Earth Lab Post-Doctoral Research Scholars
at the University of Colorado-Boulder

The Earth Lab initiative, part of the University of Colorado Boulder's "Grand Challenge: Our Space, Our Future," seeks post-doctoral researchers to join a dynamic team pushing the frontiers of coupled earth and social system science (http://www.colorado.edu/earthlab/). Earth Lab's mission is to harness the wave of Earth data generated by aerospace platforms and other sources to better understand the pace and pattern of environmental change.

Earth Lab will:

- **Capitalize on the data deluge from space** to accelerate science;
- **Reduce environmental risk and surprise** by using this wealth of data to understand and predict both slow and abrupt Earth System change to help society manage and adapt;
- **Train a new generation of data scientists in Earth Analytics.**

Earth Lab's Analytics Hub is a state-of-the-art computing facility that leverages existing cyberinfrastructure investments at the University of Colorado-Boulder and houses data science specialists and support staff who assist researchers and students with data management, analysis and visualization needs.

Post-Doctoral Research Scholars are responsible for carrying out Earth Lab's research program. Successful candidates must have content knowledge and data analytics skills relevant to each theme, as well as an eagerness to bridge among the themes and interact with specialists in data analytics, visualization, and informatics in a high performance computing or cloud computing environment. Interest in mentoring undergraduate and graduate students is a plus, as Earth Lab is committed to advancing education and developing the Earth Systems data analytics workforce. Interest in interacting with the private sector, especially with companies providing environmental sensing data and analysis, from space, aerial, and *in situ* platforms, is also desirable.

These positions will be filled as Research Associates at the University of Colorado-Boulder, with salary appropriate to qualifications and experience, and with eligible employee benefits. Initial appointment will be for one year with high likelihood of renewal for an additional year.

3. Human Health & Environmental Change, position #09413
This project will explore how we can better understand the links between environmental change and human health. The project will integrate Earth Systems datasets (e.g., satellite-derived climate, wildfire, and/or land use data) being created through Earth Lab with larger health datasets (examples include data from the Rocky Mountain Research Data Center opening up at CU Boulder in Spring 2017, electronic medical records, social media, etc.). The successful candidate will explore one or more of the following research areas: 1) Health impacts of smoke from wildland fire in various ecological contexts; 2) Health impacts of drought; 3) How social media can better inform understanding of spatiotemporal relationships between environmental exposures and health outcomes; and 4) Projecting health impacts of climate change using information on changing demographics, land use, and environmental exposures. Linking to other research areas within Earth Lab, such as Fire, Risk & Decision Making, Data Harmonization, Settlements, and Extremes is a key goal of this project to further Earth Lab's goals of exploring the human dimensions of global environmental change.

General Qualifications for post-doctoral positions at Earth Lab:
- Doctoral degree in natural or social sciences related to the Earth Lab research themes as described below.
- Strong quantitative background.
- Experience in, or willingness to learn, appropriate programming and data analytic tools. Ideally the candidates will have experience in programming languages (e.g., R, Python, or others), can work in different environments (e.g., Linux), and are well versed in geospatial analysis software (e.g., QGIS).
- Experience in integrating and analyzing large, and/or heterogeneous datasets.
- Experience in working with a high performance computing or cloud computing environment is a plus.

- Demonstrated publication and grant-writing skills.
- Team spirit and interest in interdisciplinary research settings.

Specific Qualifications for Human Health & Environmental Change: Completed Ph.D. in epidemiology, medical geography, biostatistics, environmental health sciences, public health, or related field. Strong quantitative skills and experience in linking environmental data to health data is recommended. Contact for this theme: Colleen Reid, Department of Geography, colleen.reid@colorado.edu

Information on Earth Lab can be found here: http://www.colorado.edu/earthlab/

Earth Lab is also seeking three other Post-Doctoral Scholars in the following areas:

1. The Natural Science of Coupled Extremes,
2. The Social and Economic Impacts of Extremes,
3. Settlements and Environmental Change.

These target research areas represent Earth Lab's efforts to explore society's vulnerability and resilience to global environmental change.

To Apply:
Please visit the CU Careers website (https://cu.taleo.net/careersection/2/moresearch.ftl?lang=en) to apply for these positions (search for position #s: 09415, 09414, 09413, 09412). All applications that are received by **June 9th** will be given full consideration, but the positions will remain open until filled. Applicants should provide:

1. personal information prompted by the CU Careers website,
2. a 1-2 page cover letter explaining relevant research background and interest in the specific Earth Lab theme (Doc 1);
3. complete C.V. (Doc 2),
4. a document listing the names and contact information for two references, who then will be prompted to submit their reference letters (Doc 3),
5. proof of Ph.D. degree, or formal letter from your institution stating that all requirements for the Ph.D. degree have been completed (Doc 4).

For general information on applying, please contact Chelsea Nagy (Rachel.Nagy@Colorado.EDU).

Additional Information
The University of Colorado at Boulder is committed to providing a safe and productive learning, living and working community. To achieve this goal, we conduct background investigations for all final applicants being considered for employment. Background investigations for this position include criminal history and reference checks. The Immigration Reform and Control Act requires that verification of employment eligibility be documented for all new employees by the end of the third day of work.

The University of Colorado is an Equal Opportunity Employer committed to building a diverse workforce. We encourage applications from women, racial and ethnic minorities, persons with disabilities and veterans. Alternative formats of this ad can be provided upon request for individuals with disabilities by contacting Employment Services at (303) 492-6475.