### **Open Science Fair 2025**



## **Report of Contributions**

Contribution ID: 8 Contribution code: T-IMP-PRE-2-08

Type: Individual presentation

### Paradiplomacy: An alternative to strengthen Open Science.

Tuesday 16 September 2025 15:00 (30 minutes)

International Relations are established for various purposes; however, the nature of this Open Science Fair 2025 "Fusing Forces – Accelerating Open Science through Collaboration" invites us to address the relationships that exist around Cooperation, specifically new trends.

To this end, we will review briefly what has characterized these ties for years, and then we will suggest an alternative in detail, illustrated with a successful example that is currently in operation. Traditionally, International Relations are defined as diplomacy, understood as the relationship established by nations or nation-states as a whole, such as a federal or central government, whether bilateral, one-on-one, or multilateral, between more than two countries. However, starting in the 1980s, a series of non-traditional manifestations of what has come to be known as paradiplomacy began to emerge. New actors with common expectations belonging to different systems and degree of decentralization have been working cooperatively without the intervention of central governments. Our example involves two different organizations: a Mexican research center and OpenAIRE, as subnational and supranational actors respectively.

A comparative table will show how the most representative features of paradiplomacy and its application in the creation of North American Studies (NAS). NAS is an ongoing collaborative project that transcends borders and contributes to strengthening one of the Open Science infrastructures, within the framework of the Open Science UNESCO recommendation and the FAIR principles. Scientific paradiplomacy is imperative in times of uncertainty and paradigm shift in international relations.

#### **Tagline**

How new actors could accelerate Open Science through international collaboration. NAS, an ongoing exercise of equitable participation between subnational and supranational actors, building robust infrastructures and more connected scientific community.

#### Keywords

International cooperation, Paradiplomacy, Open Science

**Author:** MANZANERA-SILVA, Norma-Aida (Center for Research on North America (CISAN), National University Autonomus of Mexico (UNAM))

**Session Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Type: Demo

Contribution ID: 10 Contribution code: -10

# From Reproducible Research to Open Science Dissemination: A Computing Platform-Centric Approach

Transparency and reproducibility requirements in computationally intensive scientific research demand novel solutions that integrate rigorous research practices with open science dissemination. This presentation presents a scientific computing platform designed for big data life science research that treats the open sharing of reproducible findings as a natural and efficient extension of the research process itself. By embedding a computational reproducibility framework directly within the platform, researchers can proactively capture a complete trace of their analysis, including data, methods, and executable tools, as their investigation unfolds. This approach empowers result verification and re-execution during the study. It also provides the essential components for transparent open science publication of the study findings through the release of the reproducible trace, granting access to all relevant data and the ability to re-run analysis steps within a compute environment mirroring the original infrastructure. Furthermore, this approach to research provenance offers a powerful mechanism for contextual data governance, moving beyond traditional IT-centric metrics to policies informed by the actual use and significance of specific data sets and tools. This enables organizations to create precise policies for data archival and tool discontinuation, which in turn reinforces the platform's long-term sustainability, ensuring its continued existence and impact on scientific discovery.

#### Tagline

Integrating reproducible research with open science dissemination via a scientific computing platform designed for long-term sustainability.

#### **Keywords**

proactive provenance, analysis reproducibility, contextual data governance

**Author:** MEIJER, Paul (Allen Institute for Immunology)

Session Classification: Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Demo

Contribution ID: 18 Contribution code: -18

### Talk Data to Me: Conversational AI for FAIR and Accessible Biomedical Data Discovery

The biomedical research ecosystem is rich in data but poor in discoverability. Researchers often struggle to identify and evaluate datasets across fragmented platforms, inconsistent metadata schemas, and access-restricted environments. Traditional search interfaces fail to accommodate the exploratory and interdisciplinary nature of modern research.

We propose a new paradigm: using conversational AI to transform metadata search into natural dialogue. Powered by large language models, the chatbot prototype on Synapse.org interprets user intent, translates natural language into structured queries, and surfaces metadata summaries —enabling ethical and efficient discovery even in regulated domains.

Users can ask nuanced questions like "Which Alzheimer's datasets involve Type II Diabetes in patients over 60?" and receive synthesized metadata responses, access notes, and provenance trails. The chatbot supports non-technical users and facilitates equitable access by acting as a semantic translator between scientific domains. Moreover, logs of user queries inform improvements in metadata quality and usability.

This presentation will discuss how conversational interfaces can bridge technical, linguistic, and policy gaps in data discovery—particularly for regulated data that must remain access-controlled. It also explores the integration of safeguards such as access permissions, response transparency, and bias auditing.

We argue that conversational AI is not just an interface improvement, but a step toward inclusive and intuitive open science infrastructure.

#### **Tagline**

Turning biomedical metadata search into a conversation

#### **Keywords**

Conversational AI, metadata discovery, biomedical data, FAIR principles

Authors: PEPE, Alberto; Dr FOSCHINI, Luca (Sage Bionetworks); ALLAWAY, Robert (Sage Bionet-

works); VARMA, Susheel (Sage Bionetworks)

Session Classification: Poster & Demos Sessions

Track Classification: Open, but at What Cost? Research Security & Open Science

Contribution ID: 22 Contribution code: T-SKI-PRE-22 Type: Individual presentation

### Accelerating the Pipeline: Building Equitable Global Research Pathways in Secondary Education

Tuesday 16 September 2025 14:00 (30 minutes)

What if the pipeline for transparent, collaborative research began before university? This presentation shares a bold and scalable model for fostering open science practices in secondary school, empowering students to contribute meaningfully to research while reimagining how we train the next generation of scientists and engineers - with equity at the focal point.

Since 1998, Hathaway Brown School's STEM research fellowship has connected over 800 high school girls with scientists from NASA, Cleveland Clinic, and universities across Northeast Ohio with authentic, multi-year research projects. Over 300 students have co-authored peer-reviewed papers before graduation, and a longitudinal study shows long-term impact on their confidence, persistence in STEM, and sense of belonging in scientific spaces (https://doi.org/10.1371/journal.pone.0258717).

But today's research landscape faces increasing challenges - especially in the United States. Scientific innovation is threatened by political agendas that have already reduced support for pure academic research and disproportionately impacted women and other historically excluded and underrepresented groups in STEM fields.

This session explores how cross-sector, international partnerships can offer students new ways to engage in authentic research, free from these constraints, and will leverage the expertise of participants to imagine open science practices that authentically engage young people earlier on in their academic careers to foster a sense of inclusion.

#### **Tagline**

This session will provide an overview of the open science practices currently used at Hathaway Brown to share our successes with preparing young people to meaningfully contribute to research, and will leverage the collective expertise of the participants to discuss new collaborative opportunities.

#### **Keywords**

secondary education, research training, inclusion, girls in STEM

**Author:** MINO, Janna (Hathaway Brown School)

**Session Classification:** Open Science for All: Skills & Community

Track Classification: Open Science for All: Skills & Community

Type: Panel

Contribution ID: 25 Contribution code: T-IMP-PAN-25

### Made to measure: how do we responsibly monitor and assess Open Science?

Tuesday 16 September 2025 16:15 (1h 30m)

Over the past decade or more, Open Science (OS) has rapidly gained momentum, with thousands of policies and recommendations from national agencies, funding bodies, institutions, and journals intended to foster a paradigm shift toward openness. Despite this enthusiastic embrace of Open Science, the tools and frameworks necessary for knowing whether greater openness is being achieved have lagged behind. Better evidence is needed on the adoption and the effects of Open Science –to inform the development of support services, policies, incentives, and to identify unintended consequences . As a result, we face critical questions: How can we avoid overly narrow or reductive approaches to monitoring Open Science? What frameworks and tools can ensure equity, transparency, and meaningful insights and promote responsible use?

This panel brings together leading innovators and thinkers in OS monitoring. They will offer perspectives on emerging and established initiatives and discuss the opportunities and challenges of monitoring OS practices, processes, and outcomes at various levels—global, national, institutional, and case-specific.

We will hear from the Open Science Monitoring Initiative about their efforts to provide a common, global framework for monitoring Open Science. We will explore new research examining the impact of Open Science practices, via a collaboration between the French Open Science Monitor and PLOS. The UKRN will share insights from their pilot projects to develop Open Research Indicators for institutions.

The session will conclude with an engaging Q&A, inviting the audience to critically examine diverse approaches to OS monitoring, critically examining their strengths, limitations, and blind spots.

#### **Tagline**

Join trailblazers in Open Science monitoring as they rethink how we measure impact—pushing beyond narrow metrics to build fair, transparent, and insightful frameworks. Explore bold ideas, smart tools, and responsible paths to equity in OS assessment.

#### **Keywords**

responsible monitoring, metrics, equity, impact of Open Science

Author: Dr MORKA, Agata (PLOS)

**Presenters:** BRACCO, Laetitia (Université de Lorraine); Dr MERRET, Kirsty (University of Bristol); HRYNASZKIEWICZ, Iain (PLOS); Dr MORKA, Agata (PLOS)

**Session Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Track Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

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Contribution ID: 27 Contribution code: T-INF-CWS-3-27 Type: Workshop

### Making Research Information Open: Shared Challenges, Shared Solutions

Tuesday 16 September 2025 16:15 (1h 30m)

The Barcelona Declaration on Open Research Information, published in April 2024, promotes the openness of publication and research output metadata, as well as the openness of information about research funding. Openness of research information supports responsible research assessment, enables equitable and inclusive policy making, and helps advance more open approaches to monitoring and incentivizing open science practices.

With over 100 signatories globally, including universities and research organizations, funders, governments, and networks such as CERN, OpenAire, Coimbra Group, UKRN, EOSC-A, Liber and YERUN, the Barcelona Declaration reflects growing momentum. The Declaration has also been endorsed by organizations like CoARA, Coalition S, EUA, Science Europe, and HELIOS Open. Yet challenges remain in operationalizing its vision: from aligning infrastructures to addressing institutional readiness, research assessment and policy implications.

In this 90 minute collaborative session, participants will first identify and discuss implementation challenges using live polling tools. Then, through moderated group exchanges, attendees will codevelop actionable strategies for each challenge and explore how these connect to the international roadmap for open research information currently implemented by Barcelona Declaration working groups.

This session is designed for open science officers, policy makers, research managers, librarians, and infrastructure providers, whether their organizations have signed the Declaration or are considering it. Participants will leave with concrete ideas for local and collaborative action, and a clearer understanding of the opportunities and complexities of opening up research information. Outcomes will be captured in a report to share insights with both the Barcelona Declaration working groups and the broader community.

#### **Tagline**

Drive the path to open research information in this interactive session on the Barcelona Declaration. Identify key implementation challenges, co-create actionable solutions, and help shape the global roadmap toward open research information and more equitable, transparent, and responsible research.

#### Keywords

Barcelona Declaration, Open Research Information, Open metadata, Open Infrastructures

**Author:** Dr WALTMAN, Ludo (Leiden University)

Co-authors: Dr RANITOVIC, Ana (University of Groningen); Mr BOSMAN, Jeroen (Utrecht Uni-

versity); Dr BOTH, Joeri (Vrije Universiteit Amsterdam)

**Presenters:** Dr RANITOVIC, Ana (University of Groningen); Dr BOTH, Joeri (Vrije Universiteit Amsterdam)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 30 Contribution code: W-INF-PRE-30 Type: Individual presentation

## From Competition to Collaboration: A National Model for Sustainable and Interoperable Research Data Repositories

Wednesday 17 September 2025 11:15 (30 minutes)

This presentation explores a collaborative national network of research data repositories in Poland, where institutional, disciplinary, and generalist infrastructures coexist rather than compete. The model offers a practical example of how interoperability and central coordination can support researchers and institutions in selecting the most appropriate repository type—without duplicating efforts or fragmenting services.

Drawing on a growing ecosystem currently comprising four main repositories (including a generalist platform hosting over 50 institutional dataverses), the presentation demonstrates how this architecture helps address key challenges in the research data landscape:

- ensuring long-term sustainability (technical, operational, and financial),
- alleviating staffing shortages,
- and motivating researchers to share their data.

The model relies on shared infrastructure, harmonized metadata exchange, and cross-repository visibility, enabling researchers to deposit data in the repository best suited to their needs—while benefiting from aggregated institutional presence and increased discoverability.

By presenting this approach, we aim to share insights into a scalable, community-driven strategy that reduces overheads, strengthens national coordination, and enhances the openness of research data practices. By highlighting a collaborative infrastructure model, this presentation contributes to the broader conversation on how we can reimagine openness through shared responsibility, inclusive governance, and sustainable practices.

#### **Tagline**

Strengthening open research infrastructure: a collaborative national network where institutional, disciplinary, and generalist data repositories are interconnected, enabling sustainable, inclusive, and community-centered data practices.

#### **Keywords**

research data repository, collaboration, national infrastructure

**Authors:** CYBULSKA-PHELAN, Agnieszka (University of Warsaw); SZPROT, Jakub (University of Warsaw)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 31 Contribution code: T-IMP-PRE-2-31 Type: Individual presentation

### The Role of Stakeholder Engagement in Citizen Science Policy Development in Finland

*Tuesday 16 September 2025 14:00 (30 minutes)* 

The presentation explores open science policy development in Finland in the context of stakeholder engagement and the creation of the first national policy recommendation for citizen science with focus on measuring impact and community engagement.

The presentation is based on two 2025 studies. First study is established on the shift of responsibility for coordinating open science in Finland from the Ministry of Education and Culture to the Finnish research community, specifically the Federation of Finnish Learned Societies (TSV). We examined documents from the TSV citizen science working group, including meeting notes, survey results, and the final policy paper, to understand how stakeholder participation influenced the policy-making process.

The second study examines the impact that the recommendation had on the stakeholders. We examined survey results, and the performance of citizen science indicators based on the recommendation from the national open science and research monitoring results from 2024 to explore the impact of the recommendation.

The results show that involving stakeholders helped shape policy recommendations, especially in improving institutional support, guidelines, and funding visibility for citizen science. However, challenges like uneven awareness and engagement among stakeholders could limit the effectiveness of participatory approaches. By placing these findings within the context of participatory policymaking and stakeholder theory, the presentation provides insights into how inclusive policy design works and how participatory governance and science policy development can be integrated into institutional frameworks to drive change.

#### Tagline

Exploring how stakeholder engagement shaped Finland's first national citizen science policy, this presentation highlights the impact of participatory policymaking on open science development, community engagement, and institutional change.

#### Keywords

citizen science, open science policy, participatory policy-making, stakeholder engagement

**Authors:** SVAHN, Elena (Åbo Akademi University); KARLSSON, Jonni (Federation of Finnish Learned Societies)

**Session Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Contribution ID: 32 Contribution code: T-IMP-PRE-2-32 Type: Individual presentation

## Toward the Global Integration and Public Utility of Open Science: A Publication Facts Label

Tuesday 16 September 2025 14:30 (30 minutes)

The emergence of a digitally enabled Open Science has coincided with the vast growth of high education in the Global South, leading to a vast expansion of research and publishing activity, as attested to, for example, by the 55,000 journals (almost entirely open, without fees for readers or authors) using the journal publishing platform Open Journal Systems (OJS) launched in 2002. The rate and scale of this expansion of research may well lead to a great many missed opportunities in utilizing relevant research findings, vital to the advancement of science, whether through shortfalls in indexing or mistrust of unfamiliar sources. On the principle that we not only to open science but must find ways of supporting researcher and public use of this open science activity, I present an experiment in developing a credible standardized label for each research publication that precisely summarizes its adherence to scholarly publishing standards in ways designed to inform readers about those standards. The resulting "Publication Facts Label," lists eleven data points, from number of reviewers to days to publication, all securely drawn from the journal publishing platform. Intended for industry-wide use, it is currently being tested with journals using OJS, with this presentation reviewing the label's design for researchers and public, its integrity and trust features, the implementation plan, as well, as its review by *Nature* readers, open access publishers, school students, and others, while offering attendees ways of seeing the label in action and, if so inclined, supporting its adoption.

#### **Tagline**

Having committed a career to increasing public access to and the scholarly quality of research.

#### **Keywords**

Open Access, Research Integrity, Scholarly publishing standards

Author: WILLINSKY, John (Stanford University)

Session Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

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Track Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

pact

Type: Demo

Contribution ID: 34 Contribution code: -34

# Building and sustaining a Community of computational biologists at EMBL through Consulting, Training, and Infrastructure

Collaboration is essential in computational biology, where interdisciplinary approaches drive innovation and address complex challenges. At the European Molecular Biology Laboratory (EMBL), the **Data Science Internal Support (DaSIS)** strengthens this collaboration through four key pillars: consulting, training, infrastructure, and community building.

**Consulting** is central to our work, providing expert guidance on challenges ranging from statistical analysis and mathematical modeling to coding and project management. By connecting researchers with domain-specific experts across EMBL, we help facilitate impactful, collaborative projects.

**Training** empowers researchers to thrive in a fast-evolving landscape. We offer hybrid workshops, self-paced resources, and focused sessions on topics like programming, visualization, and machine learning. Our approach balances accessibility with depth, helping scientists stay at the forefront of their fields.

Robust **infrastructure** supports our mission. We maintain tools such as coding platforms, version control systems, and cloud-based environments tailored to bioinformatics. Combined with collaborative and communication platforms, these ensure seamless research workflows.

**Community** unites these efforts. We foster engagement through meetups, clubs, and knowledge-sharing forums that encourage connection, collaboration, and lasting professional networks.

While our work is rooted in life sciences, the challenges and strategies are relevant across disciplines. We share our approach at the Open Science Fair to promote broader dialogue on effective **research support** and to learn from others. Crucially, we advocate for research support as a vital, rewarding **career in academia**. By highlighting this work, we hope to inspire conversations about career development, institutional priorities, and how to better recognize and integrate support roles into the scientific ecosystem.

#### **Tagline**

Empowering research through consulting, training, infrastructure, and community at EMBL.

#### **Keywords**

Computational Biology, Research Support, Education and Infrastructure, Open Science Community

**Authors:** GEISSEN, Eva-Maria (European Molecular Biology Laboratory (EMBL)); PAREDES CIS-NEROS, Isabela (European Molecular Biology Laboratory (EMBL)); MIRANDA, Jacobo (European Molecular Biology Laboratory (EMBL)); PALADIN, Lisanna (European Molecular Biology Laboratory (EMBL)); ALVES, Renato (European Molecular Biology Laboratory (EMBL)); KASPAR, Sarah (European Molecular Biology Laboratory (EMBL))

Session Classification: Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 53 Contribution code: W-SKI-CWS-53 Type: Workshop

### Fostering Belonging in Data Sciences and beyond

Wednesday 17 September 2025 13:45 (1h 30m)

For science to be truly open, people need access not only to resources but also to the confidence to use them —especially in data science, where technical tools are key to sharing data and code under FAIR principles. However, the tech space remains male-dominated, and many women and newcomers feel out of place. This lack of belonging can prevent people from engaging fully.

As staff at the Data Science Centre, we regularly encounter situations where inclusivity is a barrier. We believe research infrastructures like ours can drive change by actively welcoming diverse participation and designing thoughtful interventions. We can share our experience to that end with use cases and we're eager to learn from the audience: what have you already tried, and which ideas do you consider useful?

We propose a world café format, where we divide participants into small groups and assign them to tables, each representing one of the following use cases:

- A Q&A chat about a computational topic
- · A 2 days course on git
- A scientific workflow management system
- · A meeting with mixed scientific knowledge
- · A newsletter promoting standardisation of practices

The groups work on their use cases following discussion prompts and tasks. Groups will switch tables three times and pick up the work of other groups. This format ensures a collaborative atmosphere and nudges participants to discover new topics.

Together, we aim to identify strategies and best practices for fostering inclusiveness in the Data Sciences.

#### **Tagline**

workshop on inclusiveness in the (data) sciences

#### Keywords

inclusiveness, data sciences, research infrastructure

Authors: Dr MIRANDA, Jacobo (EMBL Heidelberg); Dr KASPAR, Sarah (EMBL Heidelberg)

Session Classification: Open Science for All: Skills & Community

Track Classification: Open Science for All: Skills & Community

Type: Demo

Contribution ID: 55 Contribution code: -55

### The Zenodo EPFL Community: a pragmatic view of open research data and FAIR practices

EPFL has been an actor of open research for over two decades, as demonstrated by the Infoscience publication repository, launched in 2004. This collaboration between libraries and IT services has produced a feature-rich platform to support EPFL researchers in their Open Access endeavours, as well as a monitoring tool for EPFL's scholarly publications. However, no consensus was found among the stakeholders regarding the development of an equivalent service for datasets. Meanwhile, Zenodo was identified both by researchers and institutional service providers as a pragmatic solution to cover many urgent use cases. Therefore, an EPFL Community (i.e. collection) was set up in 2014 as a minimal way to monitor data dissemination activities.

As the creation of an EPFL data repository remained an elusive target, the idea arose to leverage the Zenodo EPFL Community to deliver new services. With the addition of a pragmatic curation policy, the Community empowers EPFL researchers to enhance the visibility and reusability of their datasets while promoting openness and the FAIR data principles. Accepted datasets gain benefits without any additional burden for the researchers: metadata records in Infoscience for broader institutional visibility, and long-term preservation in EPFL's Academic Output Archive (ACOUA) when applicable. This approach has been received favourably by our users.

We leverage various technologies (browser scripting, REST APIs, and others) to streamline processes without excessive development costs. This poster presents the tools we have selected to support the curation process, and discusses the current status and future evolutions of our services.

#### **Tagline**

Setting up an institutional FAIR data repository requires significant resources that may not be available. We were able to bypass this barrier thanks to Zenodo. Using a pragmatic curation process and a few locally developed tools, we can deliver value-added services to our researchers.

#### **Keywords**

Open research data; data curation; low-cost

Author: BOREL, Alain

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 59 Contribution code: T-SKI-PAN-1-59

Type: Panel

### **Building Bridges: Cultivating Open Science Communities Within Research Institutions**

Tuesday 16 September 2025 11:00 (1h 30m)

While many institutions have embraced open science through policies and training initiatives, creating enduring communities that sustain open practices remains a significant challenge. This panel explores strategies for developing resilient, researcher-led open science communities that persist despite institutional turnover, shifting priorities, and the project-based nature of academia. The discussion will primarily examine how institutions can move beyond episodic interventions toward sustainable community structures that embed open science into institutional culture. Panelists will share insights on establishing people-centered governance models that prioritize inclusivity and shared ownership, developing community champions networks, and creating formal and informal mentorship pathways. Special attention will be given to the professionalization and recognition of roles that embed community-building approaches within the research ecosystem, as these formalized positions can significantly enhance the resilience of open science communities and ensure technologies and practices genuinely serve researcher needs. Additionally, panelists will explore strategies for integrating open science practices into existing departmental workflows to create lasting cultural change.

Through this exchange, we hope to develop a shared understanding of effective pathways toward cultivating open science communities that accelerate discovery through collaboration.

#### **Tagline**

Discover how to transform sporadic open science activities into thriving research communities. Join us to explore people-centered governance models, sustainable engagement strategies, and practical steps to build resilient communities that survive beyond initial champions.

#### **Keywords**

Community Engagement, People-centered governance, Sustainable engagement strategies

**Authors:** PALADIN, Lisanna (European Molecular Biology Laboratory (EMBL)); SHARAN, Malvika; Dr DAHLKEMPER, Merten (CERN); MCHUNU, Nokuthula

**Co-authors:** GENTIL-BECCOT, Anne (CERN); NAIM, Kamran (CERN)

Presenters: PALADIN, Lisanna (European Molecular Biology Laboratory (EMBL)); SHARAN, Malvika; Dr

DAHLKEMPER, Merten (CERN); MCHUNU, Nokuthula

Session Classification: Open Science for All: Skills & Community

Track Classification: Open Science for All: Skills & Community

Contribution ID: 64 Contribution code: W-RAS-PRE-64 Type: Individual presentation

### Valuing what matters: Developing new approaches to research assessment

Wednesday 17 September 2025 10:45 (30 minutes)

Advancing the quality and impact of science requires a fundamental reimagining of the practices and criteria used to evaluate researchers and their institutions. The Helmholtz Open Science Office supports the cultural shift toward Open Science within the Helmholtz Association, Germany's largest scientific organization. As a signatory of the Coalition on Advancing Research Assessment (CoARA) and coordinator of the CoARA National Chapter Germany, the Helmholtz Open Science Office is involved in several activities that aim to reform research assessment.

This contribution describes key initiatives that are currently taking place within the Helmholtz Association. Together, they aim to broaden the recognition of diverse research activities and output formats as valuable scholarly contributions, in alignment with the principles of research integrity and responsible research evaluation. We present the development of a "Quality Indicator for Data and Software Products", which is designed to capture quality of research outputs beyond traditional text publications and to promote their visibility. In addition, we present the implementation of an award for sustainable research software and the work of a new Helmholtz Task Group on Research Assessment, which provides a platform for the exchange and development of modern and quality-oriented research assessment practices.

Our contribution situates these activities within broader initiatives in Germany, such as the focus area "Digitality in Science" of the Alliance of German Science Organizations, and describes how they interact with international initiatives like CoARA and the Barcelona Declaration on Open Research Information.

#### **Tagline**

This presentation by the Helmholtz Open Science Office showcases initiatives to advance responsible research assessment by broadening the recognition of diverse research activities and output formats as valuable scholarly contributions.

#### **Keywords**

research assessment, indicator, award

Authors: FERGUSON, Lea Maria; GENDERJAHN, Steffi; MEISTRING, Marcel; PAMPEL, Heinz; VLEUGEL,

Mathijs

**Presenter:** VLEUGEL, Mathijs

Session Classification: Rethinking Research Assessment

**Track Classification:** Rethinking Research Assessment

Contribution ID: 66 Contribution code: T-INF-PAN-1-66 Type: Panel

### From partnership to ecosystem: building/evolving open collaboration

Tuesday 16 September 2025 14:00 (1h 30m)

This panel brings together diverse stakeholders from commercial entities and open initiatives to engage in a candid, interactive conversation about building transparent, respectful, and mutually beneficial partnerships. It will address the critical challenge of sustaining open infrastructure in a difficult funding landscape, where over-reliance on single stakeholders threatens vital systems. There is an urgent need to step outside the boxes of the past and embrace innovative approaches. Progress has been hindered because collaboration requires balancing competing priorities: private stakeholders often hesitate to engage due to concerns about control, profit timelines, or misaligned incentives, while open advocates fear that commercial involvement could undermine transparency and accessibility. This panel will start the crucial conversation to diagnose these systemic barriers and analyse why previous initiatives fell short. It will place a significant focus on the dynamics of private-public partnerships, recognising their potential to drive innovation and secure diverse funding streams for open infrastructure. By reframing the narrative from 'open versus commercial' to 'open and commercial', the panel explores practical opportunities for collaboration that uphold openness principles while leveraging industry partnerships. It aims to showcase difficult conversations, as well as how equitable, transparent partnerships and diversified funding can support infrastructure investment, development, and resilience. The discussion will cover building sustainable models, creating trusted spaces for partnerships, and real-world examples. It brings together diverse stakeholders from open initiatives, commercial entities, foundations, and research institutions. This session aligns with the track's objective by demonstrating how collaboration can build and sustain the digital backbone of open science.

#### Tagline

Facilitating open, transparent discussions that explore sustainable funding and partnership models between commercial and open science stakeholders to build resilient, collaborative ecosystems supporting the future of open infrastructure.

#### Keywords

Open Science Infrastructure; Partnerships/Collaboration; Sustainability/Funding; Diverse Stakeholders

Author: GREEN, Emma

Co-authors: JONES, Chonnettia (Addgene); CHAMBERS, Sally (The European Library); Mr FUND,

Sven

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Demo

Contribution ID: 67 Contribution code: -67

### An Interactive AI Physicist Demonstration for Open Science

Fundamental physics research today is constrained by unprecedented complexity and information overload. FirstPrinciples is developing an advanced AI system designed to accelerate discovery and enhance transparency in fundamental physics research. Leveraging large-language models, symbolic reasoning engines, and reinforcement learning, our system will ingest open-access scientific datasets and literature to derive equations, generate hypotheses, and synthesize existing research, significantly improving researchers' productivity and insights.

In this interactive demo, participants will have the opportunity to directly interact with our AI system, experiencing firsthand how it navigates scientific questions, autonomously searches for relevant literature, and performs symbolic mathematical reasoning in real-time. A particular highlight will include our system's capability for symbolic regression demonstrated via an interactive scenario, such as deriving equations governing simple physical systems from raw data.

Participants will observe the system's transparent reasoning process, which clearly displays its internal steps, references to open-access sources, and uncertainty indicators, among other essential features to ensure trust and reproducibility. This demonstration aims to foster meaningful interactions, gathering valuable community feedback to guide future improvements, collaborations, and expansions.

We anticipate this interactive session will facilitate networking, encourage collaboration, highlight the transformative potential of transparent AI assistance within the open research community, and demonstrate practical alignment with OSFair's emphasis on openness, reproducibility, and innovative research infrastructures supporting sustainable scientific collaboration.

#### **Tagline**

An Interactive AI Physicist Demonstration for Open Science

#### Keywords

AI for Science, Large-language models (LLMs), symbolic reasoning

Authors: Mr SHAR, Ildar; Mr LE DALL, Matthias; ISMAIL, Nawar

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Demo

Contribution ID: 69 Contribution code: -69

### Enhancing FAIR and curation workflows with InvenioRDM

This demonstration showcases InvenioRDM's capabilities in enhancing both the FAIRness of research data and the efficiency of curation workflows within Open Science repositories. We will illustrate how InvenioRDM enables the capture of rich, community-specific metadata, leveraging controlled vocabularies and persistent identifiers to maximize data discoverability and reuse. Furthermore, we will highlight streamlined deposit interfaces and administrative tools designed to support sustainable Open Science infrastructure by simplifying data ingestion, validation, and access management.

Building sustainable Open Science infrastructure requires flexible tools. InvenioRDM offers this adaptability, supporting the creation of diverse repositories, from general platforms like Zenodo to institutional or domain-specific repositories within federated and national networks. This demo will highlight how InvenioRDM's design promotes interoperability, facilitating seamless data exchange and enhancing collaboration across diverse research infrastructures.

Looking towards the future, this demonstration will offer a glimpse into our ongoing work integrating AI tools to further enhance curation workflows, automating tasks and improving data quality. Join us to explore how InvenioRDM contributes to building a robust and efficient ecosystem for open research data.

#### **Tagline**

Future-Proofing Open Science: InvenioRDM for FAIR data & AI-enhanced curation.

#### Keywords

FAIR data, data curation, repository

Author: TAROCCO, Nicola (CERN)

Session Classification: Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 70 Contribution code: -70

Type: Poster

Beyond Metrics: Catalyzing Resp ...

### Beyond Metrics: Catalyzing Responsible Assessment for Open Science

Research assessment systems have traditionally relied on journal-based metrics, such as the Journal Impact Factor, which inadequately capture the diverse contributions of research and researchers, which hinder the recognition of the full spectrum of academic work, including open science practices. Traditional assessment practices are not contributing to the progress of open scholarship. The San Francisco Declaration on Research Assessment (DORA) originated from the scientific community's concern about the misuse of journal-based metrics like the Journal Impact Factor to evaluate research quality. The resulting declaration offered 18 recommendations for a transparent assessment of research quality and impact, not quantity or publication venue. DORA has become a global movement with over 26,000 signatories across 166+ countries. This international initiative now actively supports institutional change in research assessment.

In this presentation, we would like to share how responsible research assessment and open scholarship connect and how people can advance it wherever they are in the knowledge system. It will showcase DORA's resources and initiatives, such as practical guidance, narrative CV formats, the Reformscape database of institutional policies, and community engagement efforts through workshops and discussion groups. These tools and collaborative approaches help research performing organizations and funders evaluate diverse outputs like data, code, and protocols, aligning with the open science values of transparency and broader societal impact. The aim is to stimulate discussion and promote practical steps towards a more equitable, transparent, and effective research landscape, resonating with the conference's goal to facilitate idea exchange and promote collaborations for advancing Open Science.

#### **Tagline**

Practical pathways to value open science through responsible research assessment.

#### **Keywords**

Responsible research assessment; culture change; practical guidance; open science

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Presenters: LIMA, Giovanna; Dr LAWRENCE, Rebecca (F1000, DORA)

Session Classification: Poster & Demos Sessions

Track Classification: Rethinking Research Assessment

Contribution ID: 72 Contribution code: W-IMP-CWS-1-72 Type: Workshop

### Designing What Matters: Co-Creating Open Science Dashboards

Wednesday 17 September 2025 10:45 (1h 30m)

Designing What Matters is a 90-minute co-creation workshop bringing together policy makers, research support professionals, researchers, bibliometricians, and librarians to rethink how we monitor the impact of Open Science and reward it within research assessment frameworks. Building on the GraspOS Researcher Profile and Monitors, participants will break into small groups and receive a curated set of pre-selected indicators (on paper cards or lists). Each group will be tasked with designing an "Open Science dashboard" on a poster tailored to a specific stakeholder level —such as individual researchers, research-performing organisations, or funders. The session begins with a short joint presentation introducing the indicator typologies developed in PathOS and explaining how these inspired the Researcher Profile in GraspOS. This shared foundation will set the stage for structured group work, guided by three core questions: What are we trying to measure?

What kind of data would we need?

Who could collect or interpret it —and for what purpose?

Groups will visually design their dashboards and then reflect on how the selected indicators could be interpreted, used in decision-making, and communicated through compelling storytelling. This hands-on, participatory session will surface diverse perspectives and generate concrete prototypes that can inform the development of meaningful indicators —contributing to broader efforts in Open Science monitoring, assessment reform, and impact evaluation.

#### Tagline

A participatory workshop to co-design Open Science dashboards —grounded in real use cases and shared expertise.

#### **Keywords**

• Open Science - Research Assessment - Indicators - Participatory Design

**Authors:** BARDI, Alessia (ISTI-CNR); Dr MALAGUARNERA, Giulia (OpenAIRE AMKE); GRYPARI, Ioanna; AMODEO, Stefania (OpenAIRE AMKE); SZYBISTY, Tereza (OpenAIRE AMKE); XENOU, Zenia

**Presenters:** GRYPARI, Ioanna; Ms SORICETTI, Marta (Open Citation/UniBO); AMODEO, Stefania (OpenAIRE AMKE); XENOU, Zenia

**Session Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Type: Panel

Contribution ID: 76 Contribution code: W-SEC-PAN-1-76

## Strange bedfellows, indeed: How the impact of the current political moment could accelerate an open science future

Wednesday 17 September 2025 10:45 (1h 30m)

The current US government attacks on science and international collaboration are shaking the foundations of the global scientific endeavor. The damage to both research itself and the essential underpinnings of good science –collaboration, integrity, openness –may be irreversible.

US government acts of censorship, intimidation and erasure –like the removal of critical websites, discontinuation of vital data collection, and proliferation of conspiracy theories and debunked research –would lead the casual observer to assume the administration was anti-science at its core, and open science, itself, would be anathema. However, open science advocates within the administration –including the current NIH Director, Jay Bhattacharya –are viewing openness in a different light. They argue open practices will keep the government and scientific community accountable, reducing group think and enabling greater freedom for inquiry.

So, where does this leave open science globally, given the reduction in US research funding and the EU/UK commitment to increasing support (and poaching) those researchers? Does the shift in emphasis by the current Administration still move us collectively toward a more open future that achieves similar goals, just under different motivations? How are funders, research institutions and researchers themselves thinking about the global scientific endeavor in this new world? Is the open science movement being co-opted? Join this panel of experts –researchers, practitioners, and open science advocates –for a robust debate on the strange bedfellows pushing for open science policies in this new world.

#### **Tagline**

US Government priorities in open science seem to run counter to the global effort to open/enable science for all. However, current policies indicate a desire to double down on open science. What does this mean for OS globally?

#### **Keywords**

US government, funding, global research endeavor

**Author:** Ms ROUHI, Sara (Co-Author, Declaration to #DefendResearch from US Govt Censorship (DefendResearch.org))

**Co-authors:** Dr RUDMANN, Dan (Utrecht University); Dr PINTER, Frances (Central European University Press & Amsterdam University Press); Dr KYLE, Michael Anne (University of Pennsylvania)

Session Classification: Open, but at What Cost? Research Security & Open Science

Track Classification: Open, but at What Cost? Research Security & Open Science

Contribution ID: 80 Contribution code: -80

Type: Poster

### Socio-Economic Impact of collaborative and open science data platforms in a global project.

Open Science is a movement dedicated to making all scientific research publicly accessible, free from barriers or restrictions. Open Data refers to the practice of sharing research data in a way that ensures it is accessible, reusable, and reproducible by anyone. By embracing these principles, scientists can validate results, conduct new research, and foster scientific progress. The rise of collaborative platforms has revolutionized how individuals and organizations interact, enhancing communication, knowledge sharing, and collective problem-solving. Two platforms that illustrate this transformation are Indico, an event management web platform, and Zenodo, a platform designed to facilitate the sharing of information. Both are developed and maintained by CERN. Indico promotes sustainability by eliminating paper-based processes and reducing the need for physical infrastructure, leading to both cost savings and environmental benefits. It enhances accessibility by offering virtual event options, enabling broader participation and inclusivity. Additionally, Indico serves as a long-term repository for event materials such as presentations and articles, supporting interdisciplinary collaboration and advancing research.

Zenodo, on the other hand, provides features that support knowledge advancement and collaboration within the research community. By championing open access, Zenodo enables the global dissemination of research findings, overcoming barriers such as geographic and financial constraints. But what is the real Socio-Economic Impact of these platforms? This study, conducted within the framework of the Future Circular Collider (FCC) at CERN, provides a quantitative estimate of the socio-economic impact generated by these platforms in monetary terms over 29 years (2028-2057).

#### **Tagline**

Power of the Open Science: The Socio-Economic Impact of Indico and Zenodo in future scientific projects.

#### **Keywords**

Zenodo, Indico, CERN, Open Science

**Author:** CRESPO GARRIDO, Irene Del Rosario

Session Classification: Poster & Demos Sessions

Track Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

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Making Impact Visible: Storytelli · · ·

Type: Workshop

Contribution ID: 81 Contribution code: W-IMP-CWS-2-81

### Making Impact Visible: Storytelling with Open Science Impact Indicators

Wednesday 17 September 2025 13:45 (1h 30m)

As Open Science moves from aspiration to policy, the demand for actionable indicators to monitor its impact is growing. Policy initiatives like Horizon Europe Interim Evaluation, ERA Dashboard, EOSC monitoring activities, and national monitoring efforts call for reliable, interoperable data to support evidence-based decisions. Meanwhile, global frameworks such as UNESCO's Open Science Recommendation and the upcoming OSMI principles highlight the need to assess Open Science's contribution to equity and societal benefit.

The Open Science Indicator Handbook, developed in the PathOS project, provides practical guidance for this complex task. It supports the community in identifying, refining, and operationalizing indicators that capture the effect of Open Science, not just outcomes, but the causal impact of open practices across scientific, societal and economic dimensions. This workshop is intended for Open Science practitioners, research managers, policy officers, funders, interested in monitoring, assessing, and advancing the impact of Open Science practices.

In this hands-on workshop, participants will engage in small group exercises centered on indicator storytelling. Each group will choose one indicator from the Handbook and build a narrative around it, guided by questions such as:

- How would this indicator change behavior if tracked and rewarded?
- What ripple effects could it create, positive or negative?
- How does it connect to real-world Open Science practices and values?

Through creative yet critical reflection, participants will gain a deeper understanding of how Open Science indicators can influence research behaviors and policy and will develop practical skills in interpreting and applying indicators through narrative-driven, real-world scenarios.

#### **Tagline**

Can Open Science indicators do more than measure? In this workshop, we explore how story-telling around key metrics can shape behaviors, reveal impact pathways, and support meaningful policy change.

#### Keywords

Research Policy; Evaluation Practices; Science Impact, Impact Indicators

Authors: GRYPARI, Ioanna; SZYBISTY, Tereza (OpenAIRE AMKE)

Co-author: TRAAG, Vincent

**Presenters:** GRYPARI, Ioanna; SZYBISTY, Tereza (OpenAIRE AMKE)

**Session Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Contribution ID: 83 Contribution code: -83

Type: Poster

# Supporting policy processes by assuring high quality open science: the role of the Editorial Review Board of the European Commission Joint Research Centre.

The European Commission Joint Research Centre (JRC) is the European Commission's science and knowledge service providing independent scientific advice to EU policy-making conducting original, independent and open research. JRC employs over 3,000 staff and collaborates with international organizations, universities and industry putting three core values at the centre of its work: anticipation, providing the scientific underpinning for future policy initiatives; integration, linking across scientific and policy areas and impact, assisting policymakers to assess the impact of their policies.

The JRC adheres to open science standards and has committed to implementing the European Commission's Open Science policy, which aims to make scientific research more accessible, transparent, and reusable. The JRC's approach to open science encompasses aspects such as publishing in open access, producing and maintaining open data, assuring transparency and reproducibility, overall keeping a collaborative and participatory approach.

By embracing these open science principles, the JRC aims to increase the impact and visibility of its research, foster collaboration, and contribute to the development of evidence-based policies. In this presentation we will especially focus on the role played by the JRC Editorial Review Board (JERB), the internal quality assurance and scientific publication peer-reviewing structure, in front of recent challenges and radical paradigm changes in the science for policy field, such as the raise of Artificial Intelligence, the explosion of low-quality and even predatory journals also starting to impact policy support and the increasing need of dealing with scientific multidisciplinarity in order to effectively support more and more cross-sectorial and interconnected policy problems.

#### **Tagline**

How effective editorial control helps in assuring an high quality level of open science for policy support.

#### Keywords

open science for policy making; quality assurance; independent scientific advice

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Session Classification: Poster & Demos Sessions

Track Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

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Contribution ID: 86 Contribution code: W-SEC-PAN-2-86 Type: Panel

### Open & Trusted: Governing Knowledge in the Digital Age

Wednesday 17 September 2025 13:45 (1h 30m)

This panel confronts the critical tension between openness and security in today's Open Science landscape. As AI revolutionizes research, it also introduces significant risks like disinformation and trust erosion. Compounding this, geopolitical strains force a reassessment of knowledge sharing, further undermining scientific trust. We are caught in an "information paradox": unparalleled access to knowledge alongside a public debate degraded by misinformation, shaking faith in science and democratic institutions. At the heart of this lies a vulnerable "public knowledge infrastructure" spanning research, education, and media. While openness is vital for progress, it demands careful governance.

This session will explore proactive strategies and collaborative solutions. We will examine how infrastructures like OPERAS, OpenAIRE, and EOSC champion vetted, multilingual open research through transparency and initiatives such as the Information Quality Protocol (IQP). The discussion will focus on uniting diverse "knowledge workers," fostering citizen engagement, and rebuilding our knowledge infrastructure. Key themes include robust governance, quality standards, and collective action to safeguard reliable open knowledge, counter disinformation, and restore public trust. Ultimately, the panel will address how Open Science can securely foster an informed, resilient, and democratic society.

#### **Tagline**

Securing Open Science in the AI age by confronting the information paradox, rebuilding trust & knowledge infrastructure, and exploring collaborative solutions for a resilient democratic society

#### **Keywords**

disinformation, trust, security, infrastructure

**Authors:** MANOLA, Natalia; MOUNIER, Pierre (OPERAS)

Session Classification: Open, but at What Cost? Research Security & Open Science

Track Classification: Open, but at What Cost? Research Security & Open Science

Contribution ID: 94 Contribution code: T-IMP-PRE-1-94 Type: Individual presentation

### Global Collaboration Driving Open Science Impact: Insights from the RDA TIGER Landscape Analysis

Tuesday 16 September 2025 11:00 (30 minutes)

The RDA TIGER project has played a pivotal role in supporting Research Data Alliance (RDA) Working Groups (WGs) that align, harmonise and standardise Open Science developments and technologies globally. While the RDA is a global platform, one of RDA TIGER's key selection criteria for supporting WGs and projects is their potential impact on solving European data challenges and promoting data sharing and Open Science, in alignment with the EOSC Strategic Research and Innovation Agenda (SRIA). The RDA TIGER project supports 23 WGs and has funded 9 projects, each with a tangible impact on the EOSC ecosystem and related challenges. To articulate the value and impact of the RDA TIGER project on the European landscape and EOSC ecosystem, in early 2025, the project team embarked on a large-scale landscape analysis to map the impact of RDA WGs to EOSC. This presentation features an in-depth analysis and lessons learnt from this endeavour.

Specifically, we will:

Introduce the landscape report as a tool and resource for European data professionals, EOSC users, researchers, and policymakers enabling them to navigate the wealth of RDA outputs that address key challenges in the region.

Present preliminary results and lessons arising from the mapping of the RDA WGs and their direct contributions to the SRIA priorities and challenges.

Highlight forward-looking recommendations coming out of the report.

By illustrating the tangible outcomes of RDA TIGER's support, this presentation provides key insights into how collaborative, international research data initiatives can drive meaningful change in Europe and beyond.

#### **Tagline**

Mapping impact, maximising alignment: How RDA TIGER empowers RDA Working Groups to address European data challenges, advance Open Science, and deliver tangible contributions to the EOSC through targeted support, strategic mapping, and collaborative global engagement.

#### **Keywords**

Open Science Impact, Interoperability, Data challengers, EOSC, SRIA

**Authors:** Ms DELIPALTA, Alexandra (RDA Europe); PAPADOPOULOU, Athina (RDA Europe); Mr O'CONNOR, Ryan (RDA Europe)

**Session Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Contribution ID: 95 Contribution code: T-INF-CWS-2-95 Type: Workshop

# Introducing OpenREL: Rights Expression Languages for Open Science and International Data Spaces –A Practitioners'Approach

Tuesday 16 September 2025 14:00 (1h 30m)

As Open Science infrastructures evolve, it is increasingly evident that traditional open license structures no longer meet the complex needs of Research Performing and Funding Organizations (RPOs/RFOs). Today's research ecosystems require more nuanced and layered approaches to data access, sharing, and reuse—particularly within international data spaces, discipline-specific workflows, and AI-driven environments. Researchers and infrastructure providers now need clear, machine-actionable mechanisms to express complex rights, regulatory restrictions (such as GDPR), intellectual property allocations, terms of use, and licensing conditions.

To meet these challenges, the EOSC Beyond project has developed OpenREL, a new Rights Expression Language (REL) vocabulary and toolkit tailored for Open Science. Building on standards like ODRL and CCREL, OpenREL introduces advanced features for representing conditional access, role-based reuse, dual licensing, and the articulation of both legal and ethical rights and obligations. OpenREL supports EOSC's mission to enable FAIR, secure, and trusted data reuse across diverse access models.

This 90-minute hands-on workshop will begin with an introduction to OpenREL's structure and logic, followed by collaborative group work. Participants will engage with real-world scenarios involving datasets, services, and research software. In small teams, they will use simplified OpenREL templates to address key questions: What are the conditions for reuse? How can ownership be traced? Who holds which rights and responsibilities? How can these be represented in a machine-readable way?

The session aims to open community dialogue on rights governance in Open Science and collect feedback to shape this vocabulary and toolkit.

#### Tagline

OpenREL: Empowering Open Science with Machine-Actionable Rights for Trusted, FAIR Data Sharing

#### **Keywords**

Open Science, Digital Rights Expression Language, Workshop, Legal and Ethical Compliance, EOSC

Authors: KATSAMAKIS, Melios; Mr TSIAVOS, Prodromos (OpenAIRE); Mr HUGO, Wim (DANS)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

**Track Classification:** Building the Digital Backbone: Open Science Infrastructures

Type: Demo

Contribution ID: 96 Contribution code: -96

### RDA Knowledge Base –one shop stop for all RDA outputs and resources

For over a decade, Research Data Alliance (RDA) groups have produced a wide range of recommendations, supporting outputs and materials (including 72 flagship outputs and 8 ICT Technical Specifications), documentation and collections of web resources, contributing significantly to addressing Open Science and data-sharing challenges globally. To streamline access to these invaluable resources, RDA TIGER developed the RDA Knowledge Base, to serve as a centralized, structured, and user-friendly platform for navigating the extensive landscape of RDA-related resources.

This demonstration showcases the functionalities of the RDA Knowledge Base, highlighting how it enhances the accessibility, discoverability, and reuse of RDA outputs. It provides a curated and structured space where RDA members, researchers, policymakers, and data professionals can explore key RDA outputs, supplementary materials, and relevant web resources tailored to their needs.

The demonstration will highlight key features of the Knowledge Base, including:

Discovery of RDA Outputs, Supplementary Materials, and Web Resources of interest to the community

Curated Publication of RDA-related resources - with extended metadata and linked into the RDA Graph

Annotation of web resources that are of interest to the community - e.g. identified during landscape analysis and research

The demonstration provides a better understanding of the creation and how the RDA Knowledge Base facilitates knowledge-sharing, strengthens interoperability, and supports the broader Open Science ecosystem.

In addition to showcasing core functionalities, the demonstration introduces mechanisms for reusing the RDA Knowledge Base software tools in other Open Science contexts, providing participants with practical guidance on adapting the platform to their own infrastructure needs.

#### **Tagline**

Discover how the RDA Knowledge Base transforms access to global Open Science outputs, offering a curated, interoperable, and reusable platform that empowers researchers, policymakers, and data professionals to navigate, share, and reuse RDA's rich resource landscape.

#### **Keywords**

Knowledge Base, Reusability, Interoperability, Open Science Tools

**Authors:** Ms DELIPALTA, Alexandra (RDA Europe); PAPADOPOULOU, Athina (RDA Europe); Mr HUGO, Wim (DANS-KNAW)

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 99 Contribution code: W-INF-PAN-99 Type: Panel

### Harnessing Al in Open Science Infrastructures: **Collaborative Pathways Forward**

Wednesday 17 September 2025 13:45 (1h 30m)

Harnessing AI in Open Science I ...

How can we collectively shape AI integration in open science infrastructure to benefit all research communities? Join us for a dynamic 90-minute session where we'll move beyond the AI hype to explore practical implementations, ethical considerations, and collaborative pathways forward. Through lightning talks showcasing real-world applications, hands-on knowledge mapping, and our innovative fishbowl discussion format, you'll engage with diverse perspectives from across the research ecosystem. Whether you're a repository manager wondering about automated metadata extraction, a funder considering how to support equitable AI development, or a citizen science advocate concerned about inclusivity—this session creates space for your voice. Come prepared to challenge assumptions, forge unexpected collaborations, and help chart the course for AI-enhanced infrastructures that truly serve open science values. No technical expertise required —just bring your experience and insights!

#### **Tagline**

Harnessing AI in Open Science Infrastructures: Collaborative Pathways Forward

#### **Keywords**

AI, Open Science, Infrastructure, Swiss AI Weeks

Author: KNAPPER. Ines

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Poster

Contribution ID: 103 Contribution code: -103

### Reaching for the Stars: Designing Open Science Services for all Scientific Disciplines

Research data infrastructures are essential for advancing open, connected, and sustainable science. A major challenge is developing cross-disciplinary, accessible, and interoperable solutions that support research data management while respecting domain-specific requirements. The German National Research Data Infrastructure (NFDI), a collaborative network of 26 consortia, aims to address this by building a federated, sustainable infrastructure for research data across disciplines. This workshop offers an interactive Bar Camp format to discuss the development and integration of basic services within the Base4NFDI framework –a joint initiative supporting interoperable and community-driven solutions for the entire NFDI community, defining basic services as cross-disciplinary, technical-organisational solutions that bring together existing services and leveraging existing national service components. The workshop aligns with the conference's objective of "building the digital backbone", highlighting how basic services can foster open science.

The target audience includes infrastructure and technical professionals, researchers and data stewards, to ensure a diverse range of perspectives. Through participatory Bar Camp sessions, attendees will:

Gain a clear understanding of what constitutes a horizontal service to serve cross-disciplinary needs and be able to explain its significance to others.

Reflect on the multi-level considerations involved in developing basic services, from technical interoperability to international alignment

Identify and discuss common challenges in service development and integration, including making services 'FAIR'

Collaborate and share insights on building horizontal services that can be adopted across different research domains.

Participants will leave equipped to contribute to the ongoing evolution of open science infrastructures and to foster cross-community collaboration in the NFDI context.

#### **Tagline**

Sharing is caring! What Base4NFDI learned in 2 years of developing horizontal, cross-disciplinary and open basic services for the German National Research Data Infrastructure (NFDI). Let's identify, discuss and reflect together common challenges and lessons learned.

#### Keywords

basic services NFDI - German National Research Data Infrastructure RDM infrastructures federated infrastructures cross-disciplinary services national initiatives bar camp

**Authors:** LEHMENKÜHLER, Dorian (Bielefeld University); LEHMENKÜHLER, Dorian; Ms FRITZSCHE, Franziska (Gesis - Leibniz Institute for the Social Sciences); TATSCHECK, Jana (Leibniz-Institut für Psychologie (ZPID)); RETTBERG, Najla (TU Dresden); ZÄNKERT, Sandra (ZB MED - Information Center for Life Sciences)

Reaching for the Stars: Designing  $\cdots$ 

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 107 Contribution code: T-INF-PAN-2-107 Type: Panel

### Repository Reminaged: The Impact Repo Project

Tuesday 16 September 2025 16:15 (1h 30m)

There is a global consensus that open science will make research more transparent and inclusive, accelerating the advancement of knowledge. The vision of open science depends on a robust network of well-functioning repositories that not only collect, preserve, and provide access to millions of valuable research outputs but also serve as critical institutional assets. In an era where AI is reshaping research and knowledge discovery, repositories play a key strategic role as curated collections of an institution's intellectual production, ensuring visibility, integrity, and trustworthiness of research outputs.

In March 2025, LIBER, OpenAIRE, SPARC Europe, and COAR launched IMPACT-REPO, a joint plan to promote the vital position of open access repositories in Europe's research landscape. The plan outlines four key dimensions in which repositories contribute—boosting research impact, fostering inclusiveness, building trust, and supporting innovation.

The Action Plan illustrates the key contributions of repositories in open science and presents four compelling narratives that articulate the growing strategic value of repositories in Europe.

This panel session will present several case studies of repositories that are offering new and innovative services- such as Publish Review Curate, cost transparency, and artificial intelligence - and are driving innovation in the open science landscape.

#### **Tagline**

Learn how to position your repository to support exciting new roles and functionalities for the future.

#### **Keywords**

open science, repositories, innovation

**Authors:** Mr RODRIGUES, Eloy (University of Minho); Ms BERNAL, Isabel (CSIC); SHEARER, Kathleen (COAR)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 113 Contribution code: T-IMP-PRE-1-113 Type: Individual presentation

### A cost benefit analysis framework for Open Science

*Tuesday 16 September 2025 11:30 (30 minutes)* 

Understanding the impacts of Open Science (OS) and the extent to which they materialise requires a solid methodological framework, which is not yet fully established. The Cost-Benefit Analysis (CBA) framework for OS - developed (part of the PathOS project) - aims to provide a systematic and comprehensive approach to quantifying the impacts of OS. This framework goes beyond simply evaluating benefits; it incorporates associated costs and enables meaningful comparisons with scenarios in which OS is not implemented.

This presentation will illustrate key elements of this framework, focusing on the types of costs (e.g.,set-up and maintenance costs) and benefits (e.g.,costs saved) specifically related to open science, and details the methodology to quantify these elements within the context of a CBA. Real-world applications of this framework will be used to offer practical insights into its utility and effectiveness. In particular, the presentation will draw on the use of the CBA to assess the value of:

UniProt, a widely used and freely accessible open database for protein sequence and functional information.

RCAAP, a network of open institutional repositories involving multiple Portuguese research institutions.

This presentation will show how the CBA framework can support policy and funding decisions and demonstrate the value of OS practices in research infrastructures. It will also shed light on the challenges that may arise when applying this framework and offer recommendations for potential mitigation strategies and actions. These insights are intended to enhance the utility of the framework as a valuable tool for the future evaluation of OS resources.

#### **Tagline**

How can we quantify the true value of Open Science? This presentation introduces a cost-benefit analysis framework developed by PathOS, showcasing its application to real-world cases like UniProt and RCAAP to support evidence-based OS evaluation and policy decisions.

#### **Keywords**

Cost-Benefit Analysis, Open Science Impact, Policy Evaluation, Impact Assessment

Authors: CATALANO, Gelsomina (Jessica); CORREIA, Antonia

Co-authors: SOUSONI, Despoina; PRINCIPE, Pedro (University of Minho)

Presenters: CATALANO, Gelsomina (Jessica); CORREIA, Antonia

Session Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

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**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Contribution ID: 114 Contribution code: T-INF-PRE-114 Type: Individual presentation

# Enriching Scientific Knowledge Graphs with Geospatial Metadata: Toward Mapping the Energy Research Landscape in Europe

Tuesday 16 September 2025 11:00 (30 minutes)

Scientific Knowledge Graphs (SKGs) currently lack systematic approaches for handling geographic data, a particularly relevant limitation in energy planning, where spatial context is crucial for informed decision-making. The SciLake project (Horizon No. 101058573) aims to enhance knowledge discovery by improving the SKG's infrastructure and services for accessing, integrating, and reusing research data across various disciplines. During the development of the Energy pilot, we created and tested a workflow to systematically detect mentions of geographical entities in scientific texts, analysed their contextual relevance (e.g., study site, case study location, broader regional focus), and mapped these associations on a European scale.

We enriched existing scientific metadata with structured geospatial information using natural language recognition enhanced by AI. We showcase that we can extract geographic mentions of case studies and institutions from open-source research.

The resulting enriched knowledge graph enables researchers, policymakers, and funders to explore research activity through a geographical lens, supporting new forms of discovery, collaboration, and policy analysis. Our work closes the gap between research and practice by providing interactive maps, which are more accessible to broader audiences than API or other current interfaces. We utilise regional energy planning to demonstrate our approach, which includes addressing challenges related to multiple entity disambiguation. We will discuss how this enrichment pipeline could be integrated into other European Open Science infrastructures. Additionally, we will reflect on broader implications, such as areas lacking research studies, enhancing research discoverability through contextual metadata, and the potential for building more navigable, interoperable, and inclusive open science ecosystems.

#### **Tagline**

The energy pilot enhances SciLake's Scientific Knowledge Graphs with AI-driven geospatial data integration, bridging research and practice through enriched metadata and interactive maps for informed energy planning and broader research discoverability.

#### **Keywords**

Knowledge Graphs, Geographic Metadata, Natural Language Processing, Regional Energy Planning

**Authors:** Dr PEÑA-BELLO, Alejandro (HES-SO Valais/Wallis); SALMI, Andrea (HES-SO Valais/Wallis); Dr PARRA-ROJAS, César (SIRIS); Prof. RAGER, Jakob (HES-SO Valais/Wallis); Dr TROILLET, Lucien (HES-SO Valais/Wallis); Mr DURAN-SILVA, Nicolau (SIRIS); Ms BESSE, Martine (HEIG); Prof. INGENSAND, Jens (HEIG)

**Session Classification:** Building the Digital Backbone: Open Science Infrastructures

**Track Classification:** Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 117 Contribution code: T-SKI-PRE-117 Type: Individual presentation

# Challenges and Opportunities of real FAIR-by-design: The experience of the Master in Data Management and Curation (MDMC)

Tuesday 16 September 2025 15:00 (20 minutes)

Nowadays, data fuels discovery, innovation, and decision-making; therefore, the ability to manage and curate data responsibly is crucial.

The Master in Data Management and Curation (MDMC) is a pioneering educational program that embraces the "FAIR-by-design" paradigm, going beyond theory to train professionals in the practical implementation of FAIR principles across the entire research data lifecycle. Rather than retrofitting datasets to meet FAIR criteria, MDMC students learn to embed Findability, Accessibility, Interoperability, and Reusability from the earliest stages of data planning, within the wider context of Open Science.

This forward-thinking approach is made possible through a well-established collaboration between Area Science Park and SISSA and benefits from its dynamic research and innovation ecosystem. Designed for a new generation of data professionals, MDMC fosters a strategic understanding of the research process, combined with a unique mix of technical, ethical, and communication skills essential for real-world FAIR implementation.

The training structure consists of eight intensive weeks of in-person lectures and hands-on exercises, followed by a six-month internship in cutting-edge research laboratories or data-intensive institutions, during which students implement FAIR-by-design workflows and pipelines in real scientific contexts. This model offers a rare opportunity to work closely with researchers, develop tailored data strategies, and engage with the practical challenges of semantic interoperability, metadata standards, and sustainable infrastructure.

By shaping versatile and practice-oriented data professionals, MDMC contributes to building a new generation of researchers who can transform data from a research byproduct into a powerful strategic asset—crucial for both academic excellence and data-driven innovation.

#### Tagline

Shaping Data, Shaping the Future! MDMC aims to inspire a transformation in research methodologies by fostering a new digital research culture that transcends disciplinary boundaries and embraces Open Science principles, thereby driving new discoveries and innovation.

#### **Keywords**

Open Science skills, FAIR Data Management, FAIR by design

**Author:** DE LUCA, Mariarita (AREA SCIENCE PARK)

**Co-author:** Dr BAZZOCCHI, Federica (AREA SCIENCE PARK)

Session Classification: Open Science for All: Skills & Community

Track Classification: Open Science for All: Skills & Community

Contribution ID: 121 Contribution code: T-INF-PRE-121 Type: Individual presentation

### On the importance of computational reproducibility in fostering Open and FAIR Science

Tuesday 16 September 2025 12:00 (30 minutes)

In this talk we propose to survey the computational reproducibility practices, opportunities and challenges in view of fostering Open and FAIR Science in research communities.

We discuss several thinking models regarding computational reproducibility, focusing on the broader knowledge preservation and reuse aspects rather than on the raw computing evolution aspects.

Building upon several use cases from experimental particle physics and related scientific disciplines, we discuss the variety of sociological and technological challenges inherent in making the research innately reproducible and reusable.

From the researcher point of view, we argue how "preproducibility" should come early in the scientific process in order to ensure its future reusability.

From the data infrastructure point of view, we argue how the data repository services benefit from accompanying "analysis engines" to ensure the correctness of data curation procedures of the validity of data usage recipes.

The ultimate goal of the Open Science and Data Preservation efforts is to facilitate future reuse and reinterpretation of scientific data by new generation of researchers. A strong focus on the computational reproducibility of original data analyses provides a way to facilitate the reuse and reinterpretation of Open and FAIR data even many years after the original publication.

This talk is heavily inspired, but not limited to, the experiences and lessons learnt from the past ten years of running the CERN Open Data portal and the REANA reproducible analysis platform for the particle physics community.

#### Tagline

This talk proposes to survey the computational reproducibility practices, opportunities and challenges in view of fostering Open and FAIR science in research communities. We discuss how the reproducible practices benefit both researchers and data infrastructures in facilitating future data reuse.

#### **Keywords**

reproducibility, reuse, reinterpretation

Author: SIMKO, Tibor (CERN)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 124 Contribution code: T-INF-PRE-124 Type: Individual presentation

### The dark corners of open science

Tuesday 16 September 2025 11:30 (30 minutes)

Open Science infrastructures have significantly advanced global knowledge sharing, enabling wider access, collaboration, and transparency in research. However, alongside these achievements, we face substantial challenges from spam and malicious activities that threaten the integrity of scholarly communications and pollute the scholarly graph. These challenges include the exponential growth of AI-generated content that blurs the line between legitimate research and sophisticated fabrication, rampant plagiarism facilitated by easily accessible digital content, and predatory journals that exploit the openness of publication channels for commercial gain.

Further, covert and aggressive data harvesting practices threaten to take down repositories, while the dual-use nature of open platforms can inadvertently facilitate unethical uses of openly shared research. Addressing these challenges demands rigorous governance, novel technical implementations such as advanced machine-learning classifiers to detect spam, and coordinated community-driven moderation policies.

In this session, we explore practical experiences and innovative solutions from managing Zenodo, a large-scale open science infrastructures, focusing on balancing openness with robust security measures. We discuss emerging practices to mitigate risks, enhance metadata quality, and uphold the credibility and fairness of open science systems. The presentation aims to engage the community in a critical discussion about proactive strategies and collaborative approaches to safeguard open science from exploitation.

#### **Tagline**

Keeping Open Science open - but not to spam, scams, and scholarly shams.

#### **Keywords**

Open science, spam, AI-generated content

**Author:** IOANNIDIS, Alex (CERN)

Co-authors: MACKENZIE, Carlin Kenneth; Ms ZULFIQAR, Fatimah (CERN); LAMBA, Yash; TAMARIT,

Pablo (CERN); NIELSEN, Lars Holm (CERN)

Presenter: IOANNIDIS, Alex (CERN)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

**Track Classification:** Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 125 Contribution code: T-RAS-CWS-125 Type: Workshop

## Collaborative Pathways to Responsible Research Assessment via Open Infrastructures

Tuesday 16 September 2025 14:00 (3h 45m)

Reforming research assessment has shifted from asking why to focusing on how. The proposed collaborative workshop addresses that challenge, specifically, how to turn CoARA policy principles into practice using infrastructures that are open, ethical, inclusive, and sustainable, by introducing and testing the Open Infrastructure Checklist, developed by the CoARA Working Group on Open Infrastructures for Responsible Research Assessment (OI4RRA). The checklist provides actionable guidance across four key dimensions: technical strength, operational excellence, community-led governance, sustainability, ethical and accountable practices.

The workshop aims to empower institutions and infrastructure providers to operationalize responsible research assessment (RRA) using a practical, principle-based checklist, while exploring how existing tools can support this transition. Participants will apply the checklist to three real-world infrastructures: OpenAIRE's Researcher Profile, a service for showcasing diverse research contributions, beyond traditional-publications model; the GraspOS catalogue of open data, tools, services, and templates for Open-Science-aware RRA, which utilises a metadata schema that complies with a draft specification developed by OI4RRA WG; and testing the ability to gather information from the checklist for Infra Finder from IOI, a catalogue of informational entries about open infrastructure tools and services, and provide feedback.

Working in small groups, participants will evaluate each of these infrastructures against the check-list in a participatory format, test the tool's usability and adaptability, identify gaps, strengths, and opportunities. This hands-on format encourages collaboration and critical reflection. Expected outcomes include a community-refined checklist, practical insights into infrastructure readiness, and a collaborative roadmap for broader institutional adoption and cross-organizational alignment in support of RRA.

#### **Tagline**

Open Systems. Shared success. Collective Impact.

#### Keywords

Responsible Research Assessment; Open Infrastructures; Open values; Open Principles; CoARA

Author: TZOUGANATOU, Angeliki (OpenAIRE)

Co-authors: Dr COLLISTER, Lauren (IOI); Dr VERGOULIS, THANASIS (ARC); Ms XENOU, Zenia

(OpenAIRE); Dr KUCHMA, Iryna (EIFL); MALAGUARNERA, Giulia

Session Classification: Rethinking Research Assessment

Track Classification: Rethinking Research Assessment

Contribution ID: 128 Contribution code: W-RAS-PRE-128 Type: Individual presentation

### Beyond journal metrics: Why it's time to embrace more meaningful methods of research assessment

Wednesday 17 September 2025 11:45 (30 minutes)

With the increasing popularity of preprints, there are ongoing discussions among the research community about the need to apply peer review to help readers navigate new findings. eLife adopted such an approach in 2023, when we launched our model for publishing. The outputs are Reviewed Preprints, which include the original preprint, public reviews and an eLife Assessment that conveys the significance of the findings and strength of evidence, allowing readers to judge the research based on its own merits rather than where it is published.

Due to our efforts to challenge the status quo in publishing, our indexing status in Web of Science changed last year, meaning eLife no longer receives an Impact Factor. This was followed by concerns that eLife papers would no longer count toward funding or career progression opportunities. We therefore spoke to funders and institutions globally to better understand their position, and reported that 95% of respondents still consider eLife papers when evaluating research contributions. Our conversations highlighted that there is less consideration for the Impact Factor than perceived by the research community, and signalled broad support for more open science practices —showing that it's time to move away from journal metrics in favour of more transparent and meaningful methods of assessment.

In this session, we will talk more about eLife Assessments, our conversations with the community and why it's time to embrace innovative approaches to research assessment that better serve science and scientists. We also invite further discussion and participation from the audience.

#### **Tagline**

This session will discuss eLife's approach to research assessment, our recent conversations with the community about eLife papers and the Impact Factor, and why it's time to move beyond journal metrics towards more open and meaningful methods of assessment.

#### Keywords

Preprints, Public review, Research assessment, Journal metrics

Author: Dr HUTTON, Fiona

Session Classification: Rethinking Research Assessment

Track Classification: Rethinking Research Assessment

Contribution ID: 132 Contribution code: W-INF-PRE-132 Type: Individual presentation

## OSTrails: Connecting Tools and Communities for a Federated Open Science Ecosystem

Wednesday 17 September 2025 11:45 (30 minutes)

The EU-funded OSTrails project is building a federated Open Science infrastructure by enabling researchers and institutions to discover, plan, track, and assess their work in transparent and interoperable ways. With 41 partners and 25 pilots—including cross-domain, national, and Horizon Europe testbeds—OSTrails is piloting the practical integration of over 80 interoperable tools and services. This diversity reflects the scale needed to support a truly federated Open Science ecosystem.

At the core of the project are two key enablers: a modular Interoperability Reference Architecture and a tool independent Plan-Track-Assess (PTA) framework. Together, these provide a shared foundation for aligning diverse research management services—from Data Management Planning platforms to Scientific Knowledge Graphs and FAIR assessment tools—across distributed infrastructures.

To ensure long-term impact, OSTrails has launched a comprehensive training and capacity-building programme, equipping research communities and service providers with the knowledge and tools to adopt and extend project outcomes. These efforts build on the co-designed pilots, which validate interoperability across varied institutional, disciplinary settings.

For researchers, OSTrails simplifies cross-institutional Research Data Management workflows and clarifies pathways to Open Science best practices. For service providers, it offers a practical model for aligning with EOSC while retaining domain-specific autonomy.

This presentation will showcase how OSTrails contributes to a federated EOSC ecosystem by delivering standards-driven solutions that prioritise interoperability and FAIRness as essential components of a sustainable and inclusive infrastructure, supporting both federation and the development of the Web of FAIR Data and Services.

#### **Tagline**

OSTrails delivers a federated, standards-based Open Science infrastructure by integrating over 80 tools through interoperable frameworks, supporting EOSC with scalable, FAIR-aligned solutions for research planning, tracking, and assessment.

#### **Keywords**

Federated Open Science Infrastructure

Author: Ms PAPADOPOULOU, Elli (Athena Research Center)

Co-authors: Dr HIENOLA, Anca (Finnish Meteorological Institute); Dr FURCILA, Diana (Spanish

Foundation for Science and Technology); Mr STAVROPOULOS, Tassos (OpenAIRE)

**Presenter:** Ms PAPADOPOULOU, Elli (Athena Research Center)

Session Classification: Building the Digital Backbone: Open Science Infrastructures

OSTrails: Connecting Tools and  $\cdots$ 

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 133 Contribution code: -133 Type: Poster

### An Immersive Open Science Experience for Student Researchers

For Open Science advocates in universities, guiding students through their first research experience is a privileged educational opportunity. Despite their expertise with advanced research resources and tools, academic librarians may, however, miss these opportunities when there lacks space for focused Open Science instruction This submission will highlight and demonstrate a course model for librarians to transfer their Open Science expertise to students who are new to research. In this model, students learn research fundamentals while simultaneously incorporating Open Science principles throughout the research lifecycle. Students fully immerse in this experience with research output assessments, where they compare two different paths of research dissemination for the same subject sample. In these assessments, students review the accessibility, understandability, and reproducibility of both a closed and open output at each research lifecycle stage. Outputs include research notes, article collections, data, and code. Along with these activities, students simultaneously apply classroom skills to create their own open, reproducible research on chosen topics of interest. Students finish the course by presenting digital posters archived on Open Science Framework. This final deliverable both outlines project outcomes and links to each open research output created during the process. With this immersive and hands-on model, librarians can advance students' understanding of research practices while empowering them to create open, reproducible research products.

#### **Tagline**

Empowering students through immersive Open Science adoption: A librarian-centered course model where novice researchers compare closed and open outputs while creating their own transparent, reproducible research products.

#### **Keywords**

Librarian, Open Science, Education, Course Model

Author: GRIEGO, Chasz (Carnegie Mellon University Libraries)

Session Classification: Poster & Demos Sessions

**Track Classification:** Open Science for All: Skills & Community

Contribution ID: 136 Contribution code: -136

Type: **Demo** 

ARGOS in Action: A Demo on C ...

## ARGOS in Action: A Demo on Challenging Traditional Data Management Plans with Blueprints

Research today produces an expanding array of data, software, and workflows managed across diverse services and organizational environments. This growing complexity poses challenges for research support teams aiming to implement consistent, policy-aligned practices for Open Science and FAIR data management.

OpenAIRE addresses this need with ARGOS (argos.openaire.eu), a solution designed to streamline research output management from the planning stage. At its core is the Blueprint: a layered model for Data Management Planning (DMP) that connects funder and institutional policies, stakeholder roles, research outputs, and services, accommodating collaboration across teams and contexts.

ARGOS functions both as a form-based DMP tool with curated templates, and as a component embedded in research administration workflows, enabling cross-team governance, versioning, and review. With active contributions and leadership in the Research Data Alliance, TIER2, and OSTrails projects, ARGOS co-defines and implements common standards to automate certain Research Data Management (RDM) processes and enhance interoperability across the research lifecycle.

This poster and demo showcase ARGOS use cases using the Blueprint concept. It challenges the traditional DMP concept and expected format to improve the structure and content in a way that: a. better reflects common versus individual RDM practices and policies followed by project participants;

- b. static DMP documents become dynamic, FAIR and queryable outputs;
- c. advances reproducibility and research integrity.

We demonstrate how ARGOS supports data stewards and policy-makers in embedding good data practices at scale, helping institutions and funders guide researchers toward responsible science and innovation.

#### **Tagline**

This demo showcases how ARGOS and its Blueprint model turn traditional Data Management Plans into structured, connected, and reusable tools—aligning policies, teams, and services to support FAIR, collaborative, and effective research output management.

#### **Keywords**

Demonstration; ARGOS; Data Management Plans (DMPs); Reproducibility

Authors: PAPADOPOULOU, Elli; KONTOPIDI, Maria

Co-authors: KAKALETRIS, Georgios; TZIOTZIOS, Diamantis

**Session Classification:** Poster & Demos Sessions

**Track Classification:** Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 137 Contribution code: T-SKI-PAN-2-137 Type: Panel

### **Data for AI: From Readiness to Ethics**

Tuesday 16 September 2025 16:15 (1h 30m)

As Artificial Intelligence becomes increasingly integrated into the research lifecycle and transforms the research landscape, achieving AI readiness is a key priority. Ensuring high quality, accessible data and workforce preparedness are fundamental to enabling responsible AI-driven innovation. However, gaps remain in data readiness, standards, and AI-specific training.

Alongside initiatives addressing the question of data readiness for AI, efforts have been underway to support those in policy and governance to respond to AI developments. This panel will discuss the key findings and recommendations on AI readiness drawing from a series of workshops organised by the Research Data Alliance (RDA) and roundtable discussions held in coordination with RDA and Microsoft. It will highlight the series of publications from the AI and Data Visitation Working Group, an RDA TIGER-supported Group, which has provided detailed, implementable AI-related guidance on informed consent, ethical review, and a framework for an AI Bill of Rights.

The discussion will address these key topics and respective findings while providing insights into ongoing developments in the ethical, human rights, and regulatory contributions to AI governance in the European digital research environment, with particular reference to the European Commission's 'A European strategy for AI in science' within its overall AI Continent Action Plan. The discussion will show how these contexts are related to cross-border and cross-regional developments in AI governance with inclusion of the recent ACHRP's 'Study on human and people's rights and artificial intelligence, robotics, and other new and emerging technologies'.

#### **Tagline**

A discussion on community-driven considerations for data readiness and the policy environment for AI-driven research.

#### Keywords

AI, ethics, data, governance, data visitation, AI readiness, skills

**Authors:** DELIPALTA, Alexandra (RDA Association AISBL (RDA Europe)); Prof. MEYERS, Natalie (University of Notre Dame); Prof. EKMEKCI, Perihan Elif (TOBB ETU)

**Presenters:** DELIPALTA, Alexandra (RDA Association AISBL (RDA Europe)); Prof. MEYERS, Natalie (University of Notre Dame); Prof. EKMEKCI, Perihan Elif (TOBB ETU)

**Session Classification:** Open Science for All: Skills & Community

Track Classification: Open Science for All: Skills & Community

Contribution ID: 138 Contribution code: T-IMP-PRE-1-138 Type: Individual presentation

## Assessing Open Science Policy Landscapes in the EU: A Socio-Epistemological Evaluation

Tuesday 16 September 2025 12:00 (30 minutes)

This presentation delivers a critical policy assessment of national Open Science (OS) strategies and policies across selected EU Member States, examining their alignment with, and divergence from, supranational frameworks, particularly EOSC and broader EU digital agendas. Drawing on socio-epistemological theory and a critical analysis of policy and infrastructural dependencies within the EU, it explores how national approaches negotiate the balance between epistemic autonomy, institutional capacity, and compliance with common standards.

The assessment applies an evaluation framework, encompassing: the existence of national OS instruments (strategy, action plan, monitoring), thematic coverage (open access, open data, education, etc.), stakeholder engagement, legal enforceability, implementation mechanisms, degree of EOSC/EU alignment, incorporation of research assessment reform, evidence-informed policy development, and reliance on national strategic frameworks and development priorities. Countries are evaluated qualitatively, based on policy documents and data sourced from the EOSC Observatory and official national portals. The assessment framework also considers the SMART criteria. Croatia is presented as an in-depth case study of a still-emerging policy ecosystem. The analysis includes the 2023 Draft National OS Plan. Complementing this, the presentation introduces original survey results on OS awareness and perceptions among Croatian researchers and students covering all major OS components conducted throughout 2024 and 2025 with the aim of producing a white paper to inform future policymaking.

#### **Tagline**

A critical policy assessment of Open Science strategies across EU Member States using a multidimensional framework, with a focus on Croatia as a case study. Includes survey results and analysis of national policy gaps, infrastructure dependencies, and alignment with EOSC and EU priorities.

#### Keywords

National Open Science strategies ; Policy assessment ; Research assessment reform ; Science diplomacy

**Author:** HOIĆ, Maja (Institute for Development and International Relations)

**Presenter:** HOIĆ, Maja (Institute for Development and International Relations)

Session Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

pact

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Contribution ID: 140 Contribution code: W-RAS-PRE-140 Type: Individual presentation

## Who Watches the Watchers? Rethinking Open Science Monitoring

Wednesday 17 September 2025 11:15 (30 minutes)

As the open science movement gains momentum, we face a critical paradox: the very frameworks designed to promote transparency and accessibility risk perpetuating the same power imbalances they aim to dismantle. This talk explores the uncomfortable truth about how current monitoring approaches in open science often mirror colonial knowledge production patterns, with the Global North continuing to set standards and metrics for the entire scientific community.

I examine how well-intentioned monitoring frameworks can inadvertently reinforce existing hierarchies in knowledge production. While we generate volumes of "open" research about equity and inclusion, many of these efforts remain tethered to institutions that paradoxically contribute to global inequities. The talk challenges us to move beyond superficial metrics and performative inclusion, advocating instead for a decolonial approach that centres on epistemic justice and acknowledges historical power imbalances in knowledge production.

I propose shifting our focus from quantifying outputs to supporting authentic dialogue about research practices and their broader societal implications. This perspective invites us to critically examine who holds the power to define and measure "openness" in science, and how we might reimagine monitoring frameworks to truly serve the global scientific community.

#### **Tagline**

Drawing from the AIM programme's experience, we discuss practical ways to improve patient and public engagement in academic health research, highlighting the need for proper resources, skills, and institutional support.

#### **Keywords**

power imbalances, monitoring frameworks, performative inclusion

**Author:** M, Batool

**Session Classification:** Rethinking Research Assessment

Track Classification: Rethinking Research Assessment

Contribution ID: 142 Contribution code: W-INF-PRE-142 Type: Individual presentation

### Open Science Infrastructures: The Case of Austrian RDM Policies

Wednesday 17 September 2025 10:45 (30 minutes)

The initiative of the European Research Area (ERA) aims at creating a unified research and innovation space across Europe. One of the key objectives of ERA is to promote open access to research results and data, thus encouraging transparency, reproducibility, and wider dissemination of knowledge. In order to achieve an alignment with this ERA objective (and others), the European Research Area National Action Plan (ERA-NAP) supports the individual EU member states to contribute to a European Open Science infrastructure.

In this way, national measures for an open science infrastructure are promoted, which ultimately aim to create an open science infrastructure within a European framework. Open Science policies are the means of choice for the creation of such a structure at national level –because only they guarantee the joint endeavour to bundle the interests and needs of all stakeholders.

In my presentation, I outline the goals and challenges of working on such a national Open Science policy using the example of research data management in the Austrian Higher Education Area, which a working group of the Austrian University Conference has addressed, in line with the ERA-NAP. How do different types of universities define research data? What restrictions regarding openness do they wish to reserve for themselves - and for what reasons? Up to what point can a framework policy form a common ground –and at what point should individual standards be applied?

#### **Tagline**

This presentation outlines the objectives and challenges of working on a national policy for open research data using the example of the Austrian Higher Education Area in line with the objectives of the European Union.

#### **Keywords**

Open Science Infrastructure; Open Science Policies; Open Research Data; case study

Author: WAWRUSCHKA, Celine

Session Classification: Building the Digital Backbone: Open Science Infrastructures

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 143 Contribution code: -143 Type: Poster

# Advancing Research Assessment Through Knowledge-Based Infrastructure: Lessons from MERIT Project

#### Abstract:

The MERIT Portal is pioneering digital infrastructure designed to transform professorial recruitment at Charité –Universitätsmedizin Berlin. The portal embeds Open Science principles and makes narrative-based assessment practices more fair, transparent, and robust. Unlike conventional systems, MERIT not only guides applicants in presenting their academic achievements—emphasizing impact, Open Science, team contributions, and contextualized academic age—but also provides an innovative assessment tool for reviewers. This dual function supports structured, quality-oriented and bias-aware assessments, setting MERIT apart as a platform that advances both applicant presentation and reviewer decision-making. In doing so, the portal helps to institutionalize responsible research assessment aligned with international frameworks such as DORA and CoARA.

#### Motivation:

Institutional research assessment reform is thriving at the policy level but often lacks operational tools for implementation in the existing organizational workflows. Knowledge-based infrastructures like MERIT play a critical role in enabling practical, sustainable reform. By embedding evidence-informed criteria and promoting new standards of transparency, inclusivity, and societal relevance, MERIT showcases how digital infrastructures can catalyze culture change from within academic institutions.

#### Contributions:

We present the MERIT Portal's integrated structure, highlighting its three modules (Application Tool, Assessment Tool, and Management Tool) and discuss its alignment with institutional strategies (Charité Strategy 2030; BIH Strategic Research Program 2023–2027) and international best practices. We further reflect on the portal's pilot phase, offering insights into its continuous development, first results from the program evaluation and its broader implications for shaping research assessment. Furthermore, the proposal will report relevant steps of organizational implementation and discuss challenges.

#### **Tagline**

I am the project lead and product owner of MERIT portal. I am responsible for the design, and research behind MERIT Portal as a knowledge-based infrastructure.

#### Keywords

#### research assessment reform #infrastructure

**Authors:** Dr ARANCIO, Julieta; KIP, Miriam (Berlin Institute of Health QUEST Center for Responsible Research)

**Session Classification:** Poster & Demos Sessions

Track Classification: Rethinking Research Assessment

Contribution ID: 144 Contribution code: W-RAS-PAN-144 Type: Panel

## Ethics first: rethinking research assessment in the age of AI and open science

Wednesday 17 September 2025 13:45 (1h 30m)

As artificial intelligence (AI) and open science reshape research practices and outputs, the need for ethical, reliable, and transparent research assessment has become urgent for academia and science. Traditional evaluation models focused on impact factors, citations, and rigid disciplinary boundaries are increasingly misaligned with open science, open innovation, and the evolving digital research landscape.

This panel, hosted by the CoARA Working Group on 'Ethics and Research Integrity Policy for Responsible Research Assessment in Data and Artificial Intelligence (CoARA-ERIP)', will explore how ethics-based frameworks for digital research contributions can guide the transformation of research assessment systems with the evolving ethics and regulatory frameworks for data and AI. The discussion will reflect on practical tools and policy solutions emerging from CoARA-ERIP's workstreams, with particular attention to evaluating AI-generated content, assessing interdisciplinary contributions, and ensuring responsible qualitative and quantitative criterium that reflect integrity, equity, and societal relevance.

The panel brings together a transdisciplinary and diverse panel who have contributed to the development of ethics, integrity, and data governance through CoARA-ERIP and other European and global initiatives. They will share diverse institutional and international experiences, outline ethical risks and opportunities in digital research evaluation, and engage the audience in dialogue about implementing more just and reflective assessment systems. This session with short presentations and interactive audience participation will be especially relevant for institutions, funders, and open science stakeholders developing new evaluation frameworks that keep pace with digital technologies in science and education while addressing the needs of our evolving digital societies.

#### **Tagline**

This panel explores how CoARA-ERIP is developing ethics-based frameworks for responsible research assessment in AI and Open Science, focusing on ethics, reliability, and scientific and social inclusiveness in evaluating digital, data-intensive, and AI research outputs.

#### **Keywords**

ethics; research assessment; AI; open science

**Authors:** Mr CRAWLEY, Francis P. (CoARA Ethics and Research Integrity Policy Working Group on Responsible Research Assessment in Data and Artificial Intelligence (CoARA-ERIP)); Prof. DE SOUSA FREITAS, Mara (Director of the Institute of Bioethics of the Universidade Católica Portuguesa (IB-UCP)); Prof. EKMEKCI, Perihan Elif (Associate Professor, Deputy Dean, and Head of the History of Medicine and Ethics Department, School of Medicine, TOBB ETU)

**Presenters:** Mr CRAWLEY, Francis P. (CoARA Ethics and Research Integrity Policy Working Group

on Responsible Research Assessment in Data and Artificial Intelligence (CoARA-ERIP)); Prof. DE SOUSA FREITAS, Mara (Director of the Institute of Bioethics of the Universidade Católica Portuguesa (IB-UCP)); Prof. EKMEKCI, Perihan Elif (Associate Professor, Deputy Dean, and Head of the History of Medicine and Ethics Department, School of Medicine, TOBB ETU)

Session Classification: Rethinking Research Assessment

Track Classification: Rethinking Research Assessment

Contribution ID: 149 Contribution code: T-SKI-PRE-149 Type: Individual presentation

### Nudging Scientists into adopting Open Science Practices

Tuesday 16 September 2025 14:30 (30 minutes)

While funding agencies typically require data management plans for project proposals, this does not guarantee the eventual availability of Open Research Data (ORD) that adheres to the FAIR principles. In reality, only a small fraction of funded projects fulfills these commitments, primarily because providing ORD demands additional effort. Often, this effort occurs only after the publication of research results. Large international collaborations, such as the CMS Collaboration at CERN's Large Hadron Collider, face similar challenges. There is concern that requiring the sharing of analysis code and ensuring the reproducibility of research products could delay publication. However, an increasing number of scientists within CMS are adopting Open Science (OS) practices as part of their daily work. In my presentation, I will illustrate how a small group of OS advocates has successfully made these practices appealing to the community, transforming bystanders into OS practitioners. I will also review the vital role of infrastructure providers —specifically CERN as the host laboratory —in facilitating these efforts. Additionally, I will link my argument to CERN's OS policy and the recently developed best practice recommendations for OS and data preservation in high-energy physics. Ultimately, I will propose how these policies and recommendations can be adapted to benefit OS in other laboratories and research disciplines.

#### **Tagline**

Explore how a small group of Open Science advocates can transform research practices for an entire community. Discover the vital role of infrastructure and policy in promoting Open Research Data and reproducibility, and learn how these insights can benefit diverse research disciplines globally.

#### **Keywords**

Open Science Advocacy; Community Engagement in OS; OS Policies and Recommendations in Particle Physics

Author: LANGE, Clemens (Paul Scherrer Institute (CH))

Session Classification: Open Science for All: Skills & Community

Track Classification: Open Science for All: Skills & Community

Contribution ID: 151 Type: Poster

## DIRNA Project Marks a Turning Point For Open Science in Azerbaijani Universities

The poster presents the objectives and scope of the DIRNA project, a collaborative effort to improve research output management and accessibility in Azerbaijani HEIs through Open Access Institutional Repositories. By fostering collaboration, building capacity for Open Access to Institutional Repositories, and providing open science training, DIRNA is empowering Azerbaijani universities to showcase their research and contribute more effectively to the global knowledge ecosystem. Goals of the Open Science training:

- Strengthen collaboration and cultural dialogue among partner universities.
- Provide a comprehensive overview of Open Science
- Introduce key Open Science infrastructure and services
- Assess the importance of open science and tailored citizen services. Stimulate innovation through transparency, accessibility, reusability, and availability.
- Expand interdisciplinary approaches in a multicultural context.

#### **Tagline**

This poster will be useful in showing Open Science related work outside Europe. DIRNA is a partnership between 8 Azerbaijani and 3 EU universities to build open-access repositories and advance open science in Azerbaijan

#### **Keywords**

Open Science, Open Access, Institutional Repositories, DIRNA, Infrastructures

**Author:** GURDAL, Gultekin

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 156 Contribution code: -156 Type: Poster

## **Enhancing Research Reproducibility: TIER2's Integration with the European Open Science Cloud**

The reproducibility crisis presents a significant challenge in modern science, with researchers worldwide struggling with issues of transparency, data management, and methodological consistency. TIER2, a three-year project funded jointly by the EU and UKRI, addresses these challenges through a multi-faceted approach.

At the heart of TIER2 are eight strategic pilot activities, each designed to tackle specific aspects of the reproducibility challenge. These pilots focus on developing practical tools and methodologies for managing digital research objects throughout their lifecycle, from initial data collection through analysis, publication, and long-term preservation. Through our co-creation approach, we bring together researchers, funders, and publishers to ensure solutions that are both technically robust and practically implementable.

Building on this foundation, TIER2 serves as a crucial bridge between grassroots reproducibility initiatives and large-scale Open Science infrastructures like the European Open Science Cloud (EOSC).

As we approach project completion, we present our mature solutions including: planning and management tools with decision aid and reproducibility management plans; implementation support through reproducible workflows and monitoring tools; and institutional guidelines featuring funders' promotion plans and editorial tools to strengthen institutional support for reproducibility.

These developments directly support EOSC's mission by providing practical tools for researchers while addressing the needs of infrastructure providers, publishers, and funders, ultimately advancing the cause of open, reproducible science.

#### **Tagline**

We present TIER2's tools, methodologies, and guidelines that empower researchers, funders, and service providers to conduct more transparent and reproducible science.

#### **Keywords**

Reproducibility, Transparency, Integrity, EOSC

**Author:** AMODEO, Stefania (OpenAIRE AMKE)

Session Classification: Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 158 Contribution code: -158 Type: Demo

## A national federated Science Data Platform for FAIR fundamental physics research at large research infrastructures

The objective of Open Data is on one hand to produce trust in science and scientists among the general public. On the other hand to enable the reuse of data for further analyses and better exploitation. Open Data itself does not necessarily allow the reuse of data –to this end, resources (like e.g. storage and compute) as well as appropriate software and metadata are needed.

PUNCH4NFDI, a consortium in the German National Research Data Infrastructure (NFDI), develops a Science Data Platform which integrates several resources and services necessary for the reuse of data from astronomy, astrophysics, astroparticle physics, particle physics, hadron and nuclear physics. To this end, the consortium builds wherever possible on the experience, existing services and tools of the different scientific communities and extends these or develops overarching layers wherever necessary.

In this demo we show how different elements of the Science Data Platform, provided and in parts also developed by PUNCH4NFDI partner institutions in Germany, can be used by means of one example of a joint particle physics analysis of ATLAS and CMS Open Data. The workflow is submitted via the workflow engine ReAna, executed on Compute4PUNCH (federated compute resources), and reads the data, which was previously transformed to a common format, from Storage4PUNCH (federated storage resources).

#### **Tagline**

This demo shows the joint analysis of ATLAS and CMS Open Data on the Science Data Platform developed by PUNCH4NFDI which provides access to federated compute and storage resources and a workflow engine via single sign-on. This allows very low-threshold access to complex particle physics analyses.

#### Keywords

PUNCH4NFDI, federated national infrastructure, LHC

Author: SCHNEIDE, Christiane (DESY, PUNCH4NFDI)Session Classification: Poster & Demos Sessions

**Track Classification:** Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 159 Contribution code: -159 Type: Poster

## The Data Citation Corpus: Collaboratively advancing the evaluation of the impact of open data

Data citations provide insights into the use of open data, but tracking connections between journal articles and datasets remains challenging and time-consuming, as many citations are missing from structured metadata or remain locked in closed systems. This limits our understanding of the impact of open data, and hinders inclusion of open data in research assessment.

To address this, Make Data Count is developing the Data Citation Corpus, a large, open collection of data citations identified through multiple methods. The Corpus goes beyond citations collected via article references and dataset metadata, to also incorporate mentions to data identified by full-text mining of articles using machine-learning methodologies. This approach scales the number of data citations without imposing additional burden on researchers, repositories, publishers, or evaluators.

The Corpus includes 5 million citations from DataCite Event Data, Chan Zuckerberg Initiative, and Aligning Science Across Parkinson's, incorporating datasets with DOIs and accession numbers. The store of data citations is available under a CC0 license, and can be explored via an interactive dashboard: https://corpus.datacite.org/dashboard. The Corpus has been used by groups and organizations to explore the use of datasets, including the State of Open Data report, Northwestern University, and University of Colorado Boulder.

We will report on our progress on the Data Citation Corpus to include citations from additional sources, the latest developments in machine-learning methodologies to identify data mentions, and examples from the applications of the Corpus to gain insights into the impact of open data.

#### **Tagline**

Charting the impact of open data: The Data Citation Corpus unlocks millions of data citations to advance understanding and evaluation of the use of open data.

#### Keywords

Open data, machine learning, data citations, research evaluation

**Author:** PUEBLA, Iratxe

**Session Classification:** Poster & Demos Sessions

Track Classification: Beyond Compliance: Measuring and Maximizing Open Science Im-

pact

Contribution ID: 160 Contribution code: -160 Type: Poster

### The European Diamond Capacity Hub: Empowering the Diamond OA community

The European Diamond Capacity Hub (EDCH) is a collective designed to strengthen the Diamond Open Access (OA) community in Europe. It offers open, FAIR-aligned services, tools and best practices through a dedicated online platform, providing targeted support, training, and networking opportunities to Diamond OA community members.

Diamond Discovery Hub (DDH): An authoritative index of Diamond OA journals helping authors, libraries, funders, and research assessment bodies identify trustworthy journals.

Diamond Open Access Standard and self-assessment tools: A quality assurance framework to assess compliance with best practices.

Publishing tools: A set of tools and add-ons to optimise publishing workflows, improve content management, and uphold editorial quality.

Registry and Forum: A registry of Diamond OA publishers, service and tools and technology providers and a forum for collaboration and shared solutions to promote integrity and transparency in scholarly publishing.

Resources & Guidelines: A comprehensive set of materials supporting publishers transitioning to Diamond OA, including best practices and sustainability.

Training Platform: Targeted learning modules that equip editors and publishers with the knowledge to implement best publishing practices and maintain research integrity.

This demo session will include a live walkthrough of the EDCH platform, focusing on available key features. Participants will be able to explore the tools and resources, ask questions, and register directly. The session is designed to encourage discussion and collaborations, facilitate idea exchange, and help build a collaborative community that empowers its members.

The EDCH promotes equity, integrity and transparency in scholarly publishing, ensuring that high-quality research remains accessible and sustainable for all.

#### **Tagline**

A collective for the community and driven by the community

#### Keywords

collaboration, Diamond OA, community, open infrastructure

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Session Classification: Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Poster

Contribution ID: 168 Contribution code: -168

# Target group-specific approach of NFDI4Chem: Strategies to increase openness in the chemistry community

In the context of growing demands for research integrity and accessibility, NFDI4Chem, the chemistry consortium within the German National Research Data Infrastructure (NFDI), is leading the effort to enhance research data management (RDM) and infrastructure in the chemical sciences.

Our approach employs target group-specific strategies to foster openness and implementation of open science principles at various levels within the chemical research community. Recognising the unique needs and influences of each subgroup, the consortium has developed a comprehensive training and communication strategy that is underpinned by the continuous collection of community feedback through regular surveys and direct interaction at conferences or workshops.

A particular focus is placed on integrating data literacy into the curriculum to equip students for modern chemical research challenges. The close collaboration with educators and sharing best practices are key elements of this approach.

PhD candidates and postdoctoral researchers, who are active data producers, benefit from modular workshops on RDM basics and Chemotion ELN, an electronic lab notebook designed for chemists.

The communicative approach here is cross-media with a digital focus.

Acknowledging the pivotal role of professors and principal investigators in fostering a culture of openness, NFDI4Chem engages in networking and conferences to promote data sharing.

NFDI4Chem's collaboration with various stakeholders, including national (e.g. GDCh, Bunsen Society) and international organisations (e.g. IUPAC, RDA, PSDI-UK) as well as chemistry journal editors, amplifies our impact and promotes a global standardisation. Through these efforts, NFDI4Chem advances a culture of openness and adherence to FAIR data practices within the chemistry research community.

#### Tagline

NFDI4Chem leads in enhancing chemistry research data management and open science principles, through comprehensive training, community engagement, and global collaboration to foster a culture of openness and FAIR data practices.

#### **Keywords**

Chemistry, Community Engagement, RDM Training, Best Practice

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Session Classification: Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 169 Contribution code: -169 Type: Poster

# Beyond institutional boundaries: BioNT's collaborative model for open science digital skills training

The BioNT consortium demonstrates how strategic collaboration across sectors accelerates open science (OS) skills development in the biotechnology and biomedical domains. Uniting nine academic and industry partners from four European countries, BioNT bridges the gap between academic expertise and industry needs to create effective digital skills training for job seekers and SME employees.

During this conference, we will share how BioNT actively integrates with established OS communities to accelerate our impact: By partnering with The Carpentries, Galaxy Training Network, CodeRefinery, and ELIXIR, BioNT has amplified its impact through shared resources and methodologies while contributing back to these communities. As an example, we will share BioNT's ongoing collaborative development of a semi-automated translation framework that enables community members to adapt training materials into German, Spanish, and Italian, significantly extending the reach of OS training resources across linguistic boundaries.

The 2024 BioNT Community Event & CarpentryConnect exemplifies this collaborative approach. This joint event brought together 97 participants from 17 countries and 63 institutions, fostering cross-pollination of ideas between trainers, researchers, and industry professionals. Additionally, the Ambassador Programme transforms participants into advocates who facilitate knowledge exchange between their local communities and the broader bioinformatics ecosystem.

Impact metrics validate this collaborative model: across two curriculum iterations, BioNT has trained over 500 participants, with significant improvements in learner outcomes and industry engagement in the second iteration following collaborative refinement.

BioNT demonstrates that by transcending traditional institutional boundaries and fostering community connections, OS training initiatives can create more inclusive, sustainable, and impactful educational ecosystems.

#### **Tagline**

BioNT demonstrates how strategic cross-sector collaborations with established open science communities can create sustainable training ecosystems that transcend institutional boundaries, delivering impactful digital skills training for biotechnology and biomedical professionals across Europe.

#### **Keywords**

Community-led training, Cross-sector collaboration, Digital skills in bioinformatics, Open science communities

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**Session Classification:** Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 170 Contribution code: -170 Type: Poster

# The ETH Domain's Data Management Campus: Co-Creating Open Research Data Skills Across Switzerland

The ETH Domain –comprising four federal research institutes and two technical universities – supports a Swiss-wide programme for Open Research Data (ORD), with initiatives to improve research data practices across the Confederation. Our project focuses on strengthening researchers' skills in Research Data Management (RDM), a foundational but often overlooked element of Open Science.

To promote a shared vision and foster FAIR (Findable, Accessible, Interoperable, Reusable) data practices, we co-create Open Educational Resources (OER) with the ETH Domain research community. This poster presents the **Data Management Campus**, an ecosystem of open training materials on RDM practices, designed to strengthen ORD skills across Switzerland.

#### Key highlights include

**Modular, Self-Paced Learning**: Hosted on the SwissMOOC platform (based on Open edX), the Data Management Campus offers ten interactive, 30-minute modules covering best practices across the research data lifecycle. These are openly licensed and adaptable for reuse in higher education institutions throughout the Swiss research landscape.

**User-Centric Approach**: A filterable training portal (open-research-data-portal.ch/training) enables users to browse learning resources by topic, format, and institution –enhancing discoverability for researchers, students, and support staff.

**Community-Driven Sharing**: The ETH Domain's Zenodo OER RDM Community supports transparent dissemination, reuse, and collaborative curation of training materials, expanding beyond the e-learning modules. This community targets both researchers and trainers.

We invite OSFair participants to explore this practical model for a nationwide collaboration that builds RDM skills through accessible, modular training, and to gain insights into a community-driven learning ecosystem that leverages open-source platforms and OER.

#### **Tagline**

A collaborative initiative led by ETH Domain institutions to build capacity in Open Research Data management in Switzerland through open, modular training and shared learning resources.

#### Keywords

Research Data Management, FAIR data, Training, Open Education Resources

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(Lib4RI); Dr VARRATO, Francesco (EPFL)

**Session Classification:** Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 172 Contribution code: -172 Type: Poster

### **Shaping the future of Research Software Quality: The EVERSE Network**

EVERSE is a project in the scope of the European Open Science Cloud (EOSC) which focuses on elevating the recognition and acknowledgement of research software engineering.

The consortium brings together expertise from diverse scientific fields that use programming for their research, across the EOSC Science Clusters: astronomy and particle physics, photon and neutron science, environmental sciences, social sciences and humanities, and life sciences.

A central initiative is the development of the Network for Research Software Quality, which unites key stakeholders including research software engineers, researchers, policy makers, students, and industry partners. This Network facilitates knowledge exchange, best practices sharing, and collaborative problem-solving in research software development.

EVERSE connects professionals in the Network and researchers across the EOSC Science Clusters to provide a comprehensive collection of best practices, tools, and services for Research Software Quality (RSQ), co-creating a RSQkit toolbox for practical solutions for common challenges in research software quality, making FAIR principles actionable in everyday research software development.

This poster presents the Network's structure, early achievements, and future roadmap, highlighting how EVERSE is fostering a culture of quality in research software development across European research institutions.

#### **Tagline**

EVERSE aims at increasing the visibility and acknowledgement of research software engineering. With the EVERSE Network the project wants to connects RSE professionals across all fields in a virtual space where they share and exchange expertise on Research Software Quality

#### **Keywords**

research software quality, recognition, training, toolkit

Authors: FENKART, Sanje Antona; AMODEO, Stefania (OpenAIRE AMKE)

Session Classification: Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 173 Contribution code: -173 Type: Poster

# Security Meets Open Science. An Integrated Self-Assessment Tool for Responsible Research Data Management

"Should I openly share my algorithm on drone navigation?"; "Does my ethnographic research endanger me and my subjects?" Security is increasingly endorsed as a principle that should underpin all research practices. Even if this concept appears to contrast with the core values of Open Science (OS), we argue that security and OS should coexist thanks to proper research data management (RDM). Specifically, adequate RDM increases the researchers' accountability from both OS and security perspective. Thus, an integrated approach becomes necessary to raise awareness among researchers of the challenges involved in aligning security concerns with OS values. In this poster, we operationalize this approach by providing a tool for researchers's elf-assessment. Namely, we enhance the decision tree for RDM developed by the data stewards at the University of Bologna. The decision tree proved to be a valuable instrument for raising awareness of the balance between FAIR (Findable, Accessible, Interoperable and Reusable) data principles with the specific ethical, legal and contractual requirements around new and re-used data. We enrich the tree by adding security-related questions, which we define by thinking through two challenging case studies eliciting security concerns: First, dual-use research in the case of algorithms for drone navigation; Second, anticorruption research in dangerous contexts. In doing so, the decision tree becomes the single -integrated -instrument to lay the foundations of responsible RDM. Similarly, we envision data stewards as single points of contact within research services to strengthen accountability in research practices through responsible RDM.

#### **Tagline**

We introduce an updated research data management decision tree –developed through case study insights –to help researchers align Open Science practices with security concerns and strengthen accountability in sensitive research contexts.

#### **Keywords**

Research Security; FAIR; Research Data Management; Self-Assessment Tool

Authors: CALDONI, Giulia (University of Bologna); GUALANDI, Bianca (University of Bologna); MARINO,

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Presenter: VASONE, Filippo (University of Bologna)Session Classification: Poster & Demos Sessions

Track Classification: Open, but at What Cost? Research Security & Open Science

Contribution ID: 174 Contribution code: -174 Type: Demo

### Unlocking Open Science: A Demonstration of the EOSC EU Node in Action

Unlocking Open Science: A Dem · · ·

This demo showcases the EOSC EU Node, the inaugural European-level operational node of the European Open Science Cloud Federation. It highlights its capabilities to facilitate cross-border, interdisciplinary, and FAIR-compliant research through a secure, federated digital infrastructure. Conceived to address fragmentation within the European research landscape, the EOSC EU Node integrates services for data discovery, collaborative computing, identity management, and resource access, employing a user-centric, policy-aligned, and standards-based architecture.

The demo will showcase how researchers can effortlessly log in using institutional credentials, access datasets and tools via the Resource Hub, and execute on-demand computations or interactive notebooks within the EOSC EU Node User Space—all while adhering to the GDPR and FAIR data principles. A particular emphasis will be given on how the EOSC EU Node facilitates smaller institutions, citizen science initiatives, and transdisciplinary collaborations by mitigating technical and infrastructural barriers.

Motivated by the need for a trusted and inclusive research environment, the EOSC EU Node offers a blueprint for future national and thematic nodes, fostering a more integrated European Research Area. This demo will illustrate key use cases, early user feedback, and pathways for service onboarding —inviting engagement from researchers, service providers, and policymakers alike. Visitors will explore live interfaces, try-out workflows, and understand how their institutions or communities can connect to the EOSC ecosystem. The EOSC EU Node demo embodies Europe's vision for open, digital, and collaborative science.

#### **Tagline**

A live demonstration of the EOSC EU Node—showcasing how federated services, FAIR data, and cloud tools empower cross-border, open science collaboration across Europe.

#### **Keywords**

EOSC EU Node, research collaboration, federated infrastructure

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innovation Center)

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Poster

Contribution ID: 176 Contribution code: -176

### Fostering Open and FAIR Educational Resources in Danish University Libraries

Over the past two years, we have investigated the opportunities and challenges associated with developing Open Educational Resources (OER) within the context of Danish university libraries. Through a combination of workshops, storytelling sessions, and surveys, we examined staff awareness of—and engagement with—the OER platform LearningLib across the Royal Danish Library network, including the University Libraries of Copenhagen (KUB), Roskilde (RUB), and Aarhus (AUL).

Our aim is to align with the universities' current strategies for innovation in teaching and learning by designing professional development initiatives that support the implementation of FAIR-by-Design workflows in OER across institutions. These workflows integrate the FAIR principles—Findable, Accessible, Interoperable, and Reusable—into the creation of educational materials and outreach activities related to Open Science. By offering in-house training tailored to staff, we aim to foster a sustainable FAIR culture that promotes the recognition, reuse, and sharing of learning resources.

Our findings point to significant cultural challenges in the sharing and dissemination of educational materials, revealing barriers to establishing a sustainable FAIR culture. These include uncertainties around intellectual property rights, concerns about the quality and reusability of shared content, and uneven levels of digital literacy among staff.

This work contributes to the evolving field of Open Education by providing practical insights and actionable strategies for embedding FAIR-by-Design principles into the development and dissemination of educational resources within academic institutions.

#### **Tagline**

Exploring FAIR-by-Design workflows in Danish university libraries to foster a culture of sharing, reuse, and recognition in Open Educational Resources. Through staff training and collaboration, we integrate FAIR principles to support innovation in teaching and learning.

#### **Keywords**

Fair-by-design, OER, Skill building, Academic Libraries

Authors: ENGELSMANN, Hazel; WILDGAARD, Lorna

**Session Classification:** Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 177 Contribution code: -177 Type: Poster

#### The Double-Edged sword of Open Science: Empowering AI through ethical breaches within repositories

With the rapid expansion of AI and its applications in recent years, a new challenge has emerged: how to sustainably improve the quality of the data on which AI builds its knowledge. One solution is leveraging the benefits of Open Science, with its open infrastructure and repositories, as one of valuable sources of such knowledge. However, as global demand for data to advance AI systems increases, it has led to a rise in bot and crawler activity that overwhelms servers, amplifies system overhead, degrades service quality, and restricts access for legitimate users.

The primary challenge for repositories that follow the principles of Open Science is to find ways to manage crawler-generated traffic in a manner that ensures continued access for legitimate users, upholds ethical standards for information exchange over the Internet, and strives to serve all users without significant delays. Our goal was to identify a solution capable of recognizing damaging crawler patterns and guiding their actions to comply with ethical standards.

The University of Belgrade and its Computer Centre have recently faced a series of challenges due to traffic overload in their repositories, including incidents such as DDoS attacks. These issues compromised the daily operations of repository administrators and researchers who actively contribute to the repositories. Since it affected multiple production instances, the overall infrastructure was endangered. As a result, we developed a new generalized methodology to identify malicious crawlers and guide them to operate within ethical behavior principles.

#### **Tagline**

Developing AI-driven tools to support scholarly communication and Open Science, with a focus on accessibility, innovation, and community impact

#### Keywords

Web crawlers, Internet bots, DDoS attack, Pattern detection

**Authors:** KOSANOVIĆ, Biljana (University of Belgrade - Computer Center); STIJOVIĆ, Dušan (University of Belgrade - Computer Center); OTAŠEVIĆ, Vladimir (University of Belgrade, School of Electrical Engineering)

Session Classification: Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 179 Contribution code: -179 Type: Demo

#### Advancing FAIR Principles for Research Software: Implementing a Machine Actionable Software Management Plan into DMP OPIDoR

Software is one of the fundamental pillars of research, alongside publications and data. However, despite its essential contribution, research software remains difficult to discover, cite, and properly reference. While open-source practices are widely adopted in academia, they do not inherently ensure that software is easily findable or systematically documented - both of which are crucial for reproducibility, reuse, and long-term preservation. Due to the lack of proper mechanisms, software is frequently overlooked or poorly described in data management plans.

To address this gap, a dedicated template has been implemented in the well-established DMP tool - DMP OPIDoR (https://dmp.opidor.fr/) - to describe software, along with associated research data. Making the SMP machine-actionable and interoperable simplifies its maintenance throughout the research lifecycle and facilitates software tracking and documentation.

DMP OPIDoR enables the display of customizable templates aligned with institutional, disciplinary, and international guidelines, and supports best practices in data management through community-driven recommendations.

Our poster presents how this pioneering SMP template - in line with FAIR and machine actionable DMP principles - will promote good practices assuring source code quality. It encompasses the assignment of persistent identifiers, the use of software development platforms, the recognition of authors and contributors, as well as the need of a license.

In the long term, maSMP will enhance software documentation, referencing, and ultimately its discovery, reuse, and citation —helping software gain the first-class status it deserves in open science.

#### **Tagline**

Recognizing software as a first class research output: the implementation of a new Software Management Plan template fosters open science by promoting visibility, documentation, FAIR principles, and integration into digital research ecosystems.

#### Keywords

Research Software, Software Management Plan (SMP), Open Science Infrastructure, Software dissemination

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**Session Classification:** Poster & Demos Sessions

**Track Classification:** Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 188 Contribution code: -188

Type: Poster

### TSOSI, a new platform to broaden support to open science infrastructure

This poster summarizes the goal and methodology of the Transparency to Sustain Open Science infrastructure (TSOSI) project. Launched in September 2024, TSOSI aims to strengthen the sustainability of open science infrastructure. How? By highlighting the governments, institutions, library consortia and other organizations that have financially supported open science infrastructure. TSOSI's guiding principle is: "The more we highlight those who have funded, the more funders we will attract".

Open science infrastructures typically do not rely on selling services; instead they support research as a common good. These infrastructures can reach sustainability only if research stakeholders contribute financially to their budgets. However, we find that only a few research stakeholders do so. For instance, the publishing platform SciPost has reported that just 135 institutions have financially contributed, despite 12,000 institutions benefiting from its services. The goal of TSOSI is to increase the number of funders and retain them.

TSOSI takes a data-driven approach: it collects data on funding and enriches it with persistent identifiers. Its main output is a web platform that enables users to explore who has funded what. By displaying this data, we aim to facilitate the decision making process to fund these infrastructures.

The project is led led by the Université Grenoble Alpes and funded by the French Committee for open science of the French Ministry of Research. The partners of the project are DOAB, DOAJ, SCOSS SciPost, PeerCommunityIn, OPERAS, and Couperin.

#### **Tagline**

TSOSI aims to strengthen the sustainability of open science infrastructure by spotlighting the organizations that fund them. For its launching year, TSOSI have worked with DOAJ, DOAB, SciPost, PeerCommunityIn and OPERAS. TSOSI's poster summarizes the goal and methodology of the project.

#### **Keywords**

open science infrastructures, sustainability, funding open infrastructure

Author: Dr LARRIEU, Maxence (Université Grenoble Alpes)

Session Classification: Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 189 Contribution code: -189 Type: Poster

### DiTraRe –Towards Trusted Digital Research Workflows

The Leibniz ScienceCampus "Digital Transformation of Research" (DiTraRe), a collaborative initiative by FIZ Karlsruhe and Karlsruhe Institute of Technology (KIT), develops and pilots trusted digital research workflows to enhance reproducibility, transparency, and reusability in the natural sciences. Addressing the challenges posed by increasing data volumes and AI integration, DiTraRe focuses on four interdisciplinary research clusters:

- Protected Data Spaces: Develops methods for securely handling sensitive data in sports science, ensuring privacy protection while enabling research.
- Smart Data Acquisition: Optimizes digital data collection and analysis in chemistry through tools like the Chemotion Electronic Lab Notebook, aiming for efficient and standardized data capture.
- AI-Based Knowledge Realms: Investigates the application of AI in biomedical engineering, such as predicting intensive care unit stays, emphasizing explainability and reliability of AI methods.
- Publication Cultures: Explores new models for publishing large datasets, particularly in climate research, to improve accessibility and reuse of scientific data.

DiTraRe leverages the modular infrastructure of RADAR, FIZ Karlsruhe's established repository platform, to support secure data publication, workflow versioning, and long-term preservation. Funded by the Leibniz Association, the project exemplifies how interdisciplinary collaboration and robust infrastructure can foster trust in digital research across various scientific domains.

Our poster presents DiTraRe's architecture, pilot cases, and development roadmap, demonstrating practical approaches to institutionalizing trust in scientific workflows.

#### **Tagline**

DiTraRe develops modular, standards-based workflows for transparent and trusted digital research in the natural sciences, focusing on AI integration, provenance, and reproducibility.

#### **Keywords**

Research Workflows, FAIR Data, AI in Science, Reproducibility

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**Co-author:** Dr BACH, Felix (FIZ Karlsruhe)

Session Classification: Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Type: Poster

Contribution ID: 190 Contribution code: -190

#### Enhancing Participant Recruitment and Community Engagement in Citizen Science: A Training Module from the PATTERN Project

Citizen science empowers public participation and trust in research, but successful projects depend on strategic recruitment and sustained community engagement that again depend on available training of Open Science skills. Developed within the EU-funded PATTERN project (Piloting Open and Responsible Activities and Trainings Towards the Enhancement of Researchers Networks), our training module addresses these challenges. PATTERN promotes Open and Responsible Research and Innovation (OpenRRI) through eight training themes, each enhancing transferable skills critical for researchers' professional growth, as outlined in the Salzburg II Recommendations by the European Universities Association.

The "Participant Recruitment & Community Engagement in Citizen Science" training module is designed to prepare researchers and coordinators with practical skills and ethical guidance to foster effective public involvement. Building on our comprehensive analysis of existing OpenRRI training resources, it addresses gaps and identifies best practices. Based on a project-based and interactive approach, key elements include:

- Understanding Participant Motivations: Identifying the values, interests, and knowledge goals that drive citizens to engage in research activities.
- Ethical Considerations: Exploring ethical principles for inclusive and responsible research participation.
- Strategic Recruitment Techniques: Developing approaches to reach diverse audiences, including underrepresented groups. Sustaining
- Engagement: Implementing strategies for continuous participant involvement, feedback mechanisms, and community-building.

Our poster will showcase insights from pilot implementation of the module. Pilots are designed to provide insights into the effectiveness and possible improvements of the module in enhancing participant recruitment and community engagement practices.

#### **Tagline**

This contribution prosents a practical training module from the PATTERN project that helps researchers recruit participants and sustain community engagement in citizen science, promoting ethical, inclusive, and impactful research.

#### Keywords

Citizen Science, Participant Recruitment, Community Engagement, Open Science

Authors: Dr KRAGH, Gitte (Aarhus University); NIELSEN, Kristian Hvidtfelt

Session Classification: Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

TREASURE: An institutional pilot · · ·

Type: Poster

Contribution ID: 191 Contribution code: -191

# TREASURE: An institutional pilot program to reward graduate students for reproducible, reusable, and open research practices and outputs

Masters'and PhD candidates earn their degree by completing a thesis, which typically contains one or more research articles. Yet, along the research path, researchers may create other outputs (e.g., protocols, methods, data, code), use reproducible and transparent practices (e.g., evidence synthesis, reporting guidelines, use of unique identifiers) and engage academics and non-academics to develop, conduct and disseminate (e.g., public engagement) the research. Implementing and sharing these practices and outputs accelerates progress by facilitating reuse, reproducibility and replication. To change research practice and culture, however, we must recognize and reward researchers for sharing more than research articles.

In this implementation-focused opt-in pilot program, we aim to offer University of Coimbra Masters' and PhD candidates a formal reward for implementing reproducible, reusable and open research practices in their thesis research. We are co-creating the reward criteria with a Local Advisory Board (graduate students, course coordinators, and supervisors), with advice from an expert External Board.

The criteria include: (a) list of practices (e.g., reporting of null results, author contributions statements) and outputs (e.g., reusable step-by-step protocols, materials) from which the students can select, (b) assessment criteria for each practice/output (focus on quality), and (c) number of practices/outputs that must be implemented. The criteria are designed to be adaptable to different disciplines and projects.

The program will open in mid-2025. We will monitor participation, attrition, and effectiveness for program improvement. An implementation guide with lessons learned will be shared promoting mutual learning with other institutions aiming to implement similar measures.

#### **Tagline**

This implementation-focused pilot program at the University of Coimbra aims to offer a formal reward to master and doctoral candidates who implement reproducible, reusable and open research practices/outputs in their research theses. An implementation guide will be shared promoting mutual learning.

#### Keywords

Recognize and reward, Early stage researchers, Diversity of research outputs, CoARA

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**Presenter:** ALMEIDA, Ines (Center for Neuroscience and Cell Biology CNC-UC, Center for Innovative Biomedicine and Biotechnology CIBB, University of Coimbra)

Session Classification: Poster & Demos Sessions

Track Classification: Rethinking Research Assessment

Contribution ID: 192 Contribution code: -192

Type: Poster

## Routes of Knowledge: Open Science in Costa Rican Territories —A Perspective from the Distance Higher Education Model

This proposal presents an early initiative to introduce the basic concepts of Open Science to communities across different regions of Costa Rica, guided by the pedagogical and territorial model of a public distance learning university. In a country with strong geographic and cultural diversity, open knowledge requires methodologies adapted to local contexts that recognize and value different ways of knowing and communicating. From this perspective, we seek to translate the principles of Open Science into accessible, relevant, and appropriable materials for people in different regions of the country. The poster will present the conceptual and methodological approach of this proposal, along with the initial lessons learned from pilot activities carried out with community groups. In addition, we will share the vision of a future "Open Science introductory kit," which will serve as a pedagogical tool to facilitate local-level training processes. This kit, currently in the design stage, will be the basis for a future demo proposal. Our contribution seeks to improve a conversation about territorial inclusion, epistemic justice, and open practices beyond traditional academic centers.

#### **Tagline**

This proposal introduces the principles of Open Science through a distance learning model, adapted to the different regions of Costa Rica, promoting territorial inclusion and community appropriation of knowledge.

#### **Keywords**

Territorial inclusion, Distance education, Community engagement, Science communication

**Authors:** SEAS, Carolina (Universidad Estatal a Distancia, San Jose, Costa Rica. Universidad Nacional, Heredia, Costa Rica.); SEGURA JIMENEZ, Steven (Universidad Estatal a Distancia, San Jose, Costa Rica.)

**Session Classification:** Poster & Demos Sessions

Track Classification: Open Science for All: Skills & Community

Contribution ID: 193 Contribution code: -193 Type: Poster

### Regulation and Editorial Policies on the Use of Artificial Intelligence in Open Science Publishing

The use of artificial intelligence (AI) in scholarly publishing has expanded rapidly, generating new ethical, technical, and regulatory challenges. Within the framework of open science, these technologies offer opportunities to streamline scientific production, improve editorial processes, and broaden access to knowledge. However, they also raise concerns related to responsible authorship, algorithmic transparency, and the integrity of research outputs.

This poster presents a review of recent editorial policies and guidelines regarding the use of AI in scholarly communication, with an emphasis on open access environments. Among the most relevant findings is a growing consensus that AI tools (especially generative models) should not be listed as authors. Furthermore, full responsibility for the content lies with the human authors, who must explicitly disclose any use of AI and ensure the validity and originality of the final text. There is also a notable trend among scientific journals to demand greater transparency regarding the provenance of data and the behavior of the models used.

The goal is to foster critical reflection on how to design ethical and inclusive editorial policies that align with open science principles, enabling the benefits of AI without compromising quality, equity, or accountability in scholarly communication.

#### Tagline

Analysis of emerging editorial policies on the responsible use of generative AI in open access publishing, highlighting ethical risks, authorship criteria, and the need for transparency to ensure trust and integrity in open science.

#### **Keywords**

Artificial Intelligence; Open access publishing; editorial policies; ethical guidelines

Author: RAMIREZ-VEGA, Alexa (Instituto Tecnológico de Costa Rica)

Session Classification: Poster & Demos Sessions

Track Classification: Open, but at What Cost? Research Security & Open Science

Type: Demo

Contribution ID: 202 Contribution code: -202

### Matilda reinventing a bibliographic search platform at the age of open science

While open science has become paramount, bibliographical practices are still dominated by extremely costly discovery commercial platforms (Scopus, WoS) and free ones, but not based on open data (Google Scholar). Academics all around the world, but also media, companies, associations, and public institutions, deserve a free alternative, based on FAIR principles, that does not identify or trace users and is so convenient to use that you need only a few minutes to master it. That is why we made Matilda (https://matilda.science/?l=en), an open bibliography platform serving all research communities and audiences interested in scientific literature. Developed with two French grants, Matilda is built on open data in its sources and enrichment processes. Users search among 147 million works and 12 million ORCID-identified authors, through query alerts and citation tracking services covering most of the current scientific literature

In contrast to most bibliographic platforms, Matilda also uses full-text documents as a core search layer.

After a short introduction, the demo will include a description of services, interactive queries and questions from the audience, a discussion of the strengths and limits of an open data approach for such a large-scale platform. We will also present the upcoming services and the interactions with EOSC services: the opening of the entire Matilda search system, multiplying entry points for our wide range of users within that ecosystem through APIs and weekly updated multi-property graphs and the use of Matilda as a source for OpenCitations.

#### **Tagline**

This demo will present Matilda, an open academic search engine designed to establish open science in bibliographic research, and will discuss expected servives for such a platform: ease of use, reproducibility, document freshness, various citation tracking and multi-request alert., users anonymity

#### **Keywords**

bibliography, open data, full text search, citation tracking

**Author:** TORNY, Didier

**Session Classification:** Poster & Demos Sessions

Track Classification: Building the Digital Backbone: Open Science Infrastructures

Contribution ID: 204 Contribution code: -204

Type: Poster

# PATTERN: from pilot to practice –advancing Open and Responsible Research Training: empowering researchers through modular, inclusive training in RRI and Open Science.

The PATTERN project (Empowering Open and Responsible Research and Innovation) addresses a key need in the European Research Area by equipping researchers at all career stages with skills in Responsible Research and Innovation (RRI) and Open Science (OS). Since January 2023, the project has been developing and piloting training modules in eight thematic areas: Open Access, FAIR RDM, Citizen Science, Research Integrity, Gender Equality and Non-Discrimination, Science Communication, Dissemination and Exploitation of Results, and Research Management and Leadership.

In its first pilot phase (May 2024–Feb 2025), PATTERN implemented 29 training sessions—27 of which were evaluated—across 17 partner institutions. Trainings were delivered in face-to-face (59%), online (33%), and hybrid (7%) formats, using platforms such as OpenPlato and Learning Planet Institute. Each session hosted an average of 30 participants, engaging around 870 individuals from diverse disciplines and career stages, with 67% identifying as women.

Feedback from 441 participants showed strong satisfaction: 78% found the content clear, 89.3% found it relevant, and over 90% reported active engagement. Face-to-face sessions encouraged interaction, while hybrid formats generated increased interest. Strengths included broad outreach, modular design, and integration into academic settings. Challenges were noted in platform usability, practical engagement, and adapting content to participant needs.

This poster shares findings from the first pilot phase, lessons learned, and outlines the approach for the second phase (Mar–Dec 2025), focused on enhancing interactivity, expanding reuse, and supporting sustainability in alignment with Open Science infrastructures such as OpenPlato and EOSC.

#### **Tagline**

Sharing results from PATTERN Project first training pilot on RRI and Open Science, with lessons learned and next steps for improving interactivity, outreach and long-term reuse.

#### **Keywords**

Responsible Research and Innovation, Open Science, Researcher Training, FAIR RDM, Open Access, Capacity Building, Digital Platforms, Sustainability

**Authors:** Ms CORREIA, Antonia (University of Minho); Ms MOURA, Paula (University of Minho); PRÍNCIPE,

Pedro

Session Classification: Poster & Demos Sessions

**Track Classification:** Open Science for All: Skills & Community

Contribution ID: 205 Contribution code: M-PLE-POL-205 Type: Invited Panel

#### **Policies and Politics**

Monday 15 September 2025 15:00 (1 hour)

Keywords

**Tagline** 

Presenters: SAENEN, Bregt; DVORSEK, Dejan; PETRANOVIC, Dina (Technical University of

Denmark); REDA, Felix (Github); Prof. BARAN, Yusuf (Izmir institute of Technology)

Session Classification: Invited Panel

Track Classification: Open, but at What Cost? Research Security & Open Science

Contribution ID: 206 Contribution code: T-PLE-IMP-206 Type: Invited Panel

#### Impact and Monitoring

Tuesday 16 September 2025 09:00 (1 hour)

Keywords			
Tagline			

**Presenters:** Dr PERSIC, Ana (UNESCO); Dr HOLMES, Kristi (Northwestern University); DI COSMO, Roberto (Software Heritage); REILLY, Susan (Maynooth University); ANCION, Zoé (Agence Nationale de la Recherche)

Session Classification: Invited Panel

**Track Classification:** Beyond Compliance: Measuring and Maximizing Open Science Impact

Contribution ID: 207 Contribution code: W-PLE-RAS-207 Type: Invited Panel

### Rethinking Research Assessment: Emerging Trends in Open Science and Infrastructure

Wednesday 17 September 2025 09:00 (1 hour)

As the global research community embraces reform in how research is assessed, emerging practices grounded in openness, transparency, and inclusivity are gaining traction. This panel will explore how new approaches to Responsible Research Assessment (RRA) are being shaped by Open Science values and supported by open infrastructures. It will bring together perspectives from policy initiatives like CoARA, open infrastructure providers, research funders, and researchers actively piloting assessment reforms.

The discussion will address the challenges and opportunities of implementing narrative CVs, assessing diverse research outputs, and integrating transparent metrics and AI responsibly. It will also highlight tools and infrastructures that enable practical implementation at the institutional and national levels. The audience will be invited to join a forward-looking conversation on what a future-proof, fair, and inclusive research assessment system could look like, and how to get there.

#### **Keywords**

#### **Tagline**

**Presenters:** Dr YADAV, Gitanjali (National Institute for Plant Genome Research); DE JONGE, Hans (Open Science NL); MANOLA, Natalia; Dr MARTÍNEZ SAMPER, Pastora (Universitat Oberta de Catalunya)

Session Classification: Invited Panel

Track Classification: Rethinking Research Assessment

Contribution ID: 208 Contribution code: M-PLE-ORE-208 Type: Invited Panel

#### **Open Research Europe**

Monday 15 September 2025 16:45 (1 hour)

Keywords

**Tagline** 

Presenters: Mr KOHLS, Alex (CERN); ALPERIN, Juan Pablo; RIECK, Katharina (Austrian Science

Fund FWF); MOUNIER, Pierre (OPERAS); TSOUKALA, Victoria (European Commission)

Session Classification: Invited Panel

Track Classification: Building the Digital Backbone: Open Science Infrastructures