

Internships, Employment Opportunities, and Research Grants

As an unbiased, multidisciplinary science organization that focuses on biology, geography, geology, geospatial information, and water, the U.S. Geological Survey (USGS) is dedicated to the timely, relevant, and impartial study of the landscape, our natural resources, and the natural hazards that threaten us. Opportunities for undergraduate and graduate students and faculty to participate in USGS science are available through the selected programs described below. **Please note:** U.S. citizenship is required for all positions, although some noncitizens may be eligible in rare circumstances.

Undergraduate and Graduate Opportunities

NAGT-USGS Cooperative Summer Field Training Program

The USGS partners with the National Association of Geoscience Teachers (NAGT) to provide summer internship opportunities for college students who have completed a field-based course. Established in 1965, this program is one of the longest continuously running earth science internships in the country. Field camp directors nominate their top students. This nominated group is then invited to apply for summer positions with the USGS doing field, laboratory, or scientific office work. Over 1,500 students have participated in this program from its inception, with many participants proceeding on to have distinguished careers with the USGS, with academia, or with industry. Additional information is available at <http://education.usgs.gov/docs/NAGT2008.pdf>.

National Institutes for Water Resources-USGS Student Internship Program

The State Water Resources Research Institutes, organized as the National Institutes for Water Resources, collaborate with the USGS in operating a student internship program. Located in each State, the District of Columbia, the U.S. Virgin Islands, Puerto Rico, and Guam, these 54 institutes provide undergraduate and graduate students with

career-enhancing field, laboratory, and research experience through participation in USGS activities as interns. Interns are employees of participating universities and colleges. Funding is derived from USGS projects or programs that desire to support student interns as part of the mix of efforts required to carry out program or project activities. For more information, go to <http://water.usgs.gov/wrri/internship.html>.

National Cooperative Geologic Mapping Program/EDMAP Program

Established to recognize the importance of geologic mapping for our Nation's well-being, a primary objective of the EDMAP component of the National Cooperative Geologic Mapping Program (NCGMP) is to train the next generation of geologic mappers. Faculty advisors, together with graduate students or upper level undergraduate students, submit a proposal that requests support for mapping projects. Each student is expected to produce a new geologic map at a scale of 1:24,000 or larger that covers a 7.5-minute quadrangle or part of a quadrangle. Projects are funded on a year-by-year basis and are matched 1:1 by the universities. Each year since 1996, the NCGMP has funded EDMAP projects at 30 to 40 colleges and universities in 20 to 30 States, the District of Columbia, and Puerto Rico. These projects include both bedrock and surficial geologic mapping. Fifty-eight students and 38 faculty members are currently participating in these projects. Additional information is available at <http://ncgmp.usgs.gov/ncgmp/about/edmap>.

Federal Career Intern Program

The USGS Federal Career Intern Program is designed to enable managers to recruit and attract exceptional individuals into a variety of occupations. The program was created under Executive Order 13162. In general, individuals hired into the program will receive excepted-service appointments not to exceed 2 years, unless extended by the USGS with the concurrence of the Office of Personnel Management, for up to 1 additional year. Interns will be hired at grades GS-5 through GS-9. The intern program must include a 2-year training component designed and approved by the USGS. Individuals who successfully complete the program are eligible for conversion to career or career-conditional appointments with the



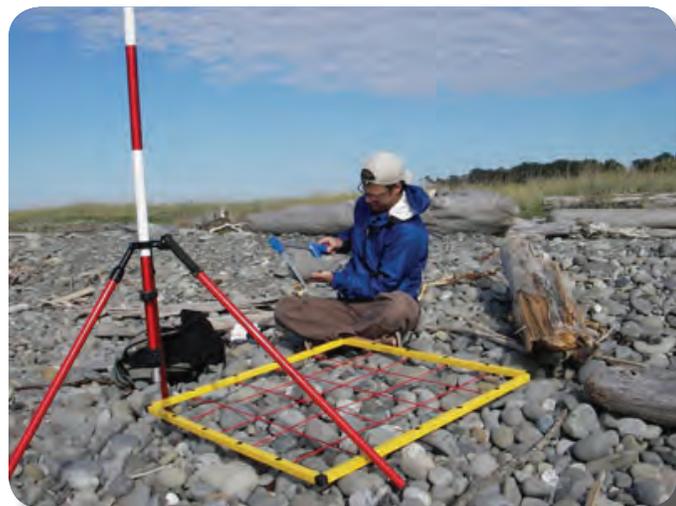
USGS. For more information, see <http://www.usgs.gov/ohr/fcip/index.html>.

USGS Student Interns in Support of Native American Relations Program

The goal of this program is to encourage students to pursue careers in geological, biological, hydrological, geographical, geospatial information management, or related sciences that may be helpful in natural resources management for Native American Tribes. Applicants are not required to be Native American; the USGS considers any research proposal that potentially benefits American Indian or Alaska Native governments. Students who are interested in participating in this internship opportunity should review the USGS projects described in the series of annual reports on the Web at <http://www.usgs.gov/indian/pubspage.html>. The most recent published reports will provide examples of potential opportunities. To be considered, students should contact the person listed in the report for the project of interest and ask whether that USGS employee would be willing to have a student intern. If an intern position is available, then the student and the USGS sponsor should submit a proposal during the solicitation period, usually in November and December. As many as six to eight interns are funded each year.

USGS Mendenhall Postdoctoral Research Fellowship Program

This prestigious and competitive program provides an opportunity for postdoctoral fellows to conduct concentrated research with members of the USGS professional staff, linking current science expertise to the science strategy of the USGS and its programs. Often, the research is a culminating element to the fellow's formal career preparation. Each year, about three dozen research opportunities spanning the wide range of USGS science are advertised during July and August. The application closing date is November to January. Positions are filled depending on the availability of funds. Candidates must have successfully completed a Ph.D. in an area described in the research opportunity by the time employment starts. Mendenhall Fellows are appointed to the USGS for 2 years. Appointments typically begin between



October and March. Additional information is available at <http://geology.usgs.gov/postdoc>.

USGS Water Science Center Programs

Many USGS Water Science Centers provide support for students. For example, the Oklahoma Water Science Center supports Native American student internships through Oklahoma State University, with the goal of placing these students in permanent positions after graduation from the university. For more information on Water Science Centers, go to http://water.usgs.gov/district_chief.html.

Opportunities at Specific Institutions (Representative)

- *Fort Valley State University, Fort Valley, GA.*—This historically black college has been the home of a program that works to increase the number of women and minorities in earth science and engineering. Since 1986, the USGS has been an active partner in a consortium providing scholarship support and employment opportunities for underrepresented students studying science. In recent years, the USGS offered summer internships to 10 students from Fort Valley State University as part of the Student Temporary Employment Program. The interns were placed with USGS mentor scientists and provided field experience that would introduce them to and prepare them for careers in a variety of geoscience fields. For more information, contact Katrina Burke [telephone, (703) 648-5515].
- *University of Puerto Rico.*—The USGS has a memorandum of understanding with the University of Puerto Rico and is committed to providing five students each year with advanced work and training in geographic information system and remote sensing technology during the summer. Student resumes are solicited at job fairs at the University of Puerto Rico Rio Piedras campus in March and at the Mayaguez campus in October. USGS personnel then sort the resumes based on student qualities and match these students with scientific projects. The resumes are forwarded to the project scientists, who make final selections. For more information, contact Yolanda Fong-Sam [telephone, (703) 648-7756].
- *City College of New York (CCNY), Harlem, NY.*—The USGS/CCNY Internship Program seeks to recruit high achieving students of diverse backgrounds (underrepresented minorities) in order to create a pool of highly qualified graduates for the USGS permanent workforce. Students applying for the program are matched with USGS scientists and placed in summer internships. In 2007, five students were placed in USGS offices and have been invited back to their project sites for another summer. For more information, contact Rafael “Willie” Rodriguez [telephone, (518) 285-5659].
- *Other Partnerships.*—The USGS is committed to developing the science skills of underrepresented groups by providing opportunities to pursue careers in hydrologic technology. Through partnerships with a number of community colleges and technical schools, the USGS provides input on curricula and training to school advisory boards. Such essential skills provide needed opportunities for both the

USGS and State and local management agencies. Programs currently exist with:

- GateWay Community College, Phoenix, AZ; contact Jim Kircher [telephone, (303) 236-4882, x258] or Deborah Lowe [telephone, (303) 236-9562];
- Vermilion Community College, Ely, MN; contact Jeff Stoner [telephone, (651) 379-2744] or Vanessa Chambless [telephone, (303) 236-9584]; and
- Western Dakota Technical Institute, Rapid City, SD; contact Joyce Williamson [telephone, (605) 394-3219] or Jennifer Farrell [telephone, (303) 236-9566].

Student Employment

The USGS offers diverse employment opportunities for students in biology, hydrology, computer science, cartography, geology, administration, and many other fields. The Student Educational Employment Program has two components: the Student Temporary Employment Program (STEP) and the Student Career Experience Program (SCEP). These programs are available to students at all levels who are enrolled at least half-time in an accredited educational program, are at least 16 years old, have a 2.0 or better accumulative grade point average, and are a U.S. citizen (although some noncitizens may be eligible).

- *STEP*.—Employment opportunities under this component do not have to relate to a student's particular field of study. Paid positions range from summer opportunities to jobs that can last as long as one is a student (in 1-year increments or less).
- *SCEP*.—This component offers paid work experience directly related to a student's academic field of study. It provides formal periods of work and study while attending school. The program is designed to be a partnership among the student, his/her school, and the USGS. The SCEP appointment may lead to permanent employment after the student successfully completes his/her educational program and meets work requirements.

For more information on both STEP and SCEP employment, go to <http://www.usgs.gov/ohr/student/apply/index.html>.



USAJOBS

USAJOBS is the one-stop, online shop for finding jobs at Federal agencies. You can create an account, store and update your resume, and search and apply for jobs in one convenient center. To see current openings at the USGS, go to the "Search Jobs" tab and type "USGS" in the Keyword Search. More information can be found at <http://www.usajobs.gov>.

Research Opportunities

State Water Resources Research Institute Program

Currently, 54 Water Resources Research Institutes serve all States, the District of Columbia, and three territories of the United States. Located at designated universities and colleges, the institutes support over 200 research and information transfer projects with appropriated and matching funds. State advisory panels operate in cooperation with the USGS to set research priorities and select proposed projects. Virtually all projects provide for undergraduate and graduate student training and support. Over 500 students received training and support under this program in recent years. Additional information is provided at <http://water.usgs.gov/wrri>.

Water Resources Research Act National Competitive Grant Program

This matching grant program, conducted in collaboration with the State Water Resources Research Institutes, is open to investigators at any institution of higher education in the United States. Proposals may be submitted for projects of 1 to 3 years in duration and may request up to \$250,000 in Federal funds. Research priorities are in the general area of water supply and availability, including the physical dimensions of supply and demand, quality trends in raw water supplies, the role of economics and institutions in water supply and demand, institutional arrangements for tracking and reporting water supply and availability, and institutional arrangements for coping with extreme hydrologic conditions. Further information about the program can be found at <https://niwr.net>.

Earthquake Hazards Program External Research Support

Grants by the USGS support research for the National Earthquake Hazards Reduction Program's goal to mitigate the Nation's earthquake losses by providing earth science data and assessments essential for land-use planning, engineering design, and emergency preparedness decisions. The program issues an annual announcement of funding opportunity for competitive proposals for grants and cooperative agreements to support research in earthquake hazards, the physics of earthquakes, earthquake occurrence, and earthquake safety policy. The application period is generally open from early March through mid-May each year. Applications are submitted through Grants.gov. More information can be found at <http://earthquake.usgs.gov/research/external>. The Catalog of Federal Domestic Assistance contains information about recent funding amounts for these grants and cooperative agreements and can be searched at <http://cfda.gov>.

Mineral Resources External Research Program

This research opportunity invites proposals from universities, State agencies, industry, or other private sector organizations to conduct research that will help ensure a sustainable supply of minerals for the Nation's future, understand the relation between minerals and public health, provide information to make informed land use decisions, and deliver mineral information critical to national security. For more information on this and previous years' funded initiatives, go to <http://minerals.usgs.gov/mrerp/index.html>. To receive announcements about future grant opportunities, please send a request to mrerp@usgs.gov.

AmericaView Program

AmericaView is a nationwide program that focuses on the science of remote sensing in support of applied research, K-to-16 education, workforce development, and technology transfer. AmericaView is comprised of university-led, State-based consortia working together to build a nationwide network of State and local users. AmericaView supports its goals by further expanding communications networks, facilities, and capabilities for acquiring and sharing remotely sensed data among AmericaView members. AmericaView projects are funded on a number of university campuses and offer the possibility of research and/or employment to students. To view AmericaView members by State, go to <http://www.americaview.org/currentmembers.htm>. Further information on the program can be found at <http://americaview.usgs.gov>.

Science Impact

The USGS Geography Discipline has established external partnerships with universities to focus external innovation in the use of science information and to provide specialized

skills beyond those traditional to the USGS. Current partnerships include:

- Indigenous Knowledge Center for Education and Science Impact (IKCE SI), Sinte Gleska University, SD.
- MIT-USGS Science Impact Collaborative (MUSIC), Massachusetts Institute of Technology.
- Science Impact Laboratory for Policy and Economics (SILPE), University of New Mexico.
- Spatial Integration Laboratory for Urban Systems (SILUS), The Wharton School, University of Pennsylvania.

Further information on these partnerships can be found at http://www.usgs.gov/science_impact.

Cooperative Research Units Program

The Cooperative Research Units Program is a unique collaborative relationship among States, universities, the Federal Government, and the Wildlife Management Institute, a nonprofit organization. The mission of this program is to provide scientific research for understanding and management of fish and wildlife and other natural resources. Operationally, the program provides technical assistance to natural resource managers in the application of scientific information to natural resource policy and management. The program also focuses on the development of future natural resource professionals through graduate education and training at host, affiliated universities. The program presently consists of 40 Cooperative Fish and Wildlife Research Units located on university campuses in 38 States. The USGS provides two to five Federal research scientists for each cooperative unit. Cooperating universities provide office space, administrative support, and access to university facilities. Further information on the program can be found at <http://www.coopunits.org>.

