

Chronic Disease

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. The Division of Epidemiologic Studies collects surveillance data through its statewide disease registries which are among the best for data integrity, completeness, quality and timeliness. 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 PhD and MPH degrees. The CSTE Fellow is expected to spend most of his/her time on analyzing existing data, interacting with supervisors and other researchers inside and outside of the Division, and 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: pediatric cancer assessment in the vicinity of nuclear power plants (Illinois has the largest nuclear power capacity in the country), breast cancer cluster evaluation in DuPage county, neuroblastoma cluster re-evaluation in Taylorville, data analysis to reveal the most hazardous occupations in Illinois, profiling birth defect patterns and the effectiveness of follow-up services, description of health disparities in the state, and modifying childhood lead screening criteria with empirical data. A GIS project is also being considered to establish a new and better methodology to detect and understand disease clusters. Initial preparations for this project, such as software purchase and installation of the NCI-developed software, SaTScan™, have been done.

The surveillance activity in which the Fellow will participate is related to an evaluation of different components of the Illinois Environmental Public Health Tracking Program (EPHT). The EPHT will utilize the existing health effect data and link them with existing environmental hazard and exposure data to generate hypotheses for further investigation and for ecologic, neighborhood and household level correlations. To be sure that data are compatible and linkable, all “input” data from both the health and environmental sides need to be carefully assessed and evaluated for completeness, quality, timeliness, and flexibility.

Bioterrorism preparedness and response training will be provided. 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).

Assignment Location: Springfield, IL

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

Advanced Degrees: PhD, Cornell University, USA (1994)
MPH Chinese Academy of Medical Science, China (1986)
MD. Harbin Medical College, China (1983)

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Secondary Mentor: Jane Fornoff
Senior Epidemiologist, Division of Epidemiologic Studies (December
2000-present)

Advanced Degrees: D.Phil., Oxford University, UK (1991)
M.Sc., Oxford University, UK (1988)