



Title: Computational Medicine and Life Sciences Workloads on Cloud Computing Platforms

When: 11:30am – 1:00pm - Thursday October 1st 2015

Where: Dupuis Hall – Queen's University – Room 217

Speaker: Dr. Mark S. Staveley – Senior Program Manager – Azure High Performance Computing

Abstract: With the cost to sequence a full human genome now below US\$1,000, most people will have their DNA sequenced and stored along with their medical records.

This, combined with the accessibility of computing services and infrastructure through cloud computing solutions, provides a fantastic environment for the advancement of medical science through computational power and access to massive amounts of data.

This talk will provide an overview of the current computational landscape, information about different approaches to the processing of genomic workloads, and lead a discussion about engineering challenges associated with moving this kind of workload to the cloud.

Bio:

Mark Staveley is a Senior Program Manager with Azure's High Performance Computing team where he is responsible for overseeing Azures Accelerated Computing and Visualization Program.

Prior to Azure, Mark worked for Microsoft Research where he oversaw their Large-Scale Data Management and Processing Program, and architected their large-scale GPU processing systems.

Mark holds a BSc from Queen's University, a MSc from the University of Waikato, and a PhD from Memorial University.

Mark is also an Associate Member of the Knowledge Media and Design Institute at the University of Toronto, and an Adjunct Instructor with the University of Washington's Data Science and Engineering Professional Certification Program.

