Job Title	Postdoctoral Research Associate
PVN ID	RC-1909-003296
Category	Research
Location	CUNY-ADVANCED SCIENCE RESEARCH CENTER
Department	Environmental Sciences Initiative
Status	Full Time
Salary	Depends on qualifications
Hour(s) a Week	35
Closing Date	Jan 14, 2020 (Or Until Filled)

General Description

A Postdoctoral Research Associate is sought to join a consortium of academic partners analyzing contemporary and future challenges to food-energy-water systems (FEWS) of the Northeast and Midwestern United States. Extreme weather will continue to challenge the performance of FEWS-related engineered and natural infrastructure, and serve as a major force shaping future decisions on environment, economy, and national security. This project responds to this imperative by creating the C-FEWS (Climate-induced extremes on the linked Food, Energy, Water System) research framework to advance modeling, data integration and assessment capabilities in support of hypothesis-based research on regional food-energy-water dynamics. It is also designed to support policy-making by identifying alternative FEWS management strategies under changing climate and weather extremes over multitemporal time horizons to 2100.

The project is seeking a creative, self-motivated, and energetic post-doctoral fellow assist, lead various aspects of, and be trained for a leadership position in the field.

Eligible fields of expertise:

Modeling, numerical methods and/or geospatial data analysis training in any of the following areas: hydrology, environmental systems analysis, environmental engineering, energy assessment, ecosystem services evaluation.

Primary responsibilities:

- Execute large-scale food-water-energy nexus modeling studies;
- Data integration from Earth System science and human dimensions perspectives;
- Analyze role of traditional engineering assets and ecosystem services in regional food-energy-water systems;
- Under the general supervision of the Senior Research Director and PIs, perform simple-to-complex

research tasks, investigations, and analytical activities independently;

- Formulate scenarios of potential future trajectories of NEXUS conditions and management responses;
- Integrate across individual project elements (models, data) by helping to create and apply a holistic analysis framework.

Qualifications and skills sought:

- Strong numerical skills;
- Modeling, data visualization geospatial analysis (GIS);
- Ability to write clearly, including technical reports & peer-reviewed scientific publications;
- Presentation skills for internal team meetings and scientific conferences;
- Capacity to participate in team-based research and lead various aspects of the work, including project management.

Other Duties

- Interdisciplinary interactions with a modeling team;
- Consultation with other researchers and authorities in the field as appropriate;
- Interact and help mentor graduate and undergraduate students who are affiliated with the project;
- Ability to travel domestically;
- Work well in team environment but with ability to perform research independently;
- Preparation of annual and other administrative reports;
- Organize planning meetings and events, web-based communications as necessary.

Qualifications

Candidate should have completed a Ph.D. by the time of appointment in an appropriate field of study, or specialty, from an accredited institution, or equivalent in related fields are preferred. Starting salary will be commensurate with experience and qualifications.