

**Post-doctoral scholar and graduate research assistant openings:
Earth System Science Interdisciplinary Center, University of Maryland College Park**

We are seeking applicants in the area of interdisciplinary earth system modeling for a post-doctoral scholar position and three graduate research assistant positions. Successful applicants will join NSF- and NOAA-funded projects focused on regional earth systems modeling. Both projects are funded for the next five years, and successful applicants will have uninterrupted support during their period of study.

The post-doc and two graduate positions are for a new NSF project to build a modeling framework (MFEW) coupling food, energy, water, and environmental change in the teleconnected Corn and Cotton Belts. This project bridges the fields of climate, hydrology, agriculture, biogeochemistry, engineering, and economics, and will provide opportunities for extensive interdisciplinary collaboration. Particular focuses for the available positions include, but are not limited to, models integration and coupling, groundwater and water quality modeling, food and bioenergy crop modeling, land and water resource management. The third graduate position is for an ongoing NOAA-funded project on regional climate modeling, and focuses the understanding and prediction of atmospheric and surface processes.

Position Activities:

- The post-doctoral scholar will be responsible for overall MFEW system development, simulations, and analyses. She/he will collaborate with interdisciplinary team members at multiple universities to implement or couple component model formulations.
- Graduate students, in addition to their academic course work, will be directly involved in model development, simulation, data preparation, and analysis. They will choose their thesis research topics in the areas listed above.

Applicant Requirements:

- A Ph.D. (post-doctoral applicants) or B.S. (graduate applicants) in atmospheric, hydrologic, agricultural sciences, applied mathematics, physics, data science, or a related field
- Strong verbal and oral communication skills, and the ability to synthesize and integrate information from other disciplines and areas of study
- Post-doctoral applicants should have demonstrated proficiency and graduate applicants should have interest and ability in the following areas:
 - Atmospheric, hydrologic, or crop modeling systems and data analysis
 - Programming (F90 and C are preferred) and parallel computing
 - Analytical skills, including the ability to rigorously evaluate and analyze observational data and simulation results
 - Statistical and mathematic skills for evaluating model simulation results, uncertainty characterization, and system optimization

Interested graduate applicants should apply to the University of Maryland through the department of Atmospheric and Oceanic Science (AOSC), and contact Professor Xin-Zhong Liang via email: xliang@umd.edu. Interested post-doctoral applicants should submit a CV and three letters of reference (including contact information) to Professor Xin-Zhong Liang by the above email. Positions are available immediately. We will continue accepting applications until the positions are filled, but for priority consideration of the post-doctoral position, please submit all materials by October 15, 2016.

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.