



**POSTDOCTORAL POSITION
MODELING MOSQUITO AND TICK-BORNE DISEASE SURVEILLANCE AND CONTROL**

**Columbia University
Department of Ecology, Evolution and Environmental Biology (E3B)
International Research Institute for Climate and Society (IRI), The Earth Institute
Northeast Regional Center for Excellence in Vector-borne diseases**

A postdoctoral position is available in Maria Diuk-Wasser's lab @ the Department of Ecology, Evolution and Environmental Biology (E3B), Columbia University, in collaboration with Ángel G. Muñoz at the International Research Institute for Climate and Society (IRI). The applicant will join research projects newly funded by the Department of Defense, NOAA and the CDC, and will become part of the Northeast Regional Center for Excellence in Vector-borne diseases, a collaborative network including faculty from Cornell, Columbia, Fordham and SUNY Universities, the NY State Department of Health and the Center for Vector Biology and Zoonotic Diseases in CT. The postdoctoral fellow will harness an extensive network of existing and newly acquired surveillance and control datasets to develop diagnostic and predictive models for the presence and abundance of mosquito and tick vectors and their associated pathogens. Areas of emphasis include modeling for optimal deployment of integrated tick management approaches, modeling the population dynamics and spread of mosquito and tick-borne pathogens, multi-model ensemble modeling for Aedes-borne diseases and helping develop a human mobility monitoring system for the US and the Caribbean region. The modeling platforms developed will enhance surveillance and institutional response capacity for real-time impact on vector-borne disease management.

Applicants should have a PhD in ecology, epidemiology, applied mathematics, statistics, climate sciences or a related quantitative field. Background in mathematical modeling of infectious diseases, theoretical ecology, spatial and dynamic modeling or mathematical biology is highly desirable, in addition to having strong programming, statistical and quantitative skills. A track record of research excellence is essential, as are excellent written and oral communication skills.

The position is available immediately. For full consideration, submit application by June 30th, review of applications will be on-going until the position is filled. Applications should submit their CV, statement of research interests and the names of three references to:

Maria Diuk-Wasser - mad2256@columbia.edu

Dept. of Ecology, Evolution and Environmental Biology
Columbia University
10th Fl. Schermerhorn Ext., Room 1013
1200 Amsterdam Avenue
New York, NY 10027