Library InfoFest highlights information resources for NIEHS scientists

By Simone Otto

NIEHS scientists enjoyed an opportunity to stop and think about how their data and research articles are discovered, shared, and archived, at the June 23 Library Infofest. After a warm welcome by NIEHS Deputy Director Rick Woychik, Ph.D., the keynote speaker, Todd Vision, Ph.D., described his proposed approach to connecting researchers, data, and scientific literature. Afterwards, library staff and vendors provided demonstrations of research tools available to save scientists time and effort.

Vision (http://bio.unc.edu/people/faculty/vision/) associate professor of biology at the University of North Carolina at Chapel Hill (UNC), expressed dismay over the ability of the average scientist to access relevant research information in an accurate, timely, and convenient fashion, due in large part to the increasing number of scientific articles published every day.

"When I first started, an afternoon in the library, reading the targeted journals, was sufficient to keep up," Vision said. "That has changed in the last 20 years." With more than one million research articles published annually, it becomes increasingly important to use search engines and several databases. But are they enough?

Proposed data archiving policy

According to Vision, the majority of researchers fail to disseminate the data behind their published research, even when asked. This makes replicating experiments difficult.

Vision and other scientists have proposed a joint data archiving policy (JDAP). If accepted uniformly, the benefits of JDAP could be enormous. For example, data would be preserved and usable for decades to come. A one-year embargo on access would preserve proprietary rights, with longer exemptions for sensitive data. And archiving data would be a condition of publication.

Several high-impact journals have already adopted data preservation policies. "The impact factor is positively related to the strength of the data preserving policy," said Vision. "When the data are most reliable, we get a 30 percent citation advantage for those that do share their data."

Vision provided an overview of one such archive, Dryad (http://datadryad.org/) a nonprofit digital repository for data underlying the international scientific and medical literature.

Simplifying author identification with ORCID

Vision also explained the benefits of ORCID, (http://orcid.org/) a unique numerical identifier that simplifies the tracking of a scientist’s work across their career. The identifier enables one to locate all journal articles published by a particular author, regardless of different spellings, or use of initials, while also distinguishing articles by other authors with similar names. An ORCID identifier also allows increased access to research outputs, by linking professional sites, such as LinkedIn, to a site with access to the scientist’s published work.

Infofest Vendors

NIEHS Library Manager Erin Knight closed the presentation by providing an overview of library services, and introducing the vendors who came to share the tools available to help manage the overwhelming growth in relevant scientific information.

NIEHS staff and vendors had exciting products to talk about (see side bar). "The InfoFest was an easy way for researchers to quickly learn about many information tools and services available," Knight said. NIEHS researchers and members of the public can get additional assistance from the NIEHS library.
Hugh Tilson, Ph.D., retiring editor of the NIEHS journal Environmental Health Perspectives, grapples daily with issues related to accessibility and future retrieval of research data. (Photo courtesy of Steve McCaw)

Jui-Hua Hsieh, Ph.D., research fellow in the NIEHS Molecular Toxicology and Informatics Group, and Yuxia Cui, Ph.D., a contract program analyst for the NIEHS Exposure, Response, and Technology Branch, learned about ways to ensure research data remains accessible for years to come. They also learned many ways the library staff can help them move their research forward. (Photo courtesy of Steve McCaw)

Library fellow Caitlin Pike, left, shows an InfoFest participant how to register for a unique author identifier with ORCID. (Photo courtesy of Steve McCaw)

Knight, left, discussed the library’s resources with Julie Foley, lead of the NTP Special Techniques Group. (Photo courtesy of Steve McCaw)

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Information tables at the Infofest

**Biomedical apps for research** - Helpful iPad tools

- Topics on environmental health, safety, and more (Bloomberg)

**EndNote** ([http://endnote.com/](http://endnote.com/))
- Search, organize, share, and create with this citation tool (Thomson Reuters)

**Dryad** ([http://datadryad.org/](http://datadryad.org/))
- A nonprofit repository for scientific and medical data

**ORCID** ([http://orcid.org/](http://orcid.org/))
- A unique link between you and your research output

**SciFinder** ([https://scifinder.cas.org/scifinder/](https://scifinder.cas.org/scifinder/))
- World's largest collection of chemistry and related scientific information

- Database of citations featuring smart tools to track, analyze, and visualize research (Elsevier)

- Multidisciplinary research, citation tracking, and more (Thomson Reuters)
As a data scientist in the NIEHS Office of Scientific Information Management, Becky Boyles is keenly aware of the key role data and scientific information management plays in advancing environmental health. (Photo courtesy of Steve McCaw)

Alyson Scoltock, right, biologist in the NIEHS Molecular Endocrinology Group, received a demonstration of one vendor's information management resources. (Photo courtesy of Steve McCaw)

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