MS ASSISTANTSHIP in the Biology Department at Western Kentucky University, Bowling Green, Kentucky, USA.

The Johnson Lab in the Biology Department at Western Kentucky University is seeking a motivated, qualified individual with prior experience in the fields of genetics and/or population biology to conduct independent research towards the completion of a Master’s of Science Degree while acting as a teaching assistant for an undergraduate Biology course. Appropriate prior experience could include independent undergraduate research in any of a variety of disciplines or undergraduate coursework that utilized molecular genetic lab techniques.

Specific areas of research include (but are not limited to) 1) landscape genetics of amphibians using microsatellite loci to evaluate the distribution of genetic variation and identify the interaction between geographic features and gene flow; and 2) analysis of hybrid zones using single nucleotide polymorphisms (SNPs) to describe genomic patterns of admixture and identify genes of ecological interest. Desirable skills include a familiarity with standard population genetic software (Structure, Fstat, Migrate, etc.) and experience with basic laboratory techniques (PCR, sequencing, etc.). Other areas of research that fall under the broad umbrella of amphibian evolutionary ecology and conservation will also be considered.

While enrolled in the Master of Sciences in Biology program at WKU, students are expected to develop, implement, and analyze independent research projects, prepare scientific manuscripts, and present research at regional and/or national meetings. Additionally, the opportunity exists for qualified applicants to apply for a Graduate Research Fellowship that offers an enhanced financial package relative to the standard Department of Biology teaching assistantship (see below for necessary qualifications).

Teaching Assistant responsibilities include: instruction of two or three 18-student laboratories once a week, preparation of laboratory materials, grading and evaluation of student performance, and weekly TA meetings with the course instructor. Instruction responsibilities include a brief pre-lab lecture describing concepts and protocols followed by hands-on demonstration of appropriate techniques. Prior teaching experience is not required, but effective communication skills are a must.

A B.S. degree in biology, or closely related discipline is required. Additional requirements include: competitive GRE scores and undergraduate GPA, prior independent research experience, demonstrated excellence in course work, excellent written and oral communication skills, and ability to work independently and as a team member. The successful applicant minimally receives two years of TA stipend, a partial tuition waiver, and contributions towards health insurance benefits.

Pertinent requirements for Graduate Research Fellowship consideration are as follows: Students must be accepted in a graduate program at WKU. Students must demonstrate outstanding scholarly promise in their selected field (e.g., GPA >3.5, GRE >315, publications, presentations, research awards, etc.). Students must have a clearly identified research topic and proposed research plan that can be completed within the framework of a master’s degree program.

For further details about this position please contact Dr. Jarrett Johnson: jarrett.johnson@wku.edu. To apply please submit a letter of interest, CV, unofficial transcripts and GRE scores, and contact information for three references to jarrett.johnson@wku.edu. Review of applications will begin immediately (10/15/14) and will continue until a suitable applicant is selected, with a target deadline for selection being February 1, 2015.