POSTDOCTORAL POSITION AVAILABLE – Viral Immunology

WHERE:
Laboratory of Dr. Eva Harris
Division of Infectious Diseases and Vaccinology
School of Public Health
University of California, Berkeley

WHEN:
Available Fall 2020

WHAT:
Investigate the B cell and antibody response, dynamics, and repertoire in natural human dengue (DENV) and Zika virus (ZIKV) infections as part of long-term longitudinal pediatric cohort and hospital-based studies of dengue and Zika in Nicaragua. For example, we have observed asymmetries in protection and enhancement based on the sequence of infection with different DENV serotypes and ZIKV and we seek to explain these phenomena by analyzing the B cell and antibody repertoire in samples collected after different infection sequences as well as in relation to the virion structure of the subsequent infecting virus. Further, analysis of long-term antibody dynamics post-DENV and ZIKV infection has revealed different patterns of persistence versus decay, and we aim to define the antibody, B cell and Tfh cell characteristics that determine the longevity of distinct antibody classes post-primary and post-secondary infection. The position may also involve assessment of the protective capacity of human monoclonal antibodies in murine models of DENV and ZIKV infection and disease. Overall, these studies involve collaborative investigations in the context of a Program Project on mechanisms of protective (and potentially pathogenic) flavivirus immunity in human populations.

QUALIFICATIONS DESIRED:
PhD or MD/PhD in Immunology, Virology and/or Microbiology
Expertise in adaptive immune response and methods such as flow cytometry/FACS, ELISpot, etc.
Substantial laboratory experience in human and/or murine immunology

ABOUT THE LAB:
The Harris lab takes a multidisciplinary approach to study the virology, pathogenesis, immunology, clinical aspects, epidemiology, and control of dengue, Zika and chikungunya, the most prevalent arboviral diseases in humans. Our work addresses viral and host factors that modulate disease severity and investigates immune correlates of protection and pathogenesis using in vitro approaches, animal models, and research involving human populations.

CONTACT:
Eva Harris
eharris@berkeley.edu
https://www.harrisresearchprogram.org/
Division of Infectious Diseases and Vaccinology
School of Public Health
University of California Berkeley
185 Li Ka Shing Center, 1951 Oxford Street
Berkeley, CA 94720-3370

Applicants should send cover letter/statement of research interests, curriculum vitae, and be prepared to submit 2-3 letters of recommendation/references upon request.

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