

**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.

Assessing The Impact of Rainwater Runoff From Impervious Surfaces

Professor Michael Miller

Arts & Sciences/Biology CROSLEY 1401A (513)556-9751

FAX: (513)556-5299

E-Mail: mike.miller@uc.edu

Nonpoint source pollution of our waterways is now the top new initiative of the US EPA. This includes runoff from farm fields, parking lots, highways and suburban lawns. We have a 319a grant that is constructing a pervious and impervious parking lot on Heritage Park along the Great Miami River in spring of 2005 (already begun). Working with nonprofit organizations, we will be monitoring the runoff volume and chemical composition running off of these lots and the changes that occur as the water crosses a rain garden. We will examine hydrology of the site with a series of wells to measure water table level relative to the GMR stage. This will be driven by rainfall and evaporation measured by remote monitoring equipment. All aspects of setup, monitoring and laboratory analyses will be developed over the summer.