

## CRIS 2022 International Conference on Current Research Information Systems

May 12-14, 2022, Dubrovnik, Croatia

<https://cris2022.srce.hr/>

### Citation

Herbert, B.E., D. Lowe, D.J. Lee, S. Potvin, and D. Hahn. 2022. Responding to Faculty Interest in Rapid Publishing During the Pandemic: The Role of interoperable Scholarly Communication Systems at Texas A&M. CRIS2022. Dubrovnik, Croatia. May 12-14, 2022.

### Abstract

In 2019 and 2020, the Office of Scholarly Communications pursued a strategy of enhancing the interoperability of our scholarly communication systems to make the systems more useful to researchers, specifically our repository (DSpace), research information management system (VIVO) and Altmetrics from Digital Science. These systems can be used to “publish” a range of documents, represent the publications on faculty Scholars@TAMU profiles, and collect engagement metrics for the publications.

In this talk, we will discuss the needs and interests of faculty, the role played by the library in supporting these projects, and the features of the scholarly communication systems at Texas A&M that allowed all of this to happen, specifically the role of persistent identifiers, a consistent ontology and APIs.

### Extended Abstract

#### The Need

In 2019 and 2020, the Office of Scholarly Communications pursued a strategy of enhancing the interoperability of our scholarly communication systems to make them more useful to researchers, specifically our repository (DSpace), research information management system (VIVO) and Altmetrics from Digital Science. These systems can be used to “publish” a range of documents, represent the publications on faculty Scholars@TAMU profiles, and collect engagement metrics for the publications.

We were ready, then, when faculty requests for help with special research projects while working from alternative working locations. The faculty wanted to rapidly publish special publications that were related to the pandemic or the Black Lives Matter protests. The outcomes from this initiative were very exciting. Heidi Campbell edited a volume entitled *The Distanced Church: Reflections on Doing Church Online* that explored how churches worldwide were responding to the pandemic. The volume went viral on social media, was written up in a Finnish newspaper, and was cited on a Wikipedia page. Dr. Campbell was pleased with the experience enough to publish nine other publications through the repository, including a Spanish language version of *The Distanced Church*. Srivi Ramasubramanian published an essay entitled *The promise and perils of interracial dialogue* in response to the BLM protests. Again, the success of her first publication led her to curate 26 other publications in OAK Trust. Kati Stoddard, an instructional faculty member, published an exemplary teaching resource, *Academic Honesty Quiz*, that seeks to support other faculty moving their courses online. The

resource has been downloaded almost 1000 times in the few months it has been accessible. Finally, a community of engineering education faculty published survey results of the challenges their students faced as their classes moved online. The teaching resource has generated more than 2000 views and a citation. Again, the success of the project led the faculty to curate many other documents in the repository.

### **The Significance of Interoperability**

Commercial providers of scholarly communication systems (publishers, repositories, RIM/CRIS systems) have been broadly focused on enhancing the interoperability of their systems across the research lifecycle. Interoperability is defined as the ability of computer systems or software to exchange and make use of information. Among open-source systems, such as those supported by Lyrisis, there has been less coordinated action.

Lyrisis is a non-for-profit organization which is a leader in open technologies, hosting, data-migration, content licensing, and community supported software programs for libraries, archives, museums, and research organizations worldwide. The organization catalyzes and enables equitable access to the world's knowledge and cultural heritage. LYRISIS brings together several critical open-source technologies (including DSpace and VIVO) all under one roof, giving members and users shared infrastructure, enhanced development of the software and a strong backbone for sustainability. DSpace is an open-source repository software package which is used for creating digital repositories for scholarly institutions' outputs. There are over three thousand instances of the DSpace platform around the world. VIVO is a member-supported, open-source software and an ontology for representing scholarship. VIVO supports recording, editing, searching, browsing, and visualizing scholarly activity. VIVO encourages research discovery, expert finding, network analysis and assessment of research impact. VIVO is easily extended to support additional domains of scholarly activity.

### **Interoperability at Texas A&M**

Depositing of open-access publications in a repository such as DSpace can be a source for monitoring an open-access policy compliance at an institution. On the other side, research information systems such as VIVO enable reporting and monitoring on research activities and achievements. Enhancing the interoperability of those two types of systems can lead to an interoperable platform for unique and comprehensive monitoring of the research domain at Texas A&M University. Also, this integration avoids duplicated efforts for cataloguing information about publications and researchers (authors) in those two types of platforms.

In this talk, we will discuss the needs and interests of faculty, the strategy used by the library to enhance interoperability among our systems, specifically use of consistent persistent identifiers and ontologies across the systems, as well as enhancing the application programming interfaces (APIs) of VIVO and DSpace.