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## ELSEVIER 1 Clarivate" $\quad$ PIGITAL :': science

## LAND ACKNOWLEDGEMENT

Simon Fraser University Library is grateful to be located on the lands of the $\mathrm{x}^{\mathrm{w}} \mathrm{m} \partial \mathrm{k}^{\mathrm{w}} \partial \mathrm{y} \partial \mathrm{m}$ (Musqueam), Skwxwú7mesh (Squamish), soliliẃətaPt (Tsleil-Waututh), qiććəý (Katzie), kwikwəユəm (Kwikwetlem), qiqéyt (Qayqayt), q'wa:ńخ’əń (Kwantlen), Səmyámə (Semiahmoo), and sćəwaӨən (Tsawwassen) Nations.

Acknowledging the benefits of occupying this land, the BRIC Conference along with the SFU Library commits to becoming a more welcoming space for Indigenous Peoples by centring Indigenous voices in our collections, services, and programs.

|  | Wednesday, June $5^{\text {th }}$ | Thursday, June $\mathbf{6}^{\text {th }}$ |
| :---: | :---: | :---: |
| 8:00-9:00 | Welcome (Badge pick-up, intros, directions, housekeeping) |  |
| 9:00-9:40 | KEYNOTE: Stefanie Haustein | KEYNOTE: Juan Pablo Alperin |
| 9:40-10:00 | Balazs Gyorffy; Unfairly Ranked? An Online Tool to Reveal True Scientific Standing | Cal Murgu; Elsevier; Assessing Named Research Organization Risk using Elsevier Bibliographic Data |
| 10:00-10:20 | Sheila Craft-Morgan; Terms of Inclusion: Mapping the concepts used to describe bias in the research lifecycle | Lenore Bajona \& Cal Murgu; "Dean’s Button" Use Case |
| 10:20-10:50 | Break and Poster Sessions |  |
| 10:50-11:10 | Emily Hart \& Shannon O'Reilly; Aspirational Growth Taking on Bigger Projects with Help from your Friends | Thane Chambers; Finding a path towards reconciling Indigenous research with research assessment |
| 11:10-11:30 | Ann Beynon \& Milan Jiancic; Clarivate; Canadian research security and collaboration: The impact of decoupling partnerships | Collin Drummond; The linguistic landscape of scholarly publishing: Quantifying language bias through Multiple Systems Estimation |
| 11:30-12:00 | Isabelle Dorsch, Germana Barata, Mariana Hafiz \& Natascha Chtena; VOICES - Analyzing the Value and Effects of Openness, Inclusion, Communication, and Engagement for Science During and Past the Pandemic | Robin Haunschild \& Lutz Bornmann; Global science overlay maps (Title added by GD) |
| 12:00-1:25 | Lunch - Included |  |
| 1:30-1:50 | John Aspler \& Laura Bredahl; Persistent Identifiers in Canada: ORCID Use Cases and a National PID Strategy | Robyn Butcher; Tracking Citation Impact - Exploring bibliometrics in Health Technology Assessment |
| 1:50-2:10 | Carlos Areia; Altmetric; Investigating the Ripple Effect of Mentorship on Open Access Publishing | Christina Gattone Karen Gutzman \& Mao Soulakis; Leaving a paper trail: tracking scholarly legacy with bibliometrics |
| 2:10-2:30 | Lucian Li; Tracing the Genealogies of Darwinian Ideas with Sentence Embeddings | Jesse Xiao; Insights into Research Performance: A Comprehensive Bibliometric Analysis for Hong Kong RAE 2026 |
| 2:30-3:00 | Katie Shamash; Open Policy Ltd (Overton); Demand side bibliometrics: mapping university outputs to government research priorities | Jacob Hill; Navigating the Open Access Landscape: Insights and Opportunities for Stanford Libraries |
| 3:00-3:20 | Break and Poster Sessions |  |
| 3:20-3:40 | Jason Portenoy; OurResearch; Linking grants to OpenAlex to gain insight on research funding by topic | Ely Lyonblum; Data-driven approaches to ResearchCreation: Prospects and Challenges for the Arts and Humanities |
| 3:40-4:00 | Yulia Sevryugina; Retractions: Analyzing the Role of Misconduct and Plagiarism in Chemistry Manuscripts | Olivia MacIsaac \& Jere Odell; Beyond the metrics: What do Wikipedia citations mean? |
| 4:00-4:30 | Maddie Hare, Leigh-Ann Butler, Stephanie Savage \& Erin Fields; An institutional portrait of 2022 APC expenditure: The University of Ottawa | Jeff Demaine - How Bibliographic Coupling became a Sleeping Beauty: a Historiography |
| 4:30-4:45 | Wrap up/questions/tidy up |  |
| 4:45-5:00 | Free time |  |
| 5:00-6:00 | Catch Ferry to Shipyards (Public Transit) |  |
| 6:00- | COCKTAIL RECEPTION @ POLYGON |  |

## PROGRAM



## Wednesday June 5

Room: Fletcher Challenge Canada Theatre

8:0o - 8:50<br>Badge pick-up, intros, directions, housekeeping

8:50-9:00
Kick-off
9:00-9:40
KEYNOTE
Stefanie Haustein
University of Ottawa, Canada
Title: TBD
9:40-10:00
Balazs Gyorffy;
Semmelweis University, Hungary

## Unfairly Ranked? An Online Tool to Reveal True Scientific Standing

Ranking researchers solely on raw output metrics like citation count or H-index can be unfair. It disadvantages younger researchers or those in fields with different publication patterns. We aimed to develop a more equitable global reference database for scientific productivity.
We constructed a reference database encompassing 19 independent scientific fields. Data from Scopus was used to download information for the last 5,000 authors in 174 sub-fields. We then calculated the H -index, yearly citations, and the number of publications in the last five years for each age for each researcher. To account for field-specific publication patterns, different publication types were included in the analysis for different scientific domains. Finally, the data was aggregated into age-percentile tables within each scientific field.

Only researchers with at least five publications were included. Our analysis utilized data from 507,233 researchers to establish the reference database. We calculated expected values for H-index, yearly citations, and recent publications (past five years) for each quartile within every scientific field. These values serve as a benchmark for scholarly performance at $10,20,30$, and 40 years after a researcher's first publication. A composite score integrating all three parameters was developed to rank publication output into deciles (D1-D10), with D1 signifying the highest
achievement. Notably, for each included researcher, only scientific parameters at the same publication age are considered, and only those active in the same scientific discipline are included, ensuring a fair comparison. A web portal to determine researcher rankings is available at https://scientometrics.org/global.
This age- and discipline-normalized database offers a valuable tool for the global scientometric ranking of individual researchers. It provides an invaluable framework for establishing expected levels of scholarly output.

## Sheila Craft-Morgan

## Ohio State University, USA

Terms of Inclusion: Mapping the concepts used to describe bias in the research lifecycle.
While conducting research about diversity, equity, inclusion and justice (DEIJ) and research impact, I have found that there is a great deal of literature in a variety of disciplines about citation bias and other types of bias in the research lifecycle. I define bias in the research lifecycle as bias based on gender, ethnicity, country of origin, institution, language, etc., that affects the participation or experience of that group, such as bias in peer review, citation bias and/or citational justice, bias in grant evaluation, or editorial board composition. Building off of my previous work which found that few ARL libraries include resources addressing this topic in their research impact resource guides, I am currently working on a project to build a toolkit to help other research impact librarians begin to incorporate this information into their resource guides.
One part of the project is a literature review that will be used to develop a framework to describe bias in the research lifecycle, in general, and specifically, proposed methods of mitigation of the bias, including the actions that other disciplines suggest that libraries can take to address this issue. For this proposal, I will map the concepts and terminology used in the title and abstracts of articles discussing bias in the research lifecycle during a ten-year timespan, 2013-2023. I will be using VosViewer and Tableau to create visualizations for this proposal. The resulting analysis will be used to shed light on the ways that other researchers are discussing this topic and contribute to the development of the framework for the toolkit.

## 10:20-10:50

## Break \& Poster Sessions

10:50-11:10

## Emily Hart, Shannon O'Reilly

 Syracuse University, USA
## Aspirational Growth - Taking on Bigger Projects with Help from your Friends

The Syracuse BioInspired Institute is a thriving interdisciplinary, multi-institutional research center. As the Institute has grown, so has the pressure to bring in large scale funding and the need to demonstrate value and impact to university administrators and stakeholders. Over the past several months, the Syracuse University Libraries' Research Impact Team has worked closely with BioInspired administration to pull bibliometrics data and create a variety of visualizations looking at collaboration, impact, and peer comparisons using publication, citation, and grant data primarily. This project is unique for the Research Impact Team because it necessitates a greater amount of time and technical skills, such as utilizing Python, API's, and Tableau, than previous initiatives. To accomplish this larger scale project, the Team is utilizing internal data in combination with data from Dimensions as well as collaborating closely with Dimensions data specialists. The Team was also fortunate to hire a graduate student versed in Python and API's. This collaborative undertaking has allowed the Team to begin entertaining larger, more data and technical skill intensive projects, while gradually upskilling to meet these ongoing needs in the future. Having access to Dimensions has been key, due to the high-quality publication and grant information included in the Dimensions dataset and the flexibility of the API to dig deeper into the data and parse and explode specific fields. This wouldn't be otherwise possible via the Dimensions web interface or using existing Syracuse data systems in isolation. This presentation will be relevant to anyone interested in taking on more data intensive projects, but who may lack the resources, staff time, and technical expertise to respond to more complex, bibliometrics requests coming from their community.

## 11:10-11:30

Ann Beynon, Milan Jiancic

## Clarivate, USA

## Canadian research security and collaboration: The impact of decoupling partnerships

The Canadian government recently announced a list of institutions in China, Iran and Russia that Canadian universities can no longer collaborate with due to possible research misappropriation and security issues. This analysis explores who is participating in these collaborations, the fields of research involved, and how this has evolved over time.
On one hand, as international collaborations are viewed as a measure of quality in faculty promotion, grants and other awards, it is a delicate balancing act to evaluate them and give them their proper weight in research evaluation. Moreover, international collaborations could bring more funding to research groups and potentially more visibility, distribution, and citations to their publications. Conversely, with the increased security risks Canada faces, researchers may be hesitant to collaborate with researchers from certain countries, "[a]nd a lack of clarity around what is considered acceptable could have a chilling effect on international collaborations" (University Affairs, July 2023). Utilizing Web of Science Core Collection data, including citation topics, Web of Science categories, and funding information, we will analyze the current collaboration landscape and identify trends in particular research areas of strategic and national importance.

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11: 30-12: 00
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Isabelle Dorsch<br>Leibniz Information Centre for Economics, Kiel, Germany<br>Germana Barata \& Mariana Hafiz<br>University of Campinas, Campinas, Brazil<br>Natascha Chtena<br>Simon Fraser University, Canada

## VOICES - Analyzing the Value and Effects of Openness, Inclusion, Communication, and Engagement for Science During and Past the Pandemic

Over the last decades, open science (OS) has been gaining attention and momentum. Yet, the COVID-19 pandemic has put openness into a new worldwide spotlight. Several publishers made their coronavirus-related content freely available, open data became a critical tool for exchanging information on the virus and vaccine, more preprints were posted than ever before and their findings distributed to unprecedented, increasingly heterogeneous audiences.

Science communicators, in general, also received new visibility and status. Concurrently, the UNESCO Recommendation on Open Science, adopted in November 2021, marked a major step forward in recognizing the importance of OS for science and society. The VOICES project (Value of Openness, Inclusion, Communication, and Engagement for Science in a Post-Pandemic World) investigates the value of opening science to other scholars and to the public during and beyond the pandemic. Using a mixed-methods approach, we analyze how OS was discussed and positioned during the pandemic within the media and among researchers and policymakers; how open access publishing developed in the same period; how press releases can be used as a metric of social impact of science; how news outlets covered preprints and who adopted them; how preprint servers adapted to the challenges brought on
by the pandemic; and how OS reshuffled the dynamics between research and the public. We present selected quantitative and qualitative findings from bibliometric/altmetric studies, content and discourse analysis of OSrelated documents, interviews with OS stakeholders, and analyses of science communication products and situate them within the pandemic context and beyond.

# 1:30-1:50 <br> John Aspler <br> Canadian Knowledge Research Network, Canada <br> Laura Bredahl <br> University of Waterloo, Canada 

## Persistent Identifiers in Canada: ORCID Use Cases and a National PID Strategy

Research generates a huge amount of information across many disconnected systems and technologies. Persistent Identifiers (PIDs) act as labels to uniquely identify research information 'entities,' like scholars, institutions, datasets, and publications. PIDs are anchors that help connect information about related entities (e.g., a scholar with their publications) and can enable software systems to effectively exchange information, making them more interoperable and FAIR. The gold standard PID for People is the ORCID iD provided by ORCID, an international not-for-profit sustained by institutional membership. In Canada, members are supported by the local consortium, ORCID-CA, in both English and French.
In this session, first, we will explore what ORCID iDs are and, why they matter. We will place ORCID iDs within the broader PID ecosystem context, and then highlight the value of specific ORCID member tools, such as the Affiliation Manager (which enables institutions to add trusted affiliation information on behalf of their scholars, with scholar permission) and the Affiliation Report (a tool to measure ORCID impact and uptake at a given institution). Then, we will explore a community use case to demonstrate ORCID's value and the usefulness of PIDs in assessing research impact. Finally, an update will be provided on the state of the development of a National PID Strategy for Canada, which was last discussed at BRIC 2022. Significant advancements have been made and a Roadmap to (PID) Success (community recommendations based on work to date) will be presented.

1:50-2:10

## Carlos Areia

Altmetric/Digital Science, UK

## Investigating the Ripple Effect of Mentorship on Open Access Publishing

In the realm of scientific research, transparency and openness are cornerstones for ensuring credibility, fostering trust, and facilitating collaborative innovation. These principles support the reproducibility of results and are critical for the advancement of science. Despite the importance of open-access (OA) publishing in achieving these goals, the influence of mentorship on researchers' decisions to publish OA remains largely unexplored. Our study focuses on understanding how the guidance of mentors affects their mentees' propensity for OA publication.
To conduct this study, we utilized a custom-built database incorporating Altmetric and Dimensions data, both products of Digital Science. This database included comprehensive information on research publications, grant details, mentor-mentee relationships, and the OA status of outputs. We primarily analyzed the average OA publication rates of mentors and their mentees, alongside various relational metrics such as co-authorship duration, number of joint publications, and grants awarded.
Analysis of over 20 million probable mentor-mentee pairings (involving 4 million mentors and 10 million mentees) and their publication records revealed a mean collaboration duration of $4.70 \pm 5.45$ years and an average of $1.02 \pm 3.04$ joint publications, with a general trend towards OA publishing ( $66 \%$ on average). A significant positive correlation was identified between the OA publication rates of mentors and mentees, suggesting that mentors heavily committed to OA significantly boost their mentees' likelihood of OA publishing by $76.48 \%$. Furthermore, the duration of the mentor-mentee relationship and the timing of their first joint publication positively influenced the mentee's OA publishing propensity, whereas the number of joint grants had a slight negative impact. This research highlights the significant impact of mentorship on researchers' choices to engage in OA publishing. The positive association between mentor and mentee OA publication rates illustrates the profound influence that mentors have on their mentees' publishing practices. However, the negative correlation observed with joint grant funding indicates that financial considerations may sometimes inhibit OA publishing. These insights are crucial for institutions, funding bodies, and policymakers who aim to encourage OA publishing, demonstrating the need to consider mentorship dynamics in strategies to enhance OA engagement.

## 2:10-2:30

## Lucian Li

School of Information Science, University of Illinois, Urbana Champaign, USA

## Tracing the Genealogies of Darwinian Ideas with Sentence Embeddings

In this paper, I present a novel method to detect intellectual influence across a large corpus. Previous studies of textual influence, such as Funk \& Mullen (2018) and Soni et al. (2021) have focused on direct text reuse or stylistic similarities in word choice. Taking advantage of the unique affordances of large language models in encoding semantic and structural meaning while remaining robust to paraphrasing, I hope to synthesize these previous approaches by discovering both direct idea transmission and indirect influence. This method allows us to operationalize different levels of confidence: we can allow for direct quotation, paraphrase, or speculative similarity
while remaining open about the limitations of each threshold. The method enables the exploration of idea transmission even with limited structured citation data.
I apply an ensemble method combining General Text Embeddings, a state-of-the-art sentence embedding method optimized to capture semantic content and an Abstract Meaning Representation graph representation designed to capture structural similarities in argumentation style and the use of metaphor. I apply this method to vectorize sentences from a corpus of roughly 400,000 nonfiction books and academic publications from the 19th century for instances of ideas and arguments appearing in Darwin's publications. This functions as an initial evaluation and proof of concept; the method is not limited to detecting Darwinian ideas but is capable of detecting similarities on a large scale in a wide range of corpora and contexts.

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2: 30-3: 00
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## Katie Shamash

## Open Policy Ltd (Overton), UK

## Demand side bibliometrics: mapping university outputs to government research priorities

When using bibliometrics to support impact assessment we're all familiar with authors and outputs, but typically less familiar with the demand side: the organizations asking for and using research. Nowadays we can tell when a government agency cites scholarly work, but what about when it has a requirement that just isn't being met by the available scholarship? We present and describe Engage, a framework using publicly available datasets that tries to quantify how well the output of a university or funder maps to the evidence needs of government, and can highlight where the most effective improvements might be made.

3:00-3:20

## Break \& Poster Sessions

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3: 20-3: 40
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## Jason Portenoy

## OurResearch, UK

## Linking grants to OpenAlex to gain insight on research funding by topic

At OpenAlex-a free and fully open catalog of the global research ecosystem-we have methods to automatically classify research outputs in different ways. Two of these are: (1) the United Nations' Sustainable Development Goals (SDGs) and (2) our own set of Topics ( $\mathrm{n}=4,516$ ) based on the scholarly citation network and language models. We can extend these methods to similarly classify other types of scholarly documents, such as course syllabi or grant applications and awards. In this presentation, we use Canada's NSERC Awards data as a case study by tagging tens of thousands of individual grants with OpenAlex's Topics and SDG classifications, using their titles and summaries. In this presentation, we will demonstrate how analyses using these classification schemes can describe trends in research funding-for example, number of grants and amount of money per Topic and SDG within and across institutions over time. Using the same classification scheme, we will demonstrate how linking grants data to scholarly works can provide additional insights like: Which topics have a high number of publications but little grant money, and vice versa? Or: Which institutions receive the most funding in topics of increasing prominence at our institution?

Yulia Sevryugina<br>University of Michigan, USA

## Retractions: Analyzing the Role of Misconduct and Plagiarism in Chemistry Manuscripts

Retractions and corrections serve as essential instruments for rectifying scientific work and safeguarding its honesty. Exploring reasons for manuscript retractions helps raise the awareness of existing mechanisms for correcting science and advancing science ethics policies. There is a consensus that clearly defined policies on scientific malpractice play a pivotal role in the detection of research fraud. The analysis of misconduct, revealed through retraction notices, serves as an educational tool for nurturing the next cohort of researchers in recognizing and disclosing unethical practices.
This study offers an analysis of research papers that have been retracted from the scientific record over the past two decades, spanning 2001 to 2021. We examined a total of 1,292 retracted papers in the field of Chemistry, which were
sourced from the Retraction Watch database. Our findings showed that $58.5 \%$ of Chemistry manuscripts were retracted due to misconduct; of them $40.5 \%$ of retractions were due to self-plagiarism and $36 \%$ - due to fraud. The median timeline for retraction of Chemistry papers is calculated to be 1.7 years, whereas the median duration of peer-review stands at 71 days. We will present a detailed analysis of retraction and peer-review timelines for each retraction reason, the distribution of retractions across various subdisciplines, and the relationships between journal impact factors and the number of retractions.

4:00-4:30
Maddie Hare, Leigh-Ann Butler
University of Ottawa, Canada
Stephanie Savage, Erin Fields

## University of British Columbia, Canada

## 'We paid how much?' Case studies of APC expenditure at the University of British Columbia and the University of Ottawa

The open access (OA) movement has catalyzed change in the scholarly publishing landscape; most notably, new publishing models, such as transformative agreements (and/or Read-and-Publish deals) have emerged alongside
traditional subscription models that are funded by libraries in higher education institutions. It has proven challenging for libraries to assess the cost effectiveness of these emerging agreements due to the complexity of estimating article processing charge (APC) spend. As a result, institutions have begun to create and employ a wide range of methods in support of estimating their total expenditures on APCs.
This joint presentation presents case studies of two Canadian institutions, the University of British Columbia (UBC) and the University of Ottawa (Ottawa) that undertook this work. UBC discusses data sources and processes used to determine total APCs paid by UBC-affiliated authors in a given year, as well as the questions they were hoping to have answered by the data, challenges they encountered along the way, the quality of their analysis and how it could be improved.
Ottawa introduces a dataset of APC price lists for six large commercial academic publishers (Elsevier, SpringerNature, Wiley, PLOS, MDPI, Frontiers) of OA content and elaborate on its use to support a bibliometric analysis of the publication outputs of the University of Ottawa in 2022. They will present results on estimated overall spend, by OA model, publisher, and by Ottawa faculty.
By demonstrating different approaches to this work, we aim to support other library practitioners, administrators, bibliometricians, and researchers grappling with the task of estimating APCs or using them in their research.

4:30-4:45
Wrap up/questions/tidy up

# Thursday June 6 <br> Room: Fletcher Challenge Canada Theatre 

8:00-8:50
Badge pick-up, intros, directions, housekeeping

| $8: 50-9: 00$ |
| :---: |
| Kick-off |

9:00-9:40
KEYNOTE
Juan Pablo Alperin
PKP/Simon Frasor University, Canada
TBD
9:40-10:oo
Cal Murgu
Elsevier, Canada

10:00-10:20
Lenore Bajona
Medical Research Development Office, Faculty of Medicine, Dalhousie University, Canada

## Cal Murgu

Elsevier, Canada

## "Dean's Button" Use Case

As academic candidate decision makers grow to understand and appreciate the value in reviewing individual publication metrics for measurable researcher's impact (dollars vs output) the request for these reports is increasing in frequency and urgency. The comprehensive process of generating a single report, which involves searching for authors and selecting desired metrics from the Scopus/SciVal websites requires prior knowledge of the platform as well as responsible use of these metrics. We have found that for some administrators, this is too much of an ask for
their reporting needs. In an effort to alleviate some of the reporting requests on research administrators, we are experimenting with the SciVal API to create point-of-need reports that provide the metrics academic leaders need in
the moment. As there are already existing APIs for SciVal covering most of the currently desired metrics per in progress report templating the "Dean's Button" Use Case is being developed for the Medical Research Development

Office (MRDO) at Dalhousie. This Use Case shall demonstrate both the ease in which senior administrators will be able to quickly respond to these requests in the future and hopefully the ease in developing other "buttons" toward additional templates also in the works at MRDO. This talk will also speak to the challenges of this approach, in particular the need to instruct academic leaders in need of immediate data about the responsible use of metrics finding the balance between speed and responsible use continues to be a significant challenge.

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10:20-10:50
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Break

## 10:50-11:10

## Thane Chambers <br> University of Alberta, Canada

## Finding a path towards reconciling Indigenous research with research assessment

The University of Alberta (UA) is the home to North America's first and only Faculty of Native Studies. Campus members and the community are proud of the innovative research, teaching, and service done by Indigenous researchers and students on our campus. UA's library leadership team has tasked the library's Research Impact Team (RIT) to provide equitable support across campus. However, RIT has struggled with how we can provide meaningful support to the Faculty of Native Studies and to the large number of Indigenous researchers working on our campus. Much of this constraint comes from having a service model and outlook which is situated in very traditional quantitative methodologies and practices. Because RIT wants to be active participants in the Library's calls for decolonization and Indigenization, in 2023 we began exploring the possible creation of a framework that we can use on our campus to assess Indigenous research and to build a relationship between RIT and Indigenous scholars.

This presentation will outline our work in this area, which to date includes: Collaborating with the UA's Indigenous Initiatives Office, the Faculty of Native Studies, and the library's Indigenous Initiatives Team; Working with Indigenous scholars and librarians to explore what research impact could mean for them and how/whether this can be measured; and an environmental scan and scoping review of literature on this topic.

We hope to reflect on how we can incorporate practices and behaviours into current research assessment activities to make them meaningful for Indigenous researchers and research in Canada.

## 11:10-11:30

## Collin Drummond

## University of North Carolina at Chapel Hill

## The linguistic landscape of scholarly publishing: Quantifying language bias through Multiple Systems Estimation

In recent years, scholars have paid increasing attention to the scope of scholarly publishing. Some contend that too much research is being published, while others raise concerns that this kind of criticism unfairly targets researchers
from the Global South, whose research has only recently started to become more visible to the Global North scholarly establishment. The balance between information overload and inclusive publishing practices can be very hard to define, especially when the best available bibliometric data is far from perfect. It is widely acknowledged that English dominates the major scholarly indices, but it is impossible to fully evaluate the comprehensiveness of these tools without knowing what they exclude. Although there has been much discussion of what bibliographic databases do cover, there have been very few attempts to quantify what they do not cover. To remedy this situation, I introduce two statistical techniques which have been mostly unknown in bibliometric research: indirect approximation and Multiple Systems Estimation (MSE). I compare overlapping and unique documents in OpenAlex, Semantic Scholar, Bielefeld Academic Search Engine (BASE), and CiNii to estimate their cumulative coverage of each of the ten mostused scholarly languages. I then compare their total coverage with other indicators such as research spending, number of researchers, and previous findings about journal coverage to estimate the global number of documents in each language. By introducing these techniques to bibliometric research, and by providing a baseline estimate for the global linguistic landscape of scholarly literature, I will provide a quantitative foundation for more grounded
discussion of the scope of scholarly publishing, in terms of both document counts and linguistic diversity.

## 11:30-12:00

## Robin Haunschild \& Lutz Bornmann

## Max Planck Institute for Solid State Research, Germany

## Global science overlay maps

This contribution deals with a specific form of science maps: global science overlay maps. These maps use base maps (which usually include the whole science system), on which certain overlay data are presented (e.g., the number of publications of an institution). Overlay maps visualize how the overlaid data (e.g., research papers by an institution) are positioned in the whole science system. For example, field-specific activities of institutions can be made visible using global overlay maps. In this contribution, OpenAlex data are used for building global base maps which are overlaid with various datasets. It is the first time that this new bibliometric database which is freely accessible is used for global science overlay maps. Overlay maps for individuals and institutions will be presented to demonstrate the overlay technique. A normalization procedure will be proposed to display the activity of individuals and institutions relative to the world's activity. The overlay approach is especially useful for comparisons of science units: Since the specific publication sets of the units (e.g., individuals, institutions, or countries) are positioned against the backdrop of the (same) whole science system, similarities and differences between the units can be immediately observed. Advantages and limitations of the proposed global science overlay maps will be discussed.

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12: 00-1: 25
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## Lunch - Included

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1:30-1:50
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## Robyn Butcher

## Canadian Agency for Drugs and Technologies in Health (CADTH)

## Tracking Citation Impact - Exploring bibliometrics in Health Technology Assessment

Traditionally bibliometrics has been used and studied primarily within academia. Non-academic institutions that produce grey literature and self-published reports, such as Health Technology Assessments (HTA) of drugs and medical devices have a need to track the use of their reports. Bibliometrics and citation tracking is a tool that can help demonstrate the impact of this evidence. However, there is a gap in the function of bibliometrics in the context of HTA and grey literature. A search of the literature and discussion with another organizations show that there is not a standard in the method of tracking citations in HTAs. At CADTH, citations are tracked and reported using several different methods honed over the years.

We have set up a system at our organization to find and showcase the use of our reports through citation tracking. Weekly alerts are set up in Scopus and Google Scholar to find articles that have referenced CADTH reports. Results are exported into Endnote and Excel. Details of the project title, year and topic are added in manually. Results are compiled on a weekly basis and are distributed through an internal email and posted on our Intranet. PowerBI is
being used to create a dashboard to showcase key data points such as number of citations by subject matter, program area, journal, date of report, etc.

Bibliometrics can help identify trending subjects and potential collaborators. It can demonstrate uptake of our reports and determine who we are and are not reaching. There are challenges within citation tracking in HTAs, specifically grey literature that are not easily addressed.

## 1:50-2:10

## Christina Gattone, Karen Gutzman \& Mao Soulakis

## Northwestern University Feinberg School of Medicine

## Leaving a paper trail: tracking scholarly legacy with bibliometrics

Although in our day-today work we tend to use bibliometrics for some immediate use, such as to support a grant application or a tenure or promotion package, we are interested in viewing bibliometrics through a different lens and timeline: to determine how bibliometrics might be used to establish an individual scholarly legacy and how bibliometric patterns over a researcher's career and across their body of work indicates both immediate impact and
long-term legacy. We are exploring how biomedical researchers at different stages of their careers view scholarly legacy: general attitudes on legacy, views on both their individual contributions and what it means to "contribute" to a research field, and to what, if any, extent they view bibliometrics as conferring impact or validation of their work. To that end, we are interviewing early-career and late-career biomedical researchers individually to determine what,
if any, patterns arise among and between researchers at different stages of their careers. Additionally, we are creating publication summaries for each of the interviewees to create well-rounded overviews of the traditional bibliometrics and alternative metrics for their research outputs.

2:10-2:30<br>Jesse Xiao<br>Hong Kong Baptist University

## Insights into Research Performance: A Comprehensive Bibliometric Analysis for Hong Kong RAE 2026

This presentation aims to provide an in-depth bibliometric analysis as part of the preparation for the Hong Kong Research Assessment Exercise (RAE) 2026. The analysis encapsulates data coverage from the Internal Research

Assessment Exercise (IRAE) 2023 and incorporates research outputs from Scopus for more than 1000 staff members, totalling around 7000 outputs. The focus is on the correlation between highly cited papers, FWCI scores, topic clusters and external review scores and how these metrics impact the selection process for Hong Kong RAE 2026.

2:30-3:00
Jacob Hill
Stanford University Libraries

## Navigating the Open Access Landscape: Insights and Opportunities for Stanford Libraries

Stanford Libraries recently embarked on a comprehensive initiative to enhance its understanding of and support for Open Access (OA) publishing, catalyzed by a provost-initiated review of Stanford's institutional OA policy and the

White House Office of Science and Technology Policy (OSTP) memorandum on public access to research. Leveraging the interdisciplinary expertise of a diverse team, Stanford Libraries has undertaken a campus-wide exploration culminating in a detailed report on OA publishing.

This presentation outlines our methodology and findings. By harnessing data from four distinct APIs, supplemented by internal organizational records and a comprehensive funding agency dataset, the report offers insights at multiple levels of granularity, including university-wide, school-level, and department-level analyses. Among the focal points are general trends in OA publishing, analysis of article processing charges, financial expenditures with specific publishers, and assessment of the potential impact of the OSTP memo on Stanford research.
The presentation will explore the challenges of the data collection process, showcasing innovative approaches to data integration and analysis. Furthermore, it will elucidate key discoveries and implications gleaned from the comprehensive examination of OA publishing practices within the Stanford community.

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3: 00-3: 20
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## Break and Poster Sessions

3:20-3:40
Ely Lyonblum
University of Toronto

## Data-driven approaches to Research-Creation: Prospects and Challenges for the Arts and Humanities

This presentation examines methods for measuring impact in the nascent cross-disciplinary field of ResearchCreation. At once a funding category in higher education and the culture sector, as well as an academic practice and form of praxis,

Research-Creation offers scholars and institutions novel ways of analyzing and producing research. Scholarship in
Research-Creation has been theorized through four modalities: 1) "Research-for-creation," the framework of iterative development that is continuously informed by the relationship between research and practice; 2)
"Research-from-creation," the theoretical and methodological insights derived from creative processes; 3) "Creative
presentations of research," alternative forms of research dissemination and knowledge mobilization; and 4)
"Creation-as-research," an amalgamation of the aforementioned modalities to present the research outcomes of creative practice (Chapman and Sawchuck 2015, p49). With an increasing interest across the arts and humanities in producing documentaries, podcasts, and curating exhibitions, as well as the expectation for working musicians to have skills in production, training in multimedia creation has become vital to investigators and trainees seeking careers in academia and across the culture sector. How to measure the impacts of these practices remains a difficult task for investigators, creators, and the institutions they work within.
Incorporating altmetrics and using principles of data equity, this presentation considers how data across higher education and culture sectors might be used to offer a more comprehensive view of Research-Creation's impact. This
presentation concludes with the challenges that lie ahead, as well as recommendations for synthesizing datasets using toolkits and established platforms for analysis of research analytics.

## Olivia MacIsaac \& Jere Odell

## Indiana University Indianapolis, USA

## Beyond the metrics: What do Wikipedia citations mean?

Recent studies have demonstrated that Wikipedia citations to scholarly articles may be correlated with higher citation rates in the scholarly literature. It is also the case that Wikipedia serves a key role in the dissemination of public knowledge. Wikipedia has supplanted most encyclopedias as a general knowledge source and is one of the ten-most visited web properties in the world. With this in mind some publishers have made a deliberate effort to contribute reliable, peer reviewed information from their venues to Wikipedia. In far many more cases, volunteer editors cite scholarly articles as needed when creating or improving Wikipedia entries. In this study, we examine citations to an interdisciplinary collection of mostly open access journals published in collaboration with an academic library. We measure the citation rate for these articles prior to and after Wikipedia citation. In addition to quantifying the prevalence of Wikipedia citations to these titles, we identify how these citations are used in Wikipedia. By completing a content analysis of these citations, we identify "impact" beyond a count of mentions. These results contribute toward a better understanding of the value of a Wikipedia citation.

## 4:00-4:30

Jeff Demaine

## Bibliometrician, Canada

## How Bibliographic Coupling became a Sleeping Beauty: a Historiography

As the first technique invented to leverage citation indexes, Bibliometric Coupling has long been a basic operation found in bibliometric tools. Yet despite being commonplace, there has been a surge of interest in this technique in recent years, with citations of the original 1962 paper exhibiting a Sleeping Beauty pattern beginning in 2017. Why would a 60 -year-old form of citation analysis have suddenly seen a spike in interest? This presentation will provide an overview of the concept of Bibliometric Coupling, highlighting its usefulness as a technique for uncovering related authors and institutions. Next the features of the Sleeping Beauty pattern are introduced, and its use as an indicator of a paradigm shift within a research field is shown. Bringing these two together, a Historiograph is presented that reveals the cause of the sudden increase in citations: a publication by two Slovenian economists is found to be the "Prince" that awakened the interest in Bibliographic Coupling. This combination of Sleeping Beauty plus Historiograph is a practical technique for investigating changes in science at a fine level of detail.

## POSTERS

Monica Morrison

University of Saskatchewan
Using research metrics to explore influence of a large, networked science programme

## Sarah Siddiqui

University of Rochester
Tip of the Iceberg: Pythonic insights from a large XML bibliometric collection

## Christopher Sweet

Illinois Wesleyan University
Transitioning from bepress's Selected Works to Elsevier's Pure: A Cautionary Tale

## Marié Roux Stellenbosch

University, Library and Information Service
Mapping skills and tools needed for researcher impact reports at Stellenbosch University

## Maxime Descartes Mbogning Fonkou

York University
Mapping the Phage Therapy Innovation Landscape : A Big Data and Machine Learning Approach

## Andrea Medina-Smith

Manchester Metropolitan University
Measuring the impact of the 2013 US federal public access memos: research toward a Ph.D.

Shadan AlMuhaidib, Rawan Alqahtani, Haifa F. Alotaibi, Asma Saeed, Sahar Alnasrallah, Fayez

Alshamsi, Saleh A. Alqahtani, \& Waleed Alhazzani
King Faisal Specialist Hospital \& Research Centre
Mapping the Landscape of Medical Research in the Arab World Countries: A Comprehensive Bibliometric Analysis

## SPEAKERS



Carlos Areia, Altmetric/Digital Science, UK
Carlos Areia is a Senior Data Scientist working in Digital Science. With a background in Clinical Research, and a PhD in Intelligent Healthcare, he is published academic with more than 50 publications in the fields of epidemiology and health technologies during his work at the University of Oxford.

John Aspler, Canadian Knowledge Research Network, Canada
John Aspler, Manager, Canadian Persistent Identifier Community (CRKN-RCDR), has a PhD from McGill in Neuroscience; his passion for scientific literacy led to projects on media discourse about neurodevelopmental diagnoses. At CRKN, John combines a love of scholarship with a love of libraries by focusing on community service and knowledge access.

Lenore Bajona, Medical Research Development Office, Faculty of Medicine, Dalhousie University, Canada
Lenore Bajona brings 20+ years experience in transforming data into knowledge to the Faculty of Medicine at Dalhousie University in the new role of Coordinator, Research Data and Impact. Practiced in active listening for full understanding of the issues and needs of the user community, supporting continuous improvement in the management and governance of data.

Germana Barata, University of Campinas, Campinas, Brazil
Germana Barata is a researcher and science journalist at the State University of Campinas (Unicamp), Brazil, and a collaborator of the Scholarly Communications Lab, Canada. She coordinates the Laboratory of Inclusion in Communication and Science (LABinCC). She has investigated open science and access, science journalism, science communication, ocean culture, and indicators of social impact of science.

Ann Beynon, Clarivate, USA
Ann Beynon has worked in various roles at Clarivate for 18 years, specializing in bibliometrics, research evaluation, and research information management. She currently consults with US government agencies on using bibliometric tools for program evaluation and strategic planning. She is interested in research integrity, research security, and research evaluation reform.

Robyn Butcher, Canadian Agency for Drugs and Technologies in Health (CADTH), Canada
Robyn Butcher is a research information specialist at CADTH. She has over 12 years experience as a health science librarian. Her interests include bibliometrics and database analysis.

## Leigh-Ann Butler, University of Ottawa, Canada

Leigh-Ann Butler is the Scholarly Communications Librarian at the University of Ottawa, where she supports the library's journal publishing services, the institutional repository, and OA investments. She is a Research Associate at the ScholCommLab, a member of the Public Knowledge Project's Multilingual Interest Group and incoming Board member for the Library Publishing Coalition.

Thane Chambers, University of Alberta, Canada
Thane Chambers is the Head, Research Impact Services at the University of Alberta Library in Edmonton, Alberta,Treaty 6 Territory. In this role, she guides the library's research impact service program and strives to help University of Alberta authors and administrators better understand the research done on our campuses and its wide-ranging impacts inside and outside of academia.

## Natascha Chtena, Simon Fraser University, Canada

Natascha Chtena is a Postdoctoral Research Fellow in the Scholarly Communications Lab at Simon Fraser University, Canada. She is a former journalist and magazine editor with a long-standing interest in open knowledge, democratic participation, and public scholarship.

Sheila Craft-Morgan, Ohio State University, USA
Sheila Craft-Morgan is the Research Impact Librarian and an Assistant Professor at Ohio State University. She leads the development of systematic, scalable approaches that support scholarly research impact within the research lifecycle. She also supports faculty, staff and students in managing, communicating and promoting the impact of their scholarly work. Sheila holds a Bachelor of Arts in English from Ohio State, an MLS from Kent State University and a J.D. from Capital University Law School. She has more than 20 years of experience in institutional research, assessment and accreditation and expertise in data analysis and data visualization.

Isabelle Dorsch, Leibniz Information Centre for Economics, Kiel, Germany
Dr. Isabelle Dorsch (she/her) is a postdoctoral fellow at the ZBW - Leibniz Information Centre for Economics in Kiel, Germany and in the Scholarly Communications Lab, Canada. Open Science, scientometrics, scholarly communication, social media, and metrics literacies are fields of research she studies or is interested in.

Collin Drummond, School of Information and Library Science, University of North Carolina - Chapel Hill, USA
Collin received his M.S.L.S. degree from the University of North Carolina at Chapel Hill in May. His research interests include research impact metrics, data-driven collection development, ethical practices in scholarly publishing, and the role of copyright in text/data mining.

Erin Fields, University of British Columbia, Canada
Erin Fields is the Open Education and Scholarly Communications Librarian at the University of British Columbia. In this role she provides support and advocacy in publishing processes, including open access and open educational resource publishing.

Christina Gattone, Northwestern University Feinberg School of Medicine, USA
Christina Gattone is the Research Impact Librarian at Northwestern University Feinberg School of Medicine in Chicago. She works with biomedical researchers to help them identify and communicate the impact of their research and develops classes and educational resources in scholarly communications and bibliometrics.

## Balazs Gyorffy, Semmelweis University, Hungary

Balazs Gyorffy, with an MSc in management and an MD degree, has published 300+ scientific papers, filed patents, and earned a doctoral degree in bioinformatics. He has previously worked at Charité Berlin, Germany, and Harvard Medical School, Boston, USA. He is a specialist in bioinformatic data analysis.

Mariana Hafiz, University of Campinas, Campinas, Brazil
Mariana Hafiz is a PhD student in Science and Technology Policy at Unicamp University (Brazil). Journalis by training, has experience working as a science journalist and holds an MSc in Science Communication from Unicamp University (Brazil). Latest research involves studies on science and health misinformation, scientometrics, Open Science and indicators of multidimensional impact of Science.

Maddie Hare, University of Ottawa, Canada
Maddie Hare is a PhD student in Digital Transformation \& Innovation at the University of Ottawa researching in the areas of scholarly communication and bibliometrics. Her doctoral research investigates the relationship and current state of OA and EDI in the scientific research system. Maddie is also a member of the ScholCommLab where she focuses on metrics literacies.

## Emily Hart, Syracuse University, USA

Emily Hart is the Science Librarian and Research Impact Lead at Syracuse University Libraries. Emily is currently serving as Chair of the Senate Research Committee and has continued involvement with campus wide strategic planning initiatives related to research. Emily co-manages the University RIM system, the University ORCID subscription, and maintains involvement with the University's Faculty Portfolio System.

Robin Haunschild, Max Planck Institute for Solid State Research, Germany
Robin Haunschild is Head of the Scientific Facility Information Retrieval Service CPT (IVS-CPT) at the Max Planck Institute for Solid State Research. He studied chemistry in Hannover and Marburg. After two postdoctoral positions, he joined the IVS-CPT in 2014, where he runs the bibliometric service and conducts scientometric research.

Jacob Hill, Stanford University Libraries, USA
Jacob Hill is a Data Scientist as Stanford University Libraries where he works on a number of data projects. One of his primary roles is exploring new methods and strategies for harvesting and aggregating research datapublications and patents- to answer questions relating to the University's research output.

Lucian Li, School of Information Science, University of Illinois, Urbana Champaign, USA
Lucian Li is a doctoral student at the School of Information Science at the University of Illinois Urbana Champaign. His work falls between digital humanities and computational social science. He is especially interested in intellectual history, with a particular focus on detecting and quantifying the mechanisms governing idea diffusion and intellectual influence.

Ely Lyonblum, University of Toronto, Canada
Active as a research facilitator, an arts educator, and producer, Ely Lyonblum is the Strategic Research Development Officer at the Faculty of Music, University Toronto. Ely trained as a documentary filmmaker at Goldsmiths, University of London, and completed a PhD in Music at the University of Cambridge.

Olivia MacIsaac, Indiana University Indianapolis, USA
Olivia MacIsaac is the Research Information Management Librarian at IU Indianapolis University Library where she works with her colleagues in the Center for Digital Scholarship to develop relationships within the library and across campus to contribute to open research information management systems and services.
Cal Murgu, Elsevier, Canada
Cal Murgu is a Customer Success Manager at Elsevier. Prior to joining Elsevier he was a librarian at Brock University, in St. Catharines. Cal helps university and government leaders make data-driven decisions about research programs and strategy using Elsevier's suite of analytical tools, and also helps researchers and librarians find and access high-quality academic research to enable them to accomplish great things in the lab and/or classroom.

## Shannon O'Reilly, Digital Science, USA

Shannon O'Reilly is the Team Lead, Product Solutions for Altmetric and Dimensions at Digital ScienceShe has over 10 years of experience working in scholarly publishing and alongside academic institutions. She was the Digital Publishing \& Rights Manager for Georgetown University Press and served as the Senior Global Outreach Manager for ACS Publications. Shannon holds a MPS in Publishing from The George Washington University.

Jason Portenoy, OurResearch, USA
Jason Portenoy, PhD, senior data engineer at OurResearch, is a data engineer, data scientist, and researcher on the science of science. His job is to understand and improve OpenAlex-the open catalog of the global research systemand to help everyone do the same.

## Stephanie Savage, University of British Columbia, Canada

Stephanie Savage is a Scholarly Communications and Copyright Services Librarian at the University of British Columbia. In this role she provides copyright education to the UBC community and advocates for user rights at the local and national level. She also supports scholars throughout their research and publication journey, encouraging the adoption of open access models and methods.

Yulia Sevryugina, University of Michigan, USA
Yulia Sevryugina, Ph.D., brings her extensive background in chemical research crowned with over 40 peer-reviewed publications to the University of Michigan as the current Chemistry Librarian. In her role of information professional, Yulia leverages data science tools to explore the publication landscape and support informed decisionmaking across various STEM domains.

Jesse Xiao, Hong Kong Baptist University, Hong Kong
Jesse holds the position of Assistant Director at the Institutional Research and Planning Office in Hong Kong Baptist University. He is a dedicated academic leader and IT strategist with more than 12 years of experience in University Strategic Planning, Data-Driven Decision Making, University Rankings, and Library Management. Prior to joining HKBU, Jesse served as the Head of Scholarly Communication and Research Services in the University of Hong Kong Libraries.

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## Laura Bredahl, University of Waterloo, Canada

Laura Bredahl is the Bibliometrics and Research Impact Librarian at the University of Waterloo. She provides support and campus leadership on the analysis of research impact at all levels. In addition of her role on the BRIC Conference planning committee, she is a member of the ORCID-CA Governing Committee, Lis-bibliometrics committee and the CARL BRIC Community of Practice, aiming to enrich the Canadian bibliometric community.

## Jeffrey Demaine, Canada

Jeffrey Demaine has been the Bibliometrics \& Research Impact Librarian at both McMaster University and at the University of Waterloo. Prior to that he worked at the NRC in Ottawa, and at a think tank in Germany. Driven by the motto "Narratives, not numbers!", his speciality is in implementing algorithms to expose the trends hidden in the data so as to tell a story about the evolution of research. For his first bibliometric analysis he used the Science Citation Index in the original PRINTED format!

## George Duimovich, Carlton University, Canada

George Duimovich works as a Collections Librarian for Science, Engineering \& Design areas for the Collections \& Library Assessment team at Carleton University Library. George has been involved with BRIC since its inaugural meeting in 2017.

Ioana Liuta, Simon Fraser University, Canada
Ioana Liuta is a Digital Scholarship Librarian in Research Commons at Simon Fraser University where she manages the Open Access Fund and the ORCID Institutional Membership. Her support areas also include research metrics, and bibliometrics, publication venues, author rights, and new forms of scholarship and dissemination.

Alison Moore, Simon Fraser University, Canada
Alison Moore is currently the Acting Head, Learning \& Instructional Services at Simon Fraser University Library. Since joining SFU Library in 2015, Ali has been responsible for a variety of areas including scholarly communications, knowledge mobilization, digital humanities, research impact, and data visualization.

