

**Project Title:** GENETIC LINKAGE MAPPING IN IRIS NELSONII X IRIS HEXAGONA HYBRIDS

**Investigator:** Nolan Martin

**Department:** Biology

**Project Summary:**

We are pleased to report that we have created an initial linkage map between *I. nelsonii* and *I. hexagona*. This map will enable us to perform QTL mapping of traits believed to be important / causal in the speciation process in Louisiana Iris. As a partial result of this grant, we are able to perform the QTL mapping work that we describe in an NSF grant that we also received this past year. Sunni Taylor, my current PhD student, was trained off of this grant, as were several undergraduate students. These students are listed as authors on an upcoming Evolution presentation (see below), and will be authors on an upcoming publication in preparation.

**Presentations:**

Taylor, Sunni J., S. Tang, and N.H. Martin. The genetic architecture of reproductive isolation in Louisiana Iris: *Iris nelsonii* x *I. hexagona*. Society for the Study of Evolution Meeting. 2009

Taylor, Sunni J., R. Willard, J. Shaw, M. Dobson, M.L. Arnold, N.H. Martin. Society for the Study of Evolution Meeting. 2009

**External Grants Applied:**

NSF - Ecology, Evolution, and Genetic Architecture of Reproductive Isolation in *Iris Nelsonii*: A Homoploid Hybrid.

**External Grants Awarded:**

NSF - Ecology, Evolution, and Genetic Architecture of Reproductive Isolation in *Iris Nelsonii*: A Homoploid Hybrid.

**Student Number:** 4