

The Fellow will have the option of working in several chronic disease areas: cancer, birth defects, occupational diseases and injuries, and environmental public health tracking. Over the years, the Division of Epidemiologic Studies has accumulated substantial data through its disease registries which are among the best in the country for data integrity, completeness, quality and timeliness. Annually, a number of epidemiologic research papers, reports, and collaborations with outside researchers are completed based on these data by a group of Division researchers who have degrees of PhD and MPH. The Fellow is expected to spend most of his/her time on analyzing existing data, interacting with supervisors and other researchers in and outside the Division, preparing manuscripts and reporting research findings at various professional meetings.

Several research projects are currently ongoing in the Division and the Fellow will have the opportunity to join one or more of these projects. These include a CDC-funded Cancer Patterns of Care study, a case-control study on the etiology of kidney cancer, and a data linkage study between the state cancer registry and the Illinois Environmental Protection Agency to study health risks posed by TCE/PCE contamination of ground water in two Illinois communities. A GIS project is also being initiated to establish a new and better methodology to describe and understand disease clusters. The first phase of the GIS project will be to apply the NCI-developed software, SaTScan™, which uses either a Poisson-based model, a Bernoulli model, or a space-time Permutation model, to the state's registry data.

The surveillance activity in which the fellow will participate is the data linkage and analysis of our recently created Illinois Environmental Public Health Tracking Program (EPHT). The EPHT will utilize the existing cancer registry data in order to conduct ecologic, neighborhood and household level correlations with environmental hazard or exposure data collected by the Illinois EPA. Specifically, the fellow will conduct case ascertainment for cancer, using passively collected reports to the state cancer registry in two Illinois neighborhoods (Lisle and Downer Grove), carry out data linkage with EPA data (already collected), perform data analysis and prepare manuscript(s) under the guidance of the supervisor(s).

The Fellow will conduct an evaluation of the Illinois State Cancer Registry. The evaluation should include case definition, reporting mechanism, cost, flexibility, data completeness, quality, timeliness, data utilization and other major issues outlined by CDC guidelines.

Bioterrorism preparedness and response training will be included in the fellowship. The Fellow will have the opportunity to work with the Department's Bioterrorism Preparedness and Rapid Response Team for at least two weeks but no longer than 1 month on statewide issues related to bioterrorism preparedness (e.g., needs assessment of local health departments and hospitals). In addition, the Fellow will also be required to participate in training that the State health department often provides to its research/surveillance staff.

Assignment Location: Springfield, IL

Primary Mentor: Tiefu Shen, MD, MPH, PhD
Chief, Division of Epidemiologic Studies (March 2000-present)

Advanced Degrees: MD, Harbin Medical College, China (1983)
MPH, Graduate School of Chinese Academy of Preventive Medicine (1986)
PhD, Cornell University (1994)

Secondary Mentor: Margaret S. Richards, PhD, MPH
Deputy Director, Office of Epidemiology and Health System
Development (April 2001-present)

Advanced Degrees: PhD, University of Illinois at Chicago (1989)
MPH, University of Illinois at Chicago (1986)