**Post-doctoral associate position (two): regional earth system modeling**

We are seeking two highly motivated post-doctoral associates to support regional earth system modeling as part of several ongoing USDA, NSF, and NOAA funded interdisciplinary research projects. The fundamental goal of these projects is to develop, evaluate, and apply an integrated modeling framework that couples the state-of-the-art regional climate, hydrology, agriculture, agronomy, and economy models and provides accurate predictions for effective decision making toward a sustainable future under climate change.

The post-doctoral associates will focus on developing the coupled regional earth system model and performing the system prediction, skill evaluation, impact assessment, and real application. This will involve calibrating, testing, and analyzing a suite of crop, urban, lake, coastal ocean, and biogeochemistry models and coupling them with the regional Climate-Weather Research and Forecasting model (CWRF). The resulting coupled system will then be used to generate more accurate forecasts of regional climate, terrestrial hydrology, crop yield, carbon uptake, nutrient loading, urban effect, lake level, coastal inundation, ecosystem productivity, and economic risk that can be shared directly with wide stakeholders to support their decisions toward sustainable development. The associates will be encouraged and supported in conducting and publishing research. Salary is commensurate with experience and University benefits will be included.

**Qualifications:**

Applicants should have a recent Ph.D. (within 5 years) in atmospheric or climate, hydrologic or agricultural sciences and a strong background in dynamic model development. They must have experience and skill in programming (particularly Fortran or C), as well as analytical skill in system model evaluation and process interaction understanding. Experience in developing and applying mesoscale regional climate models are desired and skills in machine learning are encouraged. Strong verbal and written English communication skills are required.

**Availability:**

The positions are available immediately and extendable over two or more years depending on funding availability. Applications will be reviewed on a rolling basis until the position is filled.

**To apply:**

Interested applicants should submit a cover letter, CV, and contact information for three references to Professor Xin-Zhong Liang at xliang@umd.edu and CC to Dr. Drew Gower at dbgower@umd.edu.