

December 11: Dr. Jeremy Goecks, Using Galaxy to Understand Cancer Genomes



SYNOPSIS:

Low-cost, high-throughput DNA sequencing has become widespread and is revolutionizing biomedical research and clinical care alike. In the era of pervasive genomics, the greatest challenge is making sense of large sequencing datasets. The [Galaxy platform](#) is a popular Web-based workbench that enables accessible, reproducible, and collaborative analysis of genomic data using high-performance computing resources. Galaxy makes it easy for anyone, regardless of programming experience, to analyze large genomic datasets. In collaboration with the Emory Winship Cancer Institute, we have extended Galaxy with tools, workflows, and visual analysis applications to better support integrative analyses of cancer genomes. Using these enhancements, we have analyzed high-throughput sequencing data from the transcriptomes of primary pancreatic adenocarcinoma tumors and a pancreatic cancer cell line. Insights derived from these analyses demonstrate how Galaxy can assist in the interpretation of cancer genomes and transcriptomes.

[Session details...](#)

BIO:

Jeremy Goecks is an Assistant Professor of Computational Biology at George Washington University. The research agenda of Dr. Goecks' laboratory centers on using high-throughput biomedical data for disease prediction and treatment, with a focus on cancer, and creating interactive computing systems for analyzing and understanding such data. He is a lead member of the Galaxy project; Galaxy is a popular Web-based platform for performing accessible, reproducible, and transparent genomics research. Dr. Goecks received his Ph.D. from the Georgia Institute of Technology and his B.S. (with Honors) from the University of Wisconsin.

SUMMARY:

Topic: Using Galaxy to Understand Cancer Genomes

Speaker: Jeremy Goecks, Ph.D., Assistant Professor of Computational Biology at George Washington University

Date: Wednesday, December 11, 2013

Time: 11 AM – 12 PM

You are invited to listen to Dr. Goecks' presentation in Room TE408/410 in the NCI Shady Grove Building on Medical Center Drive or via WebEx.

Presentation: A screen cast of the presentation will be available for viewing after the event here on our [Speaker Series Videos page](#) and on the [NCI's CBIIT Speaker Series YouTube Playlist](#).

About the NCI CBIIT Speaker Series:

The National Cancer Institute (NCI) Center for Biomedical Informatics and Information Technology (CBIIT) Speaker Series is a bi-weekly knowledge-sharing forum featuring both internal and external speakers on topics of interest to the biomedical informatics and research communities. For additional information, including past speaker series presentations, visit the [CBIIT Speaker Series page](#).

Questions? Please email us at NCICBIITcomms@mail.nih.gov.

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