

Biomedical and Health Informatics Lecture Series

Tuesday, December 1, 2009
12:00-12:50 p.m., Room T-739

Neil Abernethy, PhD

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“Integrating Diverse Data Sources for Disease Surveillance”

Disease surveillance and control are critical activities in the maintenance of public health. These activities make use of multiple sources of data including clinical, geographic, social contact, and genetic information. Integration of these diverse data types is required to support decision-makers, disease control activities, and detection algorithms. In this talk I will review different approaches to this problem, focusing on research at the Center for Public Health Informatics that includes the Outbreak Investigator, EpiVue, and Distribute projects. The functionality of these tools includes querying, detection algorithms, and dynamic visualizations to support users' public health information needs.

Neil Abernethy is an Assistant Professor with joint appointments in Medical Education and Biomedical Informatics in the School of Medicine, and in Health Services in the School of Public Health. His research interests include models of infectious disease, global health, social network analysis, and integration of genomic, clinical, surveillance, and geographic data. Dr. Abernethy holds a Ph.D. in Biomedical Informatics from Stanford University, where he investigated computational methods to merge and analyze diverse data sources and for outbreak management. He has also conducted epidemiologic studies of tuberculosis at UCSF and bioinformatics research at North Carolina State University and Stanford University. More recently, he worked on staff at the Data Centre for the Medical Research Council in The Gambia.

NOTE: Podcasts from MEBI 590 Lecture Series talks for this quarter are available at <http://courses.washington.edu/mebi590/schedule.htm>

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