exchange that keeps cohort engaged; provide instruction in ethics and the responsible conduct of research; and/or provide 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/team teaching of undergraduate courses; group projects with external stakeholders/agencies; participation in training programs focused on skill building in interdisciplinary teamwork, leadership, communication and information sharing; and organization and participation in interdisciplinary seminar series (i.e. Water Institute Distinguished Scholar Seminar series) and conferences (i.e. Biennial Water Institute Symposium). The 2011 WIGF program has demonstrated that co-location of the student cohort in a common office space is extremely valuable.

Detailed Submission Guidelines:

1. Letters of intent, containing PI name, project title and faculty team must be submitted to the Water Institute (wgraham@ufl.edu) by August 30th, 2012
2. Attendance at an information meeting on September 6th, 2012 is strongly recommended for those who have submitted letters of intent.
3. Proposals must be submitted electronically to the Water Institute (wgraham@ufl.edu) by date October 1, 2012 and should consist of the following materials:
 - Cover Page with project title, faculty team, and their affiliations. Signed by the PI and Co-PIs.
 - Interdisciplinary Research Theme (3- 6 pages) 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 research.
 - Proposed Integrative Activities (2-3 pages) 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 (maximum \$25,000), and proposed involvement of Water Institute staff for each.
 - Project Timeline (1 page) 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

- Brief (maximum of 2 pages) Curriculum Vitae for the Principal Investigator and each of the Co-PIs and a list of their currently funded research with percent time commitment to each funded project.
- Statement of Departmental Support for proposal and any Department-specific teaching requirements that may be required of Graduate Fellows.

Proposals must be emailed to the Water Institute in ms word or pdf format. Documents should be single spaced with font size no smaller than 12 point.

Proposals will be reviewed by a panel consisting of members of the WI Faculty Advisory Committee, members of the 2011 WIGF faculty cohort, and other UF and external faculty members with experience in interdisciplinary graduate education using the criteria outlined in Appendix B. Every effort will be made to notify Principal Investigators of their award status by October 31, 2012.

QUESTIONS

Contact: Wendy Graham (wgraham@ufl.edu). Phone: 352-392-5893

Appendix A: 2013 Water Institute Graduate Fellows Program Description

An important component of the Water Institute's Strategic plan is to recruit and train excellent students to pursue careers in water-related science, engineering, policy, planning, and management, with an interdisciplinary focus. The Water Institute Graduate Fellows (WIGF) program is intended to meet the challenges of educating Ph.D. scientists and engineers, with both interdisciplinary backgrounds and deep knowledge in chosen disciplines, who will pursue water-related careers in research and education. The program will support institutionalization of the Ph.D. student cohort model developed in the UF Adaptive Management of Water Wetlands and Watersheds IGERT program, and will further the development of a supportive environment for integrative research, training, and education in water-related sciences and engineering at UF.

The UF Water Institute, with support from the Colleges of Agricultural and Life Sciences and Liberal Arts and Sciences, and the Director of the Engineering School of Sustainable Infrastructure and Environment established an innovative education and research initiative **The Water Institute Graduate Fellows (WIGF) Program**. This program funds interdisciplinary faculty-graduate fellow teams to conduct integrative research in emerging areas of the water sciences and to participate in interdisciplinary graduate education and training activities. The program supports:

- Biennial cohorts of 4-5 Ph. D. students by providing 4-5 Graduate Research Fellowships, \$25,000 per year stipend plus tuition waiver for 4 years.
- Integrative activities to support the team's development into a cohesive interdisciplinary cadre of student and professional researchers

Proposal Review

The WI Faculty Advisory Committee (FAC) will oversee the WIGF program. The FAC will solicit, review and select the winning proposal, and in conjunction with the faculty members involved in the proposal, develop graduate student recruiting plans and materials.

Student Recruitment

The Water Institute will advertise the fellowships nationally, seeking top candidates to work with faculty on the selected proposal. A fellow's selection committee composed of the proposal faculty members and members of the FAC will review applicants and make final selections. In selecting applicants, the selection committee will work closely with the proposed faculty advisors and Departments of the Colleges providing the Fellowships to insure that applicants meet departmental, college, and university requirements. Special attention will be given to increasing diversity and members of underrepresented groups in recruitment and selection. For accounting purposes, each fellow will have the departmental home of their major advisor.

Evaluation

The Water Institute is partnering with the Center for Public Issues Education in Agriculture and Natural Resources (PIE Center; www.centerpie.com) for an external evaluation of the WIGF Program and Cohorts. The evaluation specialists are responsible for designing and implementing a mixed-methods monitoring and evaluation framework to track, evaluate, and report on the outputs and outcomes of the WIGF program. The evaluation team at the PIE Center, in close coordination with Water Institute Staff, will work with faculty and students in each cohort to inform a successful 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 bio-physical, technological, ecological, social and economic challenges to sustaining water resources. The success of this program will be measured by:

- The quality and diversity of graduate fellows recruited
- Level of faculty/graduate student participation in, and evaluation of usefulness of, interdisciplinary team building activities
- Graduate Fellow research relevance and quality
- Number of external proposals submitted (and funded) by Faculty-Fellow Cohort
- Numbers of peer reviewed publications, white papers, and presentations at professional meetings resulting from the WIGF program
- Professional placement of graduate fellows

QUESTIONS

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Appendix B
2013 Water Institute Graduate Fellows Program
Proposal Evaluation Criteria

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

- **Interdisciplinary Research Theme**
 - Importance of the proposed research to advancing knowledge and understanding of an emerging area of water science
 - Background data and information to support proposed research provided, proposed research appropriate for doctoral-level study
 - Coherence of the interdisciplinary theme as a focus for all program participants and integration of individual research efforts well described.
 - Evidence of creative research fostering interdisciplinary collaborations and outputs

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

- **Partnership with the Water Institute**
 - Defines expectations from and contributions to WI
 - Creatively leverages and contributes to WI strategic mission and activities

- **Administrative plan and organizational structure**
 - 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.