North Carolina Kirkpatrick.doc

The Applied Epidemiology Fellow would work in the office that plans, trains and conducts responses to public health emergencies, both natural and man-made, for the state of North Carolina.

Public Health Preparedness & Response (PHP&R) prepares the state bioterrorism plan, including surveillance, disease investigation, vaccination/prophylaxis, quarantine/isolation, mass care, mass fatality, public information and command/control/communications. Major projects would include planning for mass immunization programs, continuation of the NC Smallpox Vaccination Plan, planning for use of the Strategic National Stockpile, participation in exercises and real-world responses to outbreaks and bioterrorist attacks (if any). Fellow would help train seven regional public health surveillance teams in use of Epi2002, syndromic and emergency department surveillance systems, outbreak investigation, local preparedness planning, and emergency telecommunications. Fellow would help man and operate the NC Public Health Command Center during simulated and real-world responses to emerging disease outbreaks and BT events. Fellow would work with an interdisciplinary team at state level consisting of senior Preventive Medicine physicians, pharmacists, nurse epidemiologists, industrial hygienists, emergency planners, medical logisticians, risk communications/public information specialists and telecommunications engineers.

As for a specific program or surveillance system evaluation project, our Fellow would be responsible for evaluating/developing systems for integrating or fusing several streams of information coming from clinical and non-clinical sources to help identify emerging threats, both natural and man-made, to the health of our citizens. The major emphasis would be on early detection and recognition of anomalous events that might indicate an emerging infection or CBRNE attack. At present, between the Surveillance Branch and Public Health Preparedness and Response offices, we are planning or currently running a series of pilot projects and other efforts in the surveillance arena. The Fellow would be the ideal person to study all these different projects and help select the ones that have the greatest potential for wider adoption and inclusion in the state's surveillance and early warning system.

A data analysis project that is ideal for the Fellow would be a review of requirements at local and state levels for manpower to operate different phases of the BT response plan. For example, the current estimates for people needed to conduct mass smallpox vaccination just in Wake County, NC range from over 5500 to a few hundred. The same problem exists in calculating manpower needed for disease investigation, strategic national stockpile distribution, and other aspects of response. A rigorous study and validation of these figures is sorely needed.

These are just the first blush of ideas for Fellowship projects. We would certainly want to work with the Fellow's particular interests and capabilities and find just the right set of projects and guidance that would make the Fellowship most successful.

It should be noted that a Fellow in PHP&R would be expected to pull duty in the Public Health Command Center (5th floor of the Cooper Bldg.) in the event that the Center was activated. This occurs in response to naturally occurring events (three activations in the first seven months of 2003) and would occur in the event of a BT or other public health emergency.

Assignment Location: Raleigh, NC

Primary Mentor: James W. Kirkpatrick, MD, MPH, FACPM
Bioterrorism Coordinator/Chief, Office of Public Health Preparedness and Response (Sep 2002-present)

Advanced Degrees:	MD, University of Texas Southwestern Medical School (1972) MPH, Tulane University School of Public Health and Tropical Medicine (1981)
Secondary Mentor:	Douglas K. Griffin Office of Public Health Preparedness and Response Administrator