

Workshop Proposal for the 2013 National VIVO Conference

Title: VIVO Data and Visualizations: Design and Usage

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Duration: 3.5 hours

Format: Lecture, demonstration, and hands-on exercises

Target Audience and Learning Objectives: The workshop should be interesting for:

- Anyone interested in the visualization capabilities of VIVO, and the visualization work of the Cyberinfrastructure for Network Science Center.
- *Software developers* interested in an overview of the VIVO environment from a technical perspective, and a more in-depth exploration of VIVO through the lens of visualization development.
- *Librarians and Science Administrators* interested in gaining a deeper understanding of how VIVO can be used to visualize data, exploring some of what it is already capable of, and understanding what it could be used for in the future.
- *Companies* that plan to offer value-added services for VIVO.
- *Researchers* that would like to utilize VIVO data in their scientific work.

Content and Instructional Approach

VIVO is an excellent system for creating and managing faculty and researcher profiles, but it is also a powerful visualization tool, capable of generating a number of informative graphics and providing data for many others. It is also capable of being expanded to integrate new visualizations, custom designed to fit an organization's needs.

This hands-on workshop aims to explore the possibilities of VIVO technology and data by way of the Cyberinfrastructure for Network Science Center's VIVO visualization work. It starts with an overview of VIVO's existing visualizations, inviting users to explore existing instances as the presenter explains the background and functionality of each. We then use SPARQL and the Cyberinfrastructure for Network Science's Science of Science (Sci2) Tool (<http://sci2.cns.iu.edu>) tool to show how VIVO data can be retrieved and used to generate visualizations using other tools. Users will be invited to use live data to create their own visualizations using the Sci2 Tool workflows. In the second half of the session, we review the VIVO visualization architecture, exploring the structures and pipelines that create the visualizations built into VIVO. This is followed by a hands-on component where participants are guided through the implementation of a simple visualization using live data from a VIVO instance. With the remaining time, we will look at ways that VIVO data is being federated, vivosearch.org (<http://beta.vivosearch.org>) and the International Researcher Network (<http://nrn.cns.iu.edu>). The workshop concludes with a general question-answer session.

Proposed Materials

Presentation slides, handouts, and web site with code and data samples.