**Population Health Intelligence: From Data to Actionable Insight**

To improve the planning and evaluation of disease prevention interventions and to assist multiple stakeholders and decision-makers in making correct and unbiased inferences about population health, several data and analytical issues should be addressed. One of the main challenges in monitoring and measuring population health is the extraction and integration of massive amounts of heterogeneous health and non-health data from multiple distributed sources. Focusing on projects in the U.S. and Canada, in this talk I will discuss the use of Semantic [BigData] Analytics, a mechanism for capturing, analyzing and inferring contextual knowledge from large datasets, to collect, integrate, track, and share data for disease surveillance and public health intervention design and evaluation.

**Bio.**

Arash Shaban-Nejad is an Assistant Professor in the OAK-Ridge National Lab (ORNL) Center for Biomedical Informatics, and the Department of Pediatrics at the University of Tennessee Health Science Center (UTHSC). Before coming to UTHSC, he was a Postdoctoral Fellow of the McGill Clinical and Health Informatics Group at McGill University, where he was conducting research on knowledge modeling/management and informed decision making for several applications in the domains of biomedical and health informatics. He received his Ph.D. and MSc in Computer Science from Concordia University, Montreal and MPH from the University of California, Berkeley. Additional training was accrued at the Harvard School of Public Health. His primary research interest is Population Health Intelligence, Epidemiologic Surveillance and Big-Data Semantic Analytics through the use of tools and techniques from Artificial Intelligence, Knowledge Representation, and Semantic Web. Dr. Shaban-Nejad is currently the principal investigator in a global health and development research project for malaria elimination, funded by Bill & Melinda Gates Foundation, and an associate editor of BMC Medical Informatics and Decision Making.