

The Nevada Bureau of Mines and Geology (NBMG), a research and public service unit of the University of Nevada, Reno (UNR) and the state geological survey, seeks two geoscientists in tenure-track faculty positions beginning on or after July 1, 2010. Managed as part of the Mackay School of Earth Sciences and Engineering within the College of Science at UNR, NBMG functions as an academic unit, and its principal scientists are tenure-track faculty members. Please see the position announcements below. Candidates who are eligible for both positions will be considered for both.

# **Position Announcements**

## **RESEARCH ASSISTANT PROFESSORS (tenure track) Economic Geology, Structural Geology, Tectonics, Geologic Hazards, Geothermal Energy, Environmental Geology**

The University of Nevada, Reno seeks two research geoscientists: (1) a field-oriented Research Assistant Professor with interest in initiating and carrying out field-based, 4D geologic framework studies relating to a wide variety of topics involving the mineral and energy resources of Nevada, and (2) a Research Assistant Professor with interest in initiating and carrying out innovative studies that can be applied to a wide variety of geologic topics of societal relevance in Nevada, including geologic hazards, geothermal energy, and environmental geology.

### **Minimum Qualifications**

Applicants must have a doctorate in geology or a related geoscience field by the time of hire and a demonstrated record of research as indicated by dissertation research or peer-reviewed publications. Excellent communication skills, as demonstrated in written application materials; commitment to public service; potential for, or established record of publications; and ability to attract funding are essential.

### **Additional Preferred Qualifications**

The general area of expertise for the first position is bedrock geology, with preferred concentrations in economic geology (metals, geothermal energy, petroleum, industrial minerals) and/or structural geology and tectonics. Preference will be given to broadly based candidates who have keen observational skills as field geologists and demonstrated experience in geologic

mapping; integration of petrologic, stratigraphic, geochemical, geochronologic, and/or geophysical data; and development of digital geologic models using GIS and/or 3D software.

The areas of expertise for the second position may include structural geology, tectonics, neotectonics, geophysics, geodesy, geomorphology, hydrogeology, environmental geology/geochemistry and/or engineering geology. Preference will be given to broadly based candidates with demonstrated experience in integrating a wide array of data sets into digital models.

Because the individuals will be competing for funding from a variety of sources, including federal agencies interested in fundamental and applied geoscience research (e.g., National Science Foundation, U.S. Department of Energy, U.S. Geological Survey, Bureau of Land Management) and industry, a strong and consistent track record, including productivity over time, in publications and grantsmanship is preferred.

### **Position Responsibilities**

The successful candidates will be expected to work independently and to collaborate with other NBMG staff. They will be encouraged to work with faculty in the UNR Department of Geological Sciences and Engineering, the UNLV Department of Geoscience, and others in developing funded projects. The successful candidates will also be expected to interface with other geologists and geophysicists working on metallic and industrial mineral resources, environmental aspects of mining, ground-water resources, geothermal and petroleum resources, geochronology, structural geology, and the stratigraphy and tectonics of the Basin and Range province as well as earthquakes, floods, debris flows, landslides, subsidence, and other urban hazards. The successful candidate should be able to communicate effectively with the public and community leaders regarding the geology of Nevada and its mineral and energy resources. Although teaching and supervision of graduate students are not requirements of the position, the successful candidate is encouraged to work with the Department of Geological Sciences and Engineering to do so and help build the academic reputation of UNR.

### **Salary and Date of Appointment**

The positions will be tenure-track faculty appointments with an academic-year base salary that is competitive with other research universities. Sufficient State of Nevada funds are available to cover the salary at the entry level for an assistant professor. If the candidate is hired at a higher salary, the State funds will be used to cover a portion of the salary, the rest of which may be covered with grants and contracts.

Starting date will be July 1, 2010 or shortly thereafter, depending on availability of the successful candidate.

### **Application**

Please submit a letter expressing your interest in the position; names, e-mail and postal addresses, and telephone numbers of at least three references; a complete vita; and electronic

copies of up to three of your publications to <http://jobs.unr.edu/>. To ensure full consideration, applicants are encouraged to have all information on file by January 31, 2010. For further information about NBMG, please consult our website (<http://www.nbmг.unr.edu>).

HR will attempt to verify academic credentials upon receipt of hiring documents. If the academic credentials cannot be verified, HR will notify the faculty member that an official transcript of their highest degree must be submitted within thirty days of the faculty member's first day of employment.

The University of Nevada, Reno is committed to Equal Employment Opportunity/Affirmative Action in recruitment of its students and employees and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and sexual orientation. The University of Nevada employs only United States citizens and aliens lawfully authorized to work in the United States. Women and under-represented groups are encouraged to apply.

### **OTHER ATTRACTIONS OF UNR, NBMG, AND RENO**

Nevada geology provides an exciting venue for basic and applied research. Excellent exposures of rocks and complex structures help our geologists unravel the tectonic history of western North America. Some of the world's most productive gold and other mineral deposits are close at hand for studies of fundamental Earth processes and applications in exploration, mining, and environmental stewardship. Abundant geothermal systems are natural laboratories for understanding relationships between fluid flow and geological structure and for furthering development of renewable energy. Active tectonics, limited water resources, and booming population centers keep urban geology and studies of hazards at the forefront. Easy access to federally managed lands facilitates field work. Nevada's desert climate and temperature differentials by latitude and elevation make field work possible in different parts of the state throughout the year. Reno's concentration of geoscientists from various industries, the U.S. Geological Survey, UNR, and the Desert Research Institute encourages interactions that stimulate research.

NBMG has excellent support staffs in administration, cartography, geographic information systems, editing, and geochemical and mineralogical analysis. Existing analytical equipment available at UNR includes ICP-MS with laser ablation capabilities, AA, XRF, XRD, IC, GC, FTIR, C-H-N-S analyzer, atomic force microscopy, SEM-EDS, electron microprobe, and stable-isotope capabilities. Some equipment is maintained by faculty members in the Mackay School of Earth Sciences and Engineering, and NBMG has two individuals dedicated to analytical support. Computer facilities include excellent computational packages for geochemical and hydrogeological modeling, remote sensing, image processing, interferometric synthetic aperture radar, GPS, GIS, and 3-D visualization and modeling. Geophysical equipment includes portable seismometers, a 48-channel reflection-refraction recording system, borehole logging systems, geodetic GPS instruments, gravimeters, total-field magnetometers, field and laboratory spectrometers for mineral identification, and a fully equipped paleomagnetic laboratory.

UNR has strong reputations in economic geology, geodesy, seismology, neotectonics, geothermal resources, remote sensing, hydrogeology, chemistry, and many other fields. NBMG is a supporter of UNR's Ralph J. Roberts Center for Research in Economic Geology and works closely with its director and graduate students on projects. NBMG supports and benefits from UNR's Great Basin Center for Geothermal Energy, whose director is an NBMG scientist. The University also hosts the Reno Field Office of the U.S. Geological Survey's mineral resources team. The Geological Society of Nevada (GSN), with approximately 1,000 members, has monthly meetings in Reno that regularly attract 100 to 200 geologists. NBMG supports GSN's efforts to hold a major symposium every five years, generally with a focus on ore deposits in the Great Basin and elsewhere. NBMG recently completed construction of a new combined sample-management, information office, and publication-sales office, the Great Basin Science Sample and Records Library on the nearby campus of the Desert Research Institute. Research faculty in the Nevada Geodetic Laboratory hold joint appointments with NBMG and the Nevada Seismological Laboratory, which conducts seismological research and operates the seismic network covering much of Nevada and eastern California.

Other attractions for the position include excellent benefits (health, dental, eye, and life insurance coverage, worker's compensation, and retirement, sick leave, holidays and an academic schedule that allows for summer and semester-break vacations), access to discretionary funds that can be used for professional development, and a great area in which to live. Reno is located within minutes of the Sierra Nevada and less than an hour from skiing and hiking near Lake Tahoe, fishing at Pyramid Lake and in the Sierras, and historic Virginia City. The gaming industry provides large-city entertainment and restaurants, but the overall population (approximately 300,000 in the Reno-Carson City region) and excellent infrastructure make for commutes and a general ambiance more typical of a small town - "the biggest little city in the world." Festivals (Art Town in July, Hot August Nights, balloon races, and airplane races) are some of the many local highlights. Public and private schools have excellent reputations for placing students in top colleges, and as a faculty member, your spouse and children may attend UNR for nominally low fees and partially waived tuition. Students with good grades from UNR have excellent opportunities for graduate school and employment. The San Francisco Bay area, Napa Valley, the Pacific coast, Los Angeles, Salt Lake City, and Las Vegas are within about an hour's plane ride or easy drives.