



SCHOOL OF MEDICINE
VANDERBILT UNIVERSITY

The Department of Biomedical Informatics (<http://www.mc.vanderbilt.edu/dbmi>) at Vanderbilt University has openings for two postdoctoral research positions to investigate privacy and security issues related to large electronic healthcare systems. Researchers will have the opportunity to work on a number of exciting topics in a highly collaborative and interdisciplinary environment. Successful candidates will have the opportunity to work with data, systems, and investigators across the Vanderbilt University Medical Center, as well as the Department of Electrical Engineering and Computer Science.

Successful researchers will design theoretical models and perform empirical investigations with massive clinical and biomedical datasets. Researchers will be able to analyze, and contribute to, real world applications, including online patient portals (e.g. patient – care provider messaging, billing, etc.), repositories of clinical and genomic data for hypothesis generation and testing, and complex electronic medical record systems.

Candidates are expected to be independent and conduct original research that has application in the local environment and is generalizable. Examples of research and development topics of interest include:

- + Access Control and Query Restriction for Biomedical Databases
- + Automated De-identification of Clinical Notes
- + Cryptographic Approaches to Private Health Data Collection and Distribution
- + Data Mining Medical Record Access Logs for Privacy and Security Violations
- + Model Design and Quantification of Privacy Threats in Complex Healthcare Systems
- + Quantitative Privacy Protections for Biomedical and Genomic Data

Requirements: Candidates should hold a PhD (or equivalent degree) in biomedical or health informatics, computer science, information science, or a related field.

Applications and inquiries regarding available positions can be sent electronically to Dr. Bradley Malin b.malin@vanderbilt.edu. To apply, send a CV, a statement of research interest, and the contact information for three references to:

Bradley Malin, PhD
2209 Garland Avenue, 4th Floor
Department of Biomedical Informatics
School of Medicine
Vanderbilt University
Nashville, TN 37232 USA

Positions will remain open until they are filled.