Responsible Research Evaluation Forum: Implementation of the SCOPE Framework

**Project Justification:** Research impact evaluation has become a staple service in the portfolio of US university academic libraries. A major challenge facing librarians is the overuse of a small number of publication-based citation metrics or research income-based measures, which are historically easy to obtain. While these limited evaluation mechanisms are naturally absorbed and reused by institutions, they can have a severely negative effect on the research ecosystem. In particular, they are biased toward certain types of research, can negatively impact researchers' wellbeing and behaviors, and are often inappropriately applied to rewards, promotion, and tenure (Benedictucs, Miedema, & Ferguson, 2016 and Biagioli & Lippman, 2020). Narrow criteria and indicators of research quality or impact distort incentives, create unsustainable pressures on researchers, and exacerbate problems with research integrity and reproducibility (Aubert-Bonn & Pinxten, 2021). In addition, it reduces the diversity of research missions and purposes. Librarians are therefore faced with the need to push back on unhelpful indicators, and highlight more reliable methods of evaluating individual researchers, research groups, research outputs and outcomes, and institutions.

This proposal requests \$149,535 to plan and deliver a two-day, in-person forum to build a community of practice of research impact librarians, academic librarians specialized in researcher profiles, research analytics, bibliographic databases, bibliometrics, altmetrics, and the social effects of metrics, such as the academic incentive system; scholarly communication and digital scholarship librarians, academic librarians who are more broadly focused on scholarly publishing, copyright, author rights, Open Access, institutional repositories, dissemination of the scholarly record, and the academic reward systems. These librarians also work in research assessment and impact, especially when their institutions do not have resources to support the hiring of research impact librarians. In addition, the forum will include researchers, bibliometricians, and research managers. The goal of the forum is to share and consider the SCOPE

framework for responsible research evaluation as a mechanism for delivering best research assessment practice. SCOPE is a five-stage process that encourages value-led evaluations that are context-specific, encompassing both quantitative and qualitative options, and ensuring reduced bias and greater equity in the research evaluation process (Himanen & Gadd, 2019). This forum will workshop this framework using relative USbased concepts. This project aligns with the National Leadership Grants for Libraries Program (NLG) goals by providing library staff and practitioners with professional development, training, and skill building related to a new and evolving research area—in this case: responsible research evaluation. Specifically, this proposal aligns with NLG program goal 5, objective 5.1 by creating a forum to bring experts together to develop new systems/frameworks for use in research impact work, research evaluation, and research strategy. This work is

### **REAL WORLD IMPACT**

Poor research assessment is everywhere and leads to significant inequities in the scholarly ecosystem.

In 2022 Yale, Harvard, and UC Berkeley Law Schools withdrew from the US News & World Report Law School Rankings because their "profoundly flawed" methodologies are "in conflict with their commitments to student diversity and affordability." Others have since followed suit including Harvard Medical School and four other prominent medical schools. The overuse of citation indicators to identify researchers for recruitment, promotion, and tenure is deeply problematic as they disadvantage women who are cited less, who self-cite less, and are less likely to collaborate internationally. There are also intersectionality issues, which led to the launch of the Cite Black Women initiative in Baltimore in 2017.

commonly shared between scholarly communication, digital scholarship, and research impact librarians and research management professionals, who despite having overlapping responsibilities, often have differing approaches, aims, and knowledge. Historically, academic librarians have provided expertise and support in the areas of bibliometrics, bibliographic data, publication databases, citation tools, scholarly publishing, and publishing integrity and ethics; in these roles, university administrators, research managers, and faculty members rely on librarians for expertise in interpreting bibliographic data and bibliometrics for research analytic and assessment purposes. It is imperative that academic librarians maintain their role in research analytics and research assessment practices for the greater academic community; otherwise, other actors, such as commercial vendors, could fill this expertise gap and distort stakeholders' understanding of the scholarly record, which can ultimately lead to poor or even unethical assessment practices. In the past decade there has been major changes in the field of responsible research evaluation including the San Francisco

Declaration on Research Assessment (DORA), the Metric Tide, the Leiden Manifesto, and several other principles that librarians are expected to follow. However, there has been very little practical training developed to support library staff and practitioners on how to incorporate these principles into their work. The SCOPE framework fills this gap; and this proposal will help develop best practices to incorporate the framework into daily practice. The project will **create a community of practice** that bridges the fields of research impact librarians, digital scholarship, and scholarly communication librarians, bibliometricians, and research administrators within higher education to develop cohesive strategies for research assessment. To strengthen the ability of academic libraries to work collaboratively for the benefit of the communities they serve, this forum will convene librarians and research managers to collectively explore the extent to which they may deploy SCOPE both individually and across the sector to deliver informed and responsible research evaluations and to continue this work beyond the event through a sustained community of practice.

The proposed work is critical when considering that academic librarians are increasingly relied upon to provide bibliographic and bibliometric data as well as expert interpretation of such data for university administrators, research managers, faculty members, and researchers (Thuna & King, 2017; Miles, Sutton, & Konkiel, 2018; Blankstein & Wolff-Eisenberg, 2019). In addition, research managers and administrators' interests in such data have increased with the growing number of research analytic tools now available on the market (e.g., SciVal, InCites, VOSviewer). Often, libraries manage the subscriptions to these proprietary tools and databases. Librarians have also historically been the experts of bibliographic data and have employed the use of bibliometric data for the purposes of collection development and assessment. One of the earliest uses of the Journal Impact Factor (JIF), a well-known proprietary metric that calculates the average number of citations a "citable" article receives in a given journal, has been used in collection development decisions for decades (Garfield & Sher, 1963; Garfield, 2006; Sutton, Miles, & Konkiel, 2017). Furthermore, librarians are the largest group of academic professionals involved in the design of statements of responsible research evaluation, closely followed by research managers (Robinson-Garcia, 2021). Librarians also founded the biannual Bibliometrics and Research Assessment Symposium at the National Institutes of Health, with over a thousand librarians in attendance (National Institutes of Health, 2020). Without including any context or history, research evaluation may seem beyond the expertise or relevance of librarians' responsibilities. However, librarians have both employed bibliometric data in their own work as well as provided expert advice to researchers and administrators (Blankstein & Wolff-Eisenberg, 2019). As a result of increasing reliance on bibliometric data sources and analytic tools, academic librarians' roles in this area are rapidly evolving, and though their current services on bibliometrics can probably be considered sufficient, the current environment of the academic incentive system begs to differ. In a 2016 survey of academic librarians, Miles et al. (2018) found that issues related to recruitment, promotion, and tenure (RPT), and grant funding greatly increased the likelihood that faculty would want to discuss the JIF, citation counts, and the h-index, three citation indicators that carry a great deal of weight in the academic world. Furthermore, a 2018 survey as well as a series of discipline-specific interview studies of faculty members in the US found that faculty feel increasing pressure to publish in journals that either meet departmental standards of journal prestige or minimum JIF requirements (Blankstein & Wolff-Eisenberg, 2019; Cooper et al., 2017a; Cooper et al., 2017b; Cooper et al., 2018, 2019; Cooper et al., 2017c; Rutner & Schonfeld, 2012; Templeton & Lewis, 2015). As a result, faculty and other researchers often alter how they communicate or disseminate their scholarship in direct response to evaluations and incentives. Academic librarians are often consulted to provide expertise, recommendations, and interpretation on research impact metrics for individual faculty members going up for annual evaluations and RPT. Administrators also consult with librarians on these metrics, and librarians' support and advocacy in this area helps individuals, departments, and institutions with selecting metrics, interpreting them, how to use them appropriately in RPT dossiers, and how to avoid misusing and abusing them in evaluations and reviews. In the absence of expertise, commercial research analytic vendors often approach individual Deans of colleges with research analytic products, such as SciVal from Elsevier, and their customer support representatives fill in the gaps as experts in research analytics and metrics. While they may be experts in their tools, they often lack or ignore the bird's eye view of the research evaluation environment in academia; their goal is to sell their products, not provide nuanced interpretations of metrics and data, which may even be flawed in their own products.

To ameliorate the negative effects of narrowly focused publication and citation-based evaluations, a variety of expertise is needed, in terms of different disciplines, methods, and backgrounds. This breadth of expertise helps ensure a

responsible evaluation that does not discriminate against the entities, groups, or individuals being evaluated. The International Network of Research Management Societies (INORMS) Research Evaluation Group (REG) brings together international representatives from a range of global member research management societies to work towards creating better, fairer, and more meaningful research evaluation practices. Over the last five years, INORMS REG members have developed a working framework—called SCOPE—for responsible research evaluation (SCOPE, 2021). The INORMS REG, a group of volunteer practitioners, are seeking to continue the development and practice of this work. The project team for this proposal includes four INORMS-REG members—project director Dr. Baron Wolf, and consultants Dr. Elizabeth Gadd, Dr. Erica Conte, and Ms. Tanja Strom—who are all experts in SCOPE and have disseminated SCOPE internationally. In addition, the project will be co-directed by Ms. Rachel Miles, Research Impact Librarian at Virginia Tech. The SCOPE framework has received increased attention and media across the globe (Nature Editorial, 2022; Bredahl, 2022; Rushforth, Sienkiewicz, & de Rijcke, 2022; Tatalović, 2021) and was cited in the new international Coalition on Advancing Research Assessment (CoARA) Agreement on Advancing Research Assessment. INORMS REG themselves were cited as one of fifteen 'movers and shapers' in the responsible research assessment space by a Global Research Council White Paper (Curry et al. 2020).

### **SCOPE IN PRACTICE**

## **United Kingdom's Research Excellence Framework**

The internationally renowned United Kingdom's Research Excellence Framework (REF) is a national performance-based funding exercise every 7-8 years. The joint UK Higher Education Funding Bodies are now seeking to redesign the REF via their Future Research Assessment Programme (FRAP). The FRAP is using the INORMS REG SCOPE Framework to underpin their work and ensure the next REF is a value-led, context-specific exercise, that mitigates any unforeseen consequences and discriminatory effects.



The first major responsible research evaluation initiative, the Declaration on Research Assessment (DORA), began in the United States a decade ago. The DORA website allows individuals and organizations to publicly sign the declaration, providing an avenue for public recognition of an effort to move towards more responsible research evaluation practices. Despite the start of DORA in the US, few universities in this country have signed the declaration; of the nine universities in the US that have signed DORA, most are departments, committees, or groups within a university, the exception being Syracuse University. These numbers are in stark contrast to those of the United Kingdom, where 90 universities have signed DORA, with only 10 representing colleges or departments within those universities (DORA, n.d.-a). Moving beyond merely signing DORA, some universities have also begun to implement reform and policy change to proactively "improve their academic career assessment practices" (DORA, n.d.-b). No

DORA case studies exist in a US-bases context. In addition, The Bibliomagician tracks self-reported statements of responsible research metrics at universities around the world, which can employ principles or themes from DORA, the Leiden Manifesto, or independently of these declarations; notably, only one statement is currently included on that list from the US (The Bibliomagician, n.d.). Despite much great US-based research into the poor effects of publication and citation-based indicators on RPT, little is known about the SCOPE framework in the US-context. All INORMS-REG case studies to-date have been conducted with non-US partners. SCOPE has been used in several different settings, resulting in case studies that include: Evaluating support for the careers of others (University of Glasgow, 2021); Evaluating the diversity of editorial boards (Emerald Publishing, 2021); Use of SCOPE in interviews with Danish higher education leaders (Danish Universities, 2021); The UK higher education funding bodies: developing a new national research evaluation system (UK HEI, 2021); and Lectures in the master's course "Scholarly Communication" (Oslo Metropolitan University, 2021). Hosting this proposed forum in the US will bring this collective expertise to North American librarians and research managers who may not be as familiar with this work and will create capacity to embed responsible research evaluation approaches, supported by the SCOPE framework, among a variety of US institutions. This will help foster a culture of responsible research evaluation within the research ecosystem and create capacity for large national transformation in how research and researchers are evaluated and assessed throughout the US. This proposal creates much-needed training and engagement opportunities for academic librarians in the realm of responsible research evaluation. The proposal also builds capacity for library staff and research managers by creating innovative methods for ensuring reduced bias and enhancing equity in the research evaluation process. This enhanced capacity includes

knowledge of research assessment techniques that could impact RPT and grant funding and ensures that evaluation is conducted with a multidisciplinary approach.

Academic librarians are keen to hone their skills and gain knowledge in this area, which is demonstrated by the emergence of research impact librarian roles across the country and communities dedicated to this space, such as the Research Assessment and Metrics Interest Group within the Association of College & Research Libraries. Other communities, resources, and professional development opportunities include The Bibliomagician blog, the LIS-Bibliometrics Community and Listserv, the Bibliometrics and Research Impact Community (BRIC) in Canada, the Nordic Workshop on Bibliometrics and Research Policy, the NIH Bibliometrics training series, and bibliometrics training available through the Center for Science and Technology Studies, a leading organization on research evaluation and bibliometrics; training opportunities on proprietary tools (e.g., SciVal) are also available from vendors (e.g., Elsevier). However, many of the training opportunities through commercial vendors focus more on the application of the tools, with no guarantee that such training will also cover the responsible use of bibliometric data and analytics. Moreover, in practice, it is challenging for academic librarians to apply their new knowledge and skills in responsible ways when providing support and consultation to university administrators. Librarians may be fully aware of the controversies, misuses, and abuses surrounding popular bibliometric indicators, and they may even warn administrators about the unintended consequences of the indicators' proposed uses; unfortunately, often the mere availability of such data, especially in a highly competitive environment, is much too tempting not to collect (de Rijcke et al., 2016). Librarians can warn and offer caveats to the data they present but engaging in meaningful research evaluation processes with research stakeholders will require proactive efforts and investments. Moreover, a delay in capacity building in this area could leave the US playing 'catch-up' in this field, and the global research environment is quickly steaming ahead with groups like the Global Research Council, the Research on Research Institute, and INORMS forging ahead. Even some of the large publishers such as Nature are supportive of a "bold vision for responsible research assessment", which specifically calls out SCOPE as a key tool in this advancement (Nature, 2022).

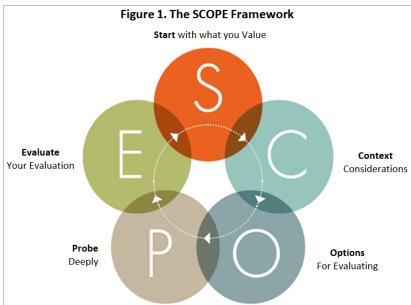
Part of the drive to sign DORA or develop responsible research assessment statements derives from the overt pressures to meet research impact metrics requirements by external evaluators. In contrast to the US, the United Kingdom has a centralized system to determine the allocation of funding for research, the Research Excellence Framework, which requires universities to produce evidence of scholarly productivity and impact (Higher Funding Council of England, n.d.). However, despite a decentralized research funding structure in the US, the need for a more responsible research evaluation approach is not any less imperative. As previously mentioned, faculty members in the US feel pressured to disseminate and communicate their research through "prestigious" and "high impact" journals rather than more appropriate journals or venues for their scholarship (Blankstein & Wolff-Eisenberg, 2019; Thuna & King, 2017). Recent studies on review and RPT guideline documents in the US and Canada have shown an over-emphasis on traditional measures of impact (Rice, Raffoul, Ioannidis, & Moher, 2020; McKiernan et al., 2019); although these documents often mention words like "community" and "public," they offer no clear incentives for demonstrating public or community impact (e.g., via Open Access of research results or meaningful public or community engagement) (Alperin et al., 2019). In addition, results from librarian and faculty survey studies have intersected with RPT expectation and guideline studies, and both find similar concerns across academia, which underscores the importance of bringing together academic librarians and research administrators to work together on the challenges of creating more equitable and fair research evaluation environments and academic incentives.

The SCOPE model presents a unique opportunity for academic actors to work together; thus far, the SCOPE team has worked with several universities in Europe and Canada to workshop individual case studies. Bringing the SCOPE workshops to the US through this forum proposal would be timely for both research managers and academic librarians actively working in bibliometrics and research evaluation.

<u>SCOPE Framework</u> – As a group of practicing research managers, librarians, and administrators, the INORMS REG sought to resolve evaluation problems by developing a practical five-stage process by which better, value-led research evaluation approaches can be designed. SCOPE is a step-by-step process designed to help research managers or anyone involved in conducting research evaluation in implementing responsible research evaluation principles, as presented in

the *Declaration on Research Assessment* (DORA, 2012), *The Metric Tide* (Wilsdon, et al., 2015) and the *Leiden Manifesto* (Hicks, Wouters, Waltman, de Rijcke & Rafols, 2015), to design robust evaluations. SCOPE fills the gap between these principles and their implementation by providing a structured and ordered framework by which evaluations can be designed and implemented as well as evaluated for continuous improvement. Also, existing principles focus mainly on either evaluating a specific entity, like researchers in the case of DORA, or via a particular mechanism, like research metrics in the case of the Leiden Manifesto. SCOPE, however, encompasses the entire evaluation system allowing any evaluator to evaluate any entity using any relevant mechanism. The five stages of SCOPE, as illustrated in **Figure 1**, operate under three main principles:

- 1. Evaluate only when necessary. Evaluation is not always the right strategy, and when it comes to incentivizing behaviors, for example, it may be more fruitful to enable them than to evaluate them.
- 2. Evaluate with the evaluated. To mitigate concerns around the poor use of metrics and unconscious bias in evaluation, ensuring that any approach is both co-produced with, and the results co-interpreted by, the evaluated community is critical.
- 3. Draw on evaluation expertise. The same rigor that is expected of academic research should be expected also of all evaluations of academic research.



The first stage of SCOPE is **Start with what you value**, a critically important first step in any evaluation. The reason so many forms of research evaluation have a negative impact on research culture is that they do not start with what is actually valued about the entity under evaluation. Instead, evaluators may start with the data sources available to them—often bibliometric data—or with the values of third parties, such as those of research funding agencies or university ranking agencies. The second stage of SCOPE is Context considerations. Evaluation approaches should be context-specific across two main dimensions: who are you evaluating and why are you evaluating? The INORMS-REG, through the development of SCOPE, recognizes six key reasons for evaluating: (1) Analysis - Evaluating to understand; (2) Advocacy - Evaluating to show off; (3) Accountability – Evaluating to monitor; (4) Acclaim – Evaluating to compare; (5) Adaptation – Evaluating to incentivize; and (6) Allocation – Evaluating to reward. The reason it is important to understand why the evaluation is conducted in the first place is that assessments, in some settings, have more impact on the entity being evaluated, causing that entity to be at higher risk for discrimination and perverse incentives. In terms of research discipline, it is well known that different disciplines operate under different research paradigms, have different funding opportunities, use different methodologies, and take very different approaches to publications. To provide a sense as to where there may be greater impacts and risks in terms of why and who you are evaluating, the SCOPE framework has plotted the six main reasons for evaluation listed above against four different entity sizes in a matrix. Each segment has been 'RAG' (red-amber-green) rated to indicate whether an evaluation in that context might be high, medium, or low impact and/or risk. The RAG-rating is provided as a guide for evaluators, as there is a continuum of impact/risk across various evaluative settings, rather than a specific rule. More information on the evaluation impact matrix is available on page twelve of supporting document 2. As an example, evaluating the publication volume of one country against that of another for the sole purpose of understanding the countries' relative production levels (i.e., analysis only) has very little impact on the countries under assessment. Therefore, this example (Analysis-Country) has been labeled green, indicating low risk. However, if this same parameter of publication volume was used to determine which faculty members are eligible for promotion (Individual-Allocation) the evaluation would carry a high degree of impact (i.e., financial reward, retention) as well as a high degree of risk (disadvantage to some disciplines or early career researchers, development of a quantity over quality research culture). Any form of assessment at the level of the individual that results in a reward has a high impact on those individuals, and therefore carries a

greater degree of risk. Therefore, it is *absolutely essential* to include principles of responsible research assessment when evaluating at the level individual or group levels.

After considering context, the third stage of SCOPE is a reminder to explore all available **Options for evaluating** your identified values in the chosen contexts, both qualitative and quantitative. As a 'rule of thumb' it is suggested that quantitative indicators are better for quantitative outputs, such as citations, research income, and student counts, and qualitative approaches are better for qualitative outputs such as research impact. Caution should be exercised when using quantitative indicators for qualitative outputs. For example, citation counts are not a proxy for research quality, and a university's ranking position does not indicate excellence. After exploring all options for evaluating, SCOPE's next stage is to **Probe deeply**. There are four key questions that should be asked when considering any evaluation approach options: (1) Who might this evaluation approach discriminate against; (2) How might this evaluation approach be gamed; (3) What might the unintended consequences of this evaluation approach be; and (4) What is the cost-benefit of this evaluation approach?

Having designed the evaluation, the final stage of SCOPE is to run the evaluation and then **Evaluate the evaluation process**. This stage is particularly important as often unintended consequences do not come to light until after an evaluation has been performed. In addition, the area of evaluation is subject to constant change, so just because an evaluation approach worked previously, it does not mean it will work forever and in all context considerations. For additional details on the SCOPE framework and case studies, please refer to supporting document 2.

SCOPE's Relationship to Other Work: The European University Association, Science Europe, and the European Commission have recently published an Agreement on Reforming Research Assessment that sets a shared direction for changes in assessment practices, and some institutions have adopted a responsible metrics policy based on such principles. Many institutions have adopted a responsible metrics policy based on one or more of the principles mentioned above. However, when it comes to applying those principles to the design of alternative research evaluation mechanisms, institutions can often struggle due to lack of expertise and heightened external pressure. Pressure from external entities, including ranking agencies and even governmental funding agencies, can often influence decision-making, incentivize incorrect reward systems, and develop a culture filled with inequity (Giacalone, 2009). The SCOPE framework goes beyond these principles by not just "checking a box" about responsible research evaluation (Gadd, 2018), but by employing an action-based, comprehensive evaluation process. For a table that provides an overview of each of these principles, their objectives, their anticipated outcomes, and how the SCOPE Framework complements or fills gaps in responsible research evaluation please see supporting document 9.

Project Work Plan: This project will develop a two-day, in-person forum that will bring together librarians, researchers, and research managers to explore the framework, best practices related to responsible research evaluation, optimal use of bibliometrics, and impact of research evaluation and rankings. Sessions at the event will include presentations by the project team related to the framework and additional presentations from prominent national/international speakers related to research evaluation, impact assessment, and the appropriate use of bibliometrics in assessment. The forum will be a mix of training sessions and breakout sessions facilitated by experts who developed and are actively using the framework. At the close of the forum, communities of practice will be established to share information, participate in mutual learning, and continue to strengthen best practices. This proposed project will be led by Dr. Baron Wolf from the University of Kentucky (UK). Dr. Wolf serves on the INORMS-REG group and in his role as Assistant Vice President for Research and Director of Research Analytics at UK he has deployed SCOPE techniques and has assisted in facilitating the SCOPE framework with the University of Glasgow and the University of Alberta. In addition, Dr. Wolf is a co-investigator on a National Institutes of Health funded U24 grant that provides a resource training center for under-resourced institutions (1U24GM146576-01) and is the principal investigator of a National Science Foundation research grant (#2215223). The project team will have partners from a variety of institutions including Ms. Rachel Miles, Research Impact Librarian from Virginia Tech University Libraries, who will serve as the co-director of this project. The project will also include consultants Dr. Elizabeth Gadd, Chair of the INORMS REG and Research Policy Manager at Loughborough University. Dr. Gadd is also the Vice Chair of the Europe Coalition on Reforming Research Assessment (COARA). Ms. Erica Conte, Director of Funding Strategy and Stewardship at Unity Health Toronto, and Ms. Tanja Strom, Senior Advisor at Oslo Metropolitan University in Norway. Ms. Strom is the Deputy Chair of the INORMS REG and co-leads the Norwegian

Network for Administration and Research Management. She specializes in open science policy and infrastructure. In addition, this proposal plans to collaborate with the <u>OCLC Research Library Partnership</u> network for marketing, promotion, and dissemination of forum outcomes. <u>Please see supporting documents 3-4 and 6-8 for letters of support.</u>

The project period will begin with planning efforts that include the project team developing the program themes, developing a curriculum, and planning forum logistics. Because the SCOPE framework has already been developed by the INORMS-REG, many of the training materials have already been created and are available for use. Workshop materials such as presentation decks, group activities, and learning action plans have already been developed—but have not been used widely in the US. Overview materials have been presented at a variety of international and regional conferences including the annual meeting of the Society of Research Administrators International and the Bibliometrics and Research Impact Community Conference-Canada (for a full list of presentations visit: <a href="https://inorms.net/reg-outputs-and-outreach/">https://inorms.net/reg-outputs-and-outreach/</a>), however the framework has yet to be taught broadly within the US. No US-based workshop of this framework has taken place by the INORMS-REG. The project team will build on previous experience to develop a two-day, in-person workshop and will include additional group exercises and action plans for specific evaluation topics based on participant feedback. The forum will use partnerships with the OCLC Research Library Partnership and other professional associations to advertise the event. It is expected that the budget will cover up to 100 participants from across the US. Effort will be made to market to all geographic regions through partnerships, listservs, and professional organizations.

The bulk of the two days will be spent using the SCOPE framework to 'workshop' best practices in evaluation designs that are specific to forum participants. **Figure 2** is a sample approach for conducting a SCOPE workshop that will be used as a foundation for this proposed project. Specific strategies will be developed based on project participants' needs by circulating a pre-forum questionnaire to learn more about their interests related to responsible research evaluation. The SCOPE workshop process and approach uses a facilitated methodology to bring individual groups together to target specific discussions/analysis around each of the five stages of SCOPE (Matsuo, 2015). The proposed workshop will be facilitated by individuals from the INORMS-REG (project team). This workshop design allows for an "evaluating with the evaluated" approach, allowing for more discreet analysis and avoiding bias and unintended consequences.

Run Workshop 1: A core evaluation The core team identify a The core team synthesise team is established diverse cross-section of What do you value the findings from the at the evaluating the evaluated community about the entity you workshop and share the for the first workshop. seek to evaluate? resulting list of values with organization. participants for comment. Run Workshop 2: The core team identify a Once the values are Identify options for suitable group of both agreed, core team evaluating and probe evaluated and other identify and/or confirm the contexts in which they those options. stakeholders for a wish to evaluate. second workshop. The core team share the Implement the The core team synthesise The core team evaluate evaluation the evaluation and the outcomes of the evaluation approach workshop and design an with all participants share the findings with approach. from Workshops 1 and evaluation approach. the evaluated and 2 for feedback. stakeholder communities.

Figure 2. SCOPE workshop approach (taken from SCOPE, 2021)

This process ensures that relevant stakeholders are considered in a multi-step process. This consideration allows for building confidence in the process, achieving consensus among stakeholders, and developing best practices to implement responsible research evaluation and assessment. While there is no single method for delivering a SCOPE workshop, the framework in Figure 2 has been successfully used in the past. Stakeholders in this framework include librarians, research administrators, and researchers—anyone interested in or working with research evaluation and/or impact within US higher education—both research intensive institutions and emerging research institutions. While research evaluation and use of bibliometrics has a foundation in library science, we encourage anyone working in this space to attend this forum.

### Project tasks include:

- 1. Finalize forum-specific SCOPE Framework materials
- 2. Facilitate workshop planning
- 3. Venue selection and conduct event planning
- 4. Develop recruitment plan for diverse participation
- 5. Develop evaluation rubrics for travel and community of practice participant support
- 6. Create a communication plan
- 7. Advertise and recruit participants
- 8. Develop a pre-survey for participants (project evaluation component)
- 9. Develop a post-survey for participants (project evaluation component)
- 10. Develop and design community of practice and virtual follow-up sessions
- 11. Deliver two-day forum
- 12. Develop case studies and manuscripts (project outcomes component)

The forum will be followed by four virtual sessions throughout the year for participants to share how they are using the framework at their institution(s) and to ensure sustainability and a community of practice beyond the project period.

Project funds will support effort for two US-based personnel and three international experts, delivery of the forum (meeting venue expenses), participant support for travel, and participant support stipends to help build a US-based community of practice to sustain these efforts. Participants will be asked to pay a modest registration fee to help cover a portion of forum expenses. More details about program income is provided in the budget justification. Participants not applying for travel support will be responsible for all travel expenses. The total budget for this proposal is \$149,535 and will support the project team and up to 100 participants (personnel \$23,140; travel \$10,636; forum expenses \$37,222; consulting fees \$21,000; participant travel support \$20,000; participant support stipends for community of practice \$7,500; marketing/recruitment \$2,000; supplies \$832; and indirect costs \$34,658). Effort will be made to align this forum with other relative meetings if possible, such as the American Library Association annual meeting, the American College & University Libraries conference, the annual meeting of the National Council of University Research Administrators, Expert Finder Systems International Forum, or events hosted by the OCLC to ensure participants have the financial resources to be involved and maximum resources. Effort will be made to host the forum in a central location that provides affordable and easy access to forum participants. Possible locations include Washington, D.C., Chicago, Illinois, or Columbus, Ohio. Location and date of the forum will be dependent on any partnerships formed with other organizations if the project is funded. Budget estimates are based on rates in Washington, D.C.

<u>Travel Support</u> – To provide opportunity for broad participation in this forum, the project team will develop a travel support program. Dollars have been budged to provide participant support to individuals who decide to attend the forum and request travel funds. Each approved applicant will receive a maximum of \$1,250 to support their travel, hotel, and per diem during the event. All attendees are eligible to apply for this support. The goal of this support is to reduce barriers that may exist for individuals to participate from a variety of institutional types, geographical regions, and provide assistance due to limited or competing institutional resources. The project team will create a rubric for review that includes an evaluation of interest in responsible research evaluation, career development goals, commitment to participating in future community of practice events, and demonstration of financial need.

<u>Community of Practice Stipends</u> — In an effort to build a sustainable community of practice the project team will offer participant support stipends to up to ten individuals who agree to continue this work through virtual quarterly meetings, regional virtual meetings, and develop white-papers and conference presentations that promote the use of the SCOPE framework. This community of practice group will enable the SCOPE framework to be used in institutions throughout the US and build relevant case studies for further development and promotion of responsible research evaluation across the country. The project team will develop an application form for interested individuals and will create a rubric for selection of participants. Effort will be made to ensure the application review is done in a manner that ensures diversity, equity, and inclusion—this includes representation from a variety of institutional types, positions, and levels of experience of individual applicants.

The <u>Schedule of Completion</u> document provides specific details and an anticipated project timeline for achieving each of the intended results of the project. The project timeline is subject to change based on availability of venue space, planning efforts, and forum participation recruitment. It is expected that the forum will occur in the spring of 2024 with final project outcomes, reports, and manuscripts created in summer of 2024. It is estimated that all project activities can be accomplished within a 17-month period (August. 2023 to December 2024). Additional effort may be required to provide dissemination at national conferences that occur after the project period.

Project Diversity Plan: Respecting diversity is at the heart of evaluating research responsibly, and the SCOPE framework in particular. Indeed, one of the SCOPE principles is to 'evaluate with the evaluated' which includes considering a diversity of perspectives in the evaluation process and practices—diversity not only in terms of research discipline, but also in gender, race, ethnicity, tenure status, and career progression. The Context stage of SCOPE also invites evaluators to factor in the needs of different disciplines and the Probe stage of SCOPE specifically invites evaluators to consider 'who might this approach discriminate against?'. The INORMS-REG, developers of the SCOPE framework, is an internationally diverse group of practitioners, with equal gender representation and diverse fields of expertise. The group's key aim is to protect diversity in scholarship through recognizing and rewarding those 'things that matter' in research, rather than dimensions such as publications and rankings which inherently benefit non-diverse groups (Gadd, 2020). The fundamental goal of the evaluation framework is focused on bottom-up discussions and not top-down assessments. It focuses on asking the practitioners questions like what is the best way to move forward with an evaluation in your discipline? A variety of expertise is needed, in terms of different disciplines, methods, and backgrounds, to ensure a responsible evaluation that does not discriminate against those being evaluated. The SCOPE framework focuses on respecting the diversity of science and making sure individuals involved in planning and research assessment/evaluations are aware of diverse perspectives and come from diverse backgrounds to be able to consider both unintended consequences as well as discriminatory effects. This forum proposal will bring together practitioners from across the United States to discuss and deploy the SCOPE framework, present workshop-relevant topics for responsible research evaluation, discuss the use of bibliometrics, and develop case studies specific to the U.S. context. Particular attention will be paid to ensure that smaller institutions and specifically minority serving institutions are included and provided support to participate in the forum. The project team will develop a communication and recruitment plan that ensures selected participants come from a wide range of institutions and backgrounds. These plans will include a focus that ensures that minority serving institutions, such as Historically Black Colleges and Universities (HBCUs) and Hispanic-serving Institutions (HSIs), are well represented among selected participants. The project team will utilize professional networks, listservs, and contacts to communicate the forum to solicit applications. Because of the limited number of participants, interested individuals will need to complete a short application online. The application process will be used to ensure broad representation of participants based on institutional size, institution type, and how the individual participant can contribute to the sharing of broad perspectives during the forum. The project team will use the SCOPE framework principles in the evaluation and selection of participants. The framework will be used to assess what types of diverse perspectives are valued, evaluate a variety of diverse context considerations, and ensure that ample diversity in participants is included. Doing so will ensure the selection process is fair and responsible and considers multiple contexts and diverse perspectives.

<u>Project Results, Sustainability, and Impact</u>: The outcome of this forum will be the establishment of a cohort of ~100 US Library-based research evaluators and research management professionals equipped with a practical means by which to

design and implement responsible research evaluations in their various academic settings. The impact of this cohort will be (1) increased capacity across the country in responsible research evaluation; (2) establishment of communities of practice; and (3) greater equity and wellbeing for researchers within our academic institutions.

- 1. Increased Capacity: while there is the direct benefit to the 100 forum attendees who will gain hands-on experience working with the SCOPE framework. We expect that there might also be a "train-the-trainer" effect, whereby attendees of the forum will teach others at their respective institutions how to apply the SCOPE framework thereby further increasing capacity in this evolving field. The expectation is that participants will present the SCOPE framework and case studies and host additional forums of their own, at regional meetings/conferences, and advocate further for responsible research evaluation practice in line with the SCOPE framework. Effort will be made for participants and INORMS-REG members to continue this work through support of the ALA Research Metrics Interest Group and the OCLC Research Library Partnership by hosting additional webinars, training, and workshops, along with presentations at other relevant national and regional associations to which participants belong. Forum participants will also be encouraged to take this work, deploying, and using the SCOPE framework, back to their home institutions in order to impact responsible research evaluation and adapt it to their additional networks.
- 2. **Communities of Practice**: A critically important element of the forum is that the resulting **beneficiaries** librarians and research managers—will form a voluntary community of practice for the sharing of best practices in research evaluation and cascading SCOPE training to others, seeding a responsible research evaluation culture and approaches more broadly in the United States and beyond. This target community of practice is especially important as it brings together both librarians and research managers—who commonly have overlapping responsibilities, yet often also with differing approaches and aims. The SCOPE Community of Practice will be supported by the INORMS-REG US representative Dr. Baron Wolf, who represents the Society of Research Administrators International on the INORMS-REG, and Ms. Rachel Miles, Research Impact Coordinator from Virginia Tech and manager of The Bibliomagician Blog, in conjunction with leaders selected from the community of practice participant support process. This small stipend will incentivize selected forum participants to help organize, plan, and deploy future virtual follow-up sessions of the forum. This will help ensure robust project outcomes, dissemination, and sustainability. The members of this community of practice will share their experiences of running SCOPE-based evaluations and best practices at their home institutions and broad professional communities of which they are active members. Listservs will be used with related groups such as the ALA Research Metrics Interest Group and OCLC to capitalize on natural synergies and extend the reach of the forum participants.
- 3. **Greater Equity and Wellbeing for Researchers**: We know that this cohort will have a positive impact on institutional decision-making, autonomy, researcher well-being, and research culture, ensuring that the right things are rewarded and incentivized, and a diversity of perspectives is included in all research assessments. In doing so, we will improve the equity of our current evaluations to be more inclusive of marginalized groups and will reduce the enormous stress and anxiety that unfair and inappropriate evaluations have on researchers across the country. When we utilized responsible evaluation approaches, we support all researchers, all types of research, and create an environment that thrives.

In addition to these major impacts, the community of practice participants and the project team will have the opportunity to develop and write a variety of case studies and manuscripts that will be submitted for publication in appropriate journals (e.g., Journal of Scientometric Research, Journal of Library and Information Research). This work will contribute to the growth of responsible research evaluation literature. To help spearhead this effort, the budget of this proposal includes additional stipends for up to ten forum participants to spend time after the forum writing manuscripts and case studies for publication and building the community of practice. In addition, outcomes of this forum and virtual community of practice may result in future applications for a National Leadership Grant through the Laura Bush 21st Century Librarian Program of the Institute of Museum and Library Services.

Please see supporting document 1 for cited references.

## **Schedule of Completion**

Project Dates: August 1, 2023 through December 31, 2024 (17 months)

Project Timeline		Planning/Development Efforts								Implementation							
Subject to change																	
	Project Period																
Activity	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	Jun	July	Aug	Sept	Oct	Nov	Dec
Workshop Planning																	
Finalize Workshop Materials																	
Communication Plan																	
Venue selection & Event Planning																	
Recruitment Plan																	
Host Forum																	
Community of Practice																	
Project Outputs (manuscripts and conference presentations)																	

Some of the major activities have already been completed because many of the SCOPE materials have already been created by the INORMS-REG as indicated in the project narrative. SCOPE framework materials, presentation slide decks, and case-studies have already been developed and used in a variety of settings. Items above in blue are planning/development activities and green is go-live/implementation timelines. Specific activities for this project include:

## 1. Workshop Planning:

- Develop presentation sequence including deciding project team members who will present each specific section of the SCOPE framework.
- b. Develop pre- and post- survey evaluation instruments.
- c. Create workshop elements (break-out groups) for facilitated workshopping of specific topics relevant to summit participants.
- d. Create plan for case-study and manuscript development.
- e. Finalize workshop presentations, exercises, hand-out materials, etc.

### 2. Communication Plan:

- a. Develop strategy to reach a broad range of interested participants.
- b. Determine which outlets (other groups) will have interest in advertising the call for summit participants.

## 3. Venue Selection & Event Planning:

- a. Determine suitable location for summit.
- b. Visit and plan summit with project team and venue (meeting space, lodging, food, etc.).

#### 4. Recruitment Plan:

- a. Develop summit application and process for review of participant requests.
- b. Develop strategy for diverse participation.
- c. Develop reimbursement instructions to clearly communicate to participants.

# 5. Project Outputs:

- a. Create strategy for case-study development with participants.
- b. Write manuscripts and identify appropriate journals and other publication outlets.
- c. Develop computer of practice plan, recruitment, and virtual meeting dates.

### **Digital Products Plan**

This project will have a variety of digital products as outlined below. The project team will use best practices and standards as outlined by the Federal Agencies Digital Guidelines Initiative (FADGI) for the creation and sustainability of digital products and collections from forum proceedings.

## Type:

- Presentation Slide Decks
- Case-Study Manuscripts
- Journal Manuscripts
- Online Community of Practice (listserv for online community)

**Availability:** One of the aims of the SCOPE Framework is to ensure that all institutions, researchers, and evaluation professionals have the resources needed in order to conduct fair and equitable responsible research evaluation. All content prepared for this project will be posted online in a variety of venues. Slide decks and summit materials will be posted on the International Network of Research Management Societies (INORMS-REG) website as an output and contribution of the Research Evaluation Working Group. In addition, the content will be distributed through a variety of listservs and available for other organizations to use free of charge. The forum website will be active and available for individuals to use and browse forum outcomes as well.

**Access:** All products, when possible, will use the CC-BY creative commons license scheme to ensure open access to the content. This of course will be limited for manuscripts published in academic journals that have particular copyright and access requirements. However, all content created by the INORMS-REG is open access and available for use. The project team will ensure individuals contributing to any output from the project will be acknowledged.

**Sustainability:** The project team hopes to be able to publish at least one journal manuscript as an outcome of this summit. Doing so will contribute to the literature in this topical area. In addition, INORMS maintains an archived website of all working group materials. This support, along with the formation of a community of practice will ensure sustainability in the digital products and their availability.

### **Organizational Profile**

Established in 1865, the University of Kentucky (UK) is a public land grant university dedicated to improving people's lives through excellence in education, research and creative work, service, and health care. As Kentucky' flagship institution of higher education, the University plays a critical leadership role by promoting diversity, inclusion, economic development, and human well-being. UK is a state-supported institution with a Board of Trustees as the governing body.

The University contributes to the economic development and quality of life within Kentucky's borders and beyond, nurturing a diverse community characterized by fairness and equal opportunity. In fall 2022, UK enrolled over 32,000 students on its 784-acre urban campus in Lexington, Kentucky. The University is one of only a small number of U.S. institutions having a major academic medical center with all six health sciences colleges and the full spectrum of academic colleges on a single campus. Students choose from more than 200 majors and degree programs in UK's 16 degree-granting colleges and diverse professional schools. The diversity of disciplines has enabled UK to develop extraordinarily productive collaborations across diverse disciplines, which collectively contribute to a tradition of excellence in multidisciplinary and interdisciplinary research. UK has over 80 national rankings for academic and research excellence and is one of 131 private and public universities in the country to be classified as Doctoral Universities: Very High Research Activity (R1) under the Carnegie Classifications. UK was also selected for inclusion in the Carnegie 2015 Community Engagement Classification, which recognizes institutions that provide evidence of substantial engagement and contribution to their communities.

UK operates a nationally recognized research library system comprised of 12 individual libraries with the Dean of Libraries reporting directly to the University Provost. As the premier research library in the Commonwealth, the UK Libraries mission is to collect, create, organize, manage, preserve, and provide access to information that enables learning and the advancement of knowledge essential to teaching, research and service. Further, UK Libraries recognizes that scholarly information needed to drive the academic enterprise comes in many formats—print, digital, analog, and archival—and aims to make access to this body of knowledge as effortless and seamless as possible. The cornerstone of UK Libraries is the world-class William T. Young Library, which seats over 4,000 patrons and features a 150-seat auditorium. UK Libraries houses more than 4.6 million volumes, over 6.5 million microforms, more than 99,000 audiovisual materials, and more than 400 licensed networked electronic databases. The collection also includes 244,000 maps, a collection of current newspapers, and 9,000 interviews housed in the Louis B. Nunn Center for Oral History. Other library units include the University Archives and Records Program, the Wendell H. Ford Public Policy Research Center, the Audio-Visual Archives, the Bert T. Combs Appalachian Collection, the Public Policy Archives, the Rare Book Collection, and the Preservation Reformatting Center.

Library scholarly strengths include leadership in creating new digital content and information for the Kentuckiana Digital Library, including electronic texts, digitized photographs, images, and archival finding aids. UK Libraries serves as a regional depository for U.S. federal government publications, Canadian government publications, and European Union publications.

The Office of the Vice President for Research is responsible for the management and oversight of all extramurally sponsored grants and contracts at the University. The Vice President for Research reports directly to the University President and has oversight of research administration support units, research compliance, technology transfer, research analytics and a variety of multidisciplinary research centers and institutes. The office creates innovated programs and approaches to create team science, build collaboration, and strengthen the university research infrastructure. This includes research analytics—a division of the office that reports directly to the Vice President for Research. Research Analytics provides robust data analysis, business intelligence, and research evaluation services to senior leadership and across campus. This includes the investment and deployment of several internal data tools and vendor provided tools that provide the campus with bibliometric analysis, scholarly output, and network analysis.