

[Infectious Disease/Chronic Disease/MCH](#)

The Fellow would conduct projects at the Gaston County Health Department (GCHD) and the Mecklenburg County Health Department (MCHD), under the supervision of Susan Long-Marin, DVM, MPH, the MCHD Epidemiology Manager. The Fellow would work four days a week at GCHD in suburban, rural, and urban communities, where s/he would be a solo practitioner, and one day a week at MCHD, in an urban setting in MCHD's established epidemiology program. The program focus in both settings is infant mortality.

Mecklenburg County, the largest in North Carolina, has over 825,000 residents, two-thirds of whom are concentrated in the City of Charlotte. At MCHD the Fellow would use linked birth-death data sets to analyze disparities in infant mortality rates between whites and blacks, which have not decreased even as rates have fallen for both groups. S/he would (1) review and analyze five years of infant mortality data; (2) write a report of findings and recommendations and prepare a PowerPoint presentation; (3) make presentations to local agencies, providers, and groups working on children's health issues, e.g the Children's Alliance and the Child Fatality Prevention and Protection Team; and (4) submit findings to APHA and other groups for presentation.

The Fellow and an MCHD epidemiologist would also develop a template for expanding the current communicable disease report from case numbers and endemic levels to include data by onset with trends in seasonality, risk factors, and geographic location. S/he would also work on EpiPreparedness Team activities, including outbreak investigations and state/regional preparedness exercises and planning.

Gaston County which is contiguous with Mecklenburg County, has 196,000 residents of whom many are poorly educated and have low incomes. With an infant mortality rate that exceeds the State rate, the Fellow would: (1) analyze three years of data from the Gaston Healthy Baby Program, which helps prevent infant mortality among high-risk populations; (2) develop recommendations with the Gaston Healthy Baby Advisory Committee for reducing infant mortality in high-risk populations; and, (3) present results to professional and lay groups. This assignment would be conducted with the Assistant Personal Health Services Administrator.

At GCHD the Fellow would also work on:

- Health Assessment...The Fellow would provide leadership and guidance on the quantitative and qualitative analyses for GCHD's quadrennial community health assessment. GCHD will use the CATCH System, which blends census, health, and hospital data to provide neighborhood-specific health status measures. This project would be conducted with the GCHD Special Projects Manager.
- Communicable Disease...The Fellow would: (1) develop a database to track CDs by onset, risk factors, seasonality, and geographic location; (2) conduct outbreak investigations with the Epi Team; (3) use GIS to map and analyze CD outbreaks; and, (4)

help conduct control activities. This project would be conducted with GCHD's CD Nurse and CD Supervisor.

•Environmental Health...The Fellow would: (1) map locations and attributes of private and community wells and underground storage tanks; (2) assess the risk to neighborhoods posed by wells and storage tanks; (3) create a priority listing of neighborhoods needing municipal water and sewer lines; (4) present results to local professional and lay groups; and, (5) recommend upgrades to the GCHD well/septic database. This assignment would be conducted with environmental specialists from GCHD and the Cooperative Extension, who manage and track the county's estimated 45,000 wells and septic systems.

•Other...The Fellow would serve on the GCHD Epidemiology Team, the Gaston County Local Emergency Planning Committee, State emergency preparedness exercises, and with our Public Health Regional Surveillance Teams (PHRST) which tracks and responds to syndromic conditions reported by area Emergency Departments. As time permits, s/he would help conduct program needs assessments and evaluations.

The Fellow would set his/her daily schedule and would be given a budget of \$3,500 to attend a national conference for presenting a paper at a public health meeting of his/her choice. GCHD will also fund the Fellow to attend eight in-state conferences, professional meetings, and education programs. The Fellow would be reimbursed for in- and out-of-county travel.

Assignment Location:	Charlotte, NC (Mecklenburg County) and Gastonia, NC (Gaston County)
Primary Mentor:	Susan Long-Marin, DVM, MPH Epidemiology Manager
Advanced Degrees:	DVM, Virginia Polytechnic Institute and State University (1990) M.P.H., University of South Carolina (1994)
Secondary Mentor:	Colleen McArthur Bridger, MPH Gaston County Health Director
Advanced Degrees:	MPH, University of North Carolina (2000)