



**Department of Epidemiology**

**Postdoctoral Position: Development and Application of Space-Time Statistical Models**

The Spatial Sciences Center for Public Health, located in the Department of Epidemiology at the Johns Hopkins Bloomberg School of Public Health, is seeking a Postdoctoral Fellow to develop spatial-temporal environmental forecasting models for the bacterium *Vibrio parahaemolyticus*. The ideal candidate will have substantial experience with geostatistics, spatial-temporal modeling, and Bayesian methods used to estimate such models. The position may also provide opportunities to work on other public health research projects where statistical expertise in space-time modeling is required. Candidates with a strong background in biostatistics and experience in environmental or environmental health applications will be given priority. Further experience in working with infectious diseases, familiarity with general concepts of microbiology, and previous work related to the risk sciences are desired but not required.

The successful applicant will work with Dr. Frank Curriero and colleagues on a project funded by the National Institute of Allergy and Infectious Diseases (NIAID) that aims to improve the understanding of the presence and abundance of infectious strains of *V. parahaemolyticus* in the environment. This bacterium is one of the leading causes of foodborne illness due to consumption of raw shellfish, both nationally and globally. The postdoctoral work will involve developing robust and reliable prediction and forecast models using environmental data (water quality, meteorological, land use, etc.) in the Chesapeake Bay and in Washington State harvesting waters. Interest and experience in developing dynamic and large environmental statistical forecast models is needed for this position. Models may also be developed to include real-time data that can be incorporated into a web application accessible to shellfish harvesters and regulators. The overall project is expected to have a direct impact on food safety and shellfish harvesting regulation and will reduce the incidence of vibriosis infections caused by shellfish harvested from two major estuarine environments.

The successful applicant will be joining researchers involved in the NIAID *Vibrio* project along with other faculty and staff at the Johns Hopkins Spatial Science for Public Health Center who focus on research and training in GIS and spatial statistics. Opportunities to become involved in other research projects and to develop new research projects are also possible.

The position will be for 1 year, with the opportunity for renewal.

Interested candidates should contact Ben Davis (Bdavis64@jhmi.edu) with a CV, statement of interest, and references. Applications will be considered on a rolling basis.