

Pacific Northwest National Laboratory
Frontiers in Computational and
Information Sciences Lecture Series
Presents

Informatics and Computational Sciences



- ▶ **Speakers:** Dr. Bruno Sobral and Dr. Chris Barrett, Virginia Bioinformatics Institute
- ▶ **Date:** Wednesday, February 4, 2009
- ▶ **Time:** Noon
- ▶ **Place:** EMSL Auditorium, PNNL Campus
- ▶ **Contact:** Jill Blaylock (509) 375-6428 or jill.blaylock@pnl.gov



The common aspiration that emphasizes properties of systems, as opposed to the characteristics of data, calls for holistic explanations that are inherently complex, the calculation of which are computationally intensive. Biosystems, from molecular information storage and functional prescription to ecologies, exhibit all of the features of systems that can only be understood systemically and require specialized computational support – informatics – to analyze and comprehend. This presentation will provide an overview of molecular, cellular, organism and population-level systems biology of infectious disease. We will start with genomic description and explanation and move toward population-level public health issues, emphasizing the role of informatics support in the scientific understanding of contagion, as an example.

