Bringing Postdocs into the Fold: A Targeted Approach to Reaching an Underserved Health Sciences Population

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Abstract

Postdoctoral fellows are individuals who have a doctorate and choose to pursue additional training and research, often in a different subject area than their dissertation research. During these years, the focus is to obtain additional research training that will benefit the fellow in their next career move. Libraries are ideally situated to support this type of training through concerted outreach efforts. This paper details efforts of a library at an R1 research university (Research 2018) to identify the postdoctoral population and provide targeted outreach about library services and professional development opportunities. The overarching result of these efforts was a deep understanding of the importance of collaboration with other university units. Specifically, the human resources department and office of postdoctoral services are ideal partners for connection with the postdoc population. Detailed results of the library initiatives, including how they were adapted to continue during the global pandemic, will be discussed along with future directions.

Introduction

The Postdoctoral Position

Pursuing a career in science, technology, engineering, math, or health-sciences (STEM-H) related fields increasingly includes additional training after the attainment of a doctoral degree. The exact number of these post-doctoral (postdoc) positions is difficult to quantify given the vast array of titles (postdoctoral fellow, postdoctoral scholar, etc.) and appointment procedures. Postdocs often transition between field and institution to begin their fellowship (Levine 2015). The result is a situation where a postdoc begins a new research project in a new work setting and could benefit from an orientation to the institution and its resources.

The average duration of a postdoc between 1980 and 2010 was 4.5 years, however 20% of postdocs were in their position for longer than 7 years (Kahn and Ginther 2017). The National Institutes of Health (NIH) have limited the number of years that a postdoctoral trainee can receive funding to five, expanding to eight years with special justification (NIH 2021). This rule

exists to protect the career of the individual postdoc and the vitality of the research programs employing postdocs in these temporary training positions (NIH 2021). These combined factors highlight the need for effective postdoctoral orientation to the university and its resources, including the library, and professional development necessary for successful careers in academia and industry.

Institutional Support and Existing Outreach

Postdocs are integral to higher education research. Their work is primarily research focused unlike graduate students, who must incorporate research and coursework into their time, and technicians, who must also manage the day-to-day activities of the lab. The purpose of this experience is to obtain additional training while contributing substantially to their research environment (Sciences, Engineering, and Medicine 2000) In addition to their research production, postdoc presence at a university is necessary for the university to be designated an R1, Very High Research Activity, university by the Carnegie Higher Education classification system (Research 2018). Thus, proactively supporting these trainees should be the goal of research universities. Institutional support for postdocs begins with a dedicated Office of Postdoctoral Services (OPS). The National Postdoctoral Association (NPA) institutional members shows that the number of postdoctoral offices has been consistently increasing from 25 when the association began in 2003 to 202 offices in early 2021 (Ferguson, Chen, and Costello 2021). A survey of NPA institutional members (199 members, 74 survey respondents) provides more detail on the structure of such offices. Most have only a single staff member and a budget of less than \$40,000/year. To supplement their resources, OPSs partner with other university units to offer programs for postdocs 87% of the time (Ferguson, Chen, and Costello 2021).

When designing outreach efforts, it is important to understand the particulars of an institution's OPS and the size of the population it serves. This begins with understanding how postdocs are hired. The NPA survey showed that while the process of hiring postdocs is moving toward standardization, with 70% of respondents utilizing a standard appointment letter, only 30% offered all postdocs at their institution the same benefits (Ferguson, Chen, and Costello 2021).

The NPA report identified several professional development offerings of an OPS. The NPA report identified several professional development offerings that contain topics adjacent to information literacy, or contain aspects of it, such as grant writing, science writing and presentation skills. These offerings increase at institutions that have more NIH funding, more office staff, and more postdocs to support (Ferguson, Chen, and Costello 2021). These factors combined with the small budgets and propensity of OPSs to partner with other university units suggested that collaboration with the library would be welcome. The next step in designing postdoc outreach is to investigate how libraries currently support postdocs.

Postdocs and the Library

Library literature details single-institution efforts to perform outreach to postdocs often noting that it is difficult to identify and build relationships with this group. At New York University-Abu Dhabi, Barr-Walker developed a personalized outreach program focused on making and maintaining personal contacts (Barr-Walker 2013). Robert Tomaszewski surveyed doctoral and postdoctoral students about their information needs at Georgia State (GSU) and found that library access for postdocs can be complicated because of their classification within the university system (Tomaszewski 2012). At GSU, the surveyed postdocs preferred online orientations and equally split preferences for in-person and virtual office hours to learn about library resources, journal collections, and interlibrary loan (Tomaszewski 2012). At Mount Sinai School of Medicine, postdocs were regular attenders at library classes devoted to specific databases or programs relevant to their work, such as EndNote and Photoshop, despite low attendance at classes marketed specifically to their research status (O'Grady and Beam 2011). An investigation of postdoctoral library usage at New Mexico State University (NMSU) echoes these previous studies in that the postdocs are infrequent in-person library visitors and utilize online resources more frequently (Gunapala 2014). This survey identified orientation to the library, postdoctoral oriented professional development, networking opportunities, and recognizing postdoc accomplishments as potential ways to increase postdoc utilization of the library (Gunapala 2014).

Postdocs and the Library at VCU

The outreach efforts detailed in this paper occur at Virginia Commonwealth University (VCU), an R1 Public University in Richmond Virginia. The OPS at VCU is housed within the Office of the Vice President for Research and Innovation (OVPRI) and has one full-time staff member. VCU Libraries has two departments of faculty librarians engaged in subject-specific outreach at the university. Of those, the librarian responsible for outreach to postdocs is the Basic Science Liaison at the Health Science Library (HSL), with collaboration from other subject-specific librarians as appropriate. The HSL hired a new Basic Science Liaison in the fall of 2018. This librarian has a doctoral degree in biomedical sciences and postdoctoral experience at VCU.

Numbering approximately 220, postdocs at VCU exist within the Schools of Medicine, Dentistry, Pharmacy, and Engineering and within the Colleges of Humanities and Sciences and the College of Health Professions. In 2019, postdoc hiring was centralized in VCU Human Resources (VCU HR), providing OPS with an up-to-date list of incoming postdocs, their departmental affiliations, and contact information. When a postdoc enters VCU they are oriented to the university through personal meetings with the OPS staff member.

Previous library outreach efforts to postdocs include the How-to Talks by Postdocs Series, developed in 2015 as a collaboration between the HSL, the university's Wright Center for Clinical and Translational Research (hereafter referred to as the Wright Center), and the VCU Postdoctoral Association (described in (Gau et al. 2020)). This brown-bag informational series has a dual purpose of providing a professional development opportunity and increasing the

networking potential for the postdoc presenters. These talks are a learning opportunity for the greater VCU community including postdocs, graduate students, faculty, and staff.

The goal of the outreach initiatives introduced in this paper was to increase postdoc awareness of library services and utilization of the library through attendance at events or workshops, individual research consultations, and use of library materials. The initiatives focus on increasing library visibility, providing career development opportunities, and increasing grantsmanship support. How these areas were developed and evaluated is described along with the results of those evaluations. Overall, the evaluations lack directly applicable detail, however the development processes provide insight applicable to other institutions. The discussion will reflect upon these efforts and provide conclusions for other librarians interested in working with postdocs along with future directions for these efforts at VCU.

Methods

Area 1: Increase Library Visibility

Focus 1: Engage with OPS and Postdocs

To begin building relationships, the Basic Sciences Liaison met with the OPS staff member, the Associate Vice President for Research and Innovation who oversees the OPS, and members of the grant writing support department within OVPRI to build relationships as the librarian engaged in postdoc support. The librarian attended in person events for postdocs to increase the visibility of the library and build personal contacts with the postdoctoral population. During the period of March 2020-June 2021 in person events were not held due to the global COVID19 pandemic and the resultant suspension of in person activities at VCU.

Focus 2: Welcome Email Campaign

An email campaign was developed to reach all postdocs entering the university. Through a collaboration with OPS and VCU HR, a list of postdocs hired during each pay period, a two-week window, was emailed to the Basic Sciences Liaison. A welcome email was developed that introduced the Health Sciences Library, located on the campus where most of the postdocs were appointed, a list of services available, and links to the research guide home page and a list of librarians at the university (full text available upon request). Beginning in September 2019, all postdocs hired from July 2019-August 2020 were sent a welcome email approximately two weeks after their start date, after confirmation that they had completed orientation with OPS was obtained. Reply rates, consultation requests, and number of visits to the main biomedical and basic sciences research guide were tracked.

After one year, in September 2020, the email procedure was updated. The email was revised to link to specific research guides instead of the research guide landing page and to provide more specific links to the librarians on the two VCU campuses (full text available upon request). To collect more data, the emails were sent through an online platform, MailChimp,

which tracked open rates and number of clicks on links contained in the email. The emails were sent at the end of the month, rather than twice a month, for all postdocs hired within that month. Six months of additional data were collected and then the project was paused while results were analyzed and future directions determined.

Area 2: Provide Professional Development and Career Building Opportunities

Efforts to Increase Series Participation. The How-to Talks by Postdocs series at VCU, and its collaborative counterpart at the University of Pittsburgh, provide professional development and networking opportunities to participating postdocs (Gau et al. 2020). In 2019 the How-to Talks by Postdocs series was updated to include additional efforts to entice postdoc participation. New photography and series branding were developed for more extensive marketing of the application window and the series. These new materials were distributed on campus through informational screens, email, and social networking. In addition, judged award, the VCU Science Communication Award, was developed and added to the 2019 series. This award included a cash prize, funded by the VCU PDA, a 3-D printed trophy designed and developed by the HSL, and university promotion of the accomplishment through news stories and social media. The award was announced at a reception held at the conclusion of How-to Talks by Postdocs series, where postdocs, series organizers, and university personnel were invited.

Efforts to Increase Series Attendance. The new marketing materials were used during the Howto Talks series to promote each talk, weekly, on informational screens on campus. Social media was utilized to promote talks as well. The How-to Talks were recorded and organized into a publicly available playlist on YouTube.

As with all outreach in 2020, the global pandemic affected the How-to Talks by Postdocs. The application window, normally held in the Spring, was disrupted by the shift to remote work and the series was ultimately postponed. In the summer of 2020, the marketing materials were updated for use in a virtual work environment. The series returned in the spring of 2021 as a virtual miniseries. For each iteration of the How-to Talks by Postdocs, in-person 2019 and virtual 2021, application rates and attendance were tracked. The speakers in each series were surveyed to gather their impressions of the series and how it impacted their career at VCU and beyond.

Area 3: Grants Workshops

A needs assessment was conducted in 2018 to determine the nature of grantsmanship needs for postdocs at VCU, followed by an environmental scan of current offerings. In collaboration with the OPS, OVPRI, and the Wright Center, a grants workshop was developed and piloted in February 2019. Session evaluations were shared at the end of each workshop, with time provided to complete it. Through analyzing feedback and meeting with the workshop leadership team, the pilot was expanded to a six-part online workshop series in the Fall of 2020. Again, evaluation feedback was collected. All evaluation feedback for the grants workshops and the How-to Talks by Postdocs was collected through QuestionPro (evaluation language available upon request.

Results

Area 1: Increase Library Visibility

Postdoctoral fellows are a hard-to-reach population because of their non-standard hiring practices, irregular start times, and focus on research first and university community second (Barr-Walker 2013, Tomaszewski 2012). To increase library visibility with the postdoc population two efforts were undertaken: engage with the OPS and postdocs, and an email welcome campaign.

Focus 1: Engage with OPS and Postdocs

Upon their hire, the Basic Sciences Liaison began meeting with the Associate Vice President for Research and Innovation, who oversees the Office of Postdoctoral Services, and members of the grants development office within OVPRI. The goal of these high-level meetings was to strategize cross-unit support of postdocs, identify areas of collaboration, and build relationships between OVPRI and the Library. The grantsmanship outreach effort described in Area 3 of this paper is a direct result of these meetings. The Basic Science Liaison also met with the OPS staff member to discuss their orientation procedures, provide library orientation materials for distribution, and build relationships. The library materials were incorporated into the packet given to incoming postdocs and this connection led to the collaboration discussed in Focus 2 of this section.

OPS held an appreciation luncheon for postdocs during National Postdoc Appreciation week in September 2019. During this event, several university units were invited to briefly speak about their services and network with postdocs. The Basic Science Librarian was invited to present and developed a presentation focused on the liaison librarian services, interlibrary loan, and the literature databases available to postdocs through VCU Libraries subscriptions. This presentation was met with several follow up questions, implying interest in the material. The liaison remained at the luncheon for its entirety, serving as a judge in a "Caption the Cartoon" contest and networking. Through this luncheon, the librarian strengthened the relationship between the OPS and the library and made contact with the Career Services staff member responsible for serving postdocs. This event was not held in 2020, due to the global pandemic.

In the Spring of 2021, the Graduate Student Association (GSA) and the VCU PDA held a panel discussion focusing on frequently asked questions of graduate students seeking postdocs. The librarian was invited to attend this event and utilize information gleaned from the conversation to brainstorm topics for the How-to Talks by Postdocs series (detailed in Area 3). At this event, the librarian was invited to share about library resources and contact points, another important point of contact for the postdocs on the panel and attendees. 21 individuals registered for this panel, with seven completing a follow up survey asking for suggested topics for the How-to Talks by Postdocs series. The survey asked attendees, who were a mix of graduate students and postdocs that did not self-identify, how likely they would be to attend How-to Talks on developing a presentation for an academic job interview and identifying funding opportunities for postdocs.

Focus 2: Welcome Email Campaign

Postdoc Hire Date	# Emails Sent	% Open Rate	% Click Rate
September 2020	12	66.7	0
October 2020	7	83.3	0
November 2020	7	60	0
December 2020 and January 2021	15	86.7	13.3
February and March 2021	13	58.3	8.3

Table 1. Open and Response rate for Welcome emails September 2020-March 2021.

In the first year of postdoc hiring through HR, 77 postdocs were hired. An email was sent to each new postdoc. One reply was received, asking for systematic review support. The number of visits to the Biomedical and Basic Science research guide, a curated resource for basic scientists at VCU, were counted as a proxy measure of library engagement. This guide was

chosen for analysis as most of the postdocs hired were working in basic science departments (67.5%). The daily average for the eight days immediately following the sending of each welcome email was calculated and is represented as the blue line in Figure 1A. These findings were compared to other randomly selected eight-day periods throughout the same time frame. There was no significant difference or discernible pattern in guide traffic following the welcome email. The average number of guide hits in the eight days after the welcome email was sent was 2.45, the average number for the comparative window was 1.9 hits.

From September 2020 to March 2021, five rounds of emails were sent to new postdoc hires. Fifty-four emails were sent during this six-month period. The average opening rate for this time period was 71% with only two of the emails resulting in any links clicked on (Table 1). Due to the low percentage of clicks, traffic to the research guides mentioned in the email was not measured. There was one direct reply to this email, expressing gratitude for the listed resources.

Area 2: Provide Professional Development and Career Building Opportunities

Efforts to Increase Series Participation. The new marketing materials and addition of the VCU Science Communication Award were designed to raise the profile of the series and increase participation. The number of applicants increased from 2018 to 2019, with one additional applicant, however this pattern was not sustained through the 2020 and 2021 application windows (Table 2).

Speakers in the series were asked to fill out an evaluation of their experience. Of the 11 speakers in 2019/2021 iterations, ten completed the survey. Overall, their experience was positive with 100% finding it a useful teaching and networking experience. 80% said that they would participate again with the remaining two speakers commenting that they were open to it if they had a topic to discuss. Suggestions for improvement of the series were to include an orientation for all speakers at the start of the series, as a training and networking opportunity, and to increase audience numbers.

Efforts to Increase Series Attendance. The number of attendees did not increase after the changes were implemented. The average attendance at a talk from 2015-2018 was 18, from 2019-2021 the average was 19 ((Gau et al. 2020), Table 3). In 2019, attendance at talks fluctuated between 6 and 26 attendees, with an average of 14 (Fig. 2A, C). The highest attendance to date for a How-to Talk, 54 participants, occurred in the 2021 Spring online miniseries (Fig. 2B). This series averaged 25 participants per session, higher than the 2015-2018 period and the 2019 period alone (Table 3). Videos from the 2019 series have averaged 103.5 views on YouTube since posting. The videos from the 2021 series averaged 73.5 views, data accessed July 9, 2021.

Applications to Participate in How-to Talks By Postdocs		
Series	Applicants	
2019	8	
2020	2	
2021	6	

Table 2. Application Rates

Area 3: Grantsmanship workshops

Environmental Scan and Needs Assessment:

Available Training Opportunities. Grantsmanship workshops are among the most common types of professional development offered by OPSs (NPA survey). Prior to the efforts described here, VCU had no official postdoctoral focused grantsmanship professional development. An

2019 How-to Talks by Postdocs Attendance		2021 How-to Talks by Postdocs Attendance	
Talk	Number of Attendees	Talk	Number of Attendees
1	16	1	11
2	12	2	22
3	22	3	14
4	9	4	54
5	26		
6	6		
7	16		
8	6		
Average	14	Average	25

Table 2. How-to Talks by Postdocs Attendance

environmental scan of the university revealed some National Institutes of Health (NIH) grants training, focused on the NIH Ruth L. Kirschstein National Research Service Award (NRSA). Two courses of note where within the Anatomy & Neurobiology department and the Psychology department. While these courses were comprehensive, they focused on the pre-doctoral F31 and required the postdoc to complete a tuition waiver and attend a semester long course. Postdoctoral fellows have limited ability to take creditbearing courses at VCU, similar to comparable institutions, and the researchintensive nature of their position makes a semester-long course difficult to complete. In the 2018 OPS survey, postdocs consistently mentioned grant-writing skills as a critical need, highlighting the persistent gap not filled by courses.

VCU Application and Success Rates. The 2017 national average of successful applications for the postdoctoral NRSA, the F32, was 28%, VCU's success rate was 0%. In 2018 the VCU

success rate improved with 3 of the 7 applicants receiving funding (43%) compared to the national average 27% ((NIH 2021) and internal data.) The number of applicants at VCU was also a cause for concern. Of the approximately 220 postdocs at VCU, 40% are eligible to apply for an F32 (VCU Office of Postdoctoral Services Survey, 2017). Only 8% of those applied for a grant in FY17 or FY18.

Program Planning and Evaluations

The grantsmanship pilot was developed to focus on the F32 NRSA. The pilot offering was a half-day workshop, offered in person over the course of four hours. Five sessions focused on different aspects of the grant process, detailed in Table 4. Evaluation feedback showed that the objectives of the workshop were met; however, there were requests for additional time devoted to explaining the basics of the F32 mechanism, other types of postdoctoral grants, and more time for discussion with successfully funded postdocs.

2019 F32 Pilot Workshop Day			
Session	Objective		
Made to Stick: Designing a Research Question to Set Yourself Apart	Develop a compelling research question and communicate it effectively.		
Crafting Your Specific Aims Page	Identify successful elements and structural approaches.		
Major Section Overview	Introduce Application Components.		
Applying for Grants at VCU	Highlight VCU-specific procedures for applications.		
Postdoc Panel and Evaluation	Provide insight into application experience from successful peers.		

Table 4. Pilot Workshop

This feedback, along with feedback from the planning team, was incorporated into an expanded workshop series in fall 2020 (Table 5). These hour-long sessions were held online in due to the global pandemic and university restrictions. An overall information session was added to begin the series, focusing on the types of federal grant opportunities available to postdocs. The logistics session and library support section and the Made

to Stick talks were retained from the pilot, with some mild restructuring to fit into the hour-long sessions. Two sessions were devoted to the main NIH postdoc mechanisms mentioned in our pilot evaluations, the F32 and the K99, each with a question-and-answer session with funded postdocs and faculty members who had participated in the application process or sat on study sections and reviewed the grants for the NIH. The series concluded with an interactive session where postdocs brought draft specific aims and worked with our team of experts to improve them (Table 5). Each session had a separate evaluation, shared at the end of the workshop. Overall, the workshops and the speakers were positively received; at least 67% of respondents reported being "satisfied" or "very satisfied" with each workshop (Table 5). The most common open-ended responses were requests for more time devoted to each workshop and requests for individual consultations about specific grant applications. Additional requests included summary materials for participants, and more information about different K-series funding from the NIH.

2020 Grants Series				
Session	Objective	Attendee Satisfaction		
Grant Mechanisms for Postdocs	Investigate available funding mechanisms.	88% (n=8)		
Basic Logistics and VCU Libraries Support	Determine how to apply for a grant at VCU and how the library supports the application process.	67% (n=3)		
Made to Stick: How to Find Your Next Big Idea	Develop a compelling, actionable research question and communicate it effectively.	83% (n=6)		
F32: Information Session and Panel of Experts	Perform a deep dive into the F32 mechanism and provide advice from successful applicants and grant reviewers.	67% (n=3)		
K99: Information Session and Panel of Experts	el of Experts Perform a deep dive into the K99 mechanism and provide advice from successful applicants and grant reviewers.			
Crafting Specific Aims that Sell	Practice communicating compelling research questions and critiquing specific aims pages.	80% (n =5)		

Table 5. 2020 Grants Series

Discussion

Area 1: Increase Library Visibility

Focus 1: Engage with OPS and Postdocs

The Basic Sciences Liaison maintained contact with the Associate VP for Research and Innovation and the OPS. These contacts have allowed the librarian to continue the postdoctoral grants outreach and forge a collaboration with the Wright Center and the School of Medicine to coordinate grants outreach for faculty and postdocs across these units. This collaboration exemplifies the potential for librarians at different universities to collaborate with their OPS and use it to build greater connections within units that house postdocs. While the pandemic disrupted in person networking, a future goal is to return to in-person events for postdocs, possibly including workshops for postdocs held by the VCU PDA. Another future goal is to leverage the relationship with OPS to add a question about library support to their yearly satisfaction survey.

Focus 2: Welcome Email Campaign

The welcome email campaign had several benefits and limitations. The conversations necessary to get the names and contact information for the postdocs allowed the Basic Science Liaison to build a relationship with VCU HR and deepen connections within OPS. The first year of emails included regular contact with OPS staff about orientation. This was discontinued after a year in an effort to streamline the process of sending emails and reduce administrative burden. The evaluation of this outreach was limited due to lack of response from postdocs and guide choice for evaluation. Email revision provided more direct links to researcher support on the library website, specialized lists of librarians, and specific research guides that were applicable to

a variety of disciplines. Despite very few links being clicked on from the welcome email, the open rate percentage was quite high for an unsolicited email from an unknown contact. This implies interest in library services and may indicate that the links are not immediately applicable to a postdoc, or that postdocs do not want to devote large amounts of time to exploring the library when opening the email. Future revisions to the email could include a short orientation video, and customized links to upcoming workshops. The data from VCU HR provides departmental affiliation which could allow for a specific contact librarian to be listed in the email. These ideas increase the amount of time needed to make and send the emails; the open rate suggests that this is warranted. Overall, emailed information may be welcome by postdocs even if it does not result in direct communication immediately.

Area 2: Provide Professional Development and Career Building Opportunities

Efforts to Increase Series Participation. An area of outreach with the postdoc community at VCU, the How-to Talks by Postdocs, had been well established when this project was undertaken (Gau et al. 2020). The initiatives described in this paper had the combined goal of increasing awareness of the series and participation in the series by postdocs. The application numbers do not support successful completion of that goal. This could be for two main reasons: there has not been enough time for the efforts to build momentum and traction within the postdoc community and these numbers may not be the best way to assess awareness of the series as a concept. To address the first, more data about the marketing emails is needed. The welcome email campaign detailed in this paper showed that while email campaigns do not garner responses at a high rate, they are opened at a good rate. It is worthwhile to consider sending the promotional emails directly to the postdoc listsery through the MailChimp platform. This would enable us not only to gather open rates, but to see how many visits the How-to Talks website and application form get directly from the email. Future application forms will include a question asking the applicant how they heard about the How-to Talks and how the VCU Science Communication Award factored into their decision to apply. These two pieces of data will provide valuable information for marketing efforts and the VCU Science Communication Award.

Efforts to Increase Series Attendance. The 2021 attendance rates were the highest yet for the How-to Talks by Postdocs series. The shift to synchronous online events in the Spring of 2021, and the shift from fall to spring, could have affected this turnout. The speakers had a largely positive experience; a drawback of their evaluation was that it did not assess the move to the online synchronous format in the spring of 2021. When thinking about the audience experience in the past, we have valued the in-person interactions of the How-to Talks, but we must consider that the online synchronous format may be more accessible for our attendees. The Health Sciences Library is centrally located on the Health Sciences campus, but it is located a mile away from the Monroe Park Campus which also houses postdocs. In addition to the time limitations of traveling, the perceived burden of disruption to work may be less when an attendee does not have to leave their office, laboratory, or research field. As the University returns to an in-person environment, the How-to Talks by Postdocs will have to consider the best way to incorporate the informal interactions that occur in person with the increased attendance of the synchronous online format. A potential way to answer this question is that the series could stay

online in fall 2021 and ask the attendees if the format was a factor in their decision to attend the workshop. Alternatively, an in-person event could be held and live-streamed to provide remote access. The evaluation, regardless of the workshop format, will be conducted during each workshop session to provide time for and encourage participation. Additional evaluation and analysis of the video views, in relation to their promotion via social media, is another data point that would be helpful when determining the future formats of the How-to Talks.

Area 3: Grantsmanship workshops

Grant writing support is a common focus of postdoctoral offices (Ferguson, Chen, and Costello 2021). While the OPS is housed in the same university division as the grant processing offices, the office does not have the bandwidth to support postdoctoral grant writing. The library is an ideal collaborator in this area, as we can bring resources that strengthen the grant application itself, in the form of efficient and detailed literature searches, metrics to enhance an applicant's profile, and connections between university units that support postdocs. The right literature search can provide relevant background information, justification for model organism choice, and evidence to support the innovative nature of the proposed research. The library is often the leader on bibliometrics and this depth of knowledge is especially important for postdocs who are early in their career and may not impress with traditional metrics like H-indices.

These sessions were well received by the attending postdocs and the evaluation comments provided clear ideas for improvement. Additional data needs to be collected during future offerings, including audience numbers. One limitation of the collaboration is that OPS and VCU Libraries use different practices for tracking attendance and administering evaluations. This process needs to be standardized across collaborations to allow for consistent, useful data collection. When considering how this will be managed, thought must be given to time commitment of the series organizers and shareability of the data.

Conclusion

The goal of this outreach initiative was to increase postdoc awareness of library services and increase utilization of the library through attendance at events or workshops, individual research consultations, and utilization of library materials. Collaboration is essential to meeting this goal. Libraries engaged in postdoc outreach should recognize the siloed nature of postdoc work and be flexible and innovative with their efforts to reach them. Attendance at events aimed at researchers is key to networking and identifying the specific disciplines where postdocs are what their specific needs at a given university. Email messaging is well-received but does not bring postdocs into the library. Librarians should keep this in mind when developing their email campaigns, particularly with regard to the amount of time and effort devoted to building the messaging campaigns. The How-to Talks by Postdocs is a successful professional development opportunity that could be replicated at other libraries, as are the Grants Workshop series. When considering how these efforts could be adapted at another institution, effective and informative evaluations are key. The evaluations mentioned in this article were focused on determining if the

objectives of each session were met and if the instructor's preparation was sufficient. Additional information about the format, timing, and applicability of these efforts to postdocs would help program planners further refine and better meet the needs of this population. Focus groups may be needed to obtain the level of desired feedback. Despite these limitations, the importance of relationship building to reach postdoctoral fellows is clear, grantsmanship is a key area of connection, and future work can be devoted to finding new areas of professional development where libraries can leverage information literacy expertise to develop opportunities that support postdoc success.

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