

## Postdoctoral Research Associate in Lake Water Quality Forecasting at Virginia Tech

A new position for a postdoctoral research associate to collaborate with a vibrant, interdisciplinary research team working in freshwater science is available in the Carey Lab at Virginia Tech. This position is part of a recently-funded NSF project that will develop a water quality forecasting system for a drinking water supply reservoir and Global Lakes Ecological Observatory Network (GLEON) site. As part of the project, we are combining high-frequency sensor monitoring, modeling, ecosystem forecasting, and data-intensive analytical approaches from ecology, computer science, engineering, and social science. This project is unique because it combines theory and application: we will be developing new, generalized approaches to forecasting that will be directly applied to managing the drinking water reservoir.

We are seeking a creative and quantitative Ph.D. with significant research experience in freshwater science, especially the implementation of sensor networks and modeling. The successful applicant will collaborate with graduate students, post docs, and faculty to address fundamental questions surrounding the effects of changing climate and management on water quality dynamics in lake and reservoir catchments. Research activities will include: deploying a network of diverse sensors in a reservoir and its catchment to feed a data-model fusion system; using hydrodynamic-water quality simulation models to create water quality forecasts; and collaborating with reservoir managers. The successful applicant will have access to new distributed computing resources that have become recently available from GLEON-PRAGMA (Pacific Rim Applications and Grid Middleware Assembly) collaborations.

The position will start in the spring semester of 2018. The specific start date is flexible and could begin as soon as January 2018 or as late as May 2018; review of applications will be rolling with a deadline of October 1, 2017. The position is for two years, contingent upon a successful one-year review. Please upload your CV, statement of interest, and contact info for three references here: <https://listings.jobs.vt.edu/postings/78848>, and don't hesitate to contact me with any questions!

Thanks,  
Cayelan Carey  
Department of Biological Sciences  
Virginia Tech  
Blacksburg, VA  
[cayelan@vt.edu](mailto:cayelan@vt.edu)