

## The 18<sup>th</sup> Munin Conference on Scholarly Publishing

8-10 November 2023, Tromsø

**Book of Abstracts** 





#### **Oral Presentations**

### KEYNOTE: Safe, ethical, and open research in the age of artificial intelligence

Kirstie Whitaker (*The Alan Turing Institute*)

It has been 40 years since the launch of the GNU project and the Free Software Movement in September 1983. Open Source followed in 1998, Open Access in 2002, Citizen Science in 1995, the Bermuda Principles for open genomic data in 1996, and Open Science was first used as a phrase in 1985. Elinor Ostrom published her Nobel Prize winning "Governing the Commons" in 1990. There has been exceptional adoption and promotion of open research practices in the last 20 years, and there has also been significant drift from the original vision of democratising access to knowledge. In the age of artificial intelligence, are we meeting our ethical responsibilities to use data responsibly? Are we using scholarly communications to dismantle oppressive and exclusive power structures? What more work must we undertake? In this keynote presentation, Dr Kirstie Whitaker will identify core tenets of open research in 2023 and propose an integration with the SAFE-D principles for responsible research and innovation. Developed by David Leslie at The Alan Turing Institute in 2019, these principles facilitate reflection and selfassessment of the safety and sustainability, accountability, fairness and nondiscrimination, and explainability and transparency of a research and innovation outputs, including a consideration of data quality, integrity, protection and privacy. Kirstie will explore with the audience whether the scholarly publishing community is ready to address the biggest societal challenges of our time, how we assess and incentivise responsible and ethical development of socio-technical solutions, and how our infrastructure can facilitate interdisciplinary teams to create outputs that are greater than the sum of their parts. All attendees will be invited to join the 800+ members of the open source, open collaboration, and community-driven Turing Way community. Developed on GitHub under open source licences, our shared goal is to provide all the information that researchers and data scientists in academia, industry and the public sector need to ensure that the projects they work on are easy to reproduce and reuse.

## The influence of Large Language Models on systematic review and research dissemination

Simon Baradziej (*UiT The Arctic University of Norway*)

This presentation will delve into the transformative role of AI in scholarly communication, highlighting its potential, implications, and challenges, and further addressing the ethical considerations that come with it.

Recent advancements in AI, specifically large language models have unlocked new possibilities for scientific exploration and communication. Large language models such as GPT-4 and LLAMA, with their remarkable text-generation capabilities, stand at the forefront of this AI revolution. In the first part of the presentation, I examine how these AI tools are reshaping the nature of systematic reviews. The ability to analyze, summarize, and generate vast amounts of text allows these models to facilitate more efficient processes, offering a valuable tool to researchers navigating through vast databases of published work.

I would discuss how AI is engendering new developments in research methodology. Through the use of predictive modelling and advanced analytics, AI tools like GPT-4 allow for a deeper understanding of existing research and the identification of gaps in the literature, thereby promoting innovative research approaches. However, these advancements come with the need for updated ethical frameworks, a topic I would try to address also.

The issues related to Al use include issues of transparency and accountability, as the "blackbox" approach to deep learning models can be uncovered; without appropriate interpretability architecture (such as with GPT-4 or LLAMA), these models can be generating inaccurate information based on their predictive capabilities.

Nevertheless, these have proved to be of use, and with a fine prompt tuning, publicly available models can be of great use to researchers. I would delve into the question of how to balance the benefits of AI tools with the need to maintain high ethical standards in research, aiming to provide possible insights into how these ethical frameworks might be updated to accommodate the new realities of AI.

Furthermore, I'd reflect on the consequences of AI for the evaluation of research. While AI can aid in the quick assessment of a paper's relevance or novelty, questions remain about its capacity to fully evaluate the quality and significance of research. This discussion emphasizes the need for a blend of AI models with human expertise to achieve robust research evaluation for the time being (or for further training for specific use cases of the models.)

I'd like to conclude with a reflection on the overall impact of the integration of AI LLMs on systematic reviews and research dissemination. While acknowledging the transformative potential of AI in reshaping the scientific landscape, it underscores the need for careful navigation of the associated challenges and ethical implications.

## Monitoring Open Science beyond publications: Datasets and software as research products to be shared

Laetitia Bracco (*University of Lorraine*) and Anne L'Hôte (*French Ministry of Higher Education and Research*)

Since 2018, the <u>French Open Science Monitor</u> (BSO) has assessed the effectiveness of the national public policy in open science. This steering tool, developed by the French Ministry of Higher Education and Research, the University of Lorraine and Inria, measures the evolution of open science in France using reliable, open and controlled data updated every year. The result is a website presenting different dashboards, tracking for example the ratio of open access scientific publications by year, discipline or publisher.

Since its last release in March 2023, the BSO also tracks the production and openness of research datasets and software mentioned in scientific publications on a national scale. To ensure a realistic coverage, our platform relies on large-scale open source Deep Learning techniques applied to the full texts of publications with at least one co-author with a French affiliation.

<u>DataStet</u> identifies every mention of datasets in scholarly publications, including implicit mentions of datasets and explicitly named datasets. <u>SoftCite</u> recognizes any software mentions in scientific publications, using as training data the <u>Softcite Dataset</u>. Dataset and software mentions are then characterized automatically as *used*, *created* and *shared* by the research work described in the scientific document. These characterizations can be cumulative. Among 1,608,839 publications from our corpus, we were able to analyze 655,954 of them with our tool DataStet. For this subset, we found 6,511,998 mentions of datasets characterized as *used*, 330,062 mentions characterized as *created*, and 78,178 mentions characterized as *shared*.

With this methodology, the BSO can offer new indicators about the proportion of French publications mentioning the usage, creation and sharing of data, as well as the proportion of publications in France that include a "Data Availability Statement". Similar indicators are dedicated to code and software. In addition, these indicators are further broken down into disciplines, publishers and institutions.

The project is addressing major technical and organizational challenges: to identify French datasets and software without reference registries as for publications, thanks to artificial intelligence; to produce relevant indicators for the different scientific communities. As an enabling technology to identify research datasets and software, deep learning plays a crucial role. This presentation will be an opportunity to present the latest results of the project, to detail the methodology, and finally to underline the reusability of the project results.

#### Knowledge Infrastructures Require Scaffolding: The role of personal relationships in information management

Gisela Schmidt (German Center for Neurodegenerative Diseases)

Knowledge infrastructures are multi-faceted, ever-shifting networks of people and information. They span departments, address varying needs and, ideally, provide stability despite personnel turnover and other changes. Information is made explicit and available via organizational charts, procedural manuals and regular meetings, ensuring members of an institution are kept up-to-date with necessary information. Moving below and between these formal channels, however, is the informal network, a web of unquantifiable, personal relationships, which are nevertheless vital to the functioning of the system.

Developing and maintaining a system that works for the current and future needs of diverse groups—e.g., a publication repository used by administrative and research staff—involves tapping into the existing knowledge infrastructure at multiple points, in both the formal departments and the spaces between them. In addition to the stakeholder meetings and the lists of user requirements, we have the informal conversations where we can learn the tacit information, for example, how research groups are defined by different parties and whether software versions are considered separate publications. It takes time to learn the right questions and to learn who might hold the answers or, if there is no pre-existing solution, with whom you can work to establish one.

In this session, we will use the example of a publication repository to discuss the role of personal relationships throughout a project lifecycle, from conception through rollout and ongoing updates. I invite you to consider how to support the development of the informal network, how to identify tacit knowledge and information gaps, and how to take personality and communication skills into account when hiring for technical positions.

## Episciences overlay journals: A bridge between scientific publications, open repositories, data and software repositories

Raphaël Tournoy (French National Centre for Scientific Research)

Episciences is a publishing platform for *diamond* open access overlay journals. The ambition is to provide scientific communities with the technical means to produce high-quality, cost-effective journals in line with FAIR principles. The process is based on open repositories (<u>arXiv</u>; <u>Zenodo</u>; <u>HAL</u>). All the published content of a journal is hosted on repositories. Episciences is therefore set up as a service layer for repositories, using them as input and output for open access publication.

The platform was launched in 2013 as a peer review service for preprints hosted in open archives. Over the years, the list of services offered has grown and adapted to new trends in scientific publications. For example, peer review reports are now a new type of content that can be hosted in repositories, along with datasets and software code for publications. Support for these new objects in Episciences increases transparency and reproducibility of science. Support for datasets and software code also means that both *data journals* and *software journals* can be easily created on top of repositories.

The platform has implemented new protocols and workflows promoted by the Confederation of Open Access Repositories (COAR) Next Generation Working Group, such as COAR Notify and SignPosting. It has enabled us to build innovative new services for researchers on top of the HAL repository. We have also connected Episciences to other open science services such as OpenAIRE Graph, OpenCitations and Scholexplorer. This has allowed us to add new services at the same time for journals and the HAL repository. The presentation will explain how Episciences and overlay journals in general can be a bridge between publications, open repositories, data and software repositories - and more broadly with open science infrastructures.

## The role of global open data infrastructure in a changing policy, technology, and research environment

Sarah Lippincott (*Dryad Digital Repository*) and Jon Treadway (*Great North Woods Consulting*)

The proliferation of open data sharing policies (such as the wide-reaching NIH policy and Nelson Memo in the United States) reflect a growing push for greater collaboration, transparency, and accountability in scientific research. They assert that the open sharing of data underpinning research is essential to achieving the benefits of open science, that researchers and the general public have a right to access that data, and that the value of shared data lies in its (re)usability.

As the scientific community rallies to meet these new requirements, research data infrastructures like Dryad, an open data publishing platform and community, face myriad opportunities and challenges.

In this talk, the presenters will

- summarize the impact that new policies, evolving researcher and institutional needs, coordinated support for open infrastructure, and other changes in the landscape are having on the Open Data movement and those that support it;
- provide insight into Dryad's experience addressing challenges like increasing file size and complexity, and simplifying data deposition workflows;
- explore the opportunities and challenges presented by emerging new technologies such as machine learning, automation, and distributed data storage;
- outline the ongoing relevance of non-specialist data infrastructures in the rapidly evolving research landscape, and how their role will have to change through collaboration and partnerships.

#### Thoth Archiving Network: Supporting Small and Scholar-led Publishers with Repository-Led Preservation of OA Books

Gareth Cole (Loughborough University), Miranda Barnes (Loughborough University) and Toby Steiner (Thoth Open Metadata)

Small and scholar-led presses make up much of the "long tail" of publishers without an active preservation policy in place, putting their significant contributions to the scholarly record at risk. As a recent study dissecting the archiving and preservation status of Open Access books suggests, there is "reason for concern for the long tail of OA books distributed at thousands of different web domains as these include volatile cloud storage or sometimes no longer contained the files at all" (Laakso, 2023).

And while large-scale publishers have existing agreements with digital preservation archives, such as <u>CLOCKSS</u> and <u>Portico</u>, small presses often languish without financial or institutional support, alongside challenges in technical expertise and staff resources (cf. Barnes et al. 2022). There are similar concerns over the long tail of open access journal publishers and projects like <u>Project JASPER</u> are working on preservation options for OA journals with no current preservation in place.

The Thoth Archiving Network, a recently-launched community initiative developed under the remit of the Community-led Open Publication Infrastructures for Monographs (COPIM) project, seeks to address this gap and help small and scholar-led book publishers with finding ways to preserve their publications for generations to come. The Thoth Archiving Network would not solve every issue, but it will be an initial step towards essential community infrastructure, allowing for presses to use a push-button deposit option to archive their publications in multiple repository locations. This will create an opportunity to safeguard against the complete loss of their catalogue should they cease to operate.

With this presentation, we would like to provide an overview of the first steps taken so far to establish the Network, with a proof-of-concept now in place that provides a simple dissemination workflow for small publishers to archive their monographs in a network of participating institutional repositories (Internet Archive, Figshare/Loughborough, and, soon, DSpace/Cambridge). Several universities have already expressed their interest, and the team working on the Thoth Archiving Network would like to extend an invitation for more university repositories to take part, particularly from outside the UK.

The Thoth Archiving Network receives funding from the Research England Development Fund and Arcadia under the <u>Open Book Futures</u> project grant, which has been awarded

to significantly expand and accelerate uptake of the open infrastructures developed in COPIM.

### KEYNOTE: Transforming Research Assessment for an Equitable Scientific Culture

Yensi Flores Bueso (*University College Cork*)

Science plays a pivotal role in the advancement of democratic societies, and there is a growing consensus advocating for its recognition as both a common good and a fundamental human right. To effectively fulfil this role, science necessitates the trust of society, the support of policy makers, and robust international collaboration, enabling the mobility of researchers and the free flow of knowledge.

To encourage this, our responsibilities as researchers extend beyond the realm of academic publishing. They encompass science outreach, education, diplomacy, policy advocacy, entrepreneurship, and collaborations aimed at addressing global challenges or progress towards more equitable societies. However, this is hampered by current research assessment practices and the academic reward system, which perpetuate a 'publish or perish' research culture that confines the scope of science to academic publishing, fosters privilege-based biases, and prioritises quantity over quality, as well as prestige over integrity.

During this talk, I will share my personal journey as an early career researcher from the Global South, now affiliated with one of the most innovative research labs worldwide. My research journey, which was enabled by securing highly competitive funding since early stages of my career, provided me with first-hand insight into the biases and repercussions of current research assessment practices on the trajectories of researchers.

Further validating this perspective is a ground-breaking study I co-led with colleagues from the Global Young Academy, exploring research assessment for career advancement on a global scale. This study shows that research institutions worldwide heavily rely on bibliometrics to evaluate career progression, irrespective of the academic discipline. However, while more established institutions appear to be walking away from these practices, these are becoming more popular in emerging research institutions from low-middle income countries. These findings highlight the need for transformational global (inclusive) initiatives.

I am privileged to be part of one such initiative – The Coalition for Advancing Research Assessment (CoARA). CoARA brings together a community of researchers and research enablers dedicated to reforming this perilous research culture. CoARA's guiding principles

centre on acknowledging the diversity of contributions and careers in science, shifting research evaluation towards qualitative aspects where research ethics and integrity are at the core, and recognizing that excellence is context-dependent, varying for each candidate, role, and projects. A standout feature of CoARA is its unwavering commitment to early career researchers, placing them at the heart of its principles, governance, structures, and interventions. Thus, ensuring that future generation of scientific leaders is well-equipped to navigate and transform the landscape of research assessment and scientific culture.

### Recognition and Assessment of Digital Scholarly Outputs in the Humanities

Maciej Maryl (Polish Academy of Sciences)

In recent years we have observed an increase in digital practices and outputs in scholarship, which should be understood as a standard evolution of scholarly practices to take advantage of digital technologies. And although written genres, such as the monograph or essay, remain dominant in the humanities, the range of technological possibilities allow scholars to redefine those forms of expression and enrich them with other media or genres. However, as the opening example showed, this innovation is not supported by the assessment system, or even sometimes takes place in spite of it. A change in attitude requires recognition of three key aspects of digital humanities work: (1) its **interdisciplinarity** in borrowing tools and methods from ICT or social sciences; (2) the new research **practices** which should be recognised as valid scholarly work; (3) innovative scholarly **outputs** that go beyond the traditional genres but provide valid research results.

This presentation discusses the recommendations of the <u>ALLEA E-Humanities Working Group</u> with regards to the assessment of novel scholarly communication genres in the humanities. The work is based on the group's previous report, <u>Sustainable and FAIR Data Sharing in the Humanities</u>, which provided recommendations on data practices in the humanities. The current focus is on attuning institutional policies to emerging scholarly needs in connection to current research assessment reform (<u>Coara</u>). The recommendations are prepared in close cooperation with stakeholders and the research community. It underwent an <u>open consultation</u> whereby we collected more than 200 comments from the public. The final draft is under preparation and will be published in fall 2023.

The ALLEA E-Humanities Working Group recommendations are meant to serve as guidance for institutions and evaluators to embrace innovative outputs in the humanities

and thus create space for their development. The Working Group has prepared tailored recommendations which could be divided into two main groups. First, the group focuses on the cross-cutting issues pertinent to digital practices in the humanities, which are (1) linking studies with underlying data, (2) updating and versioning of the outputs, (3) collaboration and authorship, (4) training and competence building, and (5) reviewing. Next, we discuss particular case studies of innovative outputs where cross-cutting issues manifest themselves, such as digital scholarly editions, extended publications, databases, visualisations, code and blogs. The overall conclusions provide some general remarks on recognising and evaluating digital practices in the humanities.

#### It's the incentives, stupid!

Leif Longva and Bård Smedsrød (UiT The Arctic University of Norway)

From 2004, a new incentives system for scholarly publishing was introduced in Norway. Part of the funding of the HE institutions has since been based on the amount of scholarly publishing produced per institution, as recorded in the Norwegian CRIS system, Cristin. And the incentives worked. Publishing increased more rapidly in Norway than in comparable countries, over the years following 2004 (Aagard et al. 2014).

But the sheer number of journal articles, anthologies and monographs is not necessarily what best brings science forward. And now the Norwegian government has announced that the publishing count will be dropped from the funding scheme (Meld. St. 14). Thus, we suggest that the right move would be to instead direct the incentives to stimulate good, transparent open science research practice.

The advantages of open science, both for further research advancement and the benefit to society, are well documented (Miedema 2022). This includes early and obstacle-free access to research output in terms of articles, peer review reports and commentaries, as well as access to the research processes with preregistration and registered reports, methods and protocols, as well as FAIR research data that enables reproducible research.

So, what is needed is an incentive system that stimulates such research practices. We suggest an incentive system, through the funding schemes of the institutions. This should favour institutions that follow open science practices. The institutions will thus be incentivized to stimulate open science, and identify and remove possible bottlenecks in their organisations that may hamper execution of open science. As employers of researchers as well as support staff, the managers of the institutions will look for ways to optimize local incentives, and also how their organisation may be designed, to best live up to the ideals of open science practices.

Based on the above, we suggest a systematic evaluation of each HE institution, to document how well they practice such openness in their research. To accomplish this a list of criteria that can be easily monitored and objectively evaluated is needed. Several of the open research output parameters should be easy to monitor and measure through a reporting system. The evaluation should also acknowledge that necessary limitations to open processes and outputs exists, and thus avoid biases between institutions due to the nature of their research.

Incentives directed towards the institutional level to stimulate open research practices will motivate the management to stimulate their organisation in the desired direction.

### Collaborative Open Access Library Hosting in Scotland

Rebecca Wojturska (University of Edinburgh)

Library hosting services are growing across the UK. In 2018, the University of Edinburgh submitted a proposal to create a shared service governed by the Scottish Confederation of University & Research Libraries (SCURL). The aim of the service was to equip member institutions with a hosting solution to fulfil their Open Access publishing activities, with the development time charged to the University of Edinburgh (which covers costs and is invested back into the service). The service launched with three members – Heriot Watt University, the Society of Antiquaries of Scotland and the University of Edinburgh – and four years later has grown to include ten partners, with more members interested in signing up.

Although the shared service caters to members engaged in both publishing and hosting activities, we have seen a growth in library partners requesting to join so they can launch their own diamond Open Access library-based hosting initiatives. These initiatives – similar to the one at Edinburgh which is called Edinburgh Diamond – aim to support academics, staff and students in their publishing endeavours by providing a free publishing workflow system, as well as a hosting platform for journal and book content. The University of Edinburgh sets partners up with an Open Journal System (OJS) or Open Monograph Press (OMP) installation and provides full technical support as well as system training and publishing advice and guidance, which the member institution can use to mould their service. The shared service members meet three times a year to shape the service according to user needs and requirements.

This presentation will explain how the shared service grew, explore how and why hosting services and publishing programmes are developing within Scottish libraries, and provide conclusions and recommendations for institutions considering creating similar initiatives.

## The Algerian Scientific Journal Platform (A.S.J.P.): Do quality and quantity go hand in hand?

Samir Hachani (Algiers University 2)

Open access has made great strides in the last 30 or so years it has existed. From a forum of militant researchers to an institutionally led movement, then a fully global movement, it has made the scholarly communication landscape a different ball game. The convergence of the Internet (which now covers 67.9% of the world's population, from a mere 0.4% in 1995) and the ever increasing pressure of the famous serial crisis has made its occurrence unavoidable. Although originating in the Global North, where financial, political and technical means are present, it is the Global South that stands to benefit most from this new way of accessing and sharing information. In this context, there have been numerous and very successful experiments geared towards allowing fair sharing of information, experiments led most of the time by the Global North. On the other hand, the Global South has also launched experiments and programs in both green and gold routes to open access. There seems to have been a preference for the latter, as local, regional and continental experiments have come to light. Algeria, a Low and Middle Income Country (LMIC) has been at the forefront of open access in the Global South in general, and in the African and Arab context more specifically, and has launched and participated in numerous experiments either locally or regionally. Locally, the Algerian Scientific Journal Platform (A.S.J.P.) – and its "ancestor" WebReview – is a Diamond Open Access Site, and is the latest of the programs launched by the Directorate-General for Scientific Research and Technological Development (DGSRTD), under the auspices of the Ministry of Higher Education and Scientific Research. In order to "Algerianize" the sector, the Ministry has launched a very ambitious program to increase the number of Algerian students being granted a PhD. Doctoral students, in order to defend their thesis, are now required to publish a number of articles and attend conferences. Most PhD students in the humanities are unable to publish in high impact journals, so the ASJP is the appropriate place for them to do so. This presentation will analyze the different steps undertaken by the DGSRTD to make this platform an acceptable outlet for PhD students, how this platform has evolved over time, how it deals with the different submissions, the different classes and classifications it is made up of. More specifically, we will focus on the way the platform deals with the ever increasing number of students who need to publish to be able to defend their thesis. At the end, we will come up with a framework to make the ASJP a more "scientific" and acceptable platform, more in line with a modern and systematic platform, and propose a ranking and classification system that promotes the quality and not the quantity of submissions.

# From product-sales models to digital ecosystems and open science: The case of scholarly journal publishers in a small language country

Arūnas Gudinavičius (Vilnius University)

Scholarly publishers in small language countries face unique challenges, such as limited funding and resources, lack of visibility and recognition, and the dominance of international commercial publishers in the global academic publishing market. Therefore, understanding the role of publishers in promoting scholarly research in small language countries is crucial. This research aims to evaluate the publication of scholarly journals in a small language country (Lithuania) by analyzing the owners and publishers of scholarly journals. After collecting information about all scholarly journals published in 2020, a list of publishers and owners was compiled. The results show that since 1990, the publishing of Lithuanian scholarly journals has grown significantly: 225 scholarly journals were published in Lithuania, by 73 different publishers, in 2020. Social publishers, mostly statefunded universities, scientific institutes, colleges, still had the largest market share of scholarly periodicals, but commercial publishers also appeared and started to make a business out of publishing scholarly journals. Judging by the number of published articles, the five largest Lithuanian social publishers – state universities – published almost half of all scholarly articles published by Lithuanian publishers. Journals of social science were published the most, and one in five journals published in Lithuania applied relatively small publication fees. The analyzed data on publishers show that Lithuanian publishers have tried to take over and reorganize a number of scholarly journals from the Soviet era, while adapting to the dynamically changing world of scholarly publishing, and moving from simple product-sales models of the 20th century to new digital ecosystems of the 21st century, in which the essential distribution of publications is carried out digitally. The emerging diversity of publishers, the relatively moderate application of publication fees, and the growth in the number of articles show that Lithuanian publishers are quite well prepared for further challenges - the implementation of the European Science Foundation Plan S recommendations.

### The many faces of sustaining Open Access publishing

Iva Melinščak Zlodi (*University of Zagreb*), Didier Torny (*Center for the Sociology of Innovation*), Vanessa Proudman (*SPARC Europe*), Claire Redhead (*Open Access Scholarly Publishers Association*), David Pontille (*Center for the Sociology of Innovation*), Milica Ševkušić (*Serbian Academy of Sciences and Arts*), Iryna Kuchma (*EIFL*) and Sona Arasteh (*Max Weber Foundation*)

The concept of sustainability has often been used in both research on OA publishing systems, and as a desirable design principle in thinking of and building any future OA publishing business model. At the same time, the term has gained considerable attention across other domains, mainly in relation to environmental sustainability or sustainable development (especially with the UN's Sustainable Development Goals, SDGs), which makes it even more important to draw a clear demarcation line between such uses. Despite its social importance, the financial and resource-related sustainability of OA publishing hasn't been clearly defined and largely differs across countries.

The presentation is aimed at formulating questions that could lead us to gaining transparency and reaching a consensus on the way the term 'sustainability' will be used henceforth, especially in the theoretical and practical research of funding OA publishing (diamond OA in particular). It outlines some of the results of discussing this issue within the DIAMAS project with European OA publishers, learned societies, advocacy organisations and researchers.

One of the first obstacles in reaching a better understanding is crossing the linguistic barrier and acknowledging that the term has not always gained equal traction across countries and when used, it has multiple connotations in all languages. The span of meanings could range from simply being durable and existing in the long term, or to enduring without having negative implications for other aspects of the ecosystem, such as depleting resources others might need or affecting their survival.

It is also important to acknowledge the fact that stakeholders involved in OA publishing vary and therefore perceive sustainability (and the ways to achieve it) in different ways: we often witness strategies such as more successful fundraising, efficient use of resources or shared resources, or cost reduction measures. While sustainability goals may range from cost recovery only, to enabling reinvestment or guarding against 'hard times', or sustaining revenues 'at the same level' - even if that includes high profit margins or companies with shareholders.

The building blocks of the scope and meaning of 'sustainability' have evolved from answering questions on the object or unit of sustainability (What is sustainable? Is it a journal, a publisher, a business model or a wider publishing ecosystem?) as well as on the sustainability actors or players (Who is a sustainer? Who holds responsibility for sustainability? Which stakeholder/group of stakeholders?).

A conclusion that emerged suggests that a univocal and obvious definition of 'sustainability' is unlikely to be achieved as it is dependent on multiple perspectives of actors in the ecosystem and is necessarily involving dynamics and transformative practices.

In short, this presentation hopes to give the audience a deeper understanding of what sustaining OA publishing means in different contexts. It will encourage listeners to question their perceptions of sustainability before possibly coming to new conclusions to address the topic more thoroughly in their local contexts, and to consider how we collectively take steps towards more unified terms and definitions.

## KEYNOTE: Science and society actions by our universities: From kindergarten to the President of the French Republic

Hervé Dole (University of Paris-Saclay)

What are the best practices of universities in terms of science and society activities? For what aims? How to go beyond dissemination and top-down approaches? How these strategies interplay with open science and citizen science strategies and actions of our universities?

Science and society is defined here as all actions, methods, strategies deployed by universities to interact with the public, schools, inhabitants, policymakers, media, associations, businesses, and citizens at large – thus not only with academia and students. Science obviously encompasses all human, social, natural, experimental, exact and health sciences.

I will present the results of a benchmark (we performed with Sorbonne Université and SIRIS academics) about international practices of universities to interact with the public.

I will highlight some examples from Université Paris-Saclay, like outreach to various publics, from kindergarten (about general science) to the President of the French Republic and his government (about climate change by the IPCC), with an emphasis on schools and girls in STEM.

A link with culture will also be made, as art and science is also an interesting way to touch a new public in a less formal way.

This keynote, taking place during the World Science Day for Peace and Development, will also briefly mention complotism and fake news, still spreading quickly without obvious efficient ways to counteract them, although a partnership with some media can help.

#### The many paths for an open, participatory, and inclusive science

Rita Campos (*University of Coimbra*)

Societies are facing unprecedented challenges due to human-induced climate change. In order to understand, cope with and halt global warming, we need to understand the science behind its causes and impacts and to identify reliable sources of information. Science and scientists play a crucial role in this process and are called to the forefront of new relational practices for engaging the public and helping citizens develop scientific competences to participate in contemporary societies. Empowering individuals with sustainable-oriented knowledge, skills and values is vital for an active citizenship towards sustainability. Moreover, promoting dialogic channels between science and society encourages a more critical view of current challenges and science-oriented attitudes. Participatory methodologies can play an essential role in this context as they entail the inclusion of citizens in research and/or knowledge production and a closer contact with local and global realities. I will discuss different paths taken in national and international research projects to promote the inclusion of citizens in science. I will focus on two examples. One related to how citizen science can be used in educational contexts to reconfigure schools as collaborative ecosystems, part of a network that connects teachers, students, and scientists, who share the responsibility to identify problems, think about possible solutions, reflect on existing knowledge, collect new evidence, and integrate different perspectives. Results show positive impacts on a personal and academic level, with participants declaring higher self-esteem and a deeper understanding of the scientific process and social and environmental issues. A second example concerns dialogical and arts-based strategies to include academic, political, and activist stakeholders in the public debate on the opportunities and challenges of biotechnology. These strategies are framed within a concept of engaged citizen social science, considering that engagement with science should be bidirectional, where both scientists and the public are committed to establishing an effective dialogue between different forms of knowledge to co-create new meanings and impacts for project outcomes. It is also rooted in interdisciplinary dialogues through interaction between the disciplinary fields of the partners and the individuals involved in the social dialogue to create a shared vocabulary and contribute to a transformative impact of the project on social realities. The planned art-based approaches to science will help facilitate participation through more dynamic, creative, and meaningful engagement and greater understanding of different worldviews, thoughts, and understandings. Preliminary results suggest a greater awareness of the different dimensions related to the development and (unanticipated) impacts of new technology by the scientists and the artists involved in this co-creation process.

# Designing an infrastructural service to bridging the open science ecosystem and society: The examples of the COESO project and the VERA hub

Alessia Smaniotto (School for Advanced Studies in the Social Sciences and OPERAS) and Kelly Achenbach (Max Weber Stiftung - Deutsche Geisteswissenschaftliche Institute im Ausland)

The presentation will be centred around lessons learned and experiences from the European project COESO, a double-layer research project providing a framework in support of collaborative engagement on societal issues. COESO supports ten citizen science pilots implementing a participatory approach in several European countries: small scale and high intensity collaborations, starting with the problem formulation and extending through the common analysis. The pilots include contributions from different disciplines of the social sciences and the humanities (history, philosophy, political science, sociology and anthropology) and involve artists, journalists, associative members, local authorities. The support provided to the pilots includes mutual learning sessions and accompaniment in the use of a research blogging platform: not only to share the projects' results, but also to enhance the teams' co-research activity. Furthermore, the COESO project develops a Virtual Ecosystem for Research Activation (the VERA platform), conceived as a "collaboratory", a common digital framework supporting the projects' teams in finding partners, managing their project and finding funding. VERA is included among the "Research for Society" services of the OPERAS research infrastructure, whose mission is to support scholarly communication in the social sciences and the humanities (SSH) across Europe.

In the effort to build a sustainable framework to support participatory research in the SSH through a digital platform, the COESO project journey provided insights on the challenges and opportunities of participatory research with and within the SSH, including how a

research infrastructure can effectively design a service to foster community engagement, bridging different research practices and systems of knowledge (ensemble of practices, methodologies, vocabularies, concepts, outputs), supporting innovation in output formats and setting the premise of an enhanced network of research data linking.

Participatory research and citizen science practices are research approaches that challenge the prevailing research processes, and potentially lead to innovative practices that allow for new bridges between knowledge systems and infrastructures. The presentation will highlight two innovative digital formats explored by two COESO pilots to render their research: (1) a multimodal website proposing an interactive map that guides visitors from the broader public to explore the research findings, which were accomplished through a plurality of participatory research approaches. It also includes the "data" behind: the website spatializes a set of materials: interviews, archives, focus groups, and portraits are displayed in a geographical space, and (2) the digital tool, Memorekall, which starts from a video recording to develop a multi-document (including notes, documents, audio, or web links) to record and document the creative process.

## Innovation in publishing: Why we need systems for the review and curation of preprints

Fiona Hutton (*eLife Sciences Publications*)

The growing number of papers published openly as preprints on bioRxiv and medRxiv during recent years has highlighted how preprints can accelerate and democratise access to research. However, it has also shown the need for systems of review that help readers easily assess the quality of new findings.

A number of groups are now working to openly peer-review preprints, making them more useful for authors, readers, the broader research community and the general public. Some of these models are also taking advantage of the open nature of preprints to enable researchers from groups traditionally underrepresented in science to participate in public review, sharing their expertise and perspectives with authors, readers and others who engage with preprints. These groups include, for example: ASAPbio–SciELO Preprints crowd review, Biophysics Colab, the Novel Coronavirus Research Compendium, and eLife, which officially launched a new model for publishing in January 2023.

eLife's new model eliminates accept/reject decisions after peer review and focuses instead on providing quality public reviews and assessments. The output is a Reviewed Preprint, which combines the immediacy and openness of preprints with the scrutiny of

peer review by experts. This model feeds into eLife's overarching 'publish, review, curate' mission that puts preprints first.

In this presentation, we will highlight the work of eLife in reviewing and curating preprints, and discuss why transforming preprints into reviewed preprints will have significant benefits for scientists and science more broadly.

#### Can we teach publication competency?

Jimi Thaule (*University of Agder*) and Tora Rundhovde (*University of Agder*)

Publication competency is a fundamental skill for researchers, serving as a vital criterion for attaining a Ph.D. degree. *The European Qualifications Framework* and *Norwegian Qualifications Framework* both recognize the importance of these skills. However, institutions differ in their approaches to teaching this skill set, with some neglecting it altogether.

The specific skills required for researchers to publish their work extend beyond simply disseminating research appropriately. While the qualifications frameworks offer broad guidelines, various definitions, such as the Vancouver guidelines, the Norwegian NVI guidelines, and Plan S, need consideration. Specifically we have taken publication ethics, understanding impact, copyright and Open Access into consideration.

In addition to benefiting Ph.D. students in their own endeavors, publication competency contributes to enhancing information literacy, research principles, and our local institutional knowledge. It establishes a foundation for a more systematic approach to teaching this essential skill.

To address this issue, we conducted an analysis of Ph.D. students' competency levels in publication at the University of Agder, through interviews and questionnaires. Our findings align with previous research conducted at other institutions. In our forthcoming paper, we will discuss these findings and their implications for the University Library's approach to disseminating publication competency and creating robust institutional support systems, and suggest a method for increasing publication competency among Ph.D. students.

### PANEL DISCUSSION: Research Assessment – Navigating Pitfalls and Promoting Change

Yensi Flores Bueso (*University College Cork*), Hervé Dole (*University of Paris-Saclay*), Kirstie Whitaker (*The Alan Turing Institute*), Jan-Gunnar Winther (*UiT The Arctic University of Norway*) and Tanja Larssen (*UiT The Arctic University of Norway*)

The main theme of the Munin conference is scholarly communication in its myriad of forms. The push for a reform of research assessment argues for precisely the need to recognize and reward a wider set of research activities and competencies. The demand – and initiative – for change will surely impact how and where research is disseminated and communicated. A key question then is how to evaluate research activities and outputs beyond academic publications.

With this panel we welcome a discussion on research assessment that brings together perspectives from all the topics of this year's Munin conference. We invite you to add your insights and diverse expertise to this panel that will reflect on questions such as: how do we measure the impact of citizen science, or document quality in innovative research practices and scholarly outputs? And how to ensure consensus on assessment methods for a wider and more inclusive range of research activities within a diverse academic landscape?

#### Workshops

#### Getting Out From The Back of the Sofa: Sustainable Funding for Open Access Books

Tom Grady (Birkbeck, University of London)

Professor Martin Eve pointed out in an article on WonkHE in 2020 that "the biggest blocker to open access for monographs seems to be economic. Book Processing Charges at the €12,000 mark will not scale in disciplines where an entire department's book purchasing budget is just €8,000".

Three years on and this still seems to hit the nail on the head when thinking about sustainability of funding for open access books. BPCs remain a significant method of paying to produce OA monographs for many researchers and libraries. But in the last three years we have seen several new initiatives emerge that seek to solve the problem posed by funding via BPCs alone. There are now quite a few collective funding models for OA books: they vary in complexity and all work slightly differently but they all offer alternatives to BPCs. At the last two Munin Conferences on Scholarly Publishing, my colleague Professor Eve presented on several of these models, including MIT Press's D2O, JSTOR's Path 2 Open and many others, and he also described the model that was his own invention with the COPIM project: Opening the Future.

In this workshop we will pick up where Professor Eve left off, giving a brief update on how those models have fared in order to set the scene for discussion. But we'll then pose a provocative central question that has arisen from this new landscape. All of these models offer a path for academic presses to fund their open access monographs by harnessing the power of small contributions from many member libraries, but how will they achieve sustainability? How will libraries ensure that money for these programmes is in their budget year on year? How will the scholarly publishers ensure a reliable income to produce their OA books?

In other words, how can the sector work together to ensure the continued success of non-BPC approaches and ensure that the money for them is not just found 'down the back of the sofa'?

This will be a lively session with lots of Q&A to drill down to the detail of how we, together, can find reliable income streams for the increasingly populous landscape of collective funding initiatives.

## Open Science in Peril: What is that new Open Science game?

Katrine Sundsbø (*Directory of Open Access Journals*), Aisling Coyne (*Technological University Dublin*) and Sarah Coombs (*Saxion University of Applied Sciences*)

Join us for the launch of a new open science quiz game - Open Science in Peril, where teams will compete against each other to find the questions to the answers we all have... Or do we? In this session, you can test your open science knowledge in a fun, engaging and social way. Or perhaps, you will learn a few new questions you didn't know you had the answer to? Bring your smartypants and thinking cap, you'll be assigned a team when you join the session, where four teams will play against each other to win enough money to cover the APC of your article. Will you be able to publish, or will you end up having to withdraw your article due to lack of funds?

## Hopping on the AI train? Ethical and practical considerations for the adoption of AI tools in research and higher education

Andrea Alessandro Gasparini (*University of Oslo*), Leticia Antunes Nogueira (*Nord University*), Eystein Gullbekk (*University of Oslo*), Heli Kautonen (*Finnish Literature Society*), Hilde Westbye (*University of Oslo*) and Vidar Rongved (*Nord University*)

The most recent wave of developments in AI has commanded both awe and apprehension about what these innovations mean for the future of science, scholarly communication, and librarianship. In a paradigm characterized by fierce competition, as illustrated by the pervasive culture of publish or perish, the rapid development and diffusion of AI-based tools can bring challenges to existing frameworks for research ethics. AI is likely to challenge the integrity of scientific enterprise in ways that are yet to be seen, and these impacts extend to the operation of libraries, publishers and more.

This workshop seeks to promote a collective exploration of what implications the adoption of AI tools brings to the scientific endeavor. No prior knowledge of AI is required. In advance of the workshop, the room will be arranged in three tables, each marked with one of three topics: (1) research values, accountability and integrity, (2) publishing, open science and science communication, (3) competencies of teaching and research support

staff. Participants chose their seats according to their preferred topic (not necessarily related to their specific professional identity).

The workshop agenda is as follows:

- 1. **Setting the stage (10 min).** Welcome and agenda for the workshop. Information about the posters. The facilitators will introduce themselves and present the three themes.
  - o research values, accountability, and integrity.
  - o publishing, open science, and science communication.
  - o competencies of teaching and research support staff.
- 2. **Group work (50 min).** According to each table's theme, participants will be given time to work with dilemmas or case examples. Each table will work on the following perspectives:
  - What? Discussion: Participants discuss while writing on Post-its or directly on A2 paper sheet comments, and notes: What ethical issues are emerging from the given dilemma? Participants will be requested to arrange their notes in topic clusters (affinity mapping) and give them names.
  - So what? Discussion: What do these developments mean (for science, libraries, society)? What are the possible consequences? Why should anyone care? Each group will be oriented to create a mind map of this landscape on a new A2 paper sheet.
  - Now what? Discussion: Do ethical frameworks need to be revised (and how)? What measures need to be in place as AI tools become mainstream? Who is in a position to implement such measures? What is the role of libraries, publishers, and other support units in safeguarding the upholding of ethical principles? The groups will be guided to use a simple impact and effort matrix pre-defined on an A2 paper sheet.
- 3. Plenum discussion (30 min).

The expected outcome is that participants gain a clearer understanding of the ethical challenges to come as a consequence of AI, and more confidence to champion these discussions at their home institutions. Moreover, facilitators expect to publish insights from the workshop (in a format yet to be determined). Finally, the workshop aims to plant the seeds for future work on guidelines that libraries can use when assessing the adoption or promotion of new AI tools.

#### **Poster Presentations**

## Artificial intelligence and changes in information practices in higher education: An exploratory study

Hilde Westbye, Andrea Alessandro Gasparini and Eystein Gullbekk (*University of Oslo*)

Searching, evaluating, using, sharing and organizing information are central activities in writing and research processes. These activities are carried out by students who participate in the communities of practice they share with fellow students, teachers and supervisors. In today's changing landscape, the infrastructures surrounding the research process are changing, and both students and researchers make use of new aids that challenge established practices and open up innovative ways of thinking, researching and studying.

In this poster, we examine how the introduction of artificial intelligence-based technology affects information practices in the context of learning and research in higher education, as well as how university libraries can be partners in this change. We base ourselves on an exploratory study that looks at a group of master's students and their use of Al-based tools in the writing process, and in particular on a tool for recommending literature called Keenious.

The study involved interviews with the students in their last semester before submitting the master's thesis. We found that the students use different tools in the writing process and that in searching for literature they particularly used Google and Google Scholar, as well as recommendations from supervisors and fellow students. They adopted the Keenious tool to some extent, in creative ways, as part of the larger ecology of human and technological resources. Tutors' use of tools is a role model for the students, and tools the tutors use that prove useful have a greater potential to be used than other random tools. It also matters if the tools are easily accessible in the infrastructure they already have access to and if the results can be confirmed with people or tools they already have confidence in.

The larger infrastructure the students use includes fellow students, tutors, teachers, Google, Google Scholar, Zotero, text-to-speech, and speech-to-text software. Keenious was used together with other literature search tools in some parts of the writing process but was not used systematically by any of the students. The reason for this may be that it was a new tool that the students had not started using in previous studies or writing processes and was not part of the established habits.

Students found creative ways to combine the tools throughout the writing process. Our findings provide an opportunity to discuss whether the students develop practices that are not necessarily shared with the wider academic community of practice, and whether their use of the technology enables them to participate more competently in the community.

With such changes in the students' information practices, where they explore Al-based aids and approaches, those who support the students in their information-related activities, such as tutors and library staff, will have to deal with the technology as a new type of actor. Library staff must not only provide introductions and guidance to the tools, but also help students understand the interaction with technology as an active participant in the writing process.

## Bloomsbury Open Collections: A new model for open access monographs

Charlotte Bruce, Lianna Iwanikiw and Ros Pyne (*Bloomsbury Academic*)

Open access brings important benefits to scholarly books and their authors. Research shows open access publication can substantially increase and diversify monograph readership, supporting and amplifying a worldwide interest in scholarship in the arts, humanities, and social sciences. But, while open access provides greater equality for readers, the prevailing fee-based models exclude many authors.

To address this challenge, Bloomsbury has this year launched a new model, Bloomsbury Open Collections, that aims to offer open access for books in a way that is sustainable for us as a publisher, but which does not rely on fees paid by individual authors' institutions and funders. Through this model, we are aiming to make open access publication available to a wider range of scholarly book authors by spreading the cost across multiple organisations, while providing additional benefits to participating libraries. Our hope is to engage a more diverse set of authors, bringing their work to a wider global audience.

In this poster we share details of how our open access monographs pilot works in practice and how we went about developing the model. We provide insights into how feedback from librarians shaped our approach, and how we have sought to incorporate transparency into the model. We also discuss the principles we used to select titles for inclusion in the pilot, and share some early feedback from our author community.

#### **BMJ Impact Analytics**

Simon Neilson (BMJ)

Research that improves patients' lives matters deeply to the funders, institutions and researchers who dedicate their resources to medical and health research. As part of our vision for a healthier world, BMJ engaged with the medical and health research community about the evidence that demonstrates genuine real-world impact and how it can be discovered. In the course of this research, many research managers in health and medicine shared the related challenges that they face with information overload, time, and data quality. It became apparent that Al and Machine Learning can help with finding and tracking vital evidence of real-world impact and also answering questions about research performance and strategies. BMJ began collaborating with Overton to create a prototype that was tested extensively with funders, institutions and researchers.

#### Determinants of using Al-powered discovery services

Andrea Alessandro Gasparini (*University of Oslo*) and Heli Kautonen (*Finnish Literature Society*)

In 2023 the scholarly communities are witnessing a spring of Artificial Intelligence (AI) powered tools for scientific work. Scholars are tempted to integrate various time-saving AI applications in their workflow, from data analysis to disseminating research results. Among these novel "research assistants", several enhanced discovery services apply machine learning to identify the most relevant results for the information seeker and visualize them to the user in innovative ways.

The rapid emergence of these tools has raised concerns about the impact of AI technology on scientific research and led to requirements of transparency, accountability, and explainability of the new AI tools.

From the systems viewpoint, responsibility for the impact of technology extends beyond developers to the broader society. The user communities, including librarians providing services for academia, are considered counterparts in the effects of AI technology systems. Individuals decide how they behave with the new information technology, for example, whether they trust the system and its outcome. Thus, an individual user is also part of the socio-technical evolution of building transparent, accountable, and explainable AI.

In this study, we explore the challenges of adopting AI tools in scientific research on the level of an individual librarian working for academia. We aim to detect poorly addressed mindsets around explainability, fairness, and privacy, named "blind spots" in AI ethics (Hagendorff, 2022). The goal is to understand the "determinants" of librarians' information behavior with novel AI tools. We focus on two AI-powered visual discovery services: openknowledgemaps.org and www.litmaps.com. These tools help users to navigate and analyze research articles as concept graphs.

In this poster, our primary research question is: What are the determinants of librarians' intentions when they adopt/use new Al-powered tools?

We conducted an expert evaluation (Tessmer, 1993) on these two discovery services using the Theory of Planned Behavior (TPB) as a theoretical framework that explains human behavior through three individual beliefs: attitudes, norms, and control. This framework helped us detect new "blind spots" in the behavioral determinants that have remained unnoticed in the recent discourses about AI ethics in libraries.

Our study indicated a lack in the area of normative beliefs, a "blind spot": The social pressure to quickly adopt the newest technology and the lack of library-specific norms for using Al in academia may become a handicap for an individual librarian who contemplates whether or not to use an Al tool.

### Diamond Open Access: Researcher's Best Friend or just a Distant Relative?

Eeva Savolainen and Katri Seitsonen (Aalto University)

The costs of Open Access publishing increase year by year (e.g. Zhang et al. 2022). Diamond Open Access (OA), in which journals and platforms do not charge fees to either authors or readers, has been hoped to provide solutions for the current situation. Also, the Council of the EU highlights the importance of Diamond OA in the recent Council Conclusions (8827/23). Various incentives, such as Action Plan for Diamond Open Access, DIAMAS and Craft-OA are established to support the development of Diamond OA. However, do researchers really use Diamond OA publication venues? Is Diamond OA a researcher's best friend or just a rarely met distant relative?

Both international (Bosman et al. 2021) and national level (Frantsvåg 2022) studies have been conducted in relation with Diamond OA. This poster views the phenomenon on a local level by illustrating Diamond OA publishing at the Finnish Aalto University in 2018–2022. Aalto University consists of six schools: School of Arts, Design and Architecture,

School of Business, School of Chemical Engineering, School of Electrical Engineering, School of Engineering and School of Science.

Aalto Current Research Information System, ACRIS contains the comprehensive publication data of university's researchers. Information on Diamond OA journals was added to ACRIS journal records in the spring 2023. We identified Diamond OA journals in ACRIS by using Directory of Open Access Journals and journals' web pages. This information in relation with publication data will form the basis for our analysis. We recognize that information on Diamond OA is incomplete and our results only indicative, since only a third of diamond OA journals are indexed in DOAJ (Bosman et al. 2021).

The poster seeks to illustrate the usage of Diamond OA channels from various aspects. How has Diamond OA publishing evolved over the years? Which Diamond OA journals and publishers are the most popular? What are the differences between schools? What is the share of Diamond OA compared with other Open Access types and how has the usage of different Open Access paths evolved?

#### Gender Disparity in Editorial Boards of Lithuanian Scientific Journals: An Overview of Different Science Disciplines

Andrius Šuminas (Vilnius University)

Editors-in-chief and members of editorial boards of scientific journals play an extremely important role in the development of science and assure research integrity, as scientific publications are the major results of research. While gender parity in tenure-track hiring promotion rates has improved, female academics decisions and underrepresented in senior career phases, including editors-in-chief and members of editorial boards positions of scientific journals. Journal editors and members of editorial boards exert considerable power over what is published and in certain cases the direction of an academic discipline and the career advancement of authors. For this reason it is important to minimize biases extrinsic to the merit of the work impacting publication decisions. One way to achieve this is to ensure a diverse pool of editors and members of editorial boards, ensuring the widest possible coverage of different competencies. This is in line with a diversity model of editorial appointment where editorial boards are structured to dismantle wider conditions of inequality. Another possible option, a distributive model would seek an editorial board reflective of existing proportions in the field at large.

The poster presents comprehensive results of a study of Lithuanian scientific journals. During the research process publicly available information from all scientific journals published in Lithuania was reviewed, to infer the proportions of members of editorial boards by gender. The results of the study revealed differences the proportions of male and female members of editorial boards in different disciplines of science.

### How open access boosts the societal impact of humanities and social sciences research

Ellie Souster (Taylor & Francis)

In this poster, we'll share findings from our open access partnerships in different countries (including the Nordics), showing measurable benefits such as facilitating interdisciplinary collaboration to help solve the world's most pressing issues. We're also keen to work with the research community on other innovative ways to accelerate the transition to OA and boost research impact for institutions in Europe.

We'll also present a few case studies of how research influences policy and improves lives, such as:

- 1. Addressing socio-economic challenges during the COVID-19 pandemic
- 2. Investigating the socio-cultural impact of UK gendered school sport uniform

The article 'The Impact of long COVID on the UK workforce' (Reuschke & Houston 2022) was published OA by the University of Southampton through the Jisc Agreement UK in July 2022. It provides evidence of the profound impact of Long COVID on national labour supply. The article has been cited by at least one policy document, published jointly by the think tank Demos and The Physiological Society (Dawson & Phillips 2022).

The article 'Practical, professional or patriarchal? An investigation into the socio-cultural impacts of gendered school sports uniform and the role uniform plays in shaping female experiences of school sport' (Howard 2023) was published OA by Durham University through the Jisc Agreement on 6 April 2023. It explores how school sport uniform directly impacts female sporting experiences and participation in physical activity, and how uniform policy could be changed to promote greater female sport participation. By 26 April, less than three weeks after publication, the article had already been mentioned in 17 news stories. Although it's too early to measure citations in research and policy documents, the research has already led to new inclusive kit regulations in domestic hockey.

We'll use a collection of datasets as evidence to support our argument that publishing open access increases the visibility and impact of research. It encourages innovation and collaboration and boosts public engagement. As the largest humanities and social sciences publisher in the world, Taylor & Francis is committed to supporting sustainable routes to OA for HSS research communities, who typically have less funding for OA publishing than their peers in STEM.

# On the field with social science and humanities participatory research: Some examples of community engagement from the COESO project

Kelly Achenbach (*Max Weber Stiftung - Deutsche Geisteswissenschaftliche Institute im Ausland*) and Alessia Smaniotto (*OPERAS, School for Advanced Studies in the Social Sciences*)

Citizen science is a well-established domain in many scientific disciplines. Far less is known about the practices of citizen science in the social sciences and humanities. The COESO project is fostering and highlighting citizen science practices in the social sciences and humanities. Ten European-based case studies – "pilots" – reporting on specific challenges have fed the COESO project: five of them began at the beginning of the project in January 2021, while the other five were chosen through an Open Call process in early 2022. Each pilot presents a distinct type and model of collaboration between different kinds of stakeholders, addressing specific societal issues. This diversity has contributed to generating knowledge on challenges and innovative knowledge sharing practices found within participatory practices in the social sciences and humanities research fields. The project promotes developing synergies between practices found within various social sciences and humanities disciplines, including sociology, anthropology, political science, and the arts, with practices employed by non-academic professionals working on societal issues. The 10 pilots provide a platform for collaboration between researchers, practitioners, and citizens, allowing for the co-creation of new knowledge and innovative solutions to pressing societal challenges.

The aim of this poster is to show the different engagement strategies co-developed with researchers and community members to involve active citizen participation in the research, as well as the actions and creative outputs carried out to raise awareness of the projects and maintain the interest of participants. From initial stakeholder mapping, information management, data collection and storage to communication and

dissemination of results, each pilot has deployed a unique engagement strategy, making COESO an excellent repository of information on the different ways of fostering community engagement with citizen science through social science and humanities initiatives. By showcasing the diversity and potential of these pilots, this poster invites further exploration and collaboration in the exciting and evolving domain of citizen science in the SSH.

## OPERAS Innovation Lab: Supporting Innovative Scholarly Outputs in Social Sciences and Humanities

Maciej Maryl, Magdalena Wnuk and Tomasz Umerle (*Polish Academy of Sciences*)

Scholars see innovative means of disseminating their work and data as a chance to improve the process of sharing ideas with different audiences, thanks to technological affordances. They understand innovation either in terms of form (novel means of communicating ideas through different media), or access (opening up outputs and making them easily accessible) (cf. Maryl and Błaszczyńska 2021, p. 34). What we consider a "scholarly text" has thus become understood as an expression that can employ different media and engage creatively with underlying data.

However, engaging with novel forms of communication poses new challenges to scholars, who may lack competencies, know-how, or adequate resources to take full advantage of innovative outputs (Tasovac et al. 2018). This poster will outline the means of support provided by OPERAS Innovation Lab in establishing interdisciplinary, collaborative workflows for supporting innovative outputs in social sciences and humanities (SSH) throughout their lifecycle. The Lab provides guidelines on how to create and sustain FAIR innovative outputs in the SSH.

In the current infrastructure-development project (OPERAS-PLUS) Lab's website was created (https://lab.operas-eu.org/) and serves as an innovation observatory, collecting and storing data and studies on innovative outputs as well as current research in that field. Apart from the general introduction to the Lab, the poster will showcase three diverse case studies analysed in the ongoing project. They all aim at addressing the actual needs faced by SSH researchers who decide to use innovative forms of disseminating their output:

- 1. The novel publication of project outputs: scholarly toolkit;
- 2. Management of an interdisciplinary online journal;

3. Prototyping software services for open science on the example of a recommender system for open access books based on text and data mining (Snijder 2021).

A case study workflow is firstly discussed with the scholars responsible for the project to identify their needs regarding the process and the challenges they are encountering, such as issues of intellectual and technological sustainability or evaluation of non-traditional outputs. Then, in an iterative process, solutions are prototyped, involving various stakeholders, like publishers or e-infrastructures (Ell and Hughes 2013), to forge best practices and provide practical advice. This process is based on a principle of an open collaboration whereby different users will be able to engage with the process and thus the workflow itself will be open for contributions from the wider community through feedback and consultation events, such as this poster presentation.

## Primed and ready? Ethical guidelines and the adoption of AI tools in research and library work

Leticia Antunes Nogueira (Nord University)

The emergence and proliferation of artificial intelligence (AI) tools has left the realm of science fiction and the province of computer science research and has reached the everyday activities of academics and various support staff. All promises to automate and facilitate a range of research tasks and increase scientific productivity, and can thus be expected to raise new questions and dilemmas that might challenge the systems of accountability currently in place to safeguard academic integrity.

This poster presents preliminary results of an analysis of seven prominent ethical guidelines (international and Norwegian): the Vancouver protocol, ALLEA guidelines, NENT and NESH guidelines, professional codes of ethics from IFLA, ALA, and the Norwegian Union of Librarians. EBLIDA and LIBER were consulted, but do not offer their own ethical guidelines. The main research question is: to what extent do current ethical guidelines support researchers and librarians in dealing with ethical questions brought about by the proliferation of new Al tools?

The concern that emergent technologies tend to challenge values, norms, and practices in academia is not new. For example, ALLEA (2017) acknowledges that the values and principles they lay out are "affected by social, political or technological developments and by changes in the research environment" (p.3). Nonetheless, only the Vancouver protocol (updated in May 2023) provides explicit recommendations on AI; it essentially prescribes that authors/reviewers disclose if and how they used AI tools. The other documents,

ranging from 2008 to 2022, mention neither Al nor the possibility of automation technologies in academic/library work.

Despite the absence of advice on AI, the analysis revealed interesting issues on ethical guidelines and emergent technologies. ALA (2017) makes extensive recommendations about social media, both as a tool for libraries' own work and as a demand from patrons who require their expertise. Similar needs for new competencies and responsibilities can be expected from AI. Also, the Norwegian Union of Librarians (2008) encourages the adoption of free software, open standards, and open source codes; this can gain new momentum with the emergence of proprietary tools and algorithms, particularly if they are trained on public data curated by i.a. libraries.

Ethical guidelines are general; they state a commitment to certain values and how they should guide certain tasks and practices. They do not prescribe how concrete tools should be employed. In this regard, the current ethical guidelines do offer a sound basis upon which new ethical questions can be assessed. Yet, unlike other types of tools employed in research and library work, AI poses challenges to things that are taken for granted by ethical guidelines, such as what constitutes information, or whether non-human entities can be considered authors, sources, or neither.

In conclusion, it might be beneficial to revise ethical guidelines, less so because AI requires concrete recommendations, and more because they challenge substantive assumptions upon which guidelines rely. Also, new possibilities afforded by AI might put pressure on certain values, such as reproducibility and academic craftsmanship. Assuming that academia/library communities consider these important to preserve, it might be beneficial to reaffirm these values in light of the changing landscape.

### Speech Synthesis Integration in Open Journal Systems

Peter Vedal Utnes and Obiajulu Odu (UiT The Arctic University of Norway)

PDFs of research papers are often characterized by poor accessibility and lack of speech synthesis compatibility. In this poster, we present our project that addressed these challenges by introducing a tailored EPUB format optimized for speech synthesis. The project was carried out at UiT's publishing service for open access journals (Septentrio Academic Publishing) and was partially funded by the National Library of Norway.

During the course of the project, we explored two approaches to article formats compatible with speech synthesis.

The first approach involved the implementation of specialized markup intended for speech synthesis software. However, this method proved to be excessively labor-intensive for our university's publishing service, prompting us to seek a more efficient alternative.

Our second approach entailed converting documents from Word to EPUB via JATS XML, leveraging the versatile Pandoc tool. This streamlined approach not only simplified ongoing management but also ensured the creation of accessible files enriched with robust metadata. A noteworthy aspect of this project is its reliance on open source tools, making the approach readily transferable to other publishing services, particularly those employing Open Journal Systems.

#### The State of Open Data 2023

Timon Oefelein (Springer Nature)

The annual State of Open Data survey is a global and collaborative initiative aimed at understanding the dynamics of open data within the research community across different disciplines and regions. It seeks to uncover researchers' perspectives, behaviours, and the impact of data management on their work, ultimately contributing to the development of more effective data sharing practices that align with the evolving needs of the research community.

Now in its eighth year, the 2023 survey findings, presented in this poster, shed light on the evolving landscape of research data sharing and emphasise the critical need for adaptable, nuanced approaches.

This poster will give a preview of the 2023 results, pulling out some of the main findings and analysis of year-on-year trends, with key regional differences highlighted.

One main theme to emerge is that a one size fits all approach for research data management does not work, rather there should be a move to a more nuanced strategy. Researchers across different disciplines and regions have unique needs, and their approaches to research data management vary significantly. This underscores the necessity of moving towards a more adaptable and nuanced data management strategies tailored to specific research contexts.

The State of Open Data survey is conducted in partnership with Springer Nature, Figshare and Digital Science, enhancing the survey's reach and impact and allowing for a more comprehensive analysis of the research data landscape.

#### Testing Open Science Tools: Machineactionable DMPs

Essi Viitanen (Aalto University)

Data management plans (DMP) are an intrinsic part of planning for and implementing openness in scientific research. DMPs contain integral information on research projects: IT requirements, legal and ethical considerations and strategies for opening data. However, all too often, the DMP is seen as a chore drawn up at the request of external funders rather than a tool adopted for the benefit of project members. Similarly, the information gathered into DMPs is rarely utilised by other stakeholders such as institutional research services, nor linked to external parties such as data repositories.

Machine-actionable DMPs aim to change this landscape by offering better guidance and support for researchers preparing their plans, and facilitating a research data management system that allows data and information to be shared across institutions and repositories. In fact, one of the recommendations of the EOSC Nordic project, which studied FAIR incentives and expected impact in the Nordics, Baltics and EOSC, was the implementation of machine-actionable DMPs for seamless information workflow and supporting FAIR adoption in everyday research work.

Tools such as Data Stewardship Wizard and Argos do this by taking researchers through a set of simple structural questions on research data management from which answers are exported into funder templates resulting in downloadable DMP documents. These machine-actionable online tools transform tick-the-box answers that are easy to fill in into full-text DMPs that comply with funder requirements.

This poster introduces a pilot project testing the Data Stewardship Wizard and localising its Knowledge Template to the needs of Aalto University. It presents the project's findings and stages, including the process of creating a template for the Research Council of Finland DMPs and testing the tool with researchers. In doing so, it examines machine-actionable DMPs from a practice-based perspective and comments on the process of institutional implementation.