Postdoctoral position in Quantitative Sciences

The Forest Biometrics and Measurements Lab at Oregon State University seeks a highly motivated and talented research Postdoctoral fellow in quantitative sciences, including forest biometrics, statistical ecology, remote sensing, or geospatial analysis. The incumbent will examine the efficiency and suitability of selected methods to estimate change and species composition from satellite and airborne remotely sensed spectral, airborne photogrammetric, environmental, and ground data. The position provides a competitive 12-month stipend and two-year health insurance, starting September 1, 2022.

The project is a collaborative study with Drs. Jacob Strunk (jacob.strunk@usda.gov) and David Bell (david.bell@usda.gov) at the USFS Pacific Northwest research station. The development of spatially-explicit information describing species composition and estimating forest change over a region is critical for various applications, including policy development, forest fuel mitigation, and inventory. In keeping with the importance of spatially-explicit information on species and forest change, the incumbent will:

1) Quantify the effectiveness of different remote sensing attributes to identify species (or species groups) composition and change using random forest, neural networks, SVM, boosting, kNN, or other suitable modeling approaches and map results
2) Examine the use of different models to relate field measurements and their change to multi-temporal remotely sensed structure and spectral metrics
3) Process three-dimensional data, analyze, and interpret results to support improved predictions.

As time and interest allow, the incumbent may also leverage the species and change information to address questions relevant to forest ecology and management.

Oregon State University is located between Portland and Eugene in Corvallis, Oregon. Ocean beaches, lakes, rivers, forests, high deserts, and the Coast and rugged Cascade Ranges are within a 100-mile drive of Corvallis. For information about the College of Forestry at OSU, visit http://www.cof.orst.edu/

Candidates must possess a Ph.D. in Quantitative Sciences, including Forest Biometrics/Measurements, Statistical Ecology, Remote Sensing, Geospatial Analysis, or a related field. Expertise in forest measurement or a quantitative field involving geospatial analysis is expected. Ideally, the successful candidate will have worked with common spatial products (vector and raster), spectral and point cloud remote sensing datasets, and modeling and mapping. The candidate should be proficient in scripting and data analysis (e.g., python or R). Excellent written and verbal communication skills
are desired. Interested candidates should send their application curriculum vitae, including a list of publications and references, to one of the cooperators listed below.

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Closing date: August 31, 2022, or until the position is filled.