Seminar Series: Bioinformatics

Date: Tuesday, March 1, 2016
Time: 4:30 pm – 5:20 pm
Location: STEW 320 **change in location for this talk only**

Speaker: Ed Siedel, Director
Affiliation/Organization: National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign

**DATA INTENSIVE SCIENCE IN THE MIDWEST BIG DATA HUB**

Abstract: Data intensive approaches are accelerating our ability to discover new science, to address more complex problems, to support interdisciplinary teams and large scale collaborations, and to increase reliability and reproducibility of research results. I will give examples of all these developments, and describe recent efforts to provide data services to support data intensive science, including efforts of the National Data Service. I will also describe efforts to build collaborations around data-enabled complex problems, in particular the NSF Big Data Hubs Program. The Midwest Big Data Hub is a network of partners that has unique resources based in the Midwest that will address challenges in collecting, managing, serving, mining, and analyzing rapidly growing and increasingly complex data and information collections to create actionable knowledge and guide decision-making. I will describe expected activities of the Hub as we build collaborations and pilot projects with academic, industry, government and non-profit partners.

Bio:

H. Edward Seidel is the Director of The National Center for Supercomputing Applications (NCSA) based at the University of Illinois at Urbana-Champaign. He has held positions as the senior vice president for research and innovation at the Skolkovo Institute of Science and
Technology in Moscow, directing the Office of Cyberinfrastructure and serving as assistant director for Mathematical and Physical Sciences at the U.S. National Science Foundation, and leading the Center for Computation & Technology at Louisiana State University. He also led the numerical relativity group at the Max Planck Institute for Gravitational Physics (Albert Einstein Institute) in Germany. Seidel is a fellow of the American Physical Society and of the American Association for the Advancement of Science, as well as a member of the Institute of Electrical and Electronics Engineers and the Society for Industrial and Applied Mathematics. His research has been recognized by a number of awards, including the 2006 IEEE Sidney Fernbach Award, the 2001 Gordon Bell Prize, and 1998 Heinz-Billing-Award. He earned a bachelor's degree in mathematics and physics from the College of William and Mary, a master's degree in physics at the University of Pennsylvania in 1983, and a doctorate in relativistic astrophysics at Yale University in 1988.

Associated reading:

Midwest Big Data Hub: Accelerating the Big Data Innovation Ecosystem