The Department of Geographical Sciences at University of Maryland, College Park, is seeking two Professional Track Research Faculty Members (non-tenure positions) at either the Research Associate rank or the Research Assistant Professor rank, commensurate with qualifications and experience. Salary and benefits are highly competitive. These researchers will support the development and execution of the Global Ecosystem Dynamics Investigation Lidar (GEDI). GEDI was recently selected by NASA as part of its Earth Ventures Instrument (EVI) program. GEDI will deploy a multi-beam waveform lidar on the International Space Station to obtain 3D structural information on vegetation canopies. Data from GEDI will be used for biomass estimation, habitat characterization, and to drive prognostic ecosystem models, among others. GEDI is led by the University of Maryland in collaboration with NASA Goddard Spaceflight Center (GSFC), which is responsible for building the lidar instrument.

Candidates will contribute to various phases of mission development, including science algorithms, pre- and post-flight calibration and validation, development of field observation data bases, science data product definition and development, as well as other activities in support of the Principal Investigator, the GEDI Science team and its collaborators, and the GEDI engineering teams. Applicants should have a strong pedagogic background in disciplines aligned with mission science objectives and have interests in biomass estimation, ecosystem modeling, habitat/biodiversity studies or related areas. Some technical expertise in lidar remote sensing is highly desirable; however, applicants with strong experience in other areas of remote sensing, such as radar, who are interested in pursuing lidar fusion studies are also encouraged to apply.

The researchers will be co-located with the GEDI project management, engineering and science teams at NASA GSFC, but will also spend significant time at the University of Maryland. There will also be periods of fieldwork, both domestic and foreign, in support of aircraft calibration and validation campaigns.

Minimum Qualifications and Required Skills

An earned doctoral degree in Geographical Sciences or allied fields in environmental science, such as Biology and Forestry is required. Candidates with doctoral degrees in other fields (for example, Physics, Computer Science, and Electrical Engineering) with a demonstrated knowledge and understanding of remote sensing of the land surface will also be considered. Strong programming and statistical skills (e.g. such as IDL, MatLab, C/C++, and R) are required. Candidates must have a demonstrated ability to independently conduct research as evidenced by peer-reviewed publications. Excellent verbal and written communication skills are also required.

Applications should include a personal statement of background and experience relevant to the position, a signed, dated Curriculum Vitae, reprints (or accessible download urls) of selected peer-reviewed publications, and names and addresses (including e-mail) of 3-5 references.
For best consideration applications should be submitted no later than 31 January 2015 but the search will continue until a suitable candidate is appointed.

To Apply: https://ejobs.umd.edu/postings/31438. Applications from women and minorities are particularly sought. The University of Maryland is an Equal Opportunity Affirmative Action Employer.

Further information on the research programs of the Department may be obtained from the address above and can be found at http://www.geog.umd.edu.