

**DEPARTMENT OF BIOLOGY  
McMicken-College of Arts & Sciences**

**SUMMER RESEARCH OPPORTUNITIES  
FOR UNDERGRADUATE WOMEN**

**APPLICATION DEADLINE: MARCH 1, 2005**

*The Department of Biology is pleased to offer the following research project for the summer of 2005. Interested students are urged to contact the faculty member(s) directing the project that most interests them. By contacting the faculty member, you can discover more about the project, learn what your responsibilities will be and if possible, develop a timetable for the twelve-week research period.*

**Molecular Phylogenetics of Darwin's Finches Using Nuclear Introns**

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This project involves using DNA sequences of a nuclear intron from a core set of the most genetically divergent Darwin's finches to assess phylogeographic structure. The undergraduate researcher will test the specific hypothesis of that populations of two species (warbler finches, and Sharp-beaked ground finches) are monophyletic (good genetic species). The WISE researcher will work with other members of the lab to learn DNA extraction, gel electrophoresis, PCR, sequencing, primer design and analysis. Results will reveal patterns and processes speciation and evolution of Darwin's finches.