

Infectious Disease Epidemiology __ California 2004

The proposed Fellow's position is located in the Infectious Diseases Branch (IDB) of the Division of Communicable Disease Control (DCDC) in Berkeley, California. IDB covers all infectious diseases in California that are not addressed by other existing programs, which include: the Tuberculosis Control Branch, Sexually Transmitted Disease Control Branch, or Immunization Branch or by the Office of AIDS. The IDB's 5 sections (Disease Investigations, Bioterrorism Epidemiology, Vector-Borne Disease, Surveillance and Statistics, and Veterinary Public Health) carry out activities through 61 local health jurisdictions to cover all aspects of infectious disease surveillance and control, ranging from routine surveillance to outbreak investigations and special epidemiologic studies.

The Fellow's anticipated day-to-day activities will include partaking in general public health activities of the Branch, focusing on public health studies and projects, and interacting with Branch and Division staff as well as local and federal partners on infectious disease issues. Specific activities include participating in regular Branch and Division meetings and in occasional Branch-sponsored seminars, meeting with supervisors and consultants on planning and implementing epidemiologic studies to address selected infectious disease issues of public health importance, liaising with partners at the local, state, and federal levels regarding studies, collecting and analyzing data, interpreting results, communicating findings orally and verbally to all involved (affected populations, local public health partners, and medical community), and writing reports, summaries, and manuscripts for publications. All these activities require and provide experience involving science, service, and policy.

Potential projects that the Fellow can consider include analyzing the California Hospital Discharge Data on hepatitis or meningitis for burden of disease, trends, and direct medical care costs associated with hospitalized cases in California. Other data sets include state death records, and surveillance data on a number of infectious diseases collected by the state and by the California Emerging Infections Program.

California is the most populous state in the nation and therefore, not surprisingly, has a variety and abundance of outbreaks of infectious diseases from foodborne to nosocomial. For example, in summer-fall 2004 we investigated a recreational waterborne *Cryptosporidium* outbreak, foodborne outbreaks, community-associated Methicillin-Resistant *Staphylococcus aureus* infection at a nursing home, and *Kingella kingae* infection at a day-care center. The Fellow will be invited to participate or lead outbreak investigations depending on interest and availability. While we have routinely had EIS officers match with our program, there have been more than enough opportunities (outbreak investigations, epidemiologic studies, and analysis of large data sets) to spread around. There are also opportunities to work on interdisciplinary teams we have formed to address West Nile Virus and Bioterrorism preparedness.

The fellow could evaluate the recently implemented West Nile Virus surveillance system in California using the CDC report, Updated *Guidelines for Evaluating Public Health Surveillance Systems* (CDC, 2001). Findings from this evaluation could assist us with improving WNV surveillance in California.

Bioterrorism (BT) preparedness and response training for the Fellow will be included as part of the proposed fellowship with IDB. This will be facilitated by the fact that the Bioterrorism Epidemiology Section is a part of IDB and that BT preparedness and response training has been an ongoing major activity for all IDB and Division staff.

Assignment Location: Berkeley, CA until May 2005 at which time the Branch will move 5 miles north to Richmond, CA

Primary Mentor: Duc Vugia, MD, MPH
Chief of Infectious Diseases Branch (1995-present)
Advanced Degrees: MD, University of California, San Francisco (1981)
MPH, University of California, Berkeley (1990)

Secondary Mentor: S. Benson Werner, MD, MPH
Chief of Disease Investigations Section (December 1992-present)
Advanced Degrees: MD, Washington University School of Medicine, St. Louis (1964)
MPH, University of California, Berkeley (1970)