Short Tour: What's VIVO?

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This page is part 1 of a short, self-paced tour introducing VIVO for use in an interactive workshop or online.

What is VIVO?

- A semantic-web-based research and researcher discovery tool for people plus the research they do
- · Publicly-visible information, across disciplines, for external as well as internal audiences
- An open, shared platform for connecting scholars, research communities, campuses, and countries using Linked Open Data¹

Open software

VIVO is a suite of open-source software and related tools most often used for sharing information about the research activities and outputs of university and government researchers around the world.

VIVO is most frequently set up and managed at the institution level, close to authoritative sources of information including the researchers themselves, but VIVO is also being creatively adapted for use by research centers within a university, by multi-agency government departments, and by groups of individuals and/or institutions functioning as virtual organizations or as discipline-focsed consortia.

VIVO software is free and readily available on GitHub under the BSD license, which makes no restrictions on what you can do with the code other than requesting acknowledgement.

Open data

All the data in a public VIVO instance may be directly accessed not only by humans using ordinary web browsers but also by other applications requesting data for query, search, or download for analysis or merging with other open data on the Web. Because VIVO uses the RDF data standard and the ubiquitous HTTP protocol, an investment in creating and populating a VIVO instance makes your data discoverable and shareable on the open Web.

Open ontology

What is an ontology? According to a classic 1995 reference by Tom Gruber, "A specification of a conceptualization." More informally, an ontology is a formalized recipe for structuring data for human and machine consumption specifying both types of entities and relationships among those types.

The VIVO ontology focuses on the general domain of researchers and their research-related activities and relationships. Notably, it specifically does not attempt to encompass the myriad subject domains of the research itself, which are appropriately the subject of many other ontologies that may be used in conjunction with the VIVO ontology.

As of version 1.6, the VIVO ontology will significantly broaden to encompass research resources (the domain of eagle-i) and clinical expertise through the work of the CTSAconnect project.

Open community

VIVO started at Cornell University in 2003 but by 2008 had begun to gain adoption at other U.S. universities, in Australia, and in China. With the award of a major National Institutes of Health grant in 2009, a consortium of 7 universities and medical schools became an official consortium that quickly expanded further through the three years of NIH support. Those adopting VIVO quickly realized the value of sharing knowledge, experience, and tools and the first VIVO conference was held in August, 2010 in New York City. Open implementation, development, ontology, and outreach calls further engaged new users, as did the 3 annual implementation fests held at Washington University and the University of Colorado.

VIVO has now partnered with DuraSpace to chart a path forward as an open, self-sustaining community with working groups, task forces, a steering group, and a leadership group. Working groups will continue the strong community-driven efforts on ontology, implementation, core development, and engagement with a new group focusing on apps and tools complementing VIVO.

Decentralized infrastructure with local control

In funding the 2009-2012 VIVO project, the National Institutes of Health stated clearly that it was "interested in distributed or federated approaches to both research networking and resource discovery with local control of information sources." We believe local control is key to information quality, stewardship, and long-term sustainability for research networking efforts in the U.S. and around the world.



next: what's different about VIVO?

¹ http://linkeddata.org