

Graduate Student Position in Molecular Mechanisms of Repeated Evolution of Insular Dwarfism at Auburn University

We are accepting applications for an enthusiastic, creative PhD student to join a growing research team on an NSF-funded project that aims to identify the mechanistic basis for how complex traits can be altered in natural populations and at what levels (from the ecological factors to the physiology and underlying genetic networks) these mechanisms are shared across species. To do this we will contrast mainland California and Channel Island populations for each of five reptile species (three that demonstrate insular dwarfism and two that do not) integrating data from life history traits, endocrine physiology, cellular signaling, and genomics.



The selected applicant will work closely with other graduate students and post-docs in the Schwartz Lab on the NSF funded project “[How to get SMAL: Studying “island dwarfism”](#)”. This project is in collaboration with Dr. Amanda Sparkman at Westmont College (Santa Barbara, CA) and Dr. Dave Miller at Penn State who is also recruiting a graduate student on this project to focus on the life history traits demographic modeling.

The ideal candidate will have demonstrated evidence of strong writing skills, interpersonal communication skills, and ability to work well with a diverse team as well as independently. The ideal candidate would have a previous research experience (undergraduate research or MS degree) and would be interesting in focusing their dissertation research on in one or more of these areas: endocrine physiology, particularly focusing on the Insulin-like Signaling Network; population/functional/conservation genetics of the reptile populations on the mainland and islands; conducting cell culture experiments in reptile cell lines to test for divergence in cellular signaling. Additionally, the candidate must meet the requirements for acceptance into our graduate program.

Auburn Graduate School: <http://graduate.auburn.edu/prospective-students/>

Department of Biological Sciences Graduate Program: https://www.auburn.edu/cosam/departments/biology/graduate_programs/index.htm

We strive for our research team members to be passionate about science and working with us to create a diverse, equitable, and supportive research environment. The Department of Biological Sciences at Auburn University is a highly collaborative and friendly place to work. In combination with efforts in the College of Sciences and Mathematics, we have strong support and mentoring for our graduate students and are committed to improving diversity and inclusivity within our Department and College. Our research groups are family-friendly and value diversity to create an inclusive and equitable environment, please read more about them here:

The selected applicant will benefit from 2-3 years of Graduate Research Assistantship (GRA) and up to 10 semesters of guaranteed Graduate Teaching Assistantship that provides a stipend and covers tuition, funds for travel to national meetings annually, and opportunities for career development.

Interested candidates can send the following to Dr. Tonia Schwartz (tss0019@auburn.edu) with header: Dwarf Reptile PhD Student:

- **CV including a list of three references.**
- **A letter of interest that describes: (1) your general research interests, (2) demonstrated evidence of your research experiences and skills including writing and statistical analyses, (3) why you want to go to graduate school, (4) and why you think you would be a good fit in for the project and my research team.**

For more information about the labs see:

Schwartz Lab: <http://www.schwartzlab-ecoevolutionarygenomics.org/>