Elevate research in qualified universities to level of national competitiveness
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- Already performing well despite adverse conditions

- Serve population of students not inclined to go on to graduate school
Elevate research in qualified universities to level of national competitiveness

- Already performing well despite adverse conditions
- Serve population of students not inclined to go on to graduate school
- Capable of 3-5 research proposed research projects that pass peer review and lead to societally relevant results preferably with both regional and global impact

microwave digestion

HF & HNO₃

ICP-MS
Computer Applications

Geographix™

Neuralog™

Scanning electron microscopy

Hitachi S-3400N SEM with Faraday cup and nano/pico ammeter, an Oxford INCA 7021 EDX and WDS, a Gatan ChromaCL live-time color cathode luminescence imaging system, an IXRF XBeam 10 um XRF source.

National Science Foundation Research Grants: Geophysics Program

<table>
<thead>
<tr>
<th>Grant ID</th>
<th>Principal Investigator</th>
<th>Institution</th>
<th>Amount</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4321511</td>
<td>Lund et al.</td>
<td>University of California</td>
<td>$100,000</td>
<td>Summer Lake and Mono Lake Studies</td>
</tr>
<tr>
<td>2351500</td>
<td>Liddicoat and Coe</td>
<td>University of California</td>
<td>$150,000</td>
<td>Summer Lake and Mono Lake Studies</td>
</tr>
</tbody>
</table>

- Lund et al. (2005)
- Liddicoat and Coe (1979)
West Coast Regional Carbon Sequestration Partnership
Annual Business Meeting
Lodi, CA
October 24-26, 2011

Jacobs (1994)

Summer Lake
Mono Lake

Radial flux centers
lower mantle velocity anomalies
transitional VGP clusters

CSUB Kern Water Bank Project:
Relationship between Depositional Environments and Groundwater Arsenic Concentrations
CSUB Undergrad Presented at the 32nd International Geological Congress, 2004, Florence, Italy

Science Students at CSUB learn by Doing Science

Alumni on the go: DIGGING ANTARCTICA
Cal State Student in the Mars Program

Former intern on Mars project to watch launch

CSUB NSF Center for Research in Science and Technology
Recruiting Bakersfield-Area Students to Study 21st Century Water Resources and Subsurface Carbon Storage in the San Joaquin Valley

In September of 2011, the Department of Geological Sciences at CSUB Bakersfield was awarded $8M over a five-year period for a series of studies that will bear on the future of the San Joaquin Valley as an economic center for agriculture and carbon sequestration.

Water Resource and Carbon Storage Projects
1. Forecasting 21st century trends in stream runoff from the southern Sierra Nevada.
2. Studying the changes in the elevation effect on fractional snow-cover in the Sierra Nevada due to climate change.
3. Characterization of mature oil fields as potential reservoirs for injected CO2 and laboratory simulations of chemical change during CO2 injection into San Joaquin Valley sedimentary rocks.

Support for Students
- $20,000/yr for juniors and seniors
- $30,000/yr plus benefits for graduate students
- Travel $5 to conventions and to work in national labs and cooperating Ph.D.-granting institutions (e.g., USC, U.C. Davis, UCSD, UT Austin)

Expectations of Students
- Full time enrollment
- Excellent academic performance
- Dedication to research and courses (i.e., no outside jobs)
- Willingness to work hard
- Interest in eventual Ph.D. study

For more information, contact Rob Negrini at negrini@csub.edu