Original Research

Completing the Circle: Open Access to Translational Research and Scholarly Works

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Abstract

Indiana University Purdue University Indianapolis' (IUPUI's) Center for Translating Research Into Practice (TRIP) and IUPUI University Library (Library) developed a partnership to enhance community access to faculty scholarship resulting from translational research. Library staff archives the scholarship of faculty affiliated with TRIP in IUPUI ScholarWorks, the campus's open-access institutional repository. The TRIP Scholarly Works Program launched in 2013, and outcomes include benefits for faculty authors (increased readership) and for a world of readers (free access). After almost ten years in existence, Library and TRIP staff sought to evaluate the success of this program. Librarians and TRIP staff distributed a survey to TRIP-affiliated faculty to assess the impact of open access to their scholarship on their work as translational scholars. Faculty participants report a variety of benefits and yet, also indicate a need for increased program communication and fewer barriers to participation.

Keywords: translational research, institutional repositories, dissemination, attitudes

Introduction

As an urban university, Indiana University Purdue University Indianapolis' (IUPUI) mission and vision emphasizes its commitment to "civic engagement," "external partnerships," and "contributions to the well-being of the citizens of Indianapolis, the state of Indiana, and beyond" (IUPUI 2022c). Strong translational and community-engaged scholarship involves open and respectful partnerships between university and non-university organizations. However, the advancement of knowledge and scholarly communication relies mainly on publication in reputable academic journals. Unfortunately, most scholarly journals make their articles available by paid subscription only. Consequently, many community partners and citizens must overcome financial barriers to access peer-reviewed literature resulting from their participation in translational scholarship. Reducing barriers to scholarly articles honors a university's commitment to its community and, by providing ready access to quality information, contributes to the well-being of citizens. Many universities have the tools and expertise to provide open access to works written by their faculty members at no cost to authors or readers. This article describes developing and evaluating an intra-campus partnership to provide open access to translational scholarship authored by IUPUI faculty members. This program has contributed to changing the culture of scholarship and dissemination at an urban university that values translational research.

Background

Translational Research and the IUPUI Campus

Located in Indianapolis, Indiana, IUPUI is a public research university that enrolls 27,690 undergraduate, graduate, and professional students (IUPUI 2022a). The campus was formally created in 1969 with the encouragement of then-Mayor Richard Lugar, who supported efforts to pass state legislation to complete a merger of Indiana University and Purdue University in Indianapolis, observing that Indianapolis was the only large U.S. city without a state-supported university (Gray 2003, p. 86). Not insignificantly, the final "I" of IUPUI stands for Indianapolis and reflects a partnership between two universities and the city itself. As a result of this history, IUPUI has realized a research mission that capitalizes on these partnerships with the community. Much of the research conducted by IUPUI faculty meets the criteria of "translational," which is described as follows:

- Translational research is interdisciplinary or cross-disciplinary.
- This kind of community-engaged research aims to make a difference in people's lives.
- Translational research takes knowledge generated from scientific inquiry or humanistic scholarship and transforms that knowledge into practices and solutions. (Center for Translating Research into Practice, IUPUI 2022)

Center for Translating Research into Practice (TRIP), IUPUI

The idea of IUPUI as a translational campus was identified by Sandra Petronio, an IUPUI faculty member in Communication Studies and the spouse of Chancellor Emeritus Charles R. Bantz. As a "translational" scholar, Dr. Petronio's research in communications studies has led to a better understanding of how privacy is managed by people and organizations in daily practice. When Petronio and Bantz arrived at IUPUI in 2003, she observed that IUPUI was the most translational campus they had served. They recognized that a great deal of scholarly work at IUPUI met the criteria of "translational." At IUPUI, translational research and community-engaged research are often used interchangeably, referring to research addressing pressing community issues. Over half of the faculty on IUPUI's campus have engaged in a collaborative research project with community partners (IUPUI Office of Community Engagement, 2023). The culture at IUPUI is permeated by an understanding that we are inextricably linked to the world around us, a sense of responsibility to address issues affecting our community, and a desire to engage in participatory research with those affected by these issues. These faculty also routinely invite students from all levels and programs to participate in research endeavors that enhance student experiences and connections to the community. With this in mind, Dr. Petronio began promoting IUPUI as a translational campus and speaking with administrative leaders, faculty, and community members about the concept. Eventually, she garnered their support to build the initial programs of TRIP.

TRIP programs have grown over the years and include events that showcase faculty translational research, invited presentations from translational scholars, and the development of incentives to encourage translational scholarship. These incentives have included speaking engagements, poster presentations, "hero" cards describing individual faculty member's translational research, a dedicated webpage about the scholar's translational research, and the Scholar of the Month series that includes a "community conversation" with faculty, staff, students, and community partners. In 2013, the Bantz-Petronio Translating Research Into Practice Award was established to recognize, honor, and encourage translational research at IUPUI. This honor has been presented annually at the Chancellor's Honors Convocation and has a monetary award. The awardee also presents their research at the annual TRIP Fall Showcase during the year of the award. When Chancellor Bantz stepped down from his position in 2015, the community established a fund in his honor to create the Bantz Community Fellowship in partnership with the campus. This fellowship provides a unique opportunity for community-engaged scholarship. Starting in 2016, the annual fellowship began funding collaborative research teams of faculty, community partners, and students working to address a pressing community issue. At the same time and with funding from the IUPUI Office of the Vice Chancellor for Research, the Bantz Community Scholar Award was established to support an emerging project of significance. Recipients of the Bantz Fellow and Scholar awards are invited and encouraged to become TRIP Affiliates as their work meets the criteria for translational research as currently defined at IUPUI. Faculty maximize these funding opportunities as evidenced by the variety of community

outcomes, additional grants, and new projects emanating from these awards. All these faculty and their projects represent various disciplines, schools, programs, and community partners and address an array of community issues.

Open Access and Institutional Repositories

Enabled by the Internet, open access (O.A.) is an approach to sharing literature, data, and other works without requiring subscription, credentials, or payment from those that wish to retrieve them. Peter Suber provides a widely used and succinct definition: "Open access (O.A.) literature is digital, online, free of charge, and free of most copyright and licensing restrictions" (Suber, 2012, p. 4). Once considered an experiment, O.A. is now one of the fastest-growing segments of the academic publishing market (Ricci & Kreisman, 2013; Pollock & Michael, 2020); it is required by many funding agencies, including the N.I.H. and all U.S. federal funding agencies (ROARMAP 2022; Department of Health & Human Services, U.S. 2022; Nelson, 2022), and it is included in the policies of a growing list of North American universities (COAPI, 2022). While most academic authors are familiar with the words "open access" as an option offered by major publishers of scholarly journals and as a fee-based approach to peer-reviewed publishing, fewer authors are aware of alternative routes (Odell et al., 2017; Fitzgerald & Jiang, 2020; Tmava & Ryza, 2023). Self-archiving, sometimes called "green" open access, is the practice of depositing a version of a published work in an open archive at the author's institution (Harnad, 2001). While there are many websites that an author could choose for self-archiving, websites that provide access to a document at no cost to the author or to the reader and repositories that meet the standards of the Open Archives Initiative (O.A.I.) provide better discoverability and preservation (Lagoze et al., 2002). Currently, more than 5,300 OAI-compliant institutional repositories are supported by universities as a service to their faculty, staff, and students (OpenDOAR, 2022). The motivations for self-archiving in an institutional repository can be altruistic and self-interested. Uploading a scholarly article or work that would otherwise be hidden behind a paywall adds to the available sources of knowledge in our world. Scholars, educators, students, and readers worldwide can access the item without worrying about economic constraints. At the same time, an author's readership can greatly increase due to self-archiving, and many studies have shown a resulting increase in citation rates (SPARC Europe, 2015; Piwowar et al., 2018). Most journals permit authors to upload a peer-reviewed version of their article (Laakso, 2014), and many academic libraries provide authors assistance; some even "mediate" the self-archiving process (Duranceau & Kriegsman, 2013), and yet faculty authors are less familiar with this free route to O.A. dissemination.

Institutional Repositories and Translational Research

A few years after Bantz and Petronio launched the Center for Translating Research into Practice, a sustained focus on translational research took hold at the National Institutes of Health (N.I.H.).

Under the leadership of Francis Collins, the N.I.H. sought to accelerate the application of new research discoveries into applicable and effective interventions in clinical and public health (Collins, 2011). In 2008, Indiana University School of Medicine, with its home on the IUPUI campus, was in the initial two cohorts of the Clinical and Translational Sciences Awards (CTSA Program) (Indiana CTSI, 2023). Today, the National Center for Advancing Translational Sciences funds research at more than 60 institutions (NCATS, 2022). Although these programs focus on community engagement and outreach, many universities (like IUPUI and other "urban universities") have pre-existing intentions to foster research that results in real benefits for their communities. Many more have an interest in documenting and demonstrating "translational" initiatives in support of their applications for Carnegie Community Engagement classification. Some universities have explored leveraging their library-supported repository to collect and share scholarly products that align with these "translational" efforts.

Miller and Billings (2012) share an early example of using Institutional Repositories (I.R.) to support community engagement. In 2009 the University of Massachusetts Amherst created an I.R. collection focused on engagement. The works shared there supported the institution's Carnegie Community Engagement classification application. The authors report on expected challenges to maintaining the collection and anticipated barriers to faculty participation but do not report efforts to evaluate the service. Other examples have followed the approach at UMass Amherst. Makula (2019) reports on a collaboration between the University of San Diego and a local lowrider car club as an example of how a university can use an I.R. to support public scholarship and shares similar examples at Central Washington University and Boise State University.

Similarly, librarians at the University of South Florida St. Petersburg (USFSP) curated an I.R. collection of local scholarship of civic and community engagement to support the university's application for Carnegie classification (Mann & Symulevich, 2020). Likewise, the University of Northern Iowa used its I.R. to support its Carnegie classification and reports on fifteen related, topical collections (Neuhaus, 2018). The University of Minnesota points to using its I.R. to support "publicly engaged campus units" (including its Extension service and the Center for Urban and Regional Affairs). The article encourages others to pursue similar IR-based initiatives (Moore et al., 2020). A review of I.R.s at 46 Canadian universities found 193 projects related to community-based research units—a deposit rate of 37% compared to all projects at these universities. The author concludes that the approach is valuable but has room to grow (Bradley, 2021). And as an example of I.R. use to support clinical and translational medical research, Palmer and Gore (2016) report on a case study at the University of Massachusetts School of Medicine. In many of these studies, the authors share collection deposit numbers and subsequent usage data but do not report efforts to gather participant feedback or other approaches to program evaluation. Without ongoing support, outreach, and evaluation, these efforts risk becoming under-utilized (Miller and Billings, 2012; Tillman, 2017; Hwang et al., 2020).

IUPUI ScholarWorks

The Library launched an installation of DSpace, an open-source institutional repository software developed by the Massachusetts Institute of Technology (M.I.T.) Libraries and Hewlett-Packard Labs in 2003 (Smith et al., 2003). Initially branded as IdeA: IUPUI's Digital Archive, early submissions to IUPUI ScholarWorks included historical works, working papers, and student theses and dissertations (Moore and Durrant, 2011). In recent years, the library has worked to market the repository as a service to support the sharing of published work by faculty authors. In 2010, the library piloted a mediated submission process known as Open Access to Scholarly Writings or "OASIS" (Truesdell et al., 2010). Responding, in part, to the success of the mediated approach to faculty self-archiving, the library advocated for the adoption of a campus-wide open-access policy for scholarly articles authored by faculty members—the campus adopted the policy in October 2014 (IUPUI, 2014). As the library works to implement the O.A. policy, the number of works by faculty authors shared in IUPUI ScholarWorks has increased. Currently, IUPUI ScholarWorks provides open access to over 30,000 works (Odell & Price, 2023)—more than 16,000 are articles submitted in accordance with the O.A. policy (IUPUI, 2022c).

The TRIP Scholarly Works Program

The TRIP Scholarly Works Program is a partnership between TRIP and the Library. The Library uploads and indexes available items written by TRIP-affiliated faculty to IUPUI ScholarWorks. To participate in this program, faculty must identify themselves as TRIP Scholars by completing a brief form that identifies and describes their translational work. Additionally, they approve the library's approval to begin uploading and archiving their works.

This partnership with the Library provides value for faculty who seek increased readership and accessibility to their works. Community partners often do not have access to scholarly journals; however, many are interested in understanding research and evidence-based practices. ScholarWorks helps meet the needs of both faculty and community partners. Access to articles in ScholarWorks is achieved through the TRIP website, where a list of publicly accessible materials is available on author profile pages. This makes it easy for the faculty member to direct community partners to relevant translational research articles and for the community to find the information. An added benefit to the faculty member is that library staff identify accessible journal articles, confirm copyright policies, and populate the webpage.

Growth of the TRIP Scholarly Works Program

The TRIP Scholarly Works program was launched in August 2013. The inaugural recipient of the Bantz-Petronio TRIP Faculty Award, David G. Marrero, was invited to be both an early adopter and an exemplar. With Marrero's assistance, forty-six full-text journal articles were

added to ScholarWorks. Marrero authored or co-authored each of these articles, and the majority were directly related to his translational research on diabetes identification and management. TRIP staff created Marrero's author profile page with hyperlinks to his freely available articles in ScholarWorks and displayed his page during September 16, 2013, TRIP Community Showcase as proof of concept. Following this, TRIP staff invited all TRIP Scholars to solicit participation. In the 2013-2014 academic year, another six TRIP scholars participated in the program. With this initial wave of participants, the TRIP Scholarly Works collection grew to 152 items. The participation rate increased in the following years, and the collection doubled several times due to subsequent Bantz Award recipients and the creation of the TRIP Scholar of the Month webinar series that highlights the research of different TRIP Scholars on a monthly basis. Today, the TRIP Scholarly Works collection includes 3,260 items authored by 125 TRIP scholars. Most of these items are peer-reviewed journal articles, chapters, and books (83 percent); however, the authors also provided conference posters, presentations, technical reports, white papers, and other works. These items are currently downloaded by readers worldwide more than 15,000 times per month (IUPUI, 2023).

Programmatic Benefits for both TRIP and the Library

TRIP continually seeks incentives for faculty to identify and promote their translational scholarship. At the same time, TRIP and the Library appreciate that many faculty will not find the time to visit a website to upload information about their scholarly work (Tillman, 2017; Doro, 2021; Tmava & Ryza, 2023). Understanding that faculty have competing demands for their time and receive many opportunities to participate in "extra" activities, the partnership with the library to promote translational work is advantageous for several reasons, including:

- Community partners can benefit from free, easy access to journal articles regarding their translational work as they partner to address problems through collaborative inquiry.
- Library staff supports faculty uploading journal articles in compliance with copyright agreements into ScholarWorks.
- Faculty experience increased visibility and readership of their scholarly work (Piwowar et al., 2018; Blair & Odell, 2020).
- Faculty can direct their research and community partners to one website to retrieve their freely available scholarly works, making them readily accessible.
- Faculty can obtain metrics to document the use of their scholarly works for their promotion and tenure processes as well as for annual reports.

The Library also continually looks for ways to promote its services and support the academic community in achieving the university's mission. Many faculty authors imagine an academic library as a building containing crowded stacks of books and print materials and perhaps some dedicated study carrels for graduate students. Even if faculty are aware of a library's digital publishing and archiving services, the library may not be the first thing that comes to mind when

looking for dissemination assistance (Blankstein, 2022). Nor are busy faculty members likely to pay much attention to emails and other announcements about these services if they do not see them as immediately relevant to the work that they are currently doing. As a result, the TRIP partnership has been advantageous to the library's IUPUI ScholarWorks efforts in the following ways:

- Some TRIP Scholars that may have ignored emails from the library have responded to personal outreach from TRIP team members.
- TRIP Scholars have added to ScholarWorks' growing user base.
- TRIP's purpose (to encourage translational research) gives potential ScholarWorks users a context to evaluate the benefits and purpose of participation.
- TRIP Scholars have served as exemplars from their fields and, as ScholarWorks participants, have increased the service's credibility.
- TRIP Scholars increase the library's network of faculty authors—key influencers for evaluating potential and existing open-access services and policies.

Ultimately, the Library expects that this collaboration with TRIP will continue to increase the number of works made freely available to readers from IUPUI's community and from around the world.

Programmatic Challenges

While the benefits of this collaboration are many, partnerships also bring challenges. Both TRIP and the Library have complex schedules and a crowded agenda. Furthermore, the individuals that support these services do so in addition to other work responsibilities at the university. These factors reduce the available time to meet the level of service some participants desire. Both programs have missions and visions that require some potential participants to learn new vocabulary and become familiar with new concepts and procedures.

Furthermore, faculty may have previous experiences and perceptions about translational research and open access, resulting in many questions and concerns about the program. In addition to addressing these questions and concerns, TRIP and the Library are tasked with keeping both website services up to date as faculty publish new articles and develop new research interests. Finally, although open access offers free access to journal articles through the Internet, there are costs associated with developing and maintaining websites and databases; both programs face budget challenges and limitations.

Program Evaluation

Both TRIP and ScholarWorks require some effort from the faculty members. At a minimum, potential TRIP scholars are required to complete a brief online form to identify and describe their translational research project. Likewise, archiving their work in ScholarWorks requires approval

from the faculty authors. Participation levels in the TRIP Scholarly Works program have been good, but not every TRIP-affiliated faculty member has assented to the library-mediated archiving process. Therefore, to identify the benefits and challenges of participating in the TRIP Scholarly Works service, feedback was solicited from all faculty identified as TRIP scholars to address two key questions: why do faculty members participate in the TRIP Scholarly Works service, and what can be done to increase participation in the service?

Survey

TRIP and the Library developed a brief qualitative, anonymous survey for TRIP-affiliated faculty members. Given that translational research involves community partners, respondents needed to consider both their interests (as authors) and the interests of the community at large (all readers, including community stakeholders). The open-ended questions were phrased to invite candid feedback from respondents. The survey was intended to be exploratory to identify key barriers and benefits to participation in the program.

The survey and invitation for participation were submitted to the institutional review board and received exempt approval (I.R.B. #15815). An invitation to participate was emailed to all 213 current TRIP-affiliated faculty members with a link to the study information sheet and the survey instrument. Two reminder invitations were sent to the list of potential participants. The study data were collected and managed using the Qualtrics survey platform. Responses were received from 41 respondents (19 percent response rate) and were exported for informal content analysis. Applying a blend of *a priori* (Crabtree & Miller, 1999) and emergent coding (Boyatzis, 1998) techniques, the authors read the survey responses individually and coded them based on pre-determined categories: benefits of participation, barriers to participation, and suggestions for improving the TRIP Scholarly Works Program. The authors then met as a group to discuss their findings. During this discussion, the authors identified themes within the responses for each category based on the repetition of similar terms and phrases; and the repeated expression of similar sentiments. These categories and themes provide a useful framework for organizing and understanding the survey responses. The results section provides a discussion of the categories, the themes that emerged within each category, and a sampling of responses representing each theme. Given the anonymity of the survey, the demographics of faculty responses were not collected. However, faculty from all schools and programs are eligible to identify as TRIP Affiliates if their scholarly work is translational.

Results

Benefits of Participation

Four repeating themes were identified in the responses reflecting on the benefits of freely sharing articles and other writings about translational research in the institutional repository—doing so increases visibility, improves knowledge application, facilitates new partnerships, and honors community partnerships.

Increases visibility for translational scholarship: Of the respondents, many expressed an appreciation for the increased exposure of their scholarly publications. One respondent replied, "Students and scholars from around the world […] access and use my work." Another respondent appreciated the no-fee access the service provides readers, acknowledging that "the products of academia (i.e., books, journals, journal access) can be quite cost-prohibitive and keeps many from accessing the work." This respondent continued, "This is where the value of translational scholarship – and efforts to foreground translational scholarship – truly comes into play by making the work accessible to more people." Other responses confirmed this theme with short replies:

> "This has increased the visibility of my research."
> "Makes people more aware of the work we do..."
> "It definitely helps reach broader audiences..."

Improves knowledge application: Translational research seeks practical solutions to make a difference in the lives of people and their communities. As translational scholars, the respondents frequently noted that open access to their works facilitated the transfer of knowledge beyond the university and a select group of research participants to a broader variety of community decision-makers and readers. Several respondents provided comments supporting this theme. One respondent reflected directly on the value of access and application in the translational research process: "The more scientists and community members can access our work means that they will read and potentially apply our work to advance their own projects, and hopefully build upon our observations and/or discoveries." Other indicative responses included:

> "This is such a great service to make science accessible to everyone. It's nice to know that the public, like community members, clinical providers, consumers of treatment services, and their families would be able to read these articles. It makes our work have more direct impact."
> "This is a crucial service that facilitates impacts beyond the academy."

Facilitates new partnerships: Many respondents expect that openly sharing access to their scholarly writings will lead to new collaborations—with other scholars and with new community partners. Several respondents contributed comments that support this theme. One respondent shared, "I have a planning grant for an industry-university collaborative research center. As we invite industry to join as members, this is the easiest place to direct them to learn details of our research." Other comments were less emphatic and more hopeful that new partnerships would be a resulting benefit of the TRIP Scholarly Works service. One respondent noted: "... it is difficult

to imagine all the possible outcomes. Some might be implementation by others, new collaborations, inspiration to students and more." Another respondent reported: "[Collaborators] have visited I.U. and spent one week, two months, and soon one semester studying and researching or publishing with me as visiting scholars."

Honors equitable relationships with community partners: Many respondents indicated or implied that open access reduced information inequities between university and community partners. One respondent drew a direct line between open sharing and community connections, simply stating:
> "Connects me to community. Connects community to work we produce." Less direct responses from others also supported this theme, including:
> "It helps me distribute it to audiences that may not otherwise have access."
> "Community partners often do not have the kind of access that I have as a faculty member. So, ensuring that community partners can access research publications is very important."

Barriers to Participation

The authors identified four themes reflecting barriers to full participation and misgivings about the value of the program: lack of time to participate, lack of knowledge about how to participate, concerns about copyright, and participation in competing services.

Limited investments of time: Academic workloads require scholars to carefully select among many potentially valuable activities. Thus "time" becomes a premium, and faculty members are quick to insist that they are short on it. Several respondents to this survey reported that time was a limiting factor in their participation in the TRIP Scholarly Works service. One respondent drew a direct line between the competing demands on faculty and how it limits their time to participate: "A big picture challenge is the lack of time scholars/researchers have in order to complete the work necessary to fully participate and reap the benefits..." Several respondents noted the difficulty with compiling materials and uploading to the system, in addition to time constraints; one stating: "...the challenges include the technical issues faced in efforts to upload work into the online system by self, and time to actually organize materials to be uploaded." Two respondents discussed the time it took to track down the correct version of their articles to share:
> "Organizing scholarly works and locating versions that can be shared in this format."
> "Time to track them down (finding the word document in the final form, with title page, etc.)."

Limited awareness: Several respondents expressed limited awareness of the program and its value. One respondent expressed a vague awareness, noting: "I have seen invitations to add works to the online repository, but I don't fully understand how it works." Other respondents indicated a complete lack of awareness: "Didn't know anything about it and not sure people

actually use it due to the other sources to find publications that are free access." Other brief responses about how limited awareness has presented a barrier to participation include:

"Didn't know it existed..."
"I didn't know it was part of the TRIP Center."
"Didn't know about it..."

Concerns about copyright: A few faculty cited concerns about copyright as a barrier to their participation. Some respondents stated outright that they were "Worried about copyright." Others were less direct but expressed concerns about content reuse restrictions imposed by publishers. One respondent wrote, "One barrier that comes to mind are the content restrictions that many journals put into place." Finally, although Title 17 U.S.C. § 201(a) gives co-authors full rights to joint-authored work, one respondent expressed concerns about their rights as a co-author, stating that "gathering permission from co-authors" is a barrier to their participation. (Ownership of copyright, 2018).

Competing non-university services: Academic social networking websites have become popular tools for staying in touch with the publishing activities of colleagues and scholars in an author's subject area. These sites also permit authors to upload free versions of their scholarly works. Although institutional repositories, such as the one that supports the TRIP Scholarly Works service offer several advantages to non-university, commercial websites (Fortney & Gonder, 2015; Fitzpatrick, 2015), some authors are satisfied with the services of these sites and are reluctant to duplicate their efforts in the institutional repository. Four respondents mentioned competing non-university services as an alternative to participating in the institutional repository:

"[This program is] in competition with other (mostly) free ways of accessing and distributing research, such as ResearchGate."
"Having to do extra work to provide content already available in a dozen places."
"I also share my work through Research Gate ...."
"I have not used it much, nor do I know who has. People tend to just search on PubMed, Google Scholar, etc."

Suggestions for Improving the TRIP Scholarly Works Service

The survey also offered respondents the opportunity to suggest ways to improve the TRIP Scholarly Works service. Responses were grouped into three categories: marketing, assistance, and other suggestions.

Marketing: Four respondents noted that more is needed to get the word out about this service. Doing so might alleviate some of the awareness-based barriers to participation and help others identify the benefits of participating. Responses supporting additional marketing included:

"I'm not on social media, but perhaps routine social media exposure for recent publications..."

"Publicizing that it is a service offered would raise awareness about the program."

Assistance: The library already offers a mediated submission service to TRIP scholars; however, suggestions also requested further assistance with the process. Two respondents suggested one-to-one meetings to sort out the details of the project, one suggesting the need for a "[c]onsult to identify key publications to add to the TRIP website."

Other suggestions: Additional ideas for improving the service were also offered. In line with the suggestion that the service increases its outreach and marketing, one respondent proposed providing help with writing brief articles translating research findings for non-academic audiences: "One terrific service would be to have someone help write op-eds or articles for publications such as The Conversation that helps communicate research to non-research audiences."

Discussion and Limitations

These results reflect a portion of TRIP scholars at IUPUI with a modest survey response rate (19 percent). Although the response rate was less than desired, the intent was not to establish frequencies or to compare responses across demographic groups. The survey was brief and open-ended; however, the results provide insights for influencing programmatic changes. The responses provide various insights regarding the TRIP Scholarly Works program and its value to participants, its role in translational research, and its contributions to respect for non-university community partners. Nonetheless, additional investigation would confirm the program benefits and barriers and provide more evidence to guide program modification. The use of small focus groups or structured interviews with individual faculty would allow respondents to digest the multifaceted nature of the TRIP Scholarly Works program. The results from this exploratory survey will provide context and direction for future evaluations and studies.

Faculty are expected and encouraged to publish the results of their translational scholarship in peer-reviewed journals. They are also keen to demonstrate the value of these works with approaches that include qualitative accounts of impact and quantitative measures of use and citation. The data from this effort provide a useful starting point for addressing barriers to participation and for aligning the service with existing incentives, including usage reports, citation tracking, and promotion and tenure standards.

The following actions would likely enhance the TRIP Scholarly Works program:
- Adopt approaches that minimize the investment of time without removing faculty responsibility for their participation in the program.

- Develop a clear and concise elevator speech and promotional materials for potential participants for the TRIP Scholarly Works program.
- Develop web-based FAQs to address common misconceptions, competing websites, copyright, and other concerns.
- Offer one-on-one meetings with potential participants to explain the TRIP Scholarly Works program and to address any questions about the benefits of participation.
- Provide usage reports to current participants and aggregate (program-wide) usage reports to all TRIP scholars.
- Advocate for appropriate recognition of translational scholarship and digital dissemination in promotion and tenure policies and procedures.

Prior to pursuing these activities, the results of this evaluation will be shared with TRIP scholars, and additional feedback will be solicited to confirm and prioritize these additions to the TRIP Scholarly Works program.

Broader Implications

Universities that value translational scholarship seek methods for connecting the community, students, and faculty in meaningful research and learning activities. The success of these endeavors depends on many variables. Things to consider prior to creating a program to facilitate open access to translational scholarship produced by campus authors include technology and human resources and the receptivity of potential sponsors and stakeholders. Institutional repositories may be built on freely available, open-source software; however, installing, maintaining, and upgrading the software requires access to server space and an understanding of database-driven website development. For those not prepared to install open-source software, fee-based solutions are available. At the same time, an investment of money or effort in new technology should be coupled with support from a campus organization that understands and values the potential uses of the institutional repository. Typically, academic libraries have served as the institutional repository's hosts, curators, and champions. If a campus is already served by a well-supported institutional repository, a program like TRIP Scholarly Works will be easier to launch. In such a case, however, the program leaders will want to be aware of the varied perspectives and frameworks that campus organizations, authors, and community partners bring to the initiative.

As exemplified by Miller and Billings (2012), Palmer and Gore (2016), Makula (2019), and Moore et al. (2020), other universities have initiated similar efforts to use an I.R. to support translational research. Likely, these and other urban and metropolitan universities that seek to collaborate with faculty to enhance the dissemination of their translational scholarship will grapple with challenges like those identified in this TRIP Scholarly Works program evaluation. These challenges (including time, understanding, familiarity with new technologies, and alignment with faculty-reward structures) are not unique to open-access services and

translational scholarship. Still, they are likely to be encountered in implementing an innovative cross-campus program. The results of this evaluation provide insights into improving participation in or launching similar efforts at other universities.

Conclusion

This collaboration between TRIP and the Library demonstrates the value of partnership when promoting translational research at a large, urban university. This partnership takes advantage of available and limited resources in two programs that share a common mission of increasing translational scholarship while providing equitable, community access to the resulting works of scholarship. Given that faculty are faced with many competing demands for time and effort, programs such as TRIP Scholarly Works require brief and clear explanations, low barriers for entry, and alignment with faculty-work incentives. The TRIP Scholarly Works program has proven valuable to its existing participants and has resulted in open access to a widely used collection of scholarship resulting from translational research. As improvements are made in response to this evaluation, it is expected that the participation in and appreciation for TRIP Scholarly Works will grow.

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Appendix

Survey Questions

1. Which of the TRIP activities have you participated in?
   a. I am a Featured Scholar on the TRIP website
   b. My journal publications are listed in the IUPUI TRIP ScholarWorks collections
   c. I presented my translational research at the annual Fall Showcase and/or Community Dialogue
   d. I am a TRIP Scholar of the Month
   e. I am a recipient of a Bantz Community Fellowship, Bantz Community Scholar Award, or a Bantz Petronio TRIP Award
2. Regarding your participation with the Center for TRIP activities and services, how has your involvement enhanced your academic and scholarly pursuits?
3. How does free, online access to scholarly works about your translational research benefit your or enhance your work?
4. What are the benefits to community partners in providing free, online access to your translational research publications?
5. What are the challenges to participating in this TRIP/library service to increase free, online access to your translational research publications?
6. In what ways does free, online access to translational research publications enhance the outcomes of research projects and community partnership?
7. How could this service be improved or what other services could TRIP and/or the IUPUI University Library offer to increase the visibility and reach of your translational research?

The final five questions prompted respondents to think about their roles as information producers in the context of openly sharing this information with communities and readers at large:

1. How does free, online access to scholarly works about your translational research benefit you or enhance your work?
2. What are the benefits to community partners in providing free, online access to your translational research publications?
3. What are the challenges to participating in this TRIP/library service to increase free, online access to your translational research publications?
4. In what ways does free, online access to translational research publications enhance the outcomes of research projects and community partnerships?
5. How could this service be improved or what other services could TRIP and/or the Library offer to increase the visibility and reach of your translational research?