

UNDERGRADUATE RESEARCH

THE DEPARTMENT OF GEOLOGY AND ENVIRONMENTAL SCIENCE



The Department of Geology and Environmental Science provides undergraduate students with unique opportunities to become involved in individual and collaborative research projects that enhance their scientific training, and prepares them for the job market or graduate school. These projects engage and help retain our students.

INDEPENDENT RESEARCH STUDIES

...provide the *Akron Advantage* to our undergraduates through unique research experiences and close interaction with faculty. **In the last five years, 30 students** have completed research projects for credit including:

- 5 Honor College Senior Theses
- 31 meeting abstracts or papers co-authored by undergraduates
- 3 UA best student presentation awards received at the UA student research day
- 6 awards/scholarships awarded to our undergraduate researchers



Rebecca Bixby studying sediments underground in Organ Cave, West Virginia.



Pete Mazzeo (right) gathering data from Lake Erie for his Senior Honors thesis.



Students research tire disposal landfills (above).





Rebecca Bixby as a paid researcher in karst geology (above).

Andrea Mullen working on a DOES funded study of the Cuyahoga River (left).

PAID UNDERGRADUATE RESEARCHERS

...are gaining important job skills. Owing to the externally funded, graduate research program in the Department, opportunities exist for paid undergraduate research positions. In the last five years:

- 17 undergraduates have held paid research jobs
- over \$45,000 has been spent on undergraduate research salaries
- funding mainly from NSF but also US-EPA, American Chemical Society, Summit Co. Environmental Services (DOES), UA Faculty Research Grants
- all of these students go on to graduate programs (U. of Chicago, U. of New Mexico, Penn State, BGSU) or find employment in geology.

EDUCATIONAL RESEARCH

...engages undergraduates in active learning through research. Because the students often work in groups or as "research teams" they are able to develop interpersonal skills.

Using NSF funding Geology faculty are paying 6 College of Education undergraduates to participate in research focused on how the use of physical models help Earth Science students understand geology concepts.





Geology Service Learning classes and field experiences actively involve students in research to investigate questions of interest. Funding from NSF, OBR, ITL, Office of Student Development.