

# Graduate RA Positions

## SIGNAL EVOLUTION

### Lizard behavior and physiology



- Seeking at least two doctoral students to study multimodal signal evolution, in 12 species of *Sceloporus* lizards in Mexico.
- The project examines physiological and genetic mechanisms underlying the coevolution of visual signals (color, motion) and chemical signals, in an explicit phylogenetic context.
- The RA positions and research are to be funded via a multiyear NSF Collaborative Grant, with Dr. Emilia P. Martins, Indiana University, pending final budget approvals.

Field Expectations: The RAs will be key members of field teams composed of ISU, IU, and Mexican colleagues, making multiple trips to collect behavioral data and tissues. Ability to speak Spanish is highly desirable.

Laboratory Expectations: Each RA will have a specific arena of laboratory responsibilities associated with the grant research. One arena of expertise will provide training in histology and image analysis to quantify dermal melanin in blue skin color patches and size of the VNO, a chemosensory organ. The other arena will provide training in chemical analyses of femoral gland secretions (working with a natural-products chemist on GC/MS, HPLC-MS and NMR analyses) and analyses of plasma levels of steroid hormones.

Academic Expectations: Students will develop their own doctoral research project involving the *Sceloporus* system.

For more information contact Diana Hews at [Diana.hews@indstate.edu](mailto:Diana.hews@indstate.edu)

If interested please send: 1) Letter of interest that includes descriptions of research experiences and interests; 2) CV; and 3) unofficial transcripts.

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