

## **Infectious Disease**

### **Assignment Description**

The fellow will be assigned to the HIV Epidemiology and Field Services Program of the Bureau of HIV/AIDS Prevention and Control and report to Dr. Braunstein. The Bureau of HIV/AIDS Prevention and Control is one of the seven Bureaus of the Division of Disease Control. The main assignments will involve assisting in, developing and taking the lead on data analyses of HIV/AIDS surveillance data available to HEFSP's Surveillance Unit. HEFSP's surveillance unit investigates and reports approximately 3,800 new HIV diagnoses a year and receives an equal number of AIDS diagnoses annually. The Bureau's epidemiology staff is also responsible for investigation of any identified clusters of HIV infections or HIV cases of special public health interest. Several new surveillance systems are being implemented to identify recent HIV infections in close to real time and antiretroviral-resistant infections among the newly infected. The Bureau administers over 200 million dollars of programmatic funding for HIV prevention, treatment and other services for HIV-infected persons. The fellow would join a committed group of public health professionals working to address this highly preventable, life-threatening, prevalent infectious disease at the population level through innovative surveillance and programmatic interventions. The fellow would specifically concentrate on areas where epidemiologic analysis can impact the Bureau's understanding of the state of the epidemic in ways that inform its programmatic interventions.

### **Day-to- Day Activities**

The CSTE fellow will assist in and conduct analyses and dissemination of HIV Surveillance data. The analyses will include descriptive analyses of outcomes in each outcome domain and by demographic and other relevant variables, comparisons of these outcomes across sample years, and inferential analyses of specific research questions. The inferential analyses will involve developing and testing explanatory models using multivariate statistical techniques. Analyses will be conducted using SAS and other analytic software.

In addition to assisting in ongoing analyses, the CSTE fellow will develop analysis concepts and take the lead in implementing analyses. Dissemination activities will include responding to data requests from the HIV Epidemiology and Field Services Program and other Programs in the Bureau of HIV Prevention and Control, and from elsewhere in the Department of Health and external sources.

In addition to working on journal-quality articles, the CSTE fellow will develop and produce slide presentations, reports, and fact sheets, and will participate in oral and poster presentations of data analyses.

Other day-to-day activities would be tailored to the fellow's interests but could include:

- a. Attending weekly Surveillance unit meetings;
- b. Attending meetings with Bureau Sexually Transmitted Disease Control and Correctional Health Services regarding ongoing programmatic collaborations;
- c. Monthly surveillance conference calls with New York State regarding issues with surveillance data transfers and data flow;

- d. If the fellow has a specific interest in an area of HIV prevention and control, this could be accommodated (e.g. anti-stigma campaigns; sex harm reduction/condom distribution; needle exchange; prevention in women, people of color or transgender persons, etc);
- e. Attending DOHMH's many formal educational opportunities including Epidemiology Grand Rounds, research seminars, and trainings;
- f. Participating in collaborations with HIV researchers outside the Bureau and outside of DOHMH, including academic public health partners (e.g., Columbia University and Hunter College).

## Potential Projects

Potential projects include:

1. Surveillance or programmatic evaluation projects
  - a. Evaluate the contribution of interview data to case information in the HIV/AIDS Surveillance Registry, comparing it in particular to case information obtained by chart review.
  - b. Analysis of HARS-STD registry match and other similar registry matches likely to take place at DOHMH in 2011.
2. Data analysis projects:
  - a. Post-match analyses based on HARS-STD registry match and other similar registry matches likely to take place at DOHMH in 2011. Analyses may include incidence and time to event for various sexually transmitted diseases among PLWHA in NYC.
  - b. Use a citywide hospitalization database to characterize HIV-related hospitalizations and assess the impact of funded treatment and care programs.
3. Outbreak/field investigation projects
  - a. Investigate identified clusters of HIV infection
  - b. Investigate a foodborne outbreak with DOHMH's Bureau of Communicable Disease

## Preparedness Role

We fully anticipate being able to engage the CSTE Fellow in the agency's emergency preparedness activities to the extent that they are interested and/or required to do so. Our current CSTE Fellow has been able to attend emergency preparedness meetings in which tabletop exercises are conducted. She has been able to participate in a foodborne outbreak response, which provided her with many experiences relevant to emergency preparedness. She has also been able to work with the leadership of one of the agency's emergency preparedness sections to conceive of her own tabletop exercise for presentation to the wider group.

Assignment Location: New York, New York

Primary Mentor: Sarah Braunstein, PhD  
Assistant Director for HIV Surveillance  
New York City Department of Health and Mental Hygiene

Secondary Mentor:

Colin Shepard, MD  
Director, HIV Epidemiology and Field Services Program  
New York City Department of Health and Mental Hygiene