

**Department of Biological Sciences  
COLLEGE OF ARTS & SCIENCES**

**SUMMER RESEARCH OPPORTUNITIES  
FOR UNDERGRADUATE WOMEN**

**APPLICATION DEADLINE: March 1, 2010**

*The Department of Biological Sciences is pleased to offer the following research project for the summer of 2010. 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.*

**PROJECT TITLE: Intestinal Remodeling in Carnivorous Tadpoles**

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**Project Description**

Carnivorous tadpoles of the genus *Lepidobatrachus* attain large sizes and swallow their prey whole, usually other tadpoles. These predators evolved from species with an herbivorous diet. Many larval modifications evolved to accommodate their meat-eating lifestyle, including intestine development. In herbivorous tadpoles, intestines shrink to ten percent their original length as they metamorphose into carnivorous adults, and they lose the ability to eat during metamorphosis. However, carnivorous tadpoles eat continuously throughout metamorphosis, and their intestines actually increase in length at this time. We will use histology and immunocytochemistry to understand the cellular events occurring during the highly modified intestinal remodeling found in carnivorous tadpoles.