

1) The New York City Department of Health and Mental Hygiene (DOHMH) is a large and well-staffed Department with expertise in emergency management, program administration, surveillance and epidemiology. We are the primary public health agency for over 8 million ethnically and socio-economically diverse people in 321 square miles (the highest population density in the US). NYC is one of the major ports of entry for travelers and commerce with recent immigrants accounting for a third of the population which makes the city especially vulnerable to the threat of imported illness as happened with West Nile Virus in 1999.

The assignment will be in the Bureau of Communicable Disease (BCD), the program responsible for the surveillance and public health response of over 60 infectious diseases or conditions, including those that may be related to bioterrorism.

2)

a) The Fellow will be assigned to the Waterborne and Enterics unit in the Bureau of Communicable Diseases and will have his/her own analytic, surveillance and educational projects to work on daily (described below). In addition, the unit investigates an average of 30 foodborne outbreaks/year and the Fellow will participate in all aspects of foodborne investigations with the goal of being able to manage them independently.

b) The Fellow will also work on educational activities regarding foodborne illness. Because of the cultural diversity of NYC this will involve working with many different communities and ethnic groups. Additionally, every effort will be made to provide the Fellow with opportunities to observe or work with other Bureaus that interact with the BCD to better understand the workings of a large local health department.

c) Although the position will be primarily focused on enteric illness, the Fellow will also participate in the general activities of the BCD including attending weekly outbreak meeting and serving in the rotation as Research Scientist of the Week to handle whatever acute public health issues arise that week in the Bureau and analyzing the routine surveillance data to detect possible clusters.

d) The Fellow will also have the opportunity to work on other projects as they interest him/her or relate to enteric illness and will collaborate with staff in the Office of Environmental Investigations and the Public Health Laboratory.

3) The Fellow will have the opportunity to work on a variety of projects that will demonstrate the opportunity for data analysis. These projects include, but are not limited to, the following:

a) Developing and analyzing case investigation data in MS Access databases. The BCD routinely interviews all reported cases of certain foodborne diseases including cases of listeriosis, yersiniosis, and E. coli O157 infections to collect information on clinical illness and exposures. More detailed analysis would provide insight into the epidemiology of these infections.

b) Analyze antibiotic resistance data for specific foodborne infections including Salmonella, Shigella, and E. coli O157. More detailed and timely analysis would provide insight into the epidemiology and antibiotic resistance issues associated with these infections.

c) Analyze Salmonella serotype data combined with PFGE data that is compiled by the DOHMH Public Health Laboratory. This will give the Fellow an opportunity to work with DOHMH staff from the laboratory

d) Analyze foodborne complaint data that is received through New York City's hotline. This will give the Fellow an opportunity to work with DOHMH staff from the Office of Environmental Investigations

e) Investigating foodborne outbreaks. Outbreaks in New York City are identified from a variety of sources including patients themselves, providers, and analysis of disease reports. The DOHMH receives reports of approximately 30 foodborne outbreaks each year. The Fellow will take primary responsibility for investigating these outbreaks. The Fellow will have the opportunity to oversee and become involved in every aspect of a foodborne outbreak which will include developing a questionnaire, conducting outbreak interviews, analyzing the outbreak data, and writing the final report.

4)

a) This year we will begin investigating all reported hepatitis A cases, the fellow will assist in evaluation and implementation of this program and work on improving the system.

b) While restaurant outbreaks are frequently reported, we infrequently hear about daycare outbreaks. Because of the way diseases are reported we often do not have information regarding whether case-patients are daycare employees or attendees. The Fellow will evaluate the feasibility of interviewing all case-patients with enteric illness less than 5 years of age to identify daycare status.

c) Working with the health educator to coordinate and evaluate educational material for enteric diseases.

d) Evaluate food borne outbreak investigations and summarize outbreak data that has been collected over the past five years in New York City.

e) Conducting surveys of laboratories to evaluate laboratory practices with respect to enteric diseases (e.g., diagnostic practices for testing for shiga toxin producing *E. coli*). The Fellow would be involved in developing the protocol, the survey instrument, data collection, and data analysis.

5) The NYC DOHMH has responded to a number of citywide and national emergencies in the last few years including the initial outbreak of West Nile virus in 1999, the response to the terrorist attacks and anthrax investigation in 2001, and the citywide blackout in August, 2003. All employees are assigned to an Emergency Preparedness Section for purposes of planning for and responding to emergencies. The Fellow would be assigned to the Epidemiology and Surveillance Section and expected to participate in the DOHMH response in the event of an emergency.

Assignment Location: New York City, NY

Primary Supervisor: Sharon Balter, MD
Medical Director, Waterborne and Enteric Unit (2001-present)

Advanced Degrees: MD, New York University School of Medicine (1994)

Secondary Supervisor: Heather Hanson, MPH
NYC Dept. of Health and Mental Hygiene City Research Scientist I

Advanced Degrees: MPH, Columbia University (2001)