



The Technology and Earth Sciences departments have successfully collaborated to provide research projects for the technology students and demonstration equipment for students enrolled in earth science courses (e.g. geomorphology, sedimentology, geological hazards). Recent funding through the NSF-CCLI program has been used to acquire an XRD (pictured top right). The College also maintains a field station on Black Rock Canal with easy access to the Niagara River, Buffalo River and Lake Erie. Faculty and students have access to any of the resources within this facility (which includes several Boston whalers, two research vessels, assorted sediment and water column sampling equipment). There are two boat captains that provide support for any course or research project.

## A black and white photograph of a large group of students and faculty posing in front of a classical building with columns. A statue of a man is seated on a pedestal in the center of the group.

A photograph of a museum exhibit titled "A History of Buffalo Herding" displayed in a corner. The exhibit features a large wall covered with numerous historical photographs and documents, including a map of the Buffalo Range. The floor is covered with a large, dark, textured material representing the ground, and a small potted plant is visible in the foreground.

 has resulted in senior theses at Middlebury College, honors theses at Buffalo State College and more than a dozen independent undergraduate research projects. One of the most interesting features documented through this research are sedimentary furrows (pictured above right) that are persistent within one segment of the river.

**NOW ACCEPTING APPLICATIONS**  
for the  
**2005 Undergraduate**  
**Summer Research Fellowship Program**

Each Fellowship will provide:

- \$2,500 student stipend
- \$1,000 faculty stipend
- Up to \$500 for supplies and/or travel for student

**Application Deadline: March 21, 2005**

The Buffalo State Office of Undergraduate Research anticipates awarding fourteen summer fellowships to students interested in pursuing scholarly, research, and creative projects.

Fellowships will be distributed among the academic divisions (Applied Science and Education, Arts and Humanities, Natural and Social Sciences) based on the number of proposals submitted in each division.

**Applications from all academic disciplines are encouraged.**

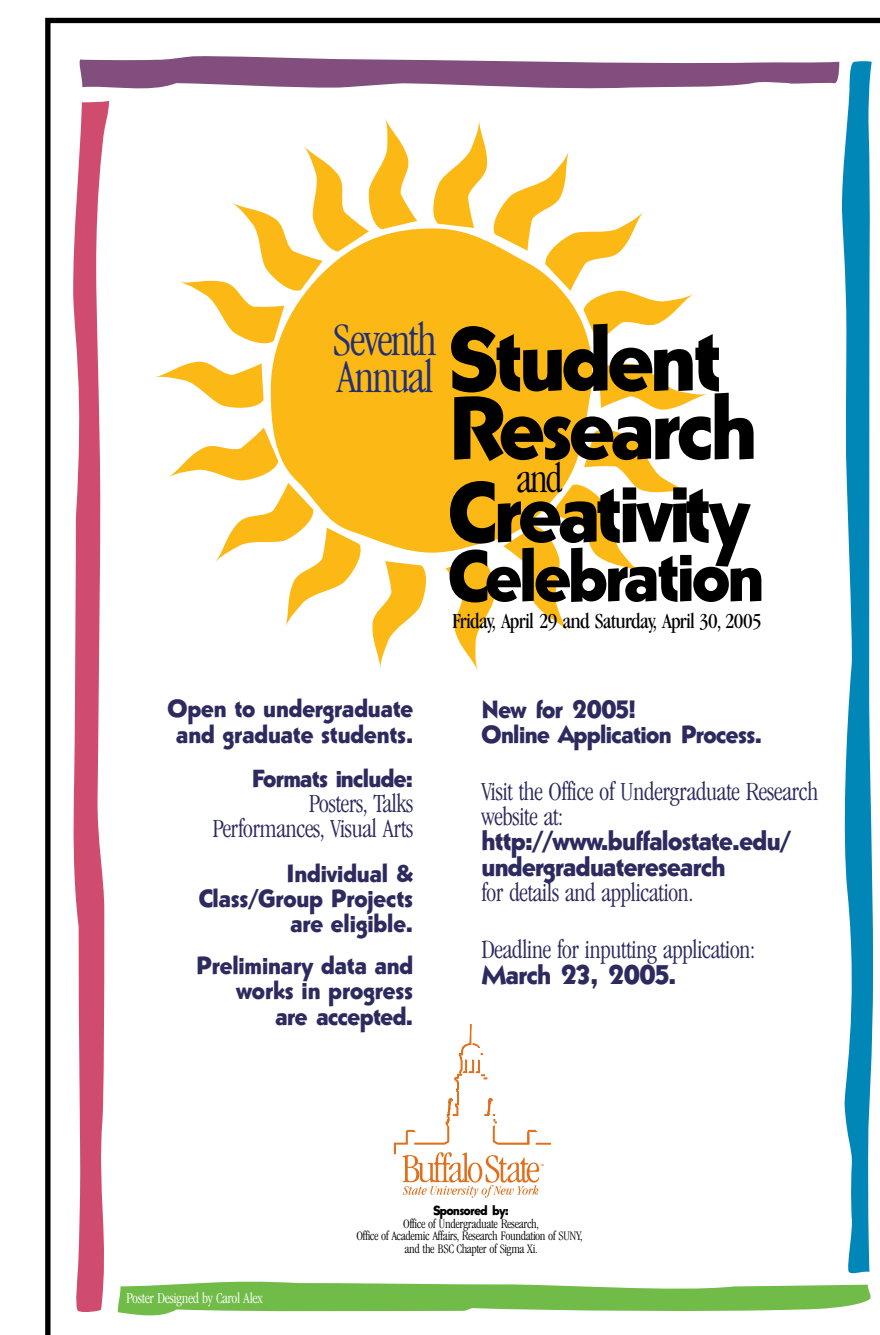
Applications can be downloaded from the Office of Undergraduate Research website: <http://www.buffalostate.edu/undergraduate/research/irc/UndergraduateResearchProgram>

Applications are available at the following locations:

Room 316 South Wing, Room 510  
Research Funding, Room 117  
Science Building Room 352

- annual student research and creativity celebration (now in its 7<sup>th</sup> year)
- undergraduate summer research fellowship program (also in its 7<sup>th</sup> year) providing student stipends and travel/supply money to support 8 weeks of full-time research
- travel support for students to attend meetings, conferences, performances, and/or art exhibits to present their research/creative work (in its 4<sup>th</sup> year)
- small grants program to provide support for academic year research/creative activities
- several programs aimed at faculty development

The Office maintains a website at: [www.buffalostate.edu/undergraduateresearch](http://www.buffalostate.edu/undergraduateresearch).



"Creating Opportunities for Success through Recruitment, Retention and Faculty Development" is a five-year (2005-2009) \$1 million project awarded to Buffalo State by the NSF-DUE. J. Singer is the project director and all seven STEM departments at the College are participating. The primary goal of the project is to increase the number of students entering STEM majors and increase the number of students receiving baccalaureate degrees in the STEM disciplines. In order to accomplish our project goals, a number of activities will be carried out, including:

- Increased outreach and recruitment activities in area high schools
- Introduction of a year-long learning community with the theme “the urban environment” open to students expressing an interest in becoming a STEM major
- Offering Freshman Seminar STEM courses for those students entering the College as Freshman that are either interested in becoming STEM majors or with a declared STEM major
- Providing an early undergraduate research experience for students interested in becoming a STEM major, or for students that declared a STEM major as a result of participating in either the learning community or Freshman Seminar programs
- Increased support services for any student enrolled in introductory STEM courses that are the gateways into the majors by establishing peer tutoring centers in all seven STEM department and by introducing problem-solving sessions in math (pre-calculus through calculus II and statistics)
- Faculty development opportunities to support substantive revision of introductory courses to change from primarily lecture to guided inquiry with an emphasis on developing problem-solving skills

