


# Emerging Standards: Data and Data Exchange in Scholarly Publishing

## MODERATOR:

**Tony Alves** 

Director of Product Management  
Aries Systems  
North Andover, Massachusetts

## SPEAKERS:

**Jeffrey Beck** 

Technical Information Specialist  
National Center for Biotechnology  
Information (NCBI)  
National Library of Medicine  
Bethesda, Maryland

**Jay Henry** 

Chief Marketing Officer  
Ringgold Inc.  
Portland, Oregon

**Jennifer Lin** 

Director of Product Management  
Crossref  
Lynnfield, Massachusetts

**Heather Pierce** 

Senior Director of Science Policy  
and Regulatory Council  
Association of American Medical  
Colleges  
Washington, D.C.

## REPORTER:

**Michael Di Natale** 

Business Systems Analyst  
Aries Systems Corporation  
North Andover, Massachusetts

For this session, moderator Tony Alves brought together a knowledgeable group of professionals from several organizations. The group discussed new initiatives that addressed several challenges, including standardizing conflict of interest reporting, easily identifying funding sources, clarifying contributor roles for research papers, and managing institution disambiguation.

Jeffrey Beck, who has been involved in the PubMed Central project since it began in 2000 and is a co-chair of the JATS Standing Committee, began the session with a JATS history lesson. He explained that JATS is a NISO standard that grew out of the preexisting NLM standard, which began in 2003 and carried forward until the NLM 3.0 release in 2008, after which the working group for the NLM was dissolved and a new group started development on JATS. For the uninitiated, he explained that JATS defines the elements and attributes used in XML as markup language, while the DTD defines the order elements must appear in the XML in order to validate.

Beck stressed the importance of a JATS in supporting article interchange. JATS serves as a common language and

allows users to simplify the reuse of their content. According to Beck, whether data is flowing to or from a vendor, the process is smoother when using a standard others already know.

The next speaker, Jennifer Lin, also spoke to interoperability of data as she reviewed Crossref's heavy use of scholarly metadata exchange. Crossref collects metadata through its repository and propagates it to many other systems. The common schema provided by JATS allows the data to easily flow in and out of the Crossref database and be reused for a variety of needs. Lin cited Crossref's Open Funder Registry initiative as an example, noting that funding data becomes easily searchable with unique, disambiguated Funder IDs. The Funder IDs and grant numbers will flow downstream into the Crossref database and be available for search and through an open API. Lin noted Crossref's database is the only central source of standardized funding acknowledgements from publications.

Lin also discussed CrossMark, which allows publishers to provide access to all of the metadata associated with a paper through a publisher's web platform. To date there have been 15 million views since the service launched.

Ringgold's institutional name database, Identify, and the associated Ringgold IDs were discussed next. Jay Henry stated that identifiers are the foundation of good data and noted that Ringgold has built a stable and up-to-date database with Identify that is focused on places, including centers of research, funders, and universities. Ringgold IDs allow for easy interoperability between otherwise siloed systems and Identify helps provide context for the institution in the form of additional metadata.

The Ringgold ID itself is not a NISO standard, but it has emerged as an accepted persistent identifier. Henry indicated that Ringgold IDs are mapped to existing standards (ISNI) and hierarchies are what make the identifier vital to organizations looking to link authors and institutions as accurately as possible.

The final presenter was Heather Pierce, discussing the creation of Convey, a global financial disclosure system from the Association of American Medical Colleges. Convey provides a repository for records of financial interests and allows individuals to disclose them to any organization that uses the system. The intention is to advance a streamlined

*CONTINUED*

---

and standardized system that also allows organizations to tailor the disclosure process to get the information they need.

Pierce sees the key benefit of Convey being realized the second time an individual makes a disclosure through Convey, when they begin with the financial interests saved in

the system. Organizations using Convey each have a specific disclosure process so individuals would determine which information goes to the one organization and which to another. Only the user would have access to their personal repository of disclosure information and would be in full control of what they disclose to an organization.