

Biomedical and Health Informatics Series

Tuesday, October 24th, Room RR 134

Greg Strylewicz, MS

PhD Student, Division of Biomedical and Health Informatics

“Errors in the Clinical Laboratory: Detecting the Invisible”

This presentation is Mr. Strylewicz's General Exam where he will present his PhD proposal along with preliminary results of his research into methods to detect rare laboratory errors. Clinical laboratories, which perform 7 billion analyses per year in the United States and play an important role in diagnosis and treatment decisions, make upwards of 70 million errors (1%) per year contributing to the number of preventable in-hospital deaths. Current methods to detect these rare laboratory errors are ineffective, suffering from poor sensitivity and specificity. Researchers in developing new methods must address the class imbalance problem, which occurs when there is a large difference between the percentage of things that are in error (1%) compared to the percentage not in error (99%).

Mr. Greg Strylewicz, MS is a third-year PhD student in the Biomedical and Health Informatics program and is the Database Architect at Northwest Lipid Metabolism and Diabetes Research Laboratories. He obtained his Masters degree in Computer Science from the University of Washington and is the primary developer of BayesLENS, a patent-pending method for detecting rare errors in the clinical laboratory. His research focuses on the development and evaluation of methods pertaining to the identification of rare events.

The Biomedical and Health Informatics lecture series covers current topics and developments in Biomedical and Health Informatics. Presenters include faculty, students, researchers and developers from the University of Washington, other academic institutions, government, and industry (locally and nationally). The intended audience is the broader University of Washington and Seattle area community with an interest in BHI as well as BHI faculty and students.

Series Website: <http://courses.washington.edu/mebi590/>