

Pathfinder Doctoral Fellowship
Agricultural and Biological Engineering Department
University of Florida

Integrated Bio and Geo-Tracking of Animal Behavior for Improved Health and Sustainability

Position Description:

Applications are solicited for a Graduate Research Assistant (GRA) position (Ph.D. Level) in the Agricultural and Biological Engineering (ABE) Department at the University of Florida under the supervision of Dr. Daniel Hofstetter and Dr. Jose Reyes-De-Corcuera. The candidate should be interested in the development of wearable multi-chemical/physical sensors to assess animal behavior. Potential research focus includes, but is not limited to: monitoring and data collection for precision animal agriculture using sensor arrays with artificial intelligence (AI), development of biosensors for animal stress biomarkers, detection and characterization of animal behavior and correlation to stress indicators for farm-raised animals, integration of multiple types of sensors including position and motion tracking for the study of ecologically important wildlife and animals raised outdoors. The successful candidate should be self-motivated, creative, and have a desire to collaborate in a fast-paced multidisciplinary environment. The candidate will be expected to publish in peer-reviewed journals and to present research results at international conferences. Funding is conditional upon satisfactory performance in coursework and research duties. The GRA will cover stipend, tuition, and health insurance (a standard UF waiver). A review of applications will begin immediately until the position is filled.

Minimum Qualifications:

B.S. and M.S. degree with a strong background in Chemical or Biological Engineering and a GPA of 3.0 or higher; Excellent English writing and communication skills; Applicants whose native or first language is not English must obtain a TOEFL score of 80 iBT or IELTS score of 6.5 or higher (GRE may be waived).

Preferred Qualifications:

- Laboratory experience working with enzymes and/or aptamers to identify biomarkers.
- Experience working with GC-MS, electrochemical and metal oxide sensors, and electronic noses.
- Knowledge and experience with AI, computer vision, microprocessors, and sensors.
- Experience and willingness to work in various field conditions.
- Programming skills (Arduino IDE, Python, R, etc.).
- Record of previous scientific communications (journal articles or/and conference publications).

The UF/IFAS ABE Department is ranked among the top 5 programs in the nation and provides unique opportunities for in-depth research and field experience with award-winning department faculty and access to [HiPerGator](#), one of the most powerful supercomputers available on a university campus.

How to Apply:

Interested applicants are encouraged to contact Dr. Daniel Hofstetter (d.hofstetter@ufl.edu) directly with a copy of your CV and research statement. Qualified candidates will be contacted separately for additional details (such as references). More information about applying for a graduate degree in Agricultural and Biological Engineering can be found at <https://abe.ufl.edu/graduate/admissions/>. *Please do not apply formally or pay any fees without making the inquiry first.*