

**Department of Science and Health
CLERMONT COLLEGE**

**SUMMER RESEARCH OPPORTUNITIES
FOR UNDERGRADUATE WOMEN**

APPLICATION DEADLINE: March 1, 2014

The Department of Science and Health is pleased to offer the following research project for the summer of 2014. 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: Wall Lizard Thermoregulation

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Project Description

We will study the thermoregulation of the wall lizard *Podarcis muralis*. To study its thermoregulation, we will place the lizards in a lab thermal gradient and measure its body temperature. Furthermore, we will collect lizards in the field and collect field data. In the 1950s, this species of wall lizard was introduced in Cincinnati from Italy, and it provides an excellent model to study adaptation. All data collected from this study will be contrasted with data from native populations of the same genus.

Thermoregulation is fundamental for lizards and for all animals unable to generate enough heat to regulate body temperature. By studying thermoregulation, one obtains insight into important physiological, behavioral, and ecological relationships. Studies using similar techniques have changed our understanding of fever and other thermal states of the human body.