#### Institution Name

The University of Chicago Library

#### Institution Characteristics

The University of Chicago is a private research university located in Chicago. The campus population includes 15,014 full time students, more than half of whom are graduate and professional school students, and 2,045 part time students, nearly all of whom are graduate and professional school students. The campus employs 2,271 full time instructional faculty and 66 librarians.<sup>1</sup>

### CARLI Counts Participant Name + Job Title

Elizabeth Edwards, Assessment Librarian

### Project Name/Title

Exploring Methods for Measuring Library Support for Faculty Scholarship

### Single Sentence Abstract

The University of Chicago Library explored the use of literature reviews and citation analysis as tools for measuring the Library's support for faculty scholarship at the University of Chicago Divinity School.

### Motivation(s) for Project

The University of Chicago's Associate Vice President (AVP) for Institutional Research and Effectiveness approached the Library in 2018 seeking assistance with quantifying the scholarly output of the campus because while departments or divisions may track the work of their faculty, neither the AVP nor the Library were aware of any systematic attempts to quantify output campus-wide.

This request for assistance provided the Library with an opportunity to explore ways of systematically quantifying its contribution to faculty scholarship in order to better demonstrate these contributions to the campus.

### Partners and Stakeholders

Anne Knafl, Bibliographer for Religion, Philosophy, and Jewish Studies, was a key partner in this project, providing helpful perspectives as both the liaison to and a graduate of the Divinity School. She was additionally a major stakeholder, as the findings of this project were expected to both reflect on and inform her work as a selector and liaison for this campus unit.

Thomas Drueke, Scholarship and Data Librarian for the D'Angelo Law Library, provided assistance in developing the workflow for identifying, gathering, and managing recent faculty publications by sharing processes in use at the Law Library.

<sup>&</sup>lt;sup>1</sup> All data reflects the 2018-2019 academic year.

David Larsen, Director of Access Services and Assessment (and, incidentally, a graduate of the Divinity School), and James Mouw, Associate University Librarian for Collections and Access, provided support and guidance on methodology and data definitions.

James Mouw and his colleagues in Library administration were stakeholders on this project as improved methods for demonstrating Library contributions to faculty scholarship could potentially help the Library tell more compelling stories about its value. James Mouw and his staff in Collections and Access were also stakeholders in the sense that the development of a meaningful and replicable process could provide a useful tool as he and others with responsibility for Library collections and budgets respond to changing campus priorities and needs.

Finally, Liam Schwartz, AVP for Institutional Research and Effectiveness, was a stakeholder on this project by virtue of the need described above.

## Inquiry Question

How can the Library use citation analysis or other methods to demonstrate that its collections support faculty scholarship?

# Study Participants/Population

The University of Chicago Divinity School was an ideal population for this project as it is a relatively small stand-alone campus unit with whom the Library has a good working relationship, and whose scholarship was perceived to be relatively homogeneous, lending itself well to a comprehensive literature search.

In order to reasonably scope this project, 'faculty members' were determined to be individuals in tenured or tenure-track appointments whose primary appointment was with the Divinity School. This meant that some folks affiliated with the Divinity School were excluded – for example, faculty administrators whose appointments were through an administrative unit rather than the School. The application of a consistent definition yielded a study population of 28 tenured and tenure-track faculty members.

# Method(s) of Data Collection and Analysis

Data was collected through database and catalog searches and the review of existing documents on University and other websites.

While many faculty members have minimal information listed on the Divinity School's website<sup>2</sup>, the site reliably listed information about faculty members' areas of research or subject expertise. This information informed the subsequent literature searches. Some faculty members made their CV or recent publication lists

<sup>&</sup>lt;sup>2</sup> <u>https://divinity.uchicago.edu/</u>

available on the School's website. Others did not make this information available, but provided links to a personal or professional website or a profile on Academia.edu. All of these resources were reviewed in order to build publication lists and develop further search strategies.

For each faculty member, date-limited<sup>3</sup> author searches were performed in:

- ATLA Religious Database with ATLA Serials PLUS
- JSTOR
- Google Scholar
- Other subject-specific databases as appropriate (for example, Anthropology Plus, Art Index Retrospective, PubMed, RAMBI)

Profile searches were also conducted on Academia.edu, where some faculty members made preprint or other copies of recent scholarship available. All searches and sources searched were tracked in an Excel spreadsheet.

These searches resulted in a wide range of publications as is consistent with the range of areas for teaching and research at the Divinity School. Faculty members published in many formats ranging from research-informed blog posts to video-recorded conversations. Several faculty members published in multiple languages, either on their own or in translation. While publications were initially compiled exhaustively, an operational definition of 'publication' narrowed as this project was conducted. Works considered in scope demonstrated original scholarship or other substantive contributions to scholarly thought in their areas of research or practice. The presence or absence of citations did not determine whether a work was scholarly in nature, nor did the publication itself.

At the recommendation of Thomas Drueke, Scholarship and Data Librarian for the D'Angelo Law Library, Zotero was configured for the management of these data. Citations were imported using Zotero tools and plugins and sorted into folders by faculty member. If applicable, tags were used to note if a publication was available Open Access.

Having compiled as exhaustive a list of publications as possible, citations were then checked against the Library catalog<sup>4</sup> and electronic resources in order to determine whether the publications were among the Library's current holdings. The holding status was noted in Zotero and in an Excel spreadsheet. A total of 341 publications were identified.

The final rounds of data collection for this project had to be dramatically scaled back, and have not been completed at the time of this report.

<sup>&</sup>lt;sup>3</sup> 2014-2019

<sup>&</sup>lt;sup>4</sup> <u>https://www.lib.uchicago.edu/</u>

Rather than reviewing the citation lists of all of the identified publications, a representative 10% sample was selected from among those publications held by the Library. 33 publications were selected for review, and were obtained from Library holdings or via interlibrary loan. The citations from these publications were then imported into Zotero, though at the time of this report, less than half of publications had been reviewed.

The final phase of this project was intended to involve checking cited works against the Library's holdings in order to determine how many of those items cited by faculty were held by the Library. This work remains ongoing.

# Findings

The workflow developed for this project identified 341 recent publications from 28 tenured and tenure-track faculty members with a primary affiliation with the University of Chicago Divinity School.

- 58 publications were not held by the Library or available to its users.
- 8 publications were web-based, and so while they were available to Library users, they were not within the Library's curated holdings.
- 25 publications were Open Access. Open Access titles were counted as part of the Library's holdings if they appeared in the Library catalog.
- 2 publications had previously been held by the Library, but were missing or lost when this project was conducted.
- 1 publication was published during the time this project was being conducted.
- A number of publications evinced holdings issues and so could not be accurately counted.

### Use of Findings

The findings listed above were shared with James Mouw, David Larsen, and Anne Knafl as proof of concept for this workflow, along with a list of recent publications not currently held by the Library. While the majority of publications were in the Library's holdings, a number fell into subject areas not well covered, primarily due to the fact that they represented new areas of scholarship on the campus.

Per Anne Knafl, many of the publications not held by the Library were already in the process of being acquired. Others were outside the scope or areas of her selection responsibility – evidence of the interdisciplinary nature of Divinity School scholarship – or quite expensive.

### Next Steps and Other Results

The goals of this project were two-fold: first, exploring methods and workflows for gathering information about faculty scholarly output in order to demonstrate Library support for this scholarship.

Lisa Janicke Hinchliffe impressed upon CARLI Counts participants that not finding anything is itself a finding. As a result, and in keeping with the goals of this project, the most significant finding of this project is the determination that the process explored is not scalable as scoped.

First, the workflow developed for this project built on workflows previously developed for the D'Angelo Law Library, which collects faculty publications in order to populate its institutional repository<sup>5</sup> and to generate publication lists for tenure review. These workflows were useful as proof of concept; however, they proved to be challenging when applied to a population with a broader range of research areas and publication types.

It became obvious early in this project that areas of research and practice within the Divinity School were not as homogeneous as originally perceived. Areas of research ranged from art history to biomedical ethics to Tantric Buddhism. As a result, no single process could be used to identify and collect publications.

The diversity of languages in faculty publications presented additional challenges. While the majority of publications were in English, a number were published in primarily European languages. Detective work was often required in order to determine whether a work was an original publication done by the faculty member in a different language, a translation by someone else of a previously published work by a faculty member, a work published simultaneously in two languages, or something else entirely. Many citations were in non-Western languages or scripts, and so even if a digital version of the citation was available, OCR was not reliable, and citations could not be verified without the extensive involvement of other nonproject personnel.

While the above challenges may be less pressing in more homogeneous fields, they are good indicators that this specific workflow may not be scalable or replicable with other campus populations as was hoped.

Additionally, this process, while interesting, was frankly burdensome. The work of searching, comparing, translating, de-duplicating, updating, and verifying publications for a moderately prolific faculty member took hours of uninterrupted work. While this is an upfront cost that would decrease if these searches were conducted on an ongoing basis, scaling this project would require a significant commitment of staff time unless or until automated processes could be put in place, as is the case at the D'Angelo Law Library.

<sup>&</sup>lt;sup>5</sup> <u>https://chicagounbound.uchicago.edu/</u>

## **Additional Reflections**

This project presented me with a number of significant learning opportunities. I had the opportunity to learn more about citation analysis, including the limitations of existing tools to adequately compare the range of scholarship across academia. A deep dive into the scholarship of one program made it clear that no single number can appropriately measure the diversity and depth of a program, field, or institution.

This project highlighted differences in work that are likely artifacts of faculty career arcs rather than the quality or rigor of their work. Some faculty members were quite prolific during the covered period; others did not publish at all. Some faculty members seemed to be primarily focused on ministerial training rather than ongoing scholarship. Some faculty members worked at other institutions or joined the Divinity School during the covered period, so while their publications may be represented in the Library's holdings, it would be disingenuous to take that as a measure of support, as the work for those publications was done elsewhere. As a result, the presence of publications in Library holdings offers at best a limited measure of Library support for faculty scholarship.

Along these lines, while the choice to exclude faculty members outside the tenure stream was made for expedience and simplicity in this proof of concept project, it is not one that should be scaled as it reproduces inequities endemic in academia. While it is reasonable for the Library and the University to prioritize investing in support of those individuals who are likely to remain at the University for some time by virtue of earning tenure, the research conducted by individuals outside the tenure stream is also part of the scholarly output of the University, and may represent emerging areas of scholarship that should be supported by the Library's holdings.

Finally, this project provided a valuable opportunity to explore possible methods for addressing a number of overlapping challenges that touch on my work: how does the Library measure the adequacy and reach of its collections? How can the Library track the changing composition and needs of the campus in order to adjust its collecting and other priorities? How can the Library identify emerging areas of scholarship in different disciplines? How can the Library collections meet the research needs of emerging scholars and those of established faculty? These questions will continue to animate my work.