

# OPEN KNOWLEDGE REPORT

# 2017-2018 IUPUI UNIVERSITY LIBRARY

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# Table of Contents

Introduction	2
Library-Hosted Events Wikipedia Wikimedia Commons Wikidata	2 5
Projects Archival Collections Library-Hosted Publications Faculty Profiles	. 11 . 11
Publications & Presentations Publications Presentations	. 14
Open Knowledge Activities Summary Events Projects	. 15

# Introduction

IUPUI University Library is committed to engaging in open knowledge projects that provide a platform where communities come together to create, curate, and share information openly. This work aligns with our library's mission and values and builds upon our existing Open Access initiatives.

<u>Our commitment to participating in Open Knowledge projects</u> has focused on those that are part of the Wikimedia Foundation. Some of the objectives of this initiative are to bring awareness of the Wikimedia ecosystem within our institution and beyond—mainly Wikipedia, Wikimedia Commons, and Wikidata—and build capacity through staff training in order to systematically contribute and enhance content.

This report includes all Wikimedia-related activities from January 1st, 2017 to December 31, 2018. It covers events hosted at IUPUI University Library and the Ruth Lilly Medical Library, and projects focused on making our archival collections, library-hosted publications, and the scholarly output of our faculty members more accessible. In addition, it includes a list of relevant publications as well as presentations given at various conferences as a way of sharing ongoing efforts and increasing awareness of Open Knowledge projects. A <u>GLAM-Wiki project page</u> was created in order to maintain records of our institution's activities and share resources related to our efforts.

# **Library-Hosted Events**

## Wikipedia

Wikipedia is the free online encyclopedia with <u>303 language versions</u> of which 292 are active. The English Wikipedia, which has about 100,000 active users (those who have made at least one edit in the past 30 days), contains over 5 million articles. Contributing to making the encyclopedia a more reliable and accessible reference tool has been the focus of our events.

#### Wikipedia @ ULib: #1Lib1Ref 2017 (January 5, 2017)

IUPUI University Library hosted its first Wikipedia edit-a-thon in support of the <u>#1Lib1Ref campaign</u> as part of "Org Week"—a biannual gathering for IUPUI University Library employees to gain new skills and learn about the state of the library. The #1Lib1Ref initiative was first launched by <u>The Wikipedia Library</u> in 2016 with the idea of having librarians contribute one citation to an existing Wikipedia article in need. This seemed like a good opportunity to get library staff familiar with Wikipedia by making

micro-contributions to the online encyclopedia. The goals of this wiki-event were to provide a brief overview of Wikipedia and its <u>Core Principles</u> (Five Pillars) and assist participants in the creation of an account and a Userpage in which they were encouraged to add a Conflict of Interest Statement. The last piece was a demo of how to add citations to the online encyclopedia using the <u>Citation Hunt</u> tool in preparation for our next event in which the focus was specifically on adding citations.

The session was attended by 23 participants including staff members, librarians, and archivists. A three-question survey to assess the familiarity of participants with Wikipedia was distributed at the beginning of the event. The results revealed that although participants said they used Wikipedia regularly, only 32% had ever made any contributions prior to the event; and 80% did not have a Wikipedia account.

#### Outcomes

Participants	New Users	Gender Breakdown	Userpages
23	20	53% female	16

During this event, 20 new Wiki accounts were created. Of those, 16 participants created their Userpages and 13 added a Conflict of Interest Statement. Some participants even experimented with adding categories and userboxes in their Userpages. Overall, participants gained a better understanding of how Wikipedia works.

#### Citation Needed: #1Lib1Ref Campaign (February 2, 2017)

Building on the January event, our library hosted the second Wikipedia edit-a-thon in which the objective was for participants to add citations to existing Wikipedia articles. Adding citations enables the verifiability of the article's content which is why using reliable resources is so critical. We used the Citation Hunt tool to identify articles in need of citations. This session had 10 participants including staff members, librarians, and an archivist.

#### Outcomes

Participants	New Users	Gender Breakdown	Citations
10	2	60% female	33

Two new users were introduced to the online encyclopedia. One of them created a Userpage and added a Conflict of Interest Statement. Prior to the event, 15 citations were added, and the same amount was contributed by participants during the event. Those who were interested in participating but unable to attend contributed three citations after the event. Although the event mainly focused on adding citations, one participant also added new content to an underdeveloped article while another corrected a statement in another article.

#### Contributing Open Citations to Wikipedia Using the OAbot (October 26, 2017)

This event was hosted during Open Access week with the goal of contributing to making Wikipedia a better reference tool by adding references to free versions of resources. We used the <u>OAbot</u> which is an initiative led by The Wikipedia Library and an editor affiliated with the <u>Dissemin project</u>. This initiative aims to facilitate the finding of freely available versions of resources to be added alongside the paywall reference present in the Wikipedia article. This session had seven participants including librarians and a staff member.

#### Outcomes

Participants	Gender Breakdown	Citations
7	43% female	343

Contributions were made prior, during, and after the event, as participants found themselves wanting to advance on the OAbot leaderboard. This resulted in 343 citations added to existing Wikipedia articles.

#### 100 Citations: IUPUI #1Lib1Ref Contributions (February 1, 2018)

In an effort to continue making Wikipedia a more reliable source, we hosted a #1Lib1Ref event similar to the one we had in 2017. Here, too, the purpose was to find reliable external sources that could be used to support the claims made in existing

Wikipedia articles. As with the previous event, we made used of the Citation Hunt tool to find articles in need of citations. The five participants in this session were all librarians.

Outcomes

Participants	New Users	Gender Breakdown	Citations
5	1	60% female	21

One new user account was created during this event. Participants contributed 21 citations to existing Wikipedia articles.

## Wikimedia Commons

Wikimedia Commons is the free online media repository hosted by the Wikimedia Foundation. The over 52 million media files stored in Commons can be freely used across Wikimedia projects and beyond.

#### Wiki Learning Event: Commons (January 4, 2018)

This event was held as part of the IUPUI University Library's biannual "Org Week." The objective was to provide a quick overview of Wikimedia Commons, demonstrate how to upload photos, and have participants upload their contributions. There were 11 participants in this event including librarians and staff members.

Outcomes

Participants	New Users	Gender Breakdown	Files Added
11	2	45% female	8

Two new user accounts were registered during the event. Participants became familiar with Wikimedia Commons and were able to make eight contributions to the free media repository.

## Wikidata

Wikidata has gained popularity among GLAM (Galleries, Libraries, Archives, and Museums) professionals. The knowledge base, which serves as the data hub for all Wikimedia projects, was developed in 2012. Wikidata has a community of about 18,000 active users. It provides an open and global platform for data sharing hosting over 55 million items.

#### Bringing IUPUI Female Faculty Members to Wikidata (November 9, 2017)

This event was the first Wikidata edit-a-thon hosted at the library. The idea of hosting this event was, in part, to bring awareness of Wikidata and to have participants engage with the knowledge base. It was also an opportunity to share with participants the library's ongoing efforts to expose campus faculty and the scholarship they produce to Wikidata, with a focus on female faculty. This effort aims to contribute to a more balanced gender representation in the knowledge base.

An email with detailed steps was shared with participants prior to the event, including links to sources where they could find information about the faculty they wanted to add to the knowledge base. The purpose of the email was for confirmed participants to select the faculty member they wanted to work on (from a list shared on a Google sheet), and do some research to find at least one publication, identifiers and biographical data to use when creating the Wikidata item. During this event, we focused on strengthening the presence of IUPUI female faculty members in Wikidata. All five participants were librarians.

#### Outcomes

Participants	Gender Breakdown	Edits
5	60% female	744

Collectively, participants made 744 edits in Wikidata which included 19 new items created and 24 existing items enhanced. These micro-contributions are just a small step towards reducing the gender divide in the knowledge base.

#### Wikidata for "Women Creating Excellence at IUPUI" (March 7, 2018)

In honor of the International Women's Day, and to reaffirm the library's commitment to participating in Open Knowledge projects, we hosted a Wikidata event to provide a presence in the knowledge base for the <u>"Women Creating Excellence at IUPUI"</u> as recognized by the IUPUI Office for Women. This event included an overview of

Wikidata, and a demonstration of how to create items for individuals and their scholarship.

Learning from the previous event, this time around, the list of pre-selected names was shared with participants and included the identifiers and related sources they could use during the creation process. The sheet included, when available, values for the following identifiers: *ORCID iD, Researcher ID, Scopus Author ID, Google Scholar author ID, VIAF, ISNI, Library of Congress Authority ID,* and *Twitter username*. It also provided a link to their profile on the university site, and their *LinkedIn personal profile URL*, if available. For this event, we had seven participants including six librarians and one staff member.

Outcomes

Participants	New Users	Gender Breakdown	Edits
7	1	86% female	1046

Participants created 15 new items. There was one participant who registered an account during the event. Collectively, 1046 edits were made.

## Wikidata for Open Access Journals (March 19, 2018)

The objective of this event was to show participants how to use the <u>Mix'n'match tool</u> to either match entries against existing Wikidata items or contribute new ones, as needed. The inspiration for the event came after learning from another Wiki editor via Twitter about a dataset that was available to work on from the <u>Directory of Open Access</u> <u>Journals (DOAJ)</u>. The dataset in Mix'n'match contained 7,775 items of which only 2,781 were in Wikidata at the time. This event was attended by four participants including librarians and one staff member.

#### Outcomes

Participants	Gender Breakdown	Items	Edits
4	50% female	254	570

As part of the event, 254 new items for open access journals were created in Wikidata using Mix'n'match. In addition, manual edits were made to some of the items to include *title, ISSN,* and *official website*.

#### Wiki Edit-a-thon on Rare Diseases (April 17, 2018)

The aim of this event, hosted at the Ruth Lilly Medical Library, was to work in Wikipedia and Wikidata in order to enhance existing content and make new contributions. Participants explored options for contributing on the topic of rare diseases, and chose their preferred project to work on. Three librarians participated in this event.

#### Outcomes

Participants	Gender	Wikipedia	Wikidata
	Breakdown	Contributions	Contributions
3	67% female	1 citation	1 item 7 statements

During the event, a citation was added to a Wikipedia article in need, providing access to a reliable source to verify the information. Another participant created a Wikidata entry for a journal article while the third participant used the Mix'n'match tool to contribute to existing Wikidata items. This tool holds a large number of external datasets that users can access to either match to existing Wikidata items or create new ones. Doing this work allows for the connectivity between Wikidata items and external data sources. Seven Orpha IDs (identifier in the Orpha.net database for rare diseases) were matched to existing Wikidata items using this tool.

#### Bringing Indiana Libraries and their Collections to Wikidata (August 21, 2018)

Bringing awareness of Wikidata and getting others outside the IUPUI University Library involved with the project was the goal of this event. Cultural heritage institutions are rapidly embracing Wikidata, and as such, there is an increased interest in contributing curated data about their collections to the knowledge base. Doing this enables the development of creative projects and also offers users more accurate information related to the collections hosted at individual institutions.

The goal of this 4-hour Wikidata workshop was to enhance the presence of Indiana libraries and their collections in the knowledge base. The workshop covered the current efforts of IUPUI University Library towards Open Knowledge projects; why it is important for libraries to get involved with Wikidata; an introduction to Wikidata; how Wikidata interact with other Wikimedia projects; external tools to visualize, contribute and query

the data; and four hands-on activities throughout the event to get participants familiar with the editing process and to walk them through the steps for creating an item for an institution (library) and for individuals whose papers/archives are held at an Indiana library.

The first activity was for participants to create their Userpage and to enable the following gadgets: DuplicateReferences, Reasonator, Drag'n'drop and currentDate. For the remaining three activities, Google sheets with relevant data were provided. For the second activity, a pre-selected list of 31 institutions (libraries/archives) that were identified as either not having a description or only indicating the type of institutions, e.g. library, was used. Participants had the opportunity to make a small contribution by updating the descriptions of these existing Wikidata items. The third activity involved creating new items to represent Indiana institutions (public/academic libraries and museums). The sheet included a list with 33 pre-selected institutions along with the values to use for pre-identified properties: instance of, part of, country, located in the administrative territory entity, coordinate location, located at street address, postal code, and official website. Values for identifiers were also provided, as available, which included: VIAF ID, Library of Congress authority ID, ISNI, and Libraries.org ID. For the last activity, a sheet was also provided with a list of 44 pre-selected names that had a finding aid describing the person/creator from institutions across the state. This sheet included the values, as available, for the following properties: instance of, sex or gender, given name, family name, birth name, country of citizenship, date of birth, place of birth, date of death, place of death, occupation, employer, educated at, archives at, reference URL, and languages spoken, written or signed. Values provided for identifiers included: SNAC Ark ID, Library of Congress authority ID, VIAF, and ISNI.

As an incentive for Indiana library professionals, an application was submitted to the Indiana State Library (ISL) to be able to offer Technology Library Education Units (TLEUs) and the event was approved for 4 units. This benefited those participants who are public library professionals and who are required to attend a number of continuing education sessions per year. The event was attended by archivists, librarians and library/museum professionals from institutions across the State of Indiana including archives, public and academic libraries, and museums.

#### Outcomes

Participants	New Users	Gender Breakdown	Edits
29	24	83% female	1614

Participants gained an understanding of Wikidata and the value of contributing to the knowledge base. In preparation for the event, 24 participants registered an account and during the event, 27 created their Userpage. Collectively, 1614 edits were made, which included 124 items edited and 82 new items created.

#### Enhancing Entries in Wikidata for IUPUI Women Faculty (December 4, 2018)

Our closing Wikidata event for the year focused on enhancing existing Wikidata items for IUPUI women faculty across disciplines. A Google sheet containing a list of names of 59 women faculty and the URL for their official website was shared, whenever available in Wikidata. Otherwise, instructions were provided to find the URL on the campus site. Participants were asked to claim the name of the faculty member they wanted to work on by adding their username to the sheet. A demo of how to archive the URL using the <u>Internet Archive Wayback Machine service</u> was provided along with written instructions for editors to follow. All six participants were librarians.

#### Outcomes

Participants	Gender Breakdown	Wikidata Items Enhanced	Edits
6	67% female	59	213

This event served as an opportunity to introduce participants to the Internet Archive Wayback Machine service for the purpose of archiving the faculty's website to then add the link of the archived page (*archive URL*) to their Wikidata entry to support statements with a stable link. Collectively, 213 edits were made to 59 existing items.

# **Projects**

# Archival Collections

The library's archival collections are hosted in ArchivesSpace, a newly-adopted archives management tool. These collections are described in finding aids which often contain a rich and detailed biographical or historical information about individuals and organizations. Repurposing this archival data in open knowledge platforms not only facilitates discoverability and access, but also aids in building a more robust knowledge base.

Our initial attempt to repurposing archival data in the English Wikipedia was through the use of the <u>RAMP (Remixing Archival Metadata Project)</u> tool. This tool allows users to repurpose metadata and share it via Wikipedia. Another way in which we are repurposing our archival data is via Wikidata. We began by creating items in Wikidata for the same subjects that we provided a presence for in Wikipedia.

Outcomes

Wikipedia	Wikidata
5 articles	10 items created 4 items enhanced

The initial attempts with this work resulted in the creation of five articles in the English Wikipedia which included backlinks to the library website, and the subject's corresponding finding aid and digital collection, as applicable. That way, users can find additional information about the subject or even learn about related collections that might enhance their research experience. Three of these articles have been visited over 800 times. On the Wikidata side, ten new items were created and four existing ones were enhanced. They all include a statement with the name of the hosting institution (IUPUI University Library) and a link to their corresponding finding aid.

## Library-Hosted Publications

#### **Open Access Journals**

Our library hosts Open Access Journals using the Open Journal System (OJS), a PKP (Public Knowledge Project) product. Although these journals are openly accessible, we wanted to also provide a presence for them in Wikidata to contribute to the growing

body of knowledge being stored in the knowledge base. This project began with an assessment of the library-hosted open access journals. The findings revealed that they were not well represented in the knowledge base, and also that not all of them were suitable for inclusion for various reasons.

Outcomes

Journals	Articles
4 items created 5 items enhanced	332 items

Nine journals were identified as suitable for inclusion in Wikidata. This resulted in the creation of four items to represent the missing journals, the enhancement of five existing journal items and the creation of 332 items for all the articles from seven selected journals for this first phase of the project.

#### Electronic Theses & Dissertations (ETDs)

ETDs are hosted in ScholarWorks, our institutional repository which runs on DSpace. The initial efforts in this area include the creation of five Wikidata entries for dissertations.

## **Faculty Profiles**

#### **Pilot Project**

The scholarly profiles project was devised as a way of providing representation of IUPUI faculty members and the scholarship they produce in Wikidata. With this work, our institution is contributing to building a collection of faculty profiles that includes IUPUI faculty and their co-authors. Sharing this information in an openly-accessible platform like Wikidata facilitates the discovery and reuse of the data. <u>Scholia</u>, a web-based scholarly profile generator, is an example of a tool that makes use of the structured linked data in Wikidata to provide scholarly profiles with the most up-to-date information available in the knowledge base. A pilot project was conducted in 2017 to assess the feasibility of this work, which was meant to inform whether the library could offer this work as a service to the IUPUI campus. <u>The core faculty from the IU Lilly Family School of Philanthropy</u> was selected for the pilot.

#### Outcomes

Faculty (author)	Co-authors	Articles	Works Cited	Citing Works
20 items created 1 item enhanced	60+ items	117 items	40+ items	7 items

For the IU Lilly Family School of Philanthropy pilot, 20 new items were created to represent its core faculty and 1 existing item was enhanced. To make it possible for the co-author graph to generate in Scholia, around 60 items were created to represent co-authors regardless of their institutional affiliation. To represent the scholarship produced by the faculty, 117 items were created for their journal articles. The pilot also explored making connections between works. To this end, around 40 items for works cited in three publications from one faculty member were created; as well as seven items for works citing those three publications.

#### Women Faculty

Informed by the work done as part of the pilot and in response to the prevalent gender disparities in Wikimedia projects, our library is focusing on strengthening the presence of IUPUI women faculty across disciplines in Wikidata. The goal is to provide representation for all IUPUI women faculty that fall into the assistant, associate, and full professor ranks.

#### Outcomes

Faculty (author)	Articles
160 items created	18 items created
26 items enhanced	1130 existing items linked to faculty

Faculty members from 16 different schools and the IUPUI University Library–160 in total–now have an entry in Wikidata. Those that were already represented in the knowledge base–26 in total–were enhanced. To share the scholarship output of the

faculty, 18 items were created and 1130 existing items were connected to the entry for the faculty member through the use of the *author* property.

# **Publications & Presentations**

To honor the commitment to advance Open Knowledge within our institution and beyond, we have shared our efforts through publications as well as presentations at the state, national, and international levels.

## **Publications**

Bringing Wikipedia to IUPUI University Library: #1lib1ref Participation (2017)

Contributing Open Citations to Wikipedia: An OA Week OAbot Edit-A-Thon (2017)

Wikidata and Libraries: Facilitating Open Knowledge (2017)

Making IUPUI University Library's Archival Collections More Accessible (2018)

<u>Creating Structured Linked Data to Generate Scholarly Profiles: A Pilot Project Using</u> <u>Wikidata and Scholia</u> (2018)

Building Bridges with Structured Linked Data at IUPUI University Library (2018)

#### **Presentations**

Society of Indiana Archivists (2017): RAMP-ing up Access to Collections through Wikipedia

Code4Lib (2018): <u>From Wikidata to Scholia: Creating Structured-Linked Data to Generate Scholarly</u> <u>Profiles</u>

WikiCite (2018): Exploring the Potential of Wikidata and Scholia to Generate Scholarly Profiles at IUPUI

WikiConference North America (2018):

Wikidata in Research Libraries: Community-Owned Scholarly Infrastructure to Advance Mission

Dublin Core Metadata Initiative (DCMI) international conference (2018): <u>Wikidata & Scholia for Scholarly Profiles: The IU Lilly Family School of Philanthropy</u> <u>Pilot Project</u>

Seminar on the Acquisition of Latin American Library Materials (SALALM) (2018): Bringing the Scholarship of SALALM members to Wikidata <u>The Intersection of Open Metadata and SALALM: Learning to Use Wikidata</u>

# **Open Knowledge Activities Summary**

The tables below provide a summary of all Open Knowledge activities, which are also represented on the next page.

#### **Events**

Wikipedia	Wikimedia Commons	Wikidata
22 new users	2 new users	25 new users
377 citations	8 files	4,214 edits
26 people trained	10 people trained	35 people trained

## Projects

Archival Collections	Library-Hosted Publications	Faculty Profiles
5 Wikipedia articles 10 Wikidata items created 4 Wikidata items enhanced	4 Journal items created 5 Journal items enhanced 332 article items created 5 thesis items created	<ul> <li>180 Faculty items created</li> <li>27 Faculty items enhanced</li> <li>60+ Co-authors items</li> <li>created</li> <li>182 article items created</li> <li>1,130 existing article items</li> <li>linked to faculty</li> </ul>

