We have a fellow or post-doc position available at the US EPA's Western Ecology Division in Corvallis, OR. The position is funded through the Oakridge/ORISE program, and underlined: applications must be submitted through the Zintellect website (https://www.zintellect.com/Account/ApplicantRegister/6513; Note that applications are not visible to us until at least one recommendation letter is received).

Spatial Prediction of Ecological Indexes in USA Lakes, Rivers, and Streams (position EPA-ORD-NHEERL-WED-2019-02). This research project will seek to develop models and spatial predictions (interpolations) of observed-to-expected (O/E) taxonomic richness available at several thousand lake, river, and stream sample sites that were sampled as part of the National Aquatic Resource Surveys (NARS; https://www.epa.gov/national-aquatic-resource-surveys), as well as other measures of aquatic ecosystem status that can achieve both the spatial resolution and accuracy/precision required by a wide range of researchers and practitioners. The O/E metric is of great interest to a broad range of researchers, including economists interested in estimating the willingness to pay for changes in aquatic ecosystem health. For analyses such as these, both regional and fine-scale estimates of aquatic condition are required. There are comparable needs for other estimates of fine resolution indicators for a broad range of other applications. The research participant will contribute to the development of a research program that, among other things, models existing NARS O/E (or other biological indicator) estimates or develops new O/E predictions from individual- or multi-taxon niche models with various statistical or machine learning techniques, including evaluation of model accuracy. Separate models will be developed for lakes and rivers/streams and will likely use the USEPA's LakeCat (Hill et al. 2018) and StreamCat (Hill et al. 2016) datasets for development and application of each. The research participant will learn about the use of spatial indicators and watershed data, and will learn to develop, test, and apply national-scale models. The research participant will also further develop an expertise in spatial analysis using large national datasets. The research participant will have access to a team of experts collaborating in and across disciplines on problems of crucial importance to the EPA's mission. The qualified candidate should have a strong background in aquatic ecology and landscape analysis of aquatic systems. Specifically, expertise in watershed or statistical modeling, spatial analyses at broad spatial scales, use of aquatic monitoring data, and GIS

analyses. The full project description can be found at https://www.zintellect.com/Opportunity/Details/EPA-ORD-NHEERL-WED-2019-02.

Please share this with any colleagues that you think might be interested. Questions on the application process should be addressed to ORISE at Zintellect@orau.org. Technical questions concerning the position can be obtained by contacting me at leibowitz.scott@epa.gov. Note that applicants must have received a Masters or Doctoral Degree within the last 60 months and must be a U.S. citizen or Lawful Permanent Resident.

Applications will be accepted until the position is filled.

Thank you.

Scott G. Leibowitz, Ph.D.
U.S. Environmental Protection Agency
200 SW 35th St, Corvallis, Oregon 97333
Phone: 541.754.4508
email: leibowitz.scott@epa.gov