POSITION ANNOUNCEMENT # 0001-3930
REQUISITION # 0905700

Title: Assistant/Associate Professor – Biocomplexity Engineering

Location: Department of Agricultural and Biological Engineering
Frazier Rogers Hall
PO Box 110570
Gainesville, FL 32611-0570
Institute of Food and Agricultural Sciences (IFAS)
University of Florida
Gainesville, FL 32611-0570

Review Date: For full consideration, candidates should apply and submit additional materials by August 15, 2014. The position will open until a viable applicant pool is determined.

DUTIES AND RESPONSIBILITIES:
This is a 12-month, tenure track position (60% research, 40% teaching) in the Agricultural and Biological Engineering Department (ABE), Institute of Food and Agricultural Sciences (IFAS), University of Florida (UF).

The person in this position will conduct engineering research (data analysis, dynamic systems modeling, and theoretical development) on complex biological systems and their interactions with natural and human systems across spatiotemporal scales. Applications include human interactions with ecohidrological and agroecological systems across all scales, from cells to regional and global scales, using new and emerging complex systems science theories. A goal of this position is to enhance and expand transdisciplinary research in ABE and IFAS. The successful candidate is expected to focus on understanding the complex patterns and processes of biological systems with the aim to develop engineering solutions to current environmental and management problems.

In addition to strong disciplinary training we seek candidates with interest in integrating knowledge from multiple academic domains. This position brings together new and existing faculty in cross-disciplinary research and teaching efforts focused on coupled biophysical and human systems as a complex global challenge. Candidates should possess the interest, skills, and temperament to interact

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effectively with other researchers. A successful candidate is also expected to teach undergraduate and graduate courses addressing complex systems analysis and engineering solutions, as well as mentor and supervise highly motivated graduate and undergraduate students.

The candidate is required to establish the basis for a strong externally funded research program, and develop active collaborations with other faculty and research partners, creating synergy both inside and outside of the University of Florida. Moreover, we expect the candidate to promote his/her research activity and leadership in professional societies, supported by sustained publication activity in top scientific journals. The goals of the position are also in line with strategic research areas of the UF College of Engineering (http://www.eng.ufl.edu/research/research-areas/) of which ABE is also an active member through ABET accreditation. The candidate will be expected to participate in all activities of the department academic life (research groups, mentorship of undergraduate and graduate students, and academic service activities) and work closely with other faculty in IFAS, the College of Engineering, the Health Science Center (Emerging Pathogens Institute, and McKnight Brain Institute), UF Water Institute and Florida Climate Institute.

Because of the IFAS land-grant mission, all faculty are expected to be supportive of and engaged in all three mission areas—Research, Teaching and Extension—regardless of the assignment split specified in the position description.

**BASIC QUALIFICATIONS:** A Ph.D. (foreign equivalent acceptable) in Engineering or a closely related field is required. We seek an interdisciplinary engineer or scientist with a passion for understanding the functioning of coupled biological and human systems. The applicant should have a strong background in analysis and modeling of complex systems. It is desired that the candidate have previous experience in areas of complex systems science such as network theory, dynamic systems modeling, agent-based human-biophysical modeling, supply chain theory, risk and decision science, and analysis of big data from complex spatio-temporal datasets. Postdoctoral experience and a clearly established publication record in areas related to this position are also desired. Candidates should have demonstrated excellent verbal and written communication skills, and ability to participate in collaborative efforts. Candidates must also have a commitment to IFAS core values of excellence, diversity, global involvement, and accountability.

**BACKGROUND INFORMATION:** The Agricultural and Biological Engineering Department is a unit in the Institute of Food and Agricultural Sciences (IFAS) at the University of Florida and has diverse teaching, research and extension education programs. The Department is comprised of 29 faculty members located on the Gainesville campus, 5 faculty located across the state at research and education centers, 10 courtesy faculty and 20 support personnel (see website http://abe.ufl.edu), and consistently ranks in the top 5 Agricultural and Biological Engineering programs nationwide. Instilling excellence in research, leadership, innovation, and entrepreneurship are ABE's highest priorities. At ABE the candidate will join an dynamic, cross-disciplinary group of researchers, and will enjoy broad opportunities for collaborations with existing teams, including those studying biofilm systems and biosensors, biofuels, coupled natural and human ecosystems, nanotechnology and nanomaterials, climate variability and change, crop modeling, hydrology and water quality.

The University of Florida (http://www.ufl.edu) is a Land-Grant, Sea-Grant, and Space-Grant institution, encompassing virtually all academic and professional disciplines, with an enrollment of more than
50,000 students. UF is a member of The Association of American Universities. The Institute of Food and Agricultural Sciences (http://ifas.ufl.edu) includes the College of Agricultural and Life Sciences (http://cals.ufl.edu), the Florida Agricultural Experiment Station (http://research.ifas.ufl.edu), the Florida Cooperative Extension Service (http://extension.ifas.ufl.edu), the College of Veterinary Medicine (http://www.vetmed.ufl.edu), the Florida Sea Grant program (http://www.flseagrant.org/), and encompasses 16 on-campus academic departments and schools, 12 Research and Educational Centers (REC) located throughout the state, 6 Research sites/demonstration units administered by RECs or academic departments, and Florida Cooperative Extension Service offices in all 67 counties (counties operate and maintain). The School of Natural Resources and Environment is an interdisciplinary unit housed in IFAS and managed by several colleges on campus. IFAS employs over 3400 people, which includes approximately 950 faculty and 2450 support personnel located in Gainesville and throughout the state. IFAS, one of the nation’s largest agricultural and natural resources research and education organizations, is administered by a Senior Vice President and four deans: the Dean of the College of Agricultural and Life Sciences, the Dean for Extension and Director of the Florida Cooperative Extension Service, the Dean for Research and Director of the Florida Agricultural Experiment Station, and the Dean for the College of Veterinary Medicine. UF/IFAS also engages in cooperative work with Florida A&M University in Tallahassee.

Application Information: To ensure full consideration please apply online, and submit additional materials, by August 15, 2014. Position will be open until a viable applicant pool is determined.

Individuals wishing to apply must go online to http://jobs.ufl.edu/postings/52806 and submit the following:

1. Application;
2. Letter of application that states applicant’s interest in the position, qualifications relative to the credentials listed above, previous professional responsibilities and how these relate to the position;
3. Complete vita (which includes current position and responsibilities); and
4. The name, address, telephone and facsimile numbers, and electronic mail address of five persons to serve as references.

Final candidate will be required to provide official transcript to the hiring department upon hire. A transcript will not be considered “official” if a designation of “Issued to Student” is visible. Degrees earned from an education institution outside of the United States are required to be evaluated by a professional credentialing service provider approved by National Association of Credential Evaluation Services (NACES), which can be found at http://www.naces.org/.

Contact Information Questions regarding the position may be directed to:
Dr. Rafael Muñoz-Carpena, Professor
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The University of Florida is an Equal Opportunity Institution dedicated to building a broadly diverse and inclusive faculty and staff. The selection process will be conducted in accord with the provisions of Florida’s ‘Government in the Sunshine’ and Public Records Laws. Persons with disabilities have the right to request and receive reasonable accommodation.