



ICSTI 2025 Annual Conference



ETH Library, ETH Zurich

September 18 - 19

ICSTI Annual Conference: Workshop 2



Jenny Lam

- **“Advancing Open Access: Bilingual Monographs and Megajournal Initiatives in Hong Kong and Greater China”**

Kou Yuantao and
Zhang Dandan

- **“Knowledge Graph-Driven Knowledge Discovery Research in Crop Breeding”**

Simon Willemin

- **“Towards greater interoperability and standardization of institutional repositories in Switzerland”**
- **“Quality Assurance of Research Data in Institutional Repositories: Institutional Practices in Focus - Insights from a Survey and Expert Interviews”**

Jenny Lam



香港中文大學圖書館
The Chinese University of Hong Kong
Library



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The Chinese University of Hong Kong



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Advancing Open Access: Bilingual Monographs and Megajournal Initiatives in Hong Kong and Greater China

Jenny Lam

Open Science Librarian

The Chinese University of Hong Kong Library

Chinese University of Hong Kong



- Established In 1963 (60th anniversary in 2023)
- A comprehensive Research university With a 138.4---hectare Campus overlooking Tolo Harbor at Shatin, New Territories.
- Comprises of 9 colleges, 8 Faculties and Graduate School; 18,438 undergraduates and 4,650 postgraduates, 8000+ Full-time staff.

QS Asia University Rankings 2025

#6 
Asia

QS World University Rankings 2026

#32 
Worldwide



PRESTIGIOUS Teaching
& Research Staff

1 Nobel
Laureate

14 Rhodes Scholars



LARGEST campus in
Hong Kong

137.3 hectare
campus

250+ University
Staff
Quarters



ACADEMIC
Excellence

4 Areas of
Excellence

6 InnoHK
Centres





Upper campus :
New Asia College Library,
United College Library



Central campus:
University Library
Law Library



Lower campus:
Chung Chi College Library,
Architecture Library



Medical Library at Prince of Wales Hospital



Research Grants Council (RGC) – Major Funder in HK from the government

- Mandates OA for publications from RGC-funded projects
 - Compliance via **Green OA** (repository deposit) or **Gold OA** (OA journals)
- **No direct financial support** provided for OA (e.g. Article Processing Charges, APCs)

Implications for Universities

- Government-funded universities receive no extra OA funding from RGC
- Researchers face challenges covering APC costs for Gold OA

Libraries' Collaborative Response (JULAC – 8 UGC-funded Universities Libraries)

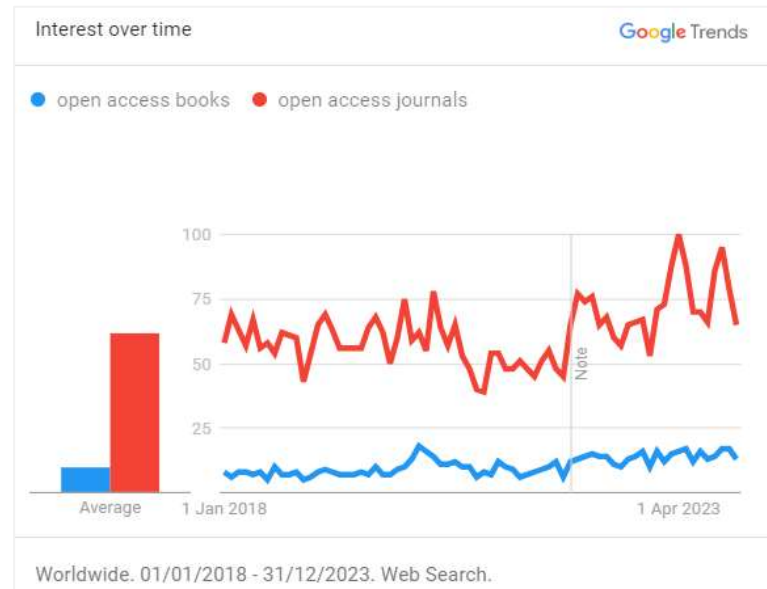
- Jointly negotiated **transformative agreements** with major publishers
- Agreements allow researchers to publish OA with APCs covered by **library budgets**
- Collective effort to bridge funding gap and support OA publishing



Open Monographs: Expanding Access to Scholarship

Addressing the Crisis in Scholarly Monograph Publishing

- Limited OA monograph publishing outlets.
- High cost of print academic books.
- Decline in traditional monograph publishing models.
- Digital versions of monographs often behind paywalls.
- Potential of OA monographs to increase research dissemination and impact.

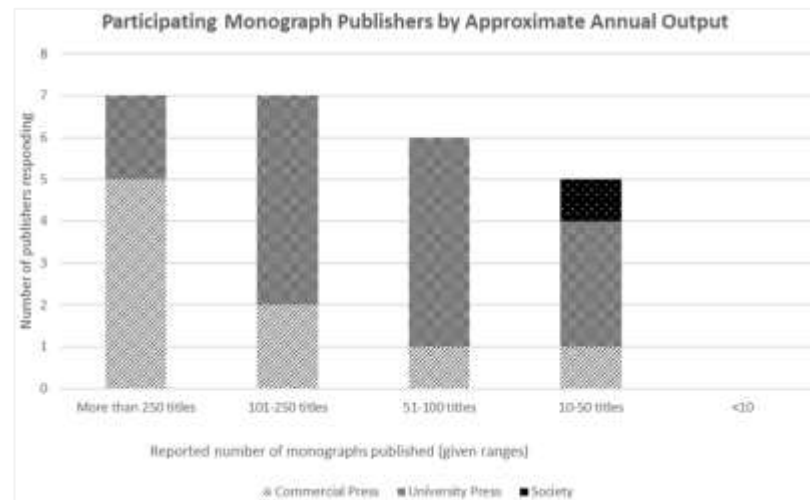


The Vital Role of University Presses in Monograph Publishing

A 2021 survey of English-language academic publishers in the UK, Europe, and North America explored the current landscape and trends in academic monograph publishing in the arts, humanities, and social sciences.

This suggests the University Presses:

- Play a vital role in monograph publishing at various scales.
- Support scholarly communication across different sizes of organizations.
- Contribute to the diversity of published works.



Open Books Hong Kong: A Vision for Open Access

- Hong Kong's first open book program: A groundbreaking initiative from HKU, CUHK, and CityU.
- The books mainly focus on Arts, Humanities, Religious studies and cultural studies in Hong Kong and China.
- Five batches of books, totaling 45 books were released since July 2024.
- Since its launch in July 2024, OBHK has garnered over 480,000 views from over 190,000 visitors.
- The most popular book, "People's West Lake," was viewed over 27,000 times.



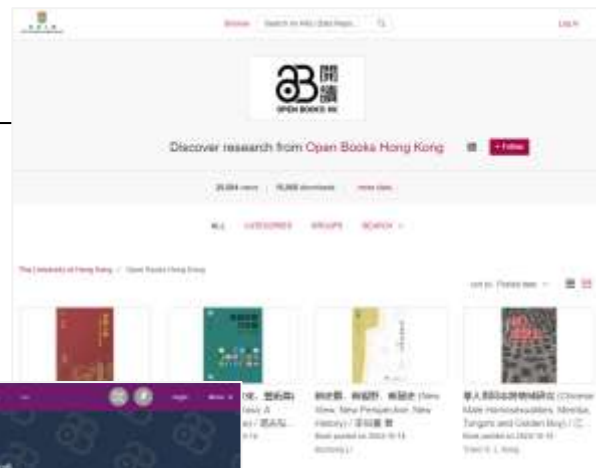


Ensuring Quality: The OBHK Pilot Selection Process

- All included titles successfully completed the standard peer review and editorial processes at the participating university presses (HKU, CUHK, CityU).
- A carefully curated subset of these titles was selected to represent the diversity of scholarship within the program.
- The selected titles represent a range of **humanities and social sciences disciplines, including history, philosophy, religion, law, anthropology, and gender studies.**

Implementation and Challenges

- Budget constraints – The project was implemented with a limited budget. Book processing charge (BPC) is required.
- Infrastructure utilization – Existing library infrastructure was leveraged to minimize costs.
- Shared landing page – A collaborative website was created as a central access point.



[Open Books@HKU Datahub](#)



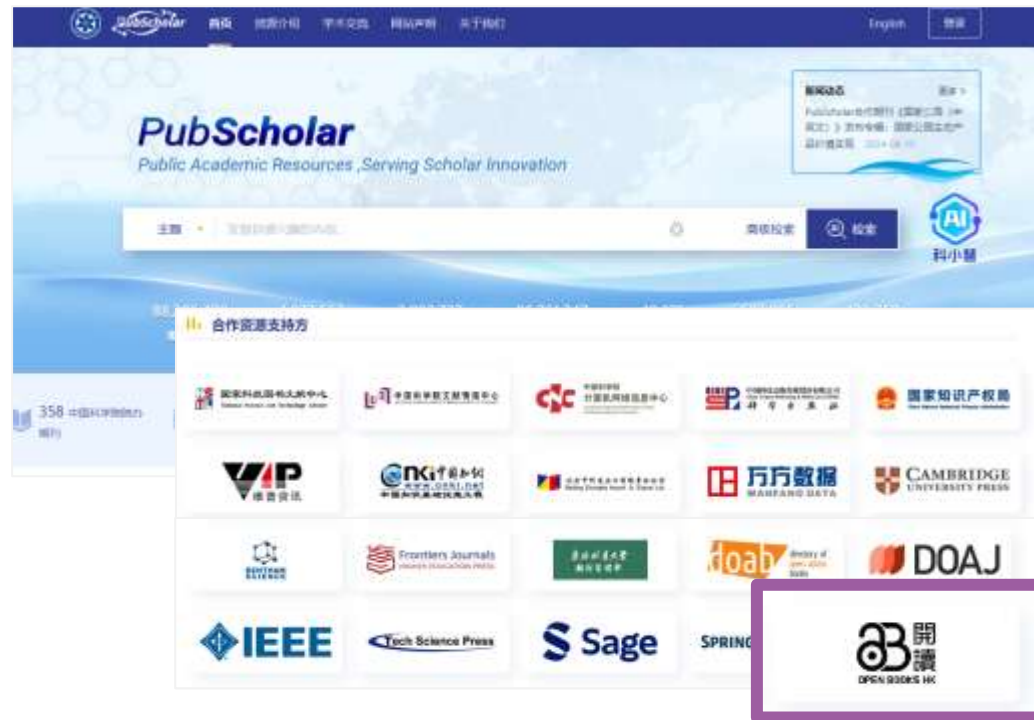
[Open Books@CUHK Library Search](#)



[Open Books@CityU LibraryFind](#)

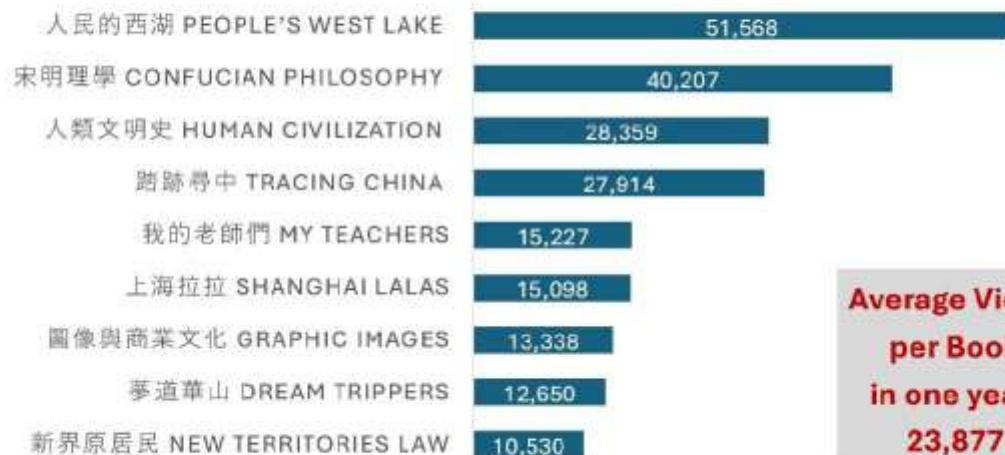
Navigating the Challenges: A Collaborative Approach

- **Technological Advancement:** Embrace new technologies for platform improvement and digital preservation.
- **Community Engagement:** Engage with the academic community to raise awareness of the project and encourage responsible use of the resources.
- **Sustainable Funding:** Explore diverse funding models to support long-term infrastructure maintenance.



Quantitative impact after 1-year launch

VIEWS OF THE FIRST BATCH OF BOOKS IN 12 MONTHS (07/2024-07/2025)



**Average Views
per Book
in one year:
23,877**

Bridging the Language Gap in Open Access



— Hong Kong's First Open Access Books Programme —

Collaboration

Joint effort by the libraries and presses of three universities in Hong Kong

Bibliodiversity

High-quality Chinese-Language scholarship by renowned scholars

Accessibility

Fully open to the academic community and the wider public

- **Challenge:** Only 0.004% of open-access books indexed in DOAB are in Chinese, a significant gap in global knowledge sharing
- **Solution:** Open Books Hong Kong (OBHK) provides open access to high-quality Chinese-language research.
- **Impact:** Over 300,000 views and 100,000+ downloads in three months.



Transforming Journal Publishing at CUHK

CUHK's Transformative Agreements



CUHK OPEN ACCESS PUBLISHING PLAN

Publish your Open Access articles in 8000+ journals for free



Future Science

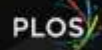
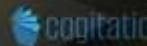


IOP Publishing

SPRINGER NATURE



Karger



WILEY

Future Medicine





1. The Cost of Scholarly Communication

- Shifts financial burden to authors or institutions via high article processing charges (APCs).
- Leads to above-inflation increases in publishing costs, making scholarly communication unsustainable for many institutions.
- TAs designed to transition from subscription-based publishing to open access; have not delivered expected cost reductions or improved accessibility.

2. Inefficiencies and Inequalities in Traditional Publishing Models

- Traditional publishing systems fail to keep pace with modern research needs in a digital landscape.
- Encourages unethical practices such as:
 - Citation manipulation
 - Predatory publishing
 - Prioritizing quantity over quality
- These issues undermine the integrity of scholarly work and contribute to a poor research environment.

3. Perpetuating Inequalities

- Creates barriers for researchers in low- and middle-income countries, reinforcing economic inequalities.
- Smaller institutions and independent researchers struggle to compete, exacerbating disparities in access and participation.

Diamond OA Megajournal project



Project Aims:

To enable research in Humanities and Social Sciences produced in Hong Kong, Macau and Mainland China

- to have maximum impact for reasonable cost;
- to sustain academic quality assurance via peer review;
- at a scale commensurate with one of the largest research-producing regions in the world.

CUHK context:

- Bilingual institution, conducting research in both English and Chinese
- Long established research focus on Chinese language and culture



CUHK Library published [a report](#) detailing the project's vision and implementation strategy.

Diamond OA Megajournal project



Range of Social Sciences subjects covered:

- Culture & Society
- High-density social science
- Lingnan culture studies
- Chinese language and linguistics
- Heritage preservation



Project name and scope



- The official name of the project is “Open Journals Hub” 開卷.
- A steering committee to oversee the quality of the journal has been setup, members include:
 - Mr. Benjamin Meunier, University Librarian (Chair)
 - Prof. Zhang Jiji, Associate Dean of Arts (Research)
 - Prof. Tang Sze Wing, Director of T.T. Ng Chinese Language Research Centre, ICS
 - Prof. James St Andre, Chairman and Director, Centre for Translation Technology
 - Ms. Gan Qi, Director, CUHK Press
 - Ms. Ye Minlei, Assistant Director, CUHK Press
- Participating journals include:
 - [Hong Kong Studies](#)
 - [Current Research in Chinese Linguistics](#)
 - [Studies in Chinese Linguistics](#)
 - [Journal of Translation Studies](#)
 - [International Journal of Catholic Studies](#)
 - [Asian Journal of English Language Teaching](#)

Project Timeline



Diamond OA Megajournal – the road ahead...

- Cost estimation, assess financial sustainability
- Seek journal editors' feedback on journal management system and discovery platform features
- Ensure scalability of platform to accommodate more articles/journals in the future
- Reach potential collaborators in Hong Kong, Macau, Greater Bay Area and Mainland China.

Conclusion



- Open Access initiatives in Hong Kong are gaining momentum through collaborative efforts.
- OBHK has demonstrated strong impact with high viewership and downloads.
- Diamond OA Megajournal aims to support bilingual and Chinese research dissemination.
- Challenges remain in funding, infrastructure, and equitable access.
- Continued collaboration and innovation are essential for sustainable OA publishing.



Thank You!



Quality Assurance of Research Data in Institutional Repositories: Institutional Practices in Focus - Insights from a Survey and Expert Interviews

Madeleine Fritschi

E-Publishing Librarian

19 September 2025, ICSTI Annual
Conference

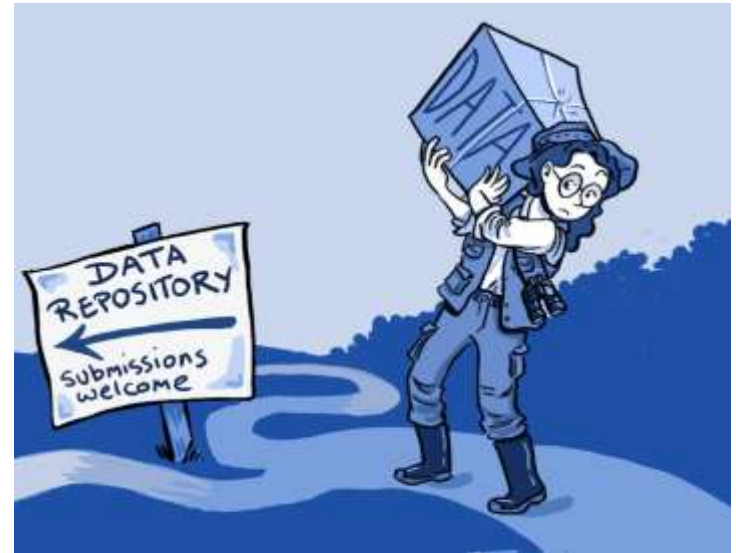
Agenda

1. The role of repositories in Open Science
2. Why Quality Assurance (QA) of ORD matters for sustainability?
3. Challenges for Institutional Repositories (IR)
4. Research Aim, Questions & Methods
5. General findings on QA for research data in IR
6. Quality Control Checks: Building Sustainable QA Standards
7. Quality Development Measures: Strategies in Practice
8. Roles in QA: Shared Responsibility
9. Conclusion & Outlook

The role of repositories in Open Science

“Repositories are document servers operated by universities or research institutions on which scholarly materials are archived and made available free of charge worldwide.” ([open-access.network \(2025\)](#))

- Provide infrastructure for storing and sharing research data
- Ensure long-term access & usability
- Support compliance with policies (e.g., FAIR, institutional or funder mandates)
- Enable trustworthy reuse of research data across disciplines



CC-BY 4.0 Roche DG, Lanfear R, Binning SA, Haff TM, Schwanz LE, et al. (2014) Troubleshooting Public Data Archiving: Suggestions to Increase Participation. PLoS Biol 12(1): e1001779. doi:10.1371/journal.pbio.1001779

Why Quality Assurance (QA) of ORD matters for sustainability?

“Data quality assurance is a concept that is associated with processes and techniques for assessing, measuring, and improving quality.” (Kindling, M., & Strecker, D. (2022). Data Quality Assurance at Research Data Repositories. Data Science Journal, 21(1), 18. <https://doi.org/10.5334/dsj-2022-018>)

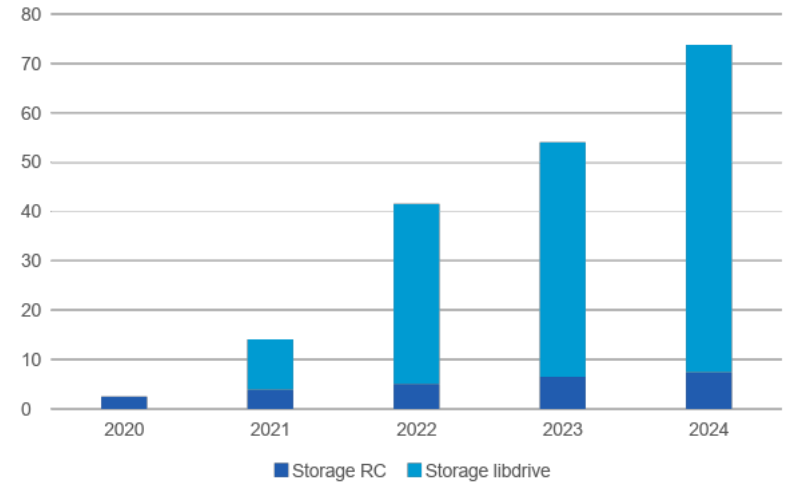
“Open Research Data (ORD) refers to the practice of making scientific data freely accessible to everyone while sustaining essential security considerations.” (openresearchdata.swiss)

- ORD without some level of “quality” may not be reusable
- QA improves trust, transparency, and reproducibility
- Trustworthy data supports long-term sustainability of Open Science

Challenges for Institutional Repositories (IR)

- Growing data volumes
- Multidisciplinary scope
- Limited resources in IR
- Legal and ethical requirements for sensitive data
- Motivation data providers (researchers)

Data volume ETH Zurich's IR Research Collection including external storage «libdrive» (in TB)



ETH Library, E-Publishing (2025)

Research Aim, Questions & Methods

Research Aim

What are the challenges and characteristics of QA for research data in IR?

Questions

- Which quality control checks for QA are applied?
- What quality development measures exist for QA?
- Who is responsible for QA?
- Basis for sustainable QA strategies

Methods

- Mixed-methods design
 - Reuse of survey analysis (2022, n=85 IR)
 - 7 expert interviews (Europe, US)
- Analysis using framework of Kindling et al. (2022)

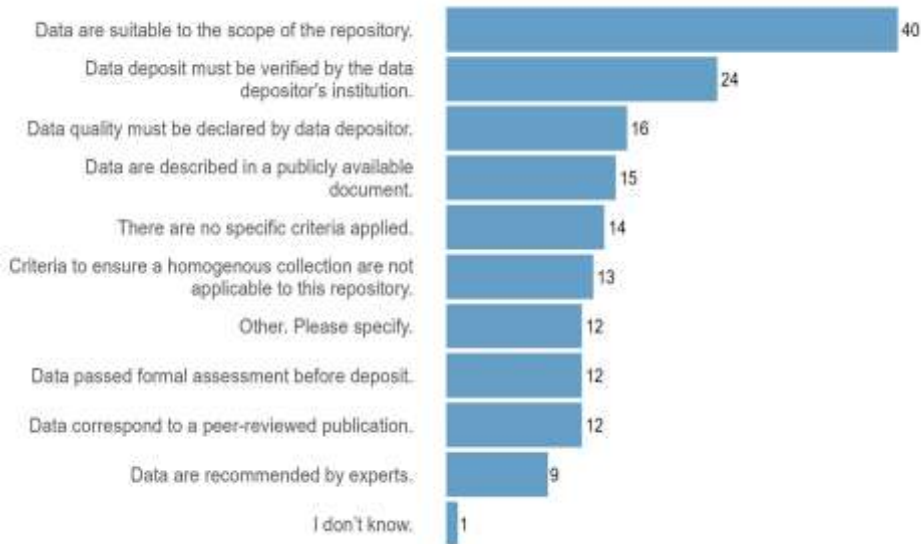
Framework for Quality Assurance of Data Publications at Research Data Repositories



CC-BY, Kindling, M., Strecker, D., Ferguson, L. M., L'Hours, H., Magder, C., Schabinger, R., Stuhec, S., Vierkant, P., & Weisweiler, N. (2022). Report on re3data COREF / CoreTrustSeal Workshop on Quality Management at Research Data Repositories. *Informationspraxis*, 8(1), Article 1. <https://doi.org/10.11588/inf.2022.1.93173>

General findings on QA for research data in IR

Overview collection policies of IR (n = 85, number of responses: 168)

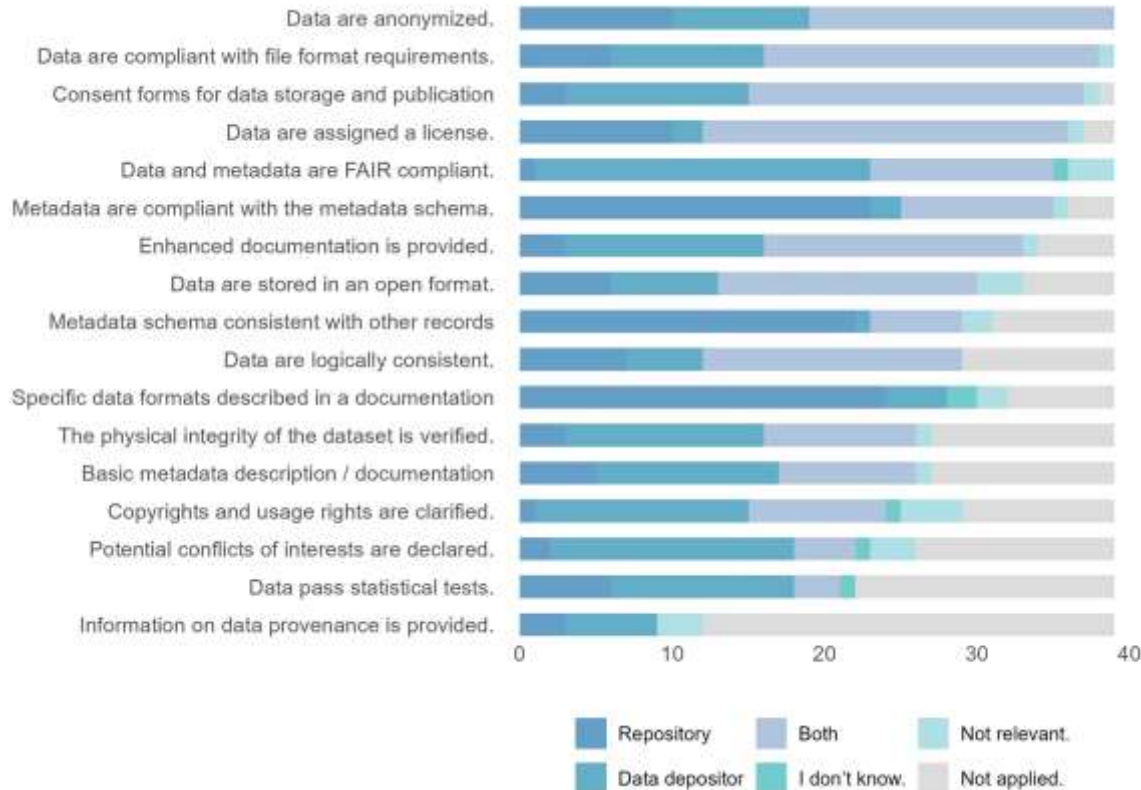


CC-BY, Fritschi, M. (2025). Massnahmen zur Qualitätssicherung von Forschungsdaten in institutionellen Repositorien. *Berliner Handreichungen zur Bibliotheks- und Informationswissenschaft*. 555, <https://doi.org/10.18452/33846>, page 36

- Institutional affiliation: 90% of IR only accept data from their own institution
 - This ensures baseline quality control
- Scope flexibility: 50% of IRs accept data outside defined scope of repository
 - Thematic openness complicates content quality checks
- Ethical and legal requirements for research data
- QA measures vary across IR depending on resources
 - Few IRs established measures for quality documentation and evaluation

Quality Control Checks: Building Sustainable QA Standards I

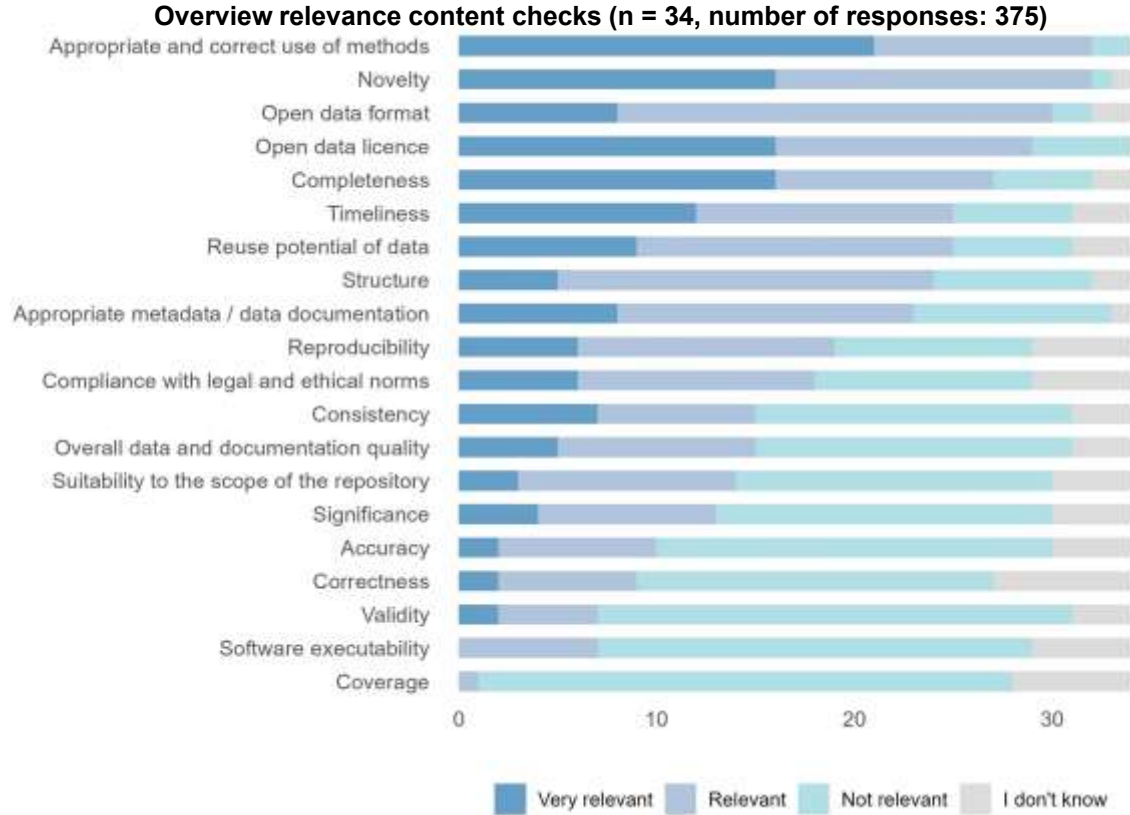
Overview formal checks (n = 39, number of responses: 497)



- **Formal checks:** anonymized data, file formats, metadata structures, licenses, versioning
- Ensure interoperability and machine-readability for long-term access
- Formal checks are more often automated

Quality Control Checks: Building Sustainable QA Standards II

- **Content checks:** appropriate and correct use of methods, completeness, timeliness
 - Enhance reuse potential across disciplines and contexts
 - Content checks rely on human expertise
 - Both sets of quality control checks are essential for sustainable usability of data



Quality Development Measures: Strategies in Practice

Support services

- Training and workshops
- Consultation and personal support
- Templates, tools, and editors
- Websites, documentation, and wikis
- Best practice examples

*"It's really about being able to **fan those sparks** or **find ways to replicate that success with other data**. It would be so powerful having an example of a dataset that's been cited over a hundred times. If you can go to a faculty member and say, "Dave down the hall has a dataset that's been cited a hundred times," that **carries more weight than any YouTube video, flyer, or outreach session you could ever do.**"*

CC-BY, Fritschl, M. (2025). Massnahmen zur Qualitätssicherung von Forschungsdaten in institutionellen Repositorien. *Berliner Handreichungen zur Bibliotheks- und Informationswissenschaft*. 18452/33846, page 49

Effective but resource-intensive

Challenge: hard to scale and evaluate success / sustaining funding over time

Roles in QA: Shared Responsibility



CC0 Public Domain

- **Data curators:** oversee submission, perform checks, support researchers
- Supported by
 - **subject librarians** and **Data Stewards:** domain expertise ensures accurate classification
 - **Graduate students:** assist with technical checks
- **Data providers:** responsible for metadata, documentation, context
 - Distributed roles reduce dependency on one group and increase institutional resilience
 - Collaboration across roles ensures sustainability of QA practices

Conclusion & Outlook

- QA measures varies across IR
- Ensure long-term access & usability
- QA is a cornerstone of sustainable Open Science
- Sustainable QA requires:
 - Automation when/if possible
 - Clear policies and standards
 - Community engagement to motivate researchers
- Future strategies:
 - hybrid approach combining automation with expert guidance
 - Balance between standardization and flexibility



CC-BY-NC-ND Isabella Ostovary (2024) "The weather you hope for".
https://www.flickr.com/photos/snsf_image_competition/53618858250/in/album-72177720315770086

References / Links

References / Links

Fritschi, M. (2025). Massnahmen zur Qualitätssicherung von Forschungsdaten in institutionellen Repositorien. Berliner Handreichungen zur Bibliotheks- und Informationswissenschaft. 555, <https://doi.org/10.18452/33846>

Kindling, M., & Strecker, D. (2022). Data Quality Assurance at Research Data Repositories. Data Science Journal, 21(1), 18. <https://doi.org/10.5334/dsj-2022-018>

open-access.network. (2025). Repositories. <https://open-access.network/en/information/publishing/repositories>

openresearchdata.swiss. (o. J.). Empowering the future of research through ORD. ORD. <https://openresearchdata.swiss/>

Research Collection: <https://www.research-collection.ethz.ch/>

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Zhang Dandan



2025 Annual Conference for the International Council of Scientific and Technical Information

Knowledge Graph-driven Knowledge Discovery in Crop Breeding



Reporter: Dr. Dandan Zhang

Instructor: Prof. Yuantao Kou

Agricultural Information Institute of CAAS

Date: 19th September, 2025



01 Background and Significance

02 Research and Practice

03 Consideration and Prospect



Background and Significance

1 Background and significance-national strategic needs

National Data Administration “Three-year Action Plan for Data Element × (2024-2026)”

The integration of digital intelligence accelerates technological innovation and drives the discovery of new knowledge.

Ministry of Science and Technology “Guiding Opinions on Accelerating Scenario Innovation and Promoting High-quality Economic Development with High-level Application of Artificial Intelligence”

Integrate AI model algorithms and domain data knowledge to achieve research breakthroughs in major scientific problems.

Interdisciplinary convergence and multi-technology integration have become the new norm of scientific research.

Data
(core elements)
+
Artificial intelligence technology
(new momentum)

National Academy of Sciences, USA “Science Breakthroughs to Advance Food and Agricultural Research by 2030”

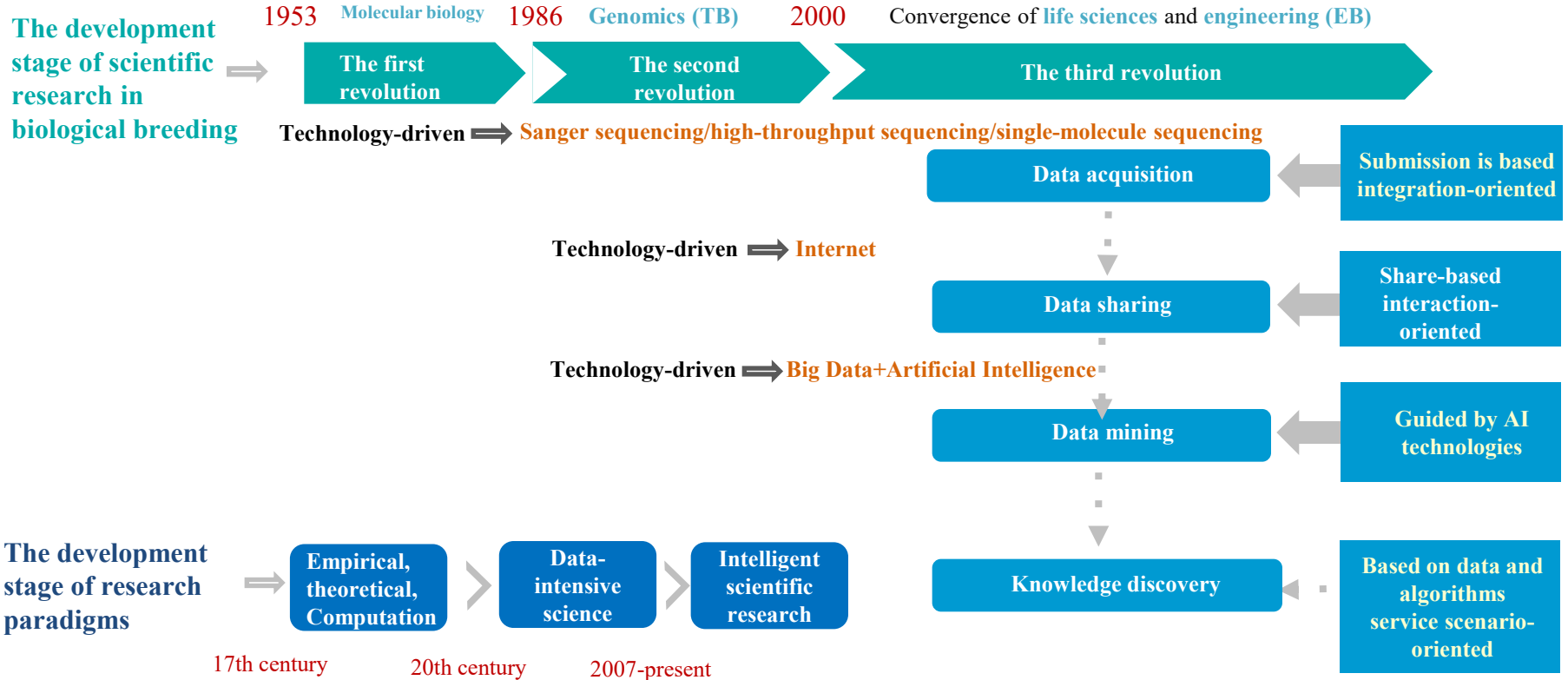
Data science and information technology are strategic key technologies for agricultural development in the next decade.

National Natural Science Foundation of China “Special Deployment on AI for Science”

Strengthening the deep integration of artificial intelligence and scientific research to enhance innovation capacity.

1 Background and significance-innovation needs in biological breeding research

The logic of knowledge acquisition has shifted from data collection, sharing, and utilization to big data-driven active knowledge discovery.



1 Background and significance-AI4S industry development



A panoramic study map of AI4S

- International Data Corporation (IDC) “IDC Perspective: A Panoramic Study Map of AI for Science”
- IDC divides the maturity of AI4S into five links: L1 to L5 from technical level, platform capability, and market prospects, and AI-empowered biological breeding is still in its infancy.



Research and Practice

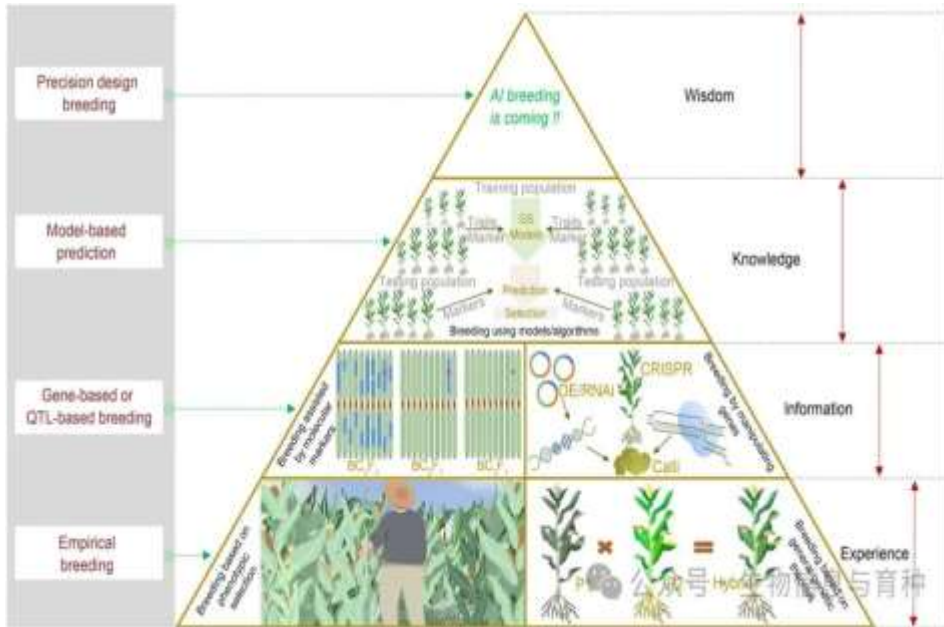
2.1 Scenario requirements analysis

2.2 Methodological framework

2.3 Domain knowledge graph construction

2.4 Model building and knowledge discovery

2.1 Scenario requirements analysis

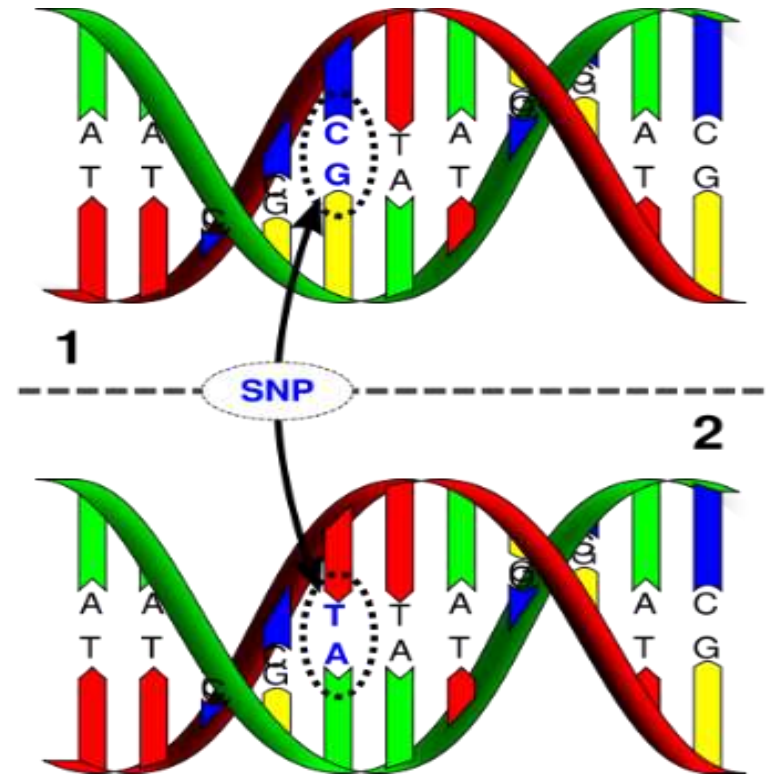


Zhu et al., *J Integr Plant Biol*, 2025.

- Crop breeding has progressed from **domestication** and **cross breeding** to **molecular marker-assisted breeding**, more recently, to **computational breeding**. At present, **genetic engineering** is increasingly used to modify the genes of crops and develop **new varieties with desirable traits**.
- The concept of **computational breeding** (“Breeding 4.0”) emphasizes the deep integration of **life science**, **information science**, and **breeding science**, aiming to aggregate multiple excellent genes. The explosion of data generated by new technologies, along with new demands for knowledge services, has shifted **crop breeding research** from **hypothesis-driven passive exploration** to **data-driven active knowledge discovery**.

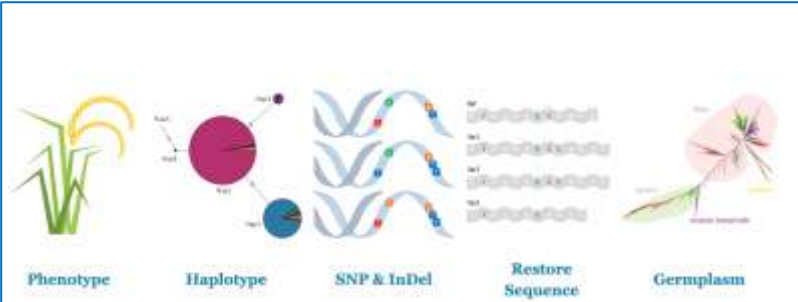
2.1 Scenario requirements analysis -practical needs in crop breeding knowledge discovery

- Crop traits are mainly controlled by **key functional genes**. The key to developing new high-yield, high-quality crop varieties lies in **identifying excellent pleiotropic genes** and analyzing their molecular biological functions.
- **AI-driven active knowledge discovery** will be the **engine of innovation** in crop breeding research.



2.1 Scenario requirements analysis-national strategic needs

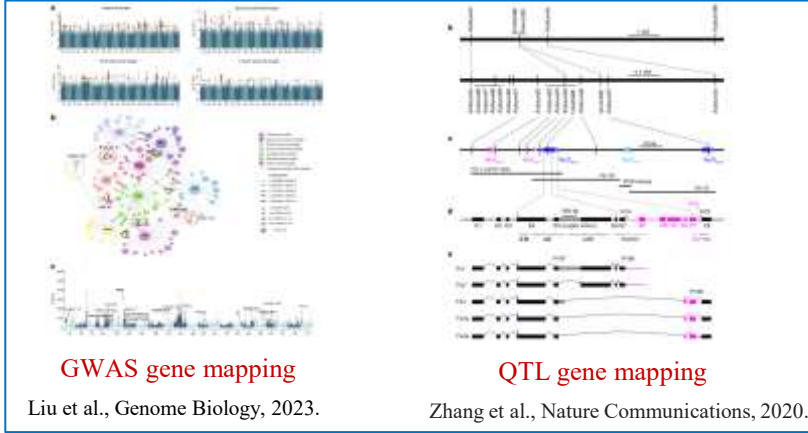
To accelerate the mining and analysis of excellent functional genes



Multi-dimensional scientific data correlation helps mine excellent functional genes

Wang et al., Plant Biotechnology Journal, 2020

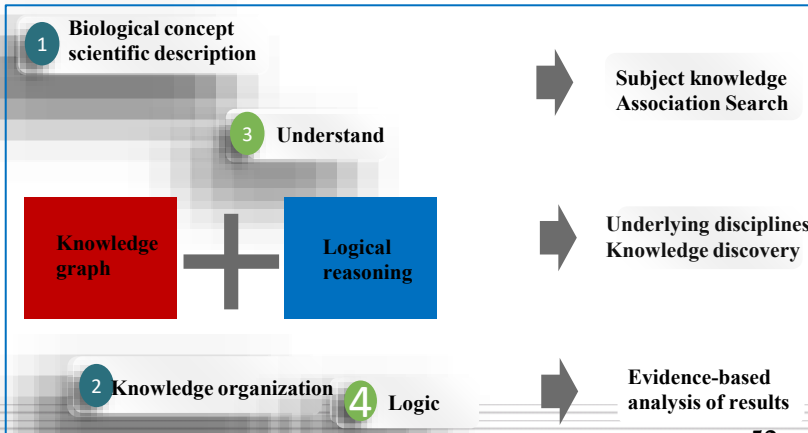
Existing methods



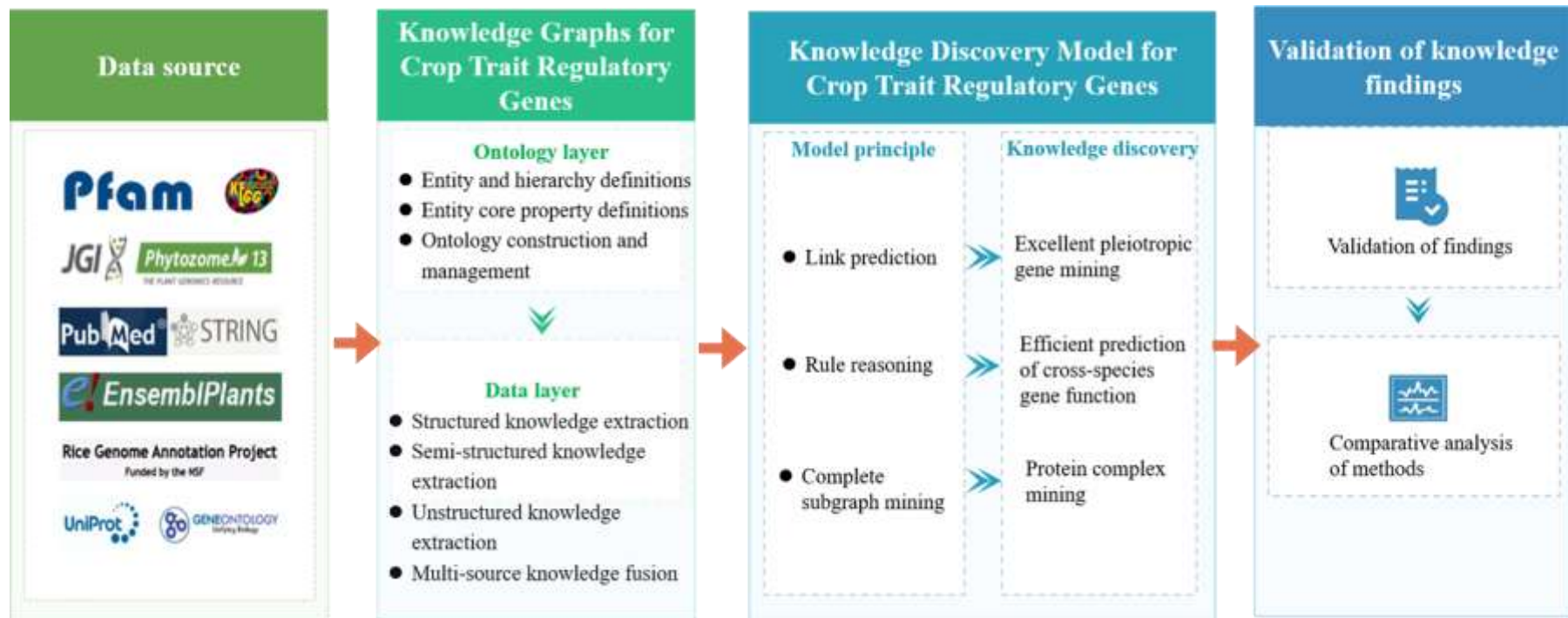
GWAS gene mapping
Liu et al., Genome Biology, 2023.

QTL gene mapping
Zhang et al., Nature Communications, 2020.

Knowledge graph



2.2 Methodological framework

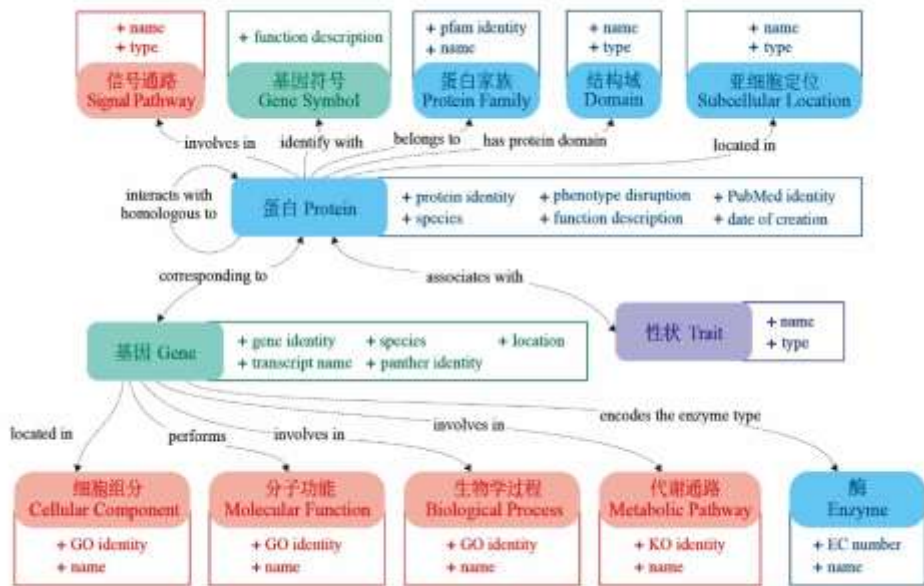


A framework for knowledge discovery in crop breeding

2.3 Construction of knowledge graph of trait regulatory genes

Realize the transfer and reuse of existing crop breeding knowledge

- We established **homologous protein object attributes**, enabling the correlation and integration of cross-species, multi-dimensional scientific data.
- We constructed an **ontological semantic model** covering 13 entity classes, 16 data attributes, and 14 object attributes.



Ontological semantic model of cross-species and multi-dimensional scientific data association

2.3 Construction of knowledge graph of trait regulatory genes

Definition of the **core entity hierarchy** and **object attributes** in the ontology layer

Table Description of entity classes in crop traits regulating-genes ontology model

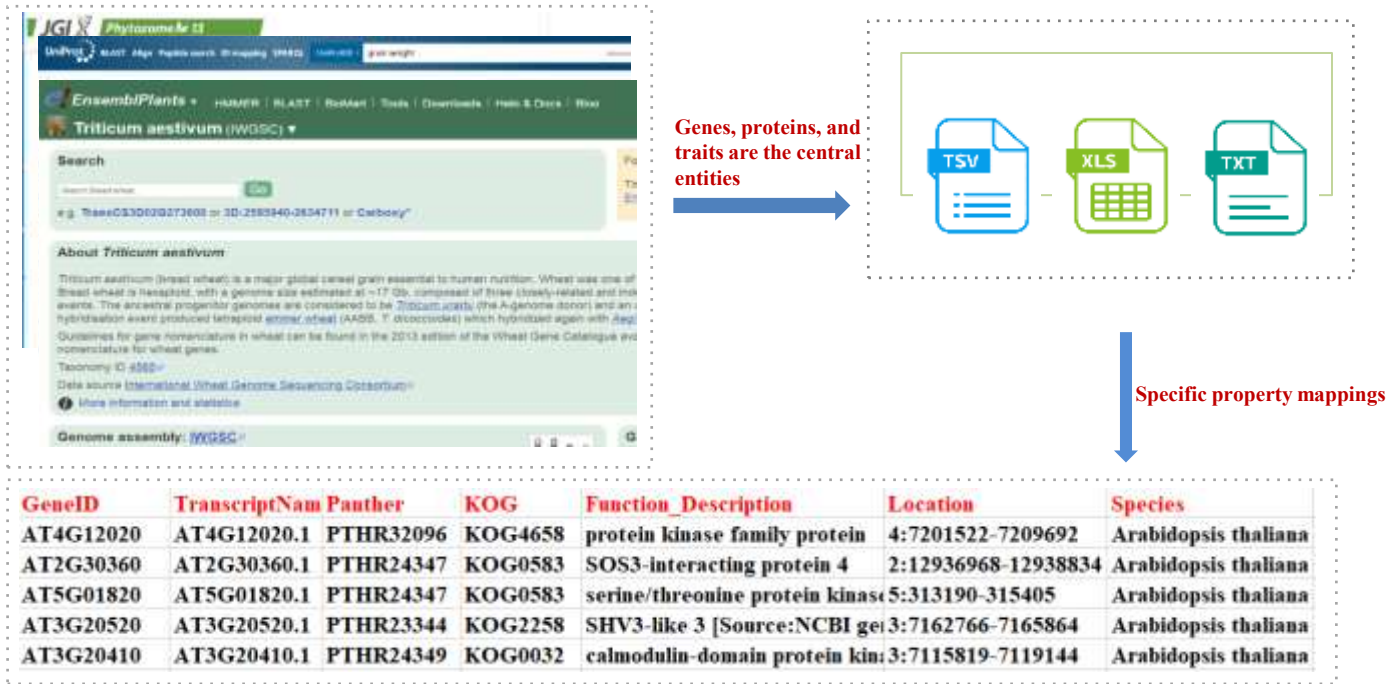
Data type dimension	Entity name	Data attribute
Gene level	Gene	Gene identity; species; location; transcript name; PANTHER identity
Protein level	Gene symbol	Function description
	Protein	Protein identity; species; date of creation; function description; phenotype disruption; PubMed identity
	Protein family	Pfam identity; name
	Enzyme	EC number; name
	Domain	Name; type
Enrichment pathways level	Subcellular localization	Name; type
	Biological process	GO identity; name
	Cellular component	GO identity; name
	Molecular function	GO identity; name
	Metabolic pathway	KO identity; name
Trait level	Signal pathway	Name; type
	Trait	Name; type

Table Description of object attributes in traits regulating-genes ontology model

Object attributes	Object
associates with	protein; trait
homologous to	protein ; protein
interacts with	protein; protein
corresponding to	protein; gene
identify with	protein; gene symbol
involves in	protein; signal pathway
located in	protein; subcellular localization
has protein domain	protein; domain
belongs to	protein; protein family
located in	gene; cellular component
performs	gene; molecular function
involves in	gene; biological process
involves in	gene; metabolic pathway
encodes the enzyme type	gene; enzyme

2.3 Construction of knowledge graph of trait regulatory genes

- In **structured knowledge extraction**, genes, proteins, and traits serve as **central entities**, with relevant knowledge extracted through **the mapping and association of specific attributes**.



Structured knowledge extraction based on specific attribute associations

2.3 Construction of knowledge graph of trait regulatory genes

- In **semi-structured knowledge extraction**, data is primarily in XML format. We extracted relevant knowledge by parsed file data and selected appropriate fields.

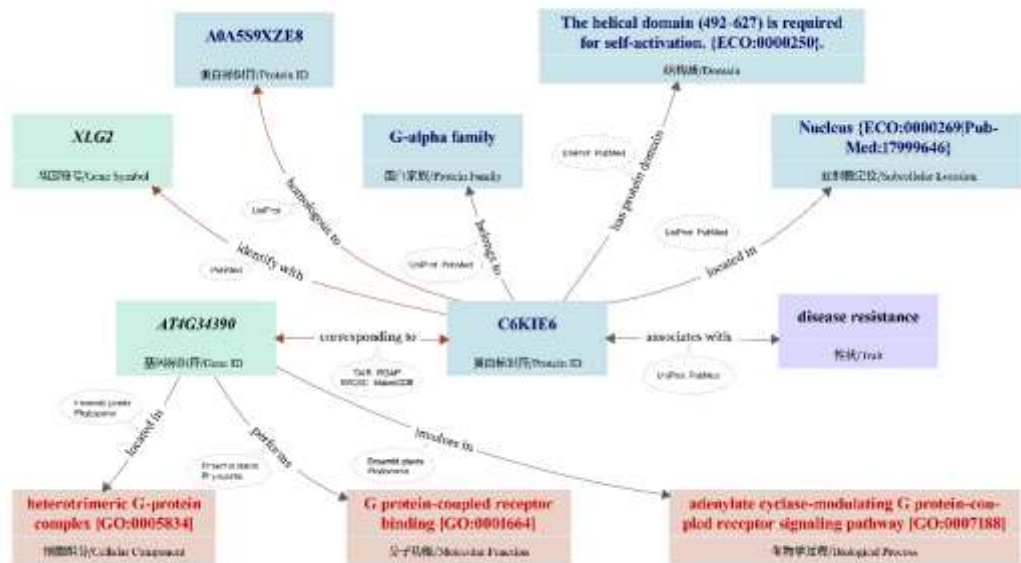


ProteinID	Species	Function_Description	Disruption_Phenotype	PubMedID
A0A178WF56	Arabidopsis thalia	FUNCTION: Regulates	DISRUPTION PHENOTY	11130712; 27862469; 2927;
A0MES8	Arabidopsis thalia	FUNCTION: Transcription regulator that probably		9634591; 10207155; 10617
F4HYF3	Arabidopsis thalia	FUNCTION: Catalyzes the production of hydroger		11130712; 27862469; 1459;
F4I1S7	Arabidopsis thalia	FUNCTION: Componer	DISRUPTION PHENOTY	11130712; 27862469; 9349;
F4J3T8	Arabidopsis thalia	FUNCTION: Phosphata	DISRUPTION PHENOTY	11130713; 27862469; 1459;

Kettle-based data parsing in XML format

2.3 Construction of knowledge graph of trait regulatory genes

Multi-source knowledge fusion



Schematic diagram of multi-source knowledge association and integration

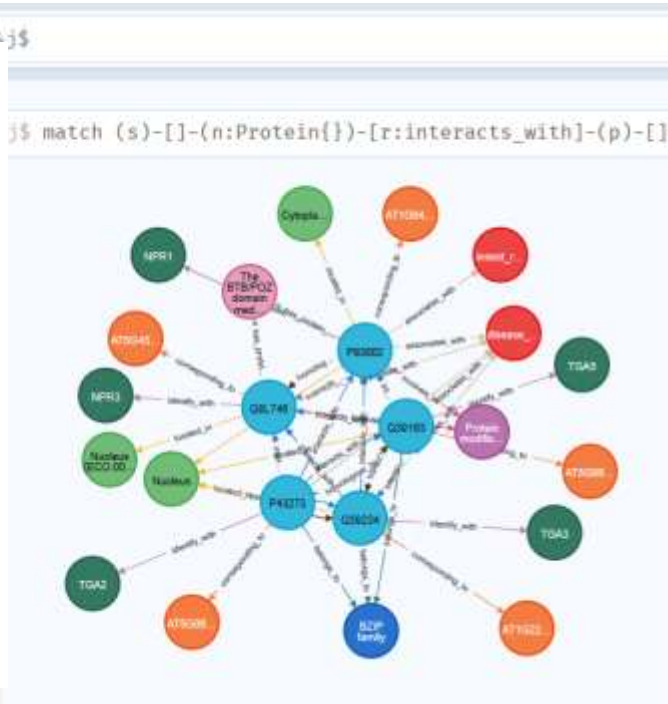
- In multi-source knowledge fusion, we selected *Arabidopsis thaliana* as a model plant, and rice, maize, and wheat as staple crops. Six traits were chosen: disease resistance, insect resistance, drought resistance, salt resistance, plant height, and grain weight.

2.3 Construction of knowledge graph of trait-regulatory genes

➤ The **knowledge graph of trait-regulatory genes**, covering 14 types of triples, 12,589 nodes, and 54,726 semantic relationships. Different colors represent different entity types and object attributes.

head entity; relation; tail entity	head entity	triples	tail entity	data source
{protein; associates with; trait}	1060	1235	6	PubMed
{protein; homologous to; protein}	1060	191221	75863	UniProt
{protein; interacts with; protein}	351	1150	351	STRING
{protein; corresponding to; gene}	76427	76427	28761	Phytozome; RAPdb
{protein; identify with; gene symbol}	18761	18761	12613	UniProt
{protein; involves in; signal pathway}	3345	3486	235	UniProt
{protein; located in; subcellular localization}	24317	41099	1885	UniProt
{protein; has protein domain; domain}	2211	2424	322	UniProt
{protein; belongs to; protein family}	41422	57582	642	Pfam
{gene; located in; cellular component}	20673	32897	389	Ensembl plants; GO
{gene; performs; molecular function}	25990	63750	1176	Ensembl plants; GO
{gene; involves in; biological process}	21794	46905	2105	Ensembl plants; GO
{gene; involves in; metabolic pathway}	4765	4777	604	Ensembl plants; KEGG
{gene; encodes the enzyme type; enzyme}	5094	5510	423	Ensembl plants; KEGG

UniProt, Universal Protein Resource; KEGG, Kyoto Encyclopedia of Genes and Genomes; Ensembl, European Molecular Biology Laboratory's European Bioinformatics Institute; RAPdb, Rice Genome Annotation Project; GO, Gene Ontology.



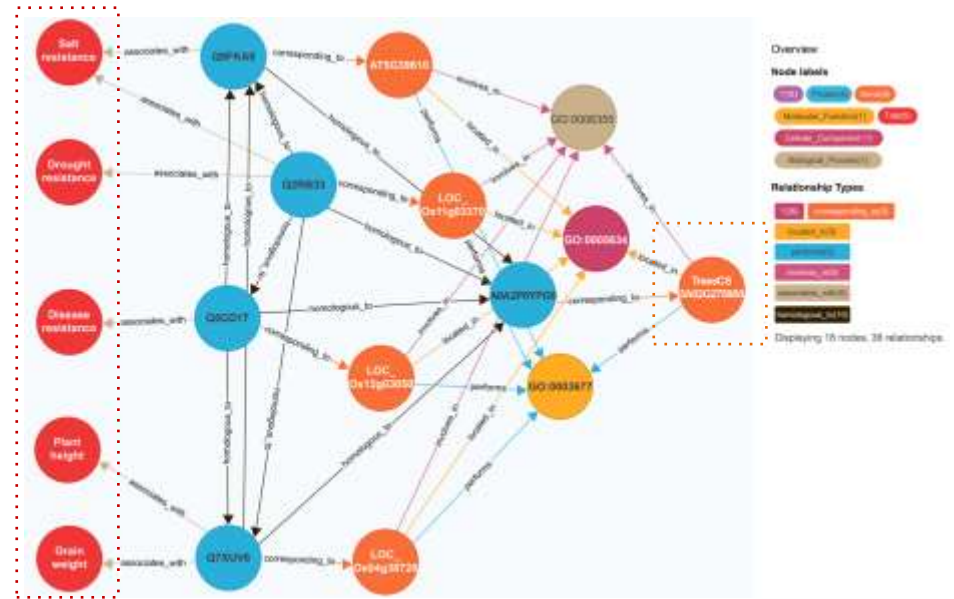
Zhang et al., *Front Plant Sci.*, 2024.

2.4 Model building and knowledge discovery-the mining of pleiotropic gene

Prediction model of gene regulatory traits

$$S(g1, g2) = C(k) \cdot D(k) \cdot S(p1, p2)$$

- We used a **similarity-based link prediction approach** to construct a **gene-trait prediction model** that integrates **entity attribute information** and **topological information** between **known and unknown genes**.



Mining of the excellent pleiotropic wheat gene *TraesCS5A02G275900*

Zhang et al., *Front Plant Sci.*, 2024.

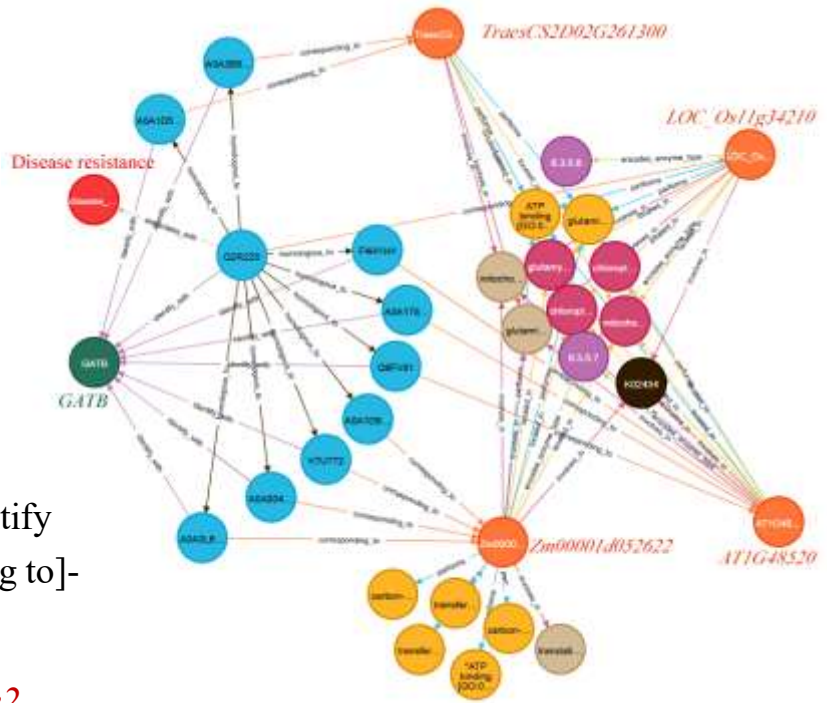
2.4 Model building and knowledge discovery - predict the functions of genes



Datalog-based association rule inference

IF *gene1*-[corresponding to]-protein1-[identify with]-gene symbol S and *gene2*-[corresponding to]-protein2-[identify with]-gene symbol S

Then *gene1*-[function identified with]-*gene2*



Overview >

Node labels

- (3) Gene (4)
- (10) Protein (10)
- (1) Trait (1)
- (1) Gene_Symbol (1)
- (2) Biological_Process (2)
- (7) Molecular_Function (7)
- (4) Cellular_Component (4)
- (2) Enzyme (2)
- (1) Metabolic_Pathway (1)

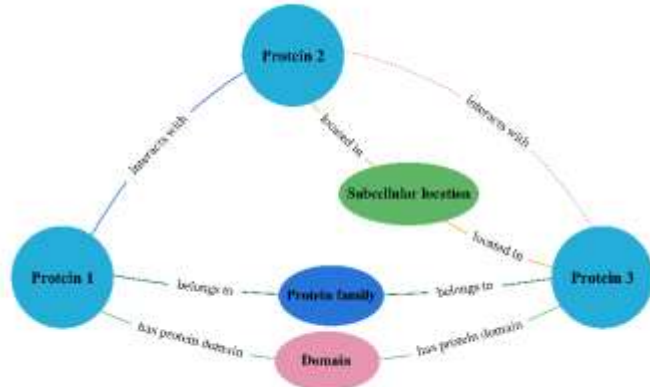
Relationship Types

- (7) identify_with (9)
- (15) corresponding_to (15)
- (9) homologous_to (9)
- (1) associates_with (1)
- (12) involves_in (12)
- (3) regulates (3)
- (3) localizes_in (3)
- (4) encodes_enzyme_type (4)

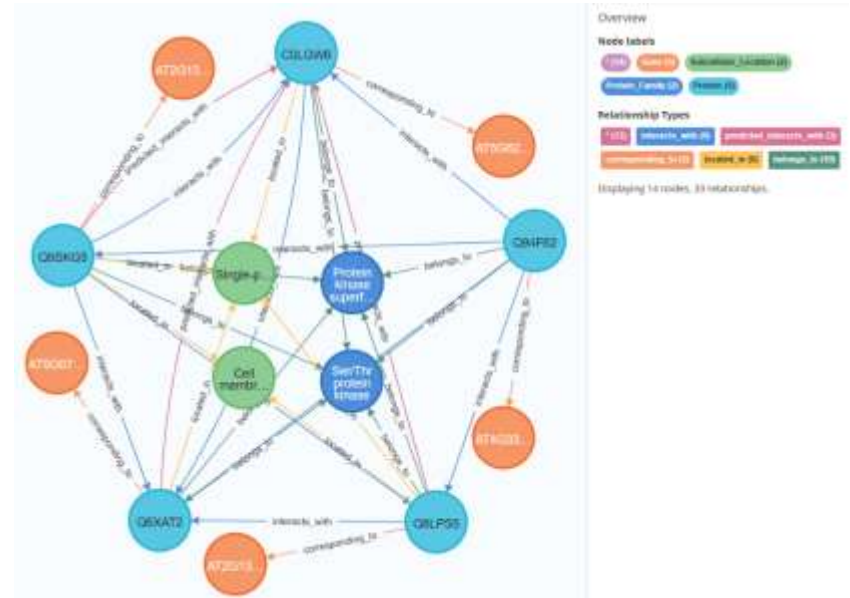
Displaying 33 nodes, 71 relationships.

Efficient prediction of gene function across species

2.4 Model building and knowledge discovery -the mining of pathway genes



- In crop breeding, the molecular regulation of traits is a complex process involving gene networks. Therefore, mining genes within the same pathway is essential for elucidating the molecular mechanisms of traits.



- We achieved potential discovery of pathway networks by associating complete subgraph structural features with pathway gene network characteristics.

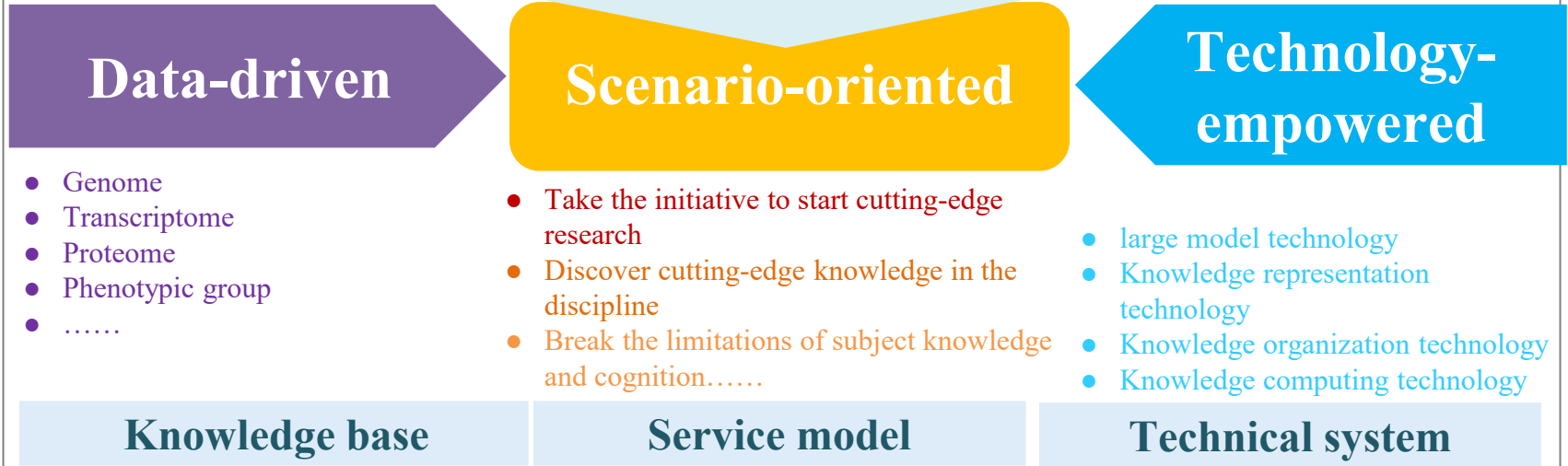
Zhao et al., *Sci Rep.*, 2025.



Consideration and Prospect

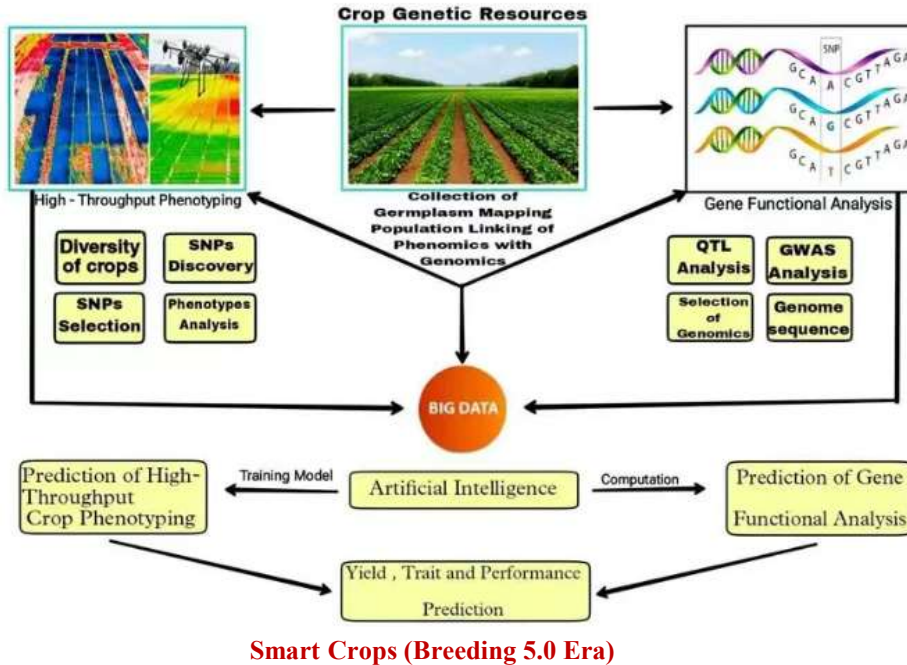
3 Consideration and prospect

Digital Intelligence Background: A New Paradigm of Knowledge Service for the Integration of "AI Data".



- The **knowledge service model** will shift from simply tracking domain frontiers to actively discovering cutting-edge domain knowledge, moving from understanding domain cognition to breaking cognitive limitations.

3 Consideration and Prospect



Ansari et al., *New Zeal J Crop Hort*, 2024.

- With the iterative upgrading of biological breeding technology, the concept of **Breeding 5.0**, also known as **intelligent crop breeding**, has recently been proposed.
- **Smart crops** can intelligently regulate gene expression—activating or silencing genes depending on external threats. This will be the core of **the Breeding 5.0 era**. Smart crops will place greater emphasis on the application of **AI technology in breeding**, and I believe that integrating domain-specific AI models remains a promising breakthrough to effectively support crop breeding research.

Thanks for your attention.

zhangdandan01@caas.cn

Simon Willemin

ETH zürich

ETH Library

Towards greater interoperability and standardization of IRs in Switzerland: The NAIF project

Simon Willemin et al.

19 September 2025

Table of contents

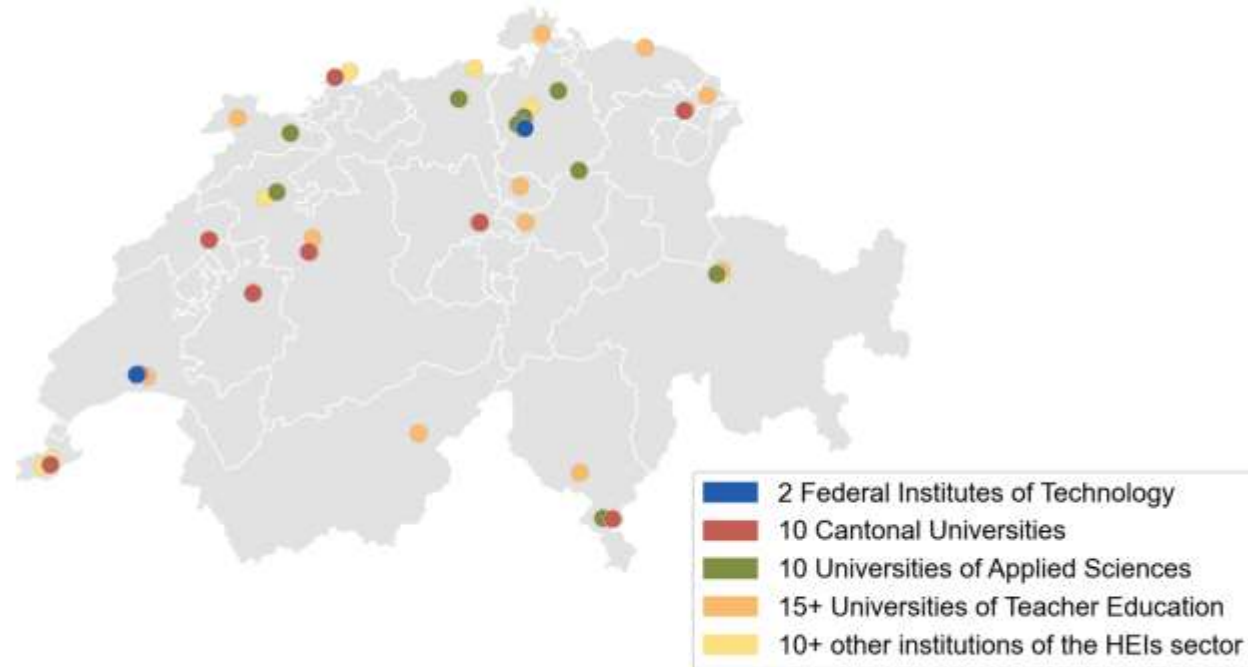
- Open Science in Switzerland
- NAIF Project
- Technical requirements
 - Track 3: Survey and analysis of Swiss institutional repositories
 - Track 4: Enhancement of national and global academic data
- Conclusion
- Questions and Feedback

Open Science in Switzerland

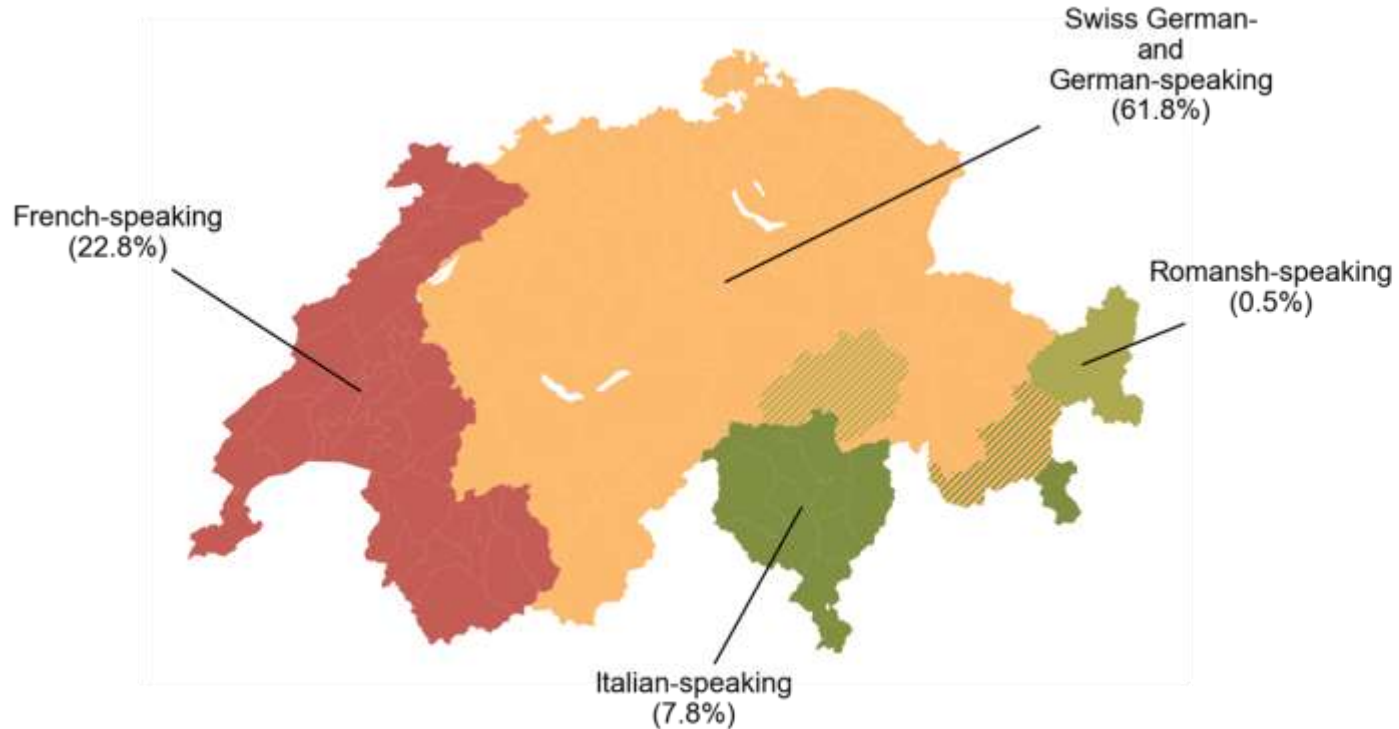
Higher Education Institutions in Switzerland

- 1 country with 26 cantons
- No national infrastructure for bibliometrics
 - No centralized publication repository
 - Limited interoperability of institutional repositories

Location of Higher Education Institutions in Switzerland



Regions and languages in Switzerland (simplified)



Data source for the map: © swisstopo
Data source for the percentages of the population speaking a national language (2022): © FDFA, Federal Population Census
Chart: ETH Library

Swiss National Open Access Strategy

Swiss National Open Access Strategy

The **Swiss National Open Access Strategy** aims at making all publicly funded scholarly publications freely available. This strategy - revised in 2024 - focuses on providing immediate, machine-readable access to scientific knowledge at no charge and with no embargo. This open dissemination of research findings brings added value to society and academia.

The review of the Swiss National Open Access Strategy

In 2017, swissuniversities and SNSF have set an ambitious vision of achieving 100% open access to publicly funded scholarly publications with the first Swiss National Strategy on Open Access. Pursuing this vision has considerably advanced the open access transformation with open access publications rising and closed articles dropping from 50% in 2017 to 27% in 2022. Open Access has been established as an idea and introduced as a policy across universities in Switzerland. In order to build on this progress and to be aligned with the international and national developments, the two strategy partners have initiated a review of the 2017 strategy and present a revised, forward-looking strategy.

<https://www.swissuniversities.ch/en/topics/open-science/open-access/national-strategy>

Programme Open Science I (2021-2024)



FLATO

Platinum Open Access Funding

PLATO is a project initiated jointly by six Swiss universities to develop a sustainable financing model that enables high-quality open access publishing in

[Read more >](#)



TOBI

Towards Open Bibliometric Indicators

TOBI is a project lead by the ETH Library and co-funded by swissuniversities. It aims to evaluate the quality of

[Read more >](#)



GOAL

Unlocking the green open access potential

GOAL's stated aim is to support and develop Green Open Access in the long term. In practice, this short

[Read more >](#)



NOAM

National Open Access Monitoring

The Swiss Open Access Monitor provides basic indicators for the vision of the Swiss National Strategy on Open Access. According to this vision, all scientific

[Read more >](#)

<https://www.swissuniversities.ch/en/topics/open-science/open-science-programme/oa-projects>

Programme Open Science II



- Objective 1** The frameworks for scholarly publishing set by institutions and service providers advance the paradigm shift towards open access.

- Objective 2** The scholarly publishing practices of research communities are characterised by a fully open access culture.

- Objective 3** The scholarly publishing system is financially sustainable.

- Objective 4** Authors affiliated with a Swiss institution have open access publishing options at reasonable conditions that align with the global context.

- Objective 5** Scholarly publishing in Diamond OA is financially viable and a robust alternative for authors.

- Objective 6** Open access for scholarly long-form publications and additional publication formats is supported.

Information regarding federal cost-cutting measures:
Effects on the Programme Open Science II ^

On 20 September 2024, the Federal Council announced to pursue several cost-cutting measures. These measures would include the discontinuation of project-related contributions (PGB).

swissuniversities has been informed that for now, financial resources for the 2025–2028 programmes can only be committed and allocated for the years 2025 and 2026 (see also [↗ this website](#)).

<https://www.swissuniversities.ch/en/topics/open-science/open-access/national-strategy>

NAIF Project

NAIF Project: Context and goals

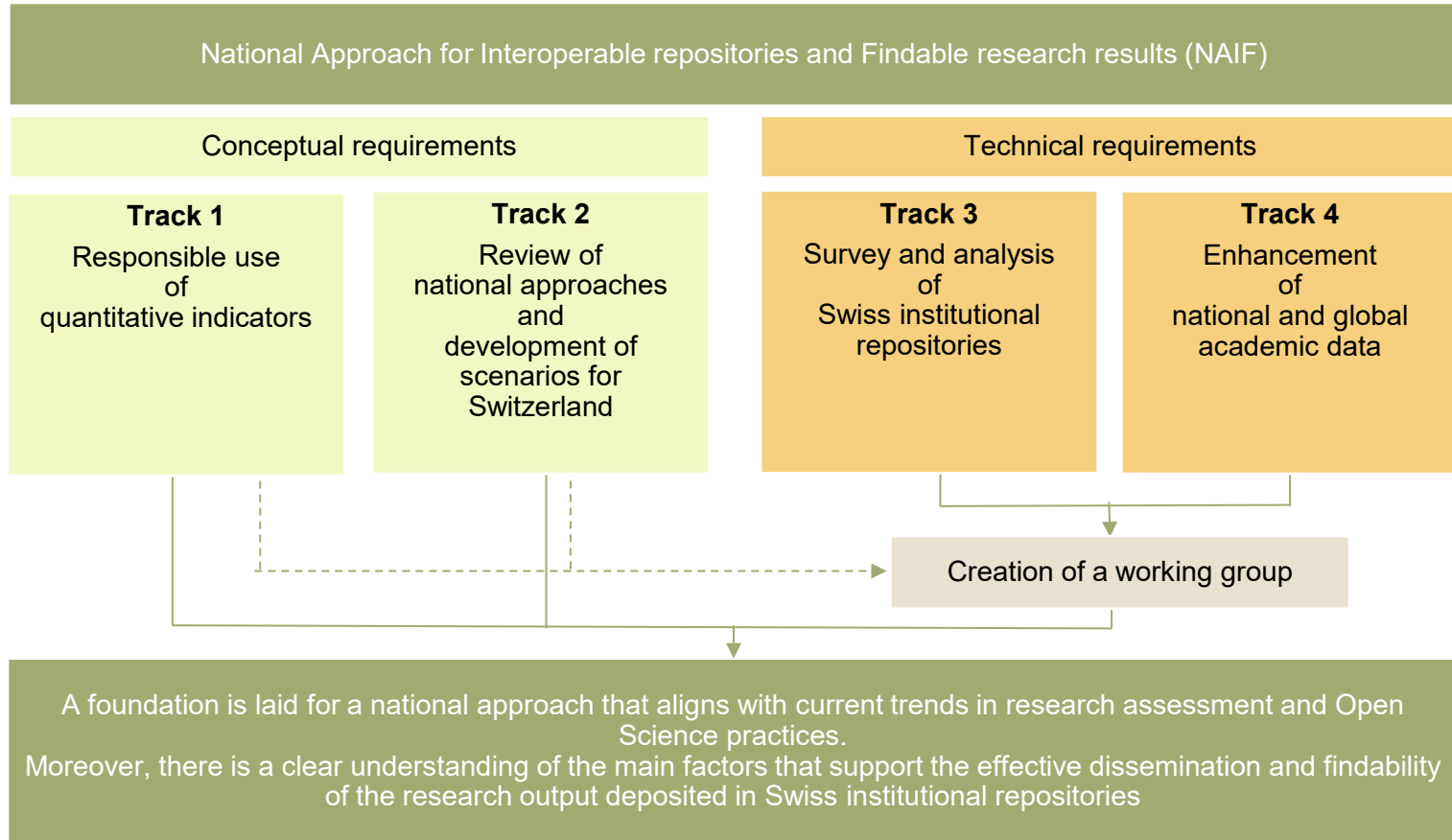
Context

- **Lack** of a systematic **overview** of Swiss research outputs
- **Fragmented** and **heterogeneous metadata** in institutional repositories
- Strong **reliance** of decision makers on **proprietary databases** and external providers
- Need for **interoperability** and **high-quality** metadata

Goals

- Increase **visibility** of Swiss research outputs
- Improve the data basis for **monitoring** and **steering**
- Promote the **responsible use of indicators**
- Support **Open Science practices**

NAIF Project: Tracks



Track 3

Survey and analysis of Swiss institutional repositories

Track 3: Survey & Analysis of Swiss Institutional Repositories

Challenges

- Fragmented metadata practices, governance models, and technical infrastructures across Swiss repositories
- Limited national overview of repository status, reducing research visibility and interoperability
- Reliance on external data providers instead of leveraging local, high-quality repository data

Objectives

- Deliver an **in-depth national analysis** of Swiss institutional repositories (IRs)
- Map **repository characteristics**: infrastructure, staffing, metadata practices, content types, sustainability
- **Align** with international **best practices** (OpenAIRE, DataCite) to enhance metadata quality
- **Understand** repository managers' **needs** and **challenges**
- **Address** metadata and support **issues** at the **source repository level**

Track 3: Survey Scope & Focus Area

Approach

- Modelled on **NORF Survey of Open Repositories** (Ireland) and the **European Open Repositories Survey 2023** (OpenAIRE, LIBER, SPARC Europe, COAR)
- Community-driven, consensus-based approach

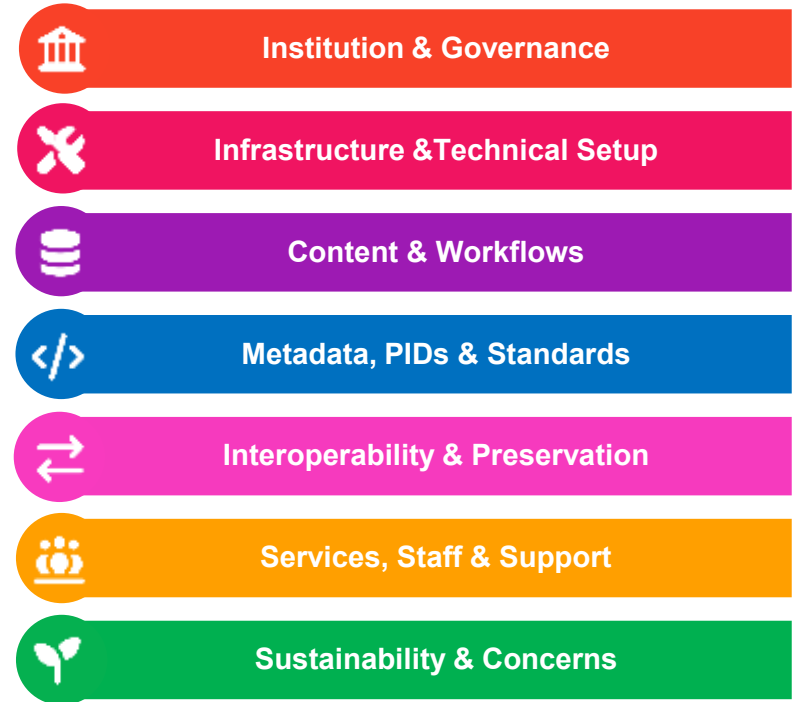
Who?

- **Institutional repositories of swissuniversities-accredited HEIs**
- Selected additional repositories (e.g., CERN, research institutes)
- ORD-only repositories **out of scope**



National Open Research Forum (NORF) Survey of Open Repositories in Ireland:
<https://zenodo.org/records/1037723>
5
Report:
<https://zenodo.org/records/1039062>
6

What?



Track 3: Illustrative Survey Questions

Which **software platform** does your repository use?

Please indicate the main software platform on which your repository is based. If your institution uses more than one platform, list them all. If it is a custom or less common solution, select 'Other' and specify.

Please **rank** the following **content types** according to their **importance or prevalence in your repository** (1 = most important / most common, N = least important / least common).

Drag and drop the items to rank them. If your repository does not accept a content type, you may leave it unranked.

Is your repository **compliant** with any of the following **metadata guidelines or frameworks**?

This question refers to external guidelines for interoperability and metadata quality.

Which **Persistent Identifiers (PIDs)** are **assigned to objects** in your repository?

Select all that apply. If PIDs vary by content type, please specify.

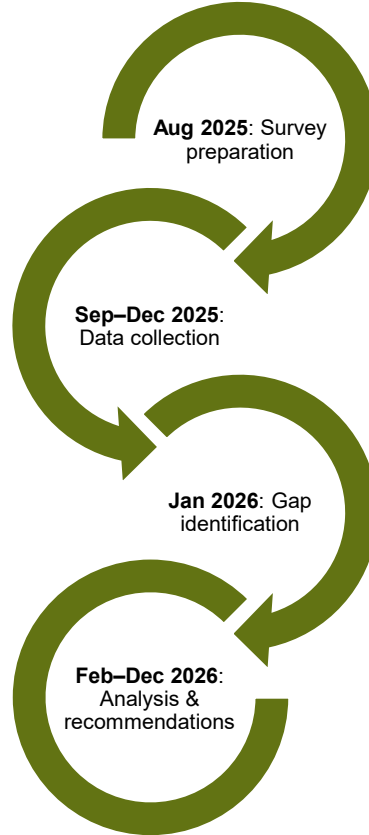
Which **interoperability protocols** does your repository support?

Select all technical protocols supported for metadata or content exchange.

Who is **responsible** for the **assessment and curation of deposits** in your repository?

Assessment and curation may include tasks such as metadata validation, copyright checks, file integrity verification, or ensuring compliance with repository policies.

Track 3: Milestones



Track 3: Outcomes & Benefits

Benefits for participants

- **Increased visibility** of your repository and outputs
- **Influence** on the design of a national metadata framework
- **Access** to international benchmarking and best practices
- **Opportunity** to join a collaborative Swiss repository network

Expected impact

- Identification of **common priorities** (metadata quality, OA advocacy, sustainability)
- **Practical, cost-effective improvements** without major new infrastructure
- Stronger **interoperability and visibility** for Swiss research on the global stage

Outcomes

National Inventory of Swiss Institutional Repositories

Gap analysis report with actionable recommendations

Shared Swiss metadata framework, aligned with international standards

Pilot initiatives to test and validate recommendations

Community of practice to connect repository experts across Switzerland

Track 4

Enhancement of national and global academic data

Track 4: Enhancement of national and global academic data

Challenges

- Visibility and findability of Swiss research are limited by incomplete or inaccurate metadata
- Need for a community-based, bottom-up approach: implement actions locally first, then scale up nationally (see use-cases described in the [Recommendations paper](#))



Objectives

- Define key categories of academic data from external authoritative sources to be (or already) integrated into institutional repositories
 - Data dimensions
 - Organizational data (e.g., ROR)
 - Authorship data (e.g., ORCID)
 - Funding data (e.g., SNSF)
 - Open Access information (e.g., Swiss OA Monitor)
- Identify key challenges and gaps for each data category
- Design, prioritize, and implement good practices to improve quality and advance FAIR principles

Track 4: Metadata focusses



Organizational data
(e.g., ROR)



Authorship data
(e.g. ORCID)



Funding data
(e.g., SNSF Funding)



Open Access
information
(e.g., OA type, APCs)

Challenge 1: Standardizing Organisational Data with ROR

Key Issues

- No comprehensive authority register for Swiss research structures → inconsistent names, signatures, and language variants
- Limited adoption of ROR IDs by Swiss HEIs
- Only a few fine-grained units within institutions – i.e., faculties, institutes, labs – are registered
- Metadata inconsistencies block linking and tracking

Open tasks

- How to improve adoption of ROR IDs across Swiss HEIs?
- How to represent institutions at multiple levels (faculty, institute, lab)?
- How to ensure consistent propagation of standardized affiliations in repositories and local systems?
- How to handle affiliations of external co-authors and funding bodies?
- How to enrich past publications with accurate, verified organizational data?

The screenshot shows the ROR profile for St. Gallen University of Teacher Education. At the top, the URL <https://ror.org/05m37v666> is displayed. The profile is organized into several sections:

- ORGANIZATION TYPES:** Education
- OTHER NAMES:** Labels: Pädagogische Hochschule St.Gallen (de); Acronyms: PHSG
- LOCATIONS:** Saint Gallen (GeoNames ID 2658622), Switzerland
- WEBSITE:** <https://www.phsg.ch/en>
- OTHER IDENTIFIERS:** GRID grid.466286.e; ISNI 0956 0961 6271 0139; Wikidata Q1758662
- RELATIONSHIPS:** Child Organizations: Institut Berufsbildung; Institut Bewegung, Sport und Gesundheit; Institut Digitale und Informatische Bildung; Institut Frühe Bildung & bis B; Institut Gesellschaftswissenschaftliche Bildung; Institut Kulturelle und Ästhetische Bildung; Institut Mathematische, Naturwissenschaftliche und Technische Bildung; Institut Pädagogische Psychologie; Institut Schule und Profession; Institut Sprachliche und Literarische Bildung; Regionale Didaktische Zentren PHSG; Zentrum Berufspraktische Studien; Zentrum Digitalisierung und Bildung; Zentrum Internationalisierung, Mobilität und Ausserbeziehungen; Zentrum Nachhaltige Entwicklung; Zentrum Weiterbildung; Zentrum Wissenschaftsberatung

At the bottom, there is a note: "Some record data is not displayed in this view. See 'ROR view for full record data'. Record last modified: 2025-04-02. Do you see an issue with the data on this record? Suggest a change."

<https://ror.org/05m37v666>

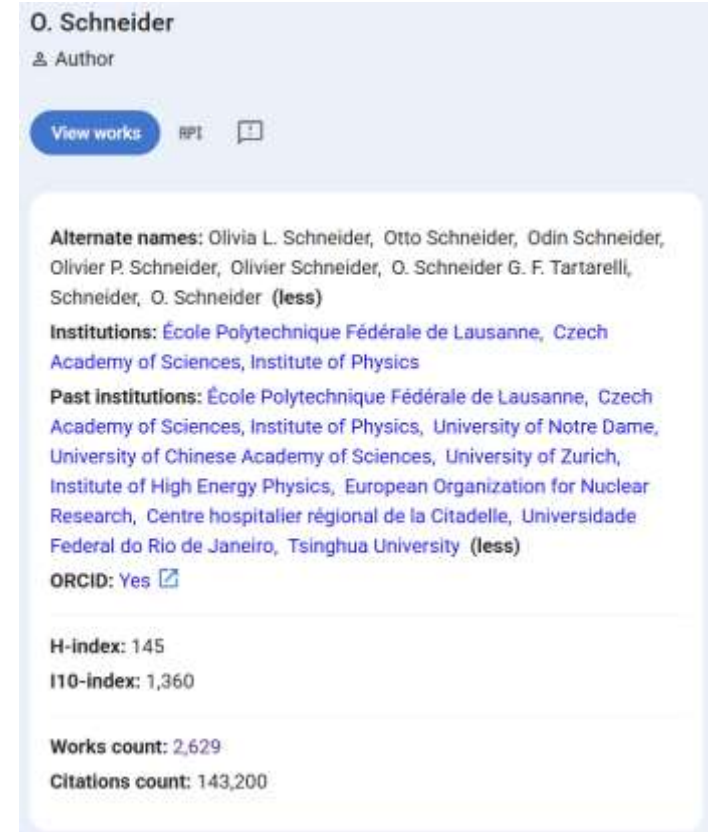
Challenge 2: ORCID and Authorship, Enhancing Researcher Visibility

Key Issues

- Name disambiguation when no identifier is available (homonyms, different spellings and transliterations)
- Uneven ORCID adoption across Switzerland
- Lack of integration of PIDs (e.g., ORCID) in local systems and institutional repositories

Open tasks

- How to encourage widespread researcher adoption and active use of ORCID through coordinated communication and institutional support?
- How to systematically integrate ORCID into repositories and institutional systems?
- How to propagate ORCID to past publications?
- How to connect external co-authors reliably via ORCID?
- How to establish workflows for continuous syncing between local systems and ORCID?



The image shows a screenshot of an ORCID iD profile for O. Schneider. The profile includes the name 'O. Schneider', the role 'Author', and a 'View works' button. Below this, there are sections for 'Alternate names', 'Institutions', and 'Past institutions', each with a list of associated organizations and a '(less)' link. At the bottom, there are statistics for 'ORCID: Yes', 'H-index: 145', 'I10-index: 1,360', 'Works count: 2,629', and 'Citations count: 143,200'.

O. Schneider
Author

[View works](#) #P1

Alternate names: Olivia L. Schneider, Otto Schneider, Odin Schneider, Olivier P. Schneider, Olivier Schneider, O. Schneider G. F. Tartarelli, Schneider, O. Schneider ([less](#))

Institutions: [École Polytechnique Fédérale de Lausanne](#), [Czech Academy of Sciences](#), [Institute of Physics](#)

Past institutions: [École Polytechnique Fédérale de Lausanne](#), [Czech Academy of Sciences](#), [Institute of Physics](#), [University of Notre Dame](#), [University of Chinese Academy of Sciences](#), [University of Zurich](#), [Institute of High Energy Physics](#), [European Organization for Nuclear Research](#), [Centre hospitalier régional de la Citadelle](#), [Universidade Federal do Rio de Janeiro](#), [Tsinghua University](#) ([less](#))

ORCID: Yes [✔](#)

H-index: 145
I10-index: 1,360

Works count: 2,629
Citations count: 143,200

<http://openalex.org/authors/a5033717261>

Challenge 3: Ensuring accurate and interoperable funding metadata

Key Issues

- Missing or incomplete grant metadata in publication records
- Difficulty to link publications to funded projects
- Limited integration of SNSF Grant Search with repositories and local systems
- Inconsistent use of funder identifiers (e.g., Crossref Funder Registry)
- Limited possibilities to connect outputs with grants and to assess research impact by funding source

Open tasks

- How to systematically integrate funding metadata (grant numbers, funder IDs) into repositories?
- How to improve the use and consistency of funder identifiers across systems?
- How can repositories act as hubs to link publications with grants and expose metadata to SNSF?
- How can repositories serve as hubs to connect publications and funding data while minimizing redundant data entry?

Datasets documentation

The SNSF makes the data published in Grant Search available for download.

Grants Details of the projects funded by the SNSF. ↓ Download CSV ↓ Download XLSX	Grants including scientific abstracts Details of the projects funded by the SNSF, including project summaries and scientific abstracts. ↓ Download CSV ↓ Download XLSX
Persons Details of the people involved in the projects. ↓ Download CSV ↓ Download XLSX	Output data: Scientific publications Details of scientific publications in the context of the funded projects. ↓ Download CSV ↓ Download XLSX
Output data: Use-inspired outputs Details of use-inspired output in the context of the funded projects, for example software or inventions. ↓ Download CSV ↓ Download XLSX	Output data: Public communication Details of different types of public communication in the context of the funded projects, including media relations, books and events. ↓ Download CSV ↓ Download XLSX
Output data: Collaboration Details of scientific collaborations in the context of the funded projects. ↓ Download CSV ↓ Download XLSX	Output data: Academic events Details of academic events in the context of the funded projects, like events organized by the grant holder or contributions to other events. ↓ Download CSV ↓ Download XLSX
Output data: Awards Details of awards in the context of the funded projects. ↓ Download CSV ↓ Download XLSX	Output data: Datasets Details of datasets in the context of the funded projects. ↓ Download CSV ↓ Download XLSX

Datasets from SNSF Grant Search

<https://data.snf.ch/datasets>

Challenge 4: Capturing reliable metadata on OA type and APC costs

Key Issues

- Swiss OA Monitor (repository survey) provides national statistics
- Common practices exist for extraction & normalization, but...
 - No guidance on embedding OA metadata directly in repository records
 - Missing info: OA funding sources, APCs and costs, Read & publish agreements, etc.
- Current setup sufficient for monitoring, but inadequate for deeper institutional or policy use

Open tasks

- How to capture OA metadata consistently and accurately across HEIs and repositories?
- How to enhance value of OA metadata for institutional reporting, policy decisions, and national monitoring?
- How to improve repository metadata for better integration and interoperability with external services (e.g., Unpaywall)?

opencost.de/en/project



- The openCost project
 - Development of a metadata schema
 - Open data exchange
- Using repositories to achieve transparency
- Where to store cost data?
- Integrating cost data into repositories
 - Exemplary implementation by the project partners
 - Cost data workflows
 - Display of OpenAPC information in repositories
 - Display of OpenAPC information in the Electronic Journals Library

Funded by the German Research Foundation (DFG) – Project number 457354095

Bartlewski, J., Broschinski, C., Deinzer, G., Pieper, D., Schweighofer, B., Sippl, C., Stein, L.-M., Wagner, A., Weisheit, S., 2024. The OpenCost project - Using repositories to achieve transparency in the transformation process to open access as part of the science economy. <https://doi.org/10.5281/zenodo.12579481>

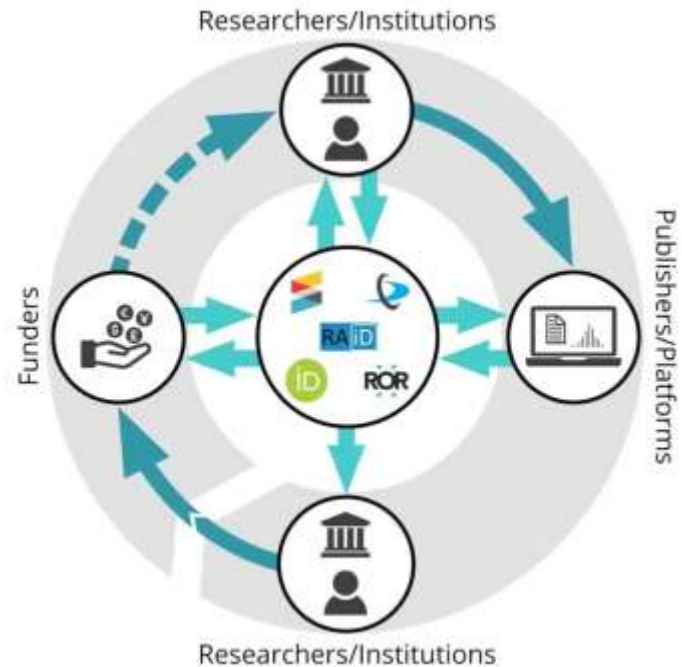
Global Challenge: Academic Data in an Interconnected Ecosystem

Key Issues

- Academic data is fragmented across multiple systems: repositories, ORCID, ROR, SNSF Grant Search, OA Monitor, publishers, funders, etc.
- Researchers and institutions enter the same information multiple times, leading to:
 - Redundancy and errors
 - Inconsistent metadata
 - Missed opportunities for aggregation, tracking, and reporting
- Current workflows underuse authoritative sources and limit interoperability and reuse

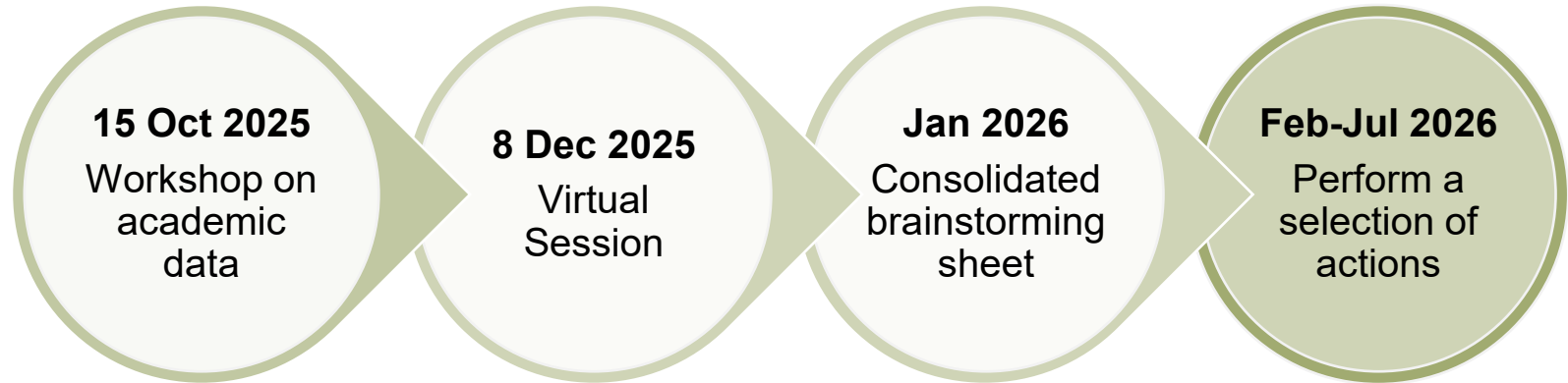
Open tasks

- How can repositories, funders, publishers, and registries collaborate to enrich academic data?
- How to implement single entry, multiple reuse to reduce redundancy and improve metadata?
- How to interconnect all academic data sources into a coherent ecosystem?
- How can this ecosystem be scaled and sustained at institutional and national levels while ensuring a Swiss Research Graph that is open, interoperable, and reusable?



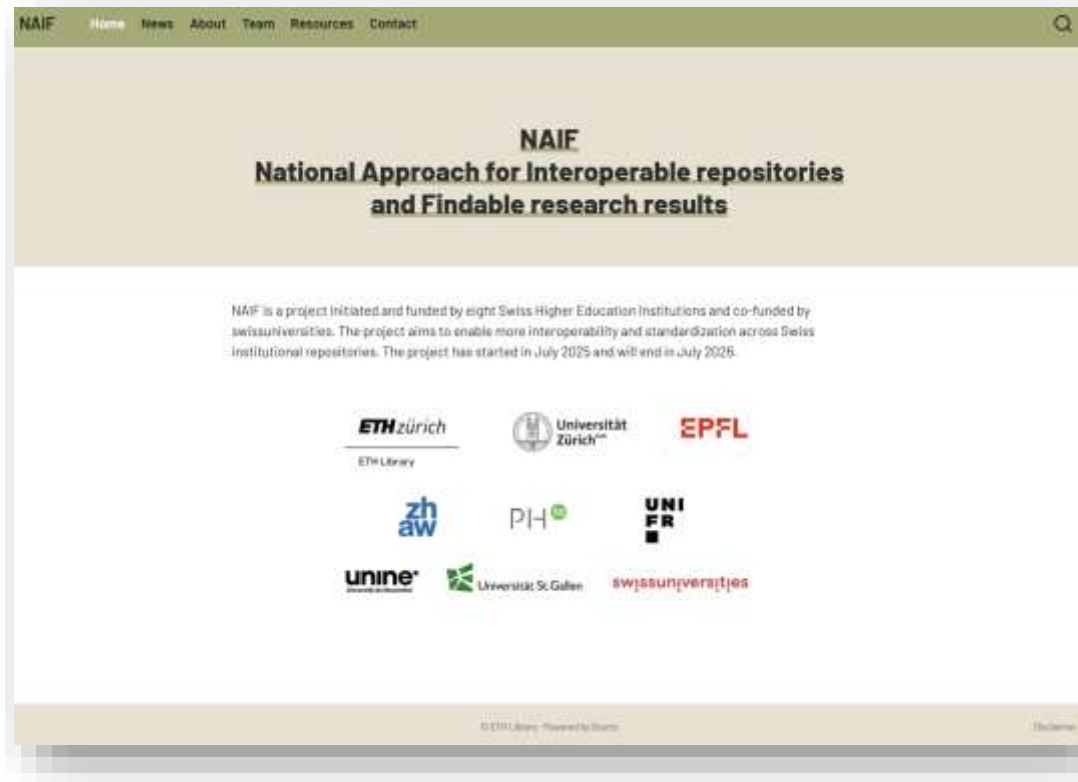
The PID-optimised research lifecycle. <https://resources.morebrains.coop/pidcycle/>

Track 4: Milestones



Conclusion

NAIF website



<https://eth-library.github.io/naif>

Save the date

NAIF events

- Workshop: Improving academic metadata for Swiss repositories and institutions (Track 4)
 - Date: 15 October 2025
 - Location: University of Neuchâtel
 - Registration: <https://forms.gle/23kzv1kubBDXpHp6>

- From Policy to Practice: Building a National Open Research Information Framework in Switzerland (Track 2)
 - Date: 5 November 2025
 - Location: University of Zurich
 - Registration: <https://ema.uzh.ch/RLX4H>

The poster is for a panel discussion at the University of Zurich. It features a network diagram of green nodes and lines. The text is as follows:

Universität Zürich | Open Science Services

**From Policy to Practice:
Building a National Open Research
Information Framework in Switzerland**

Lessons for Switzerland from Denmark, the Netherlands
& Finland

Wednesday, 5 November 2025
09:00-12:15 Panel Discussion (University of Zurich, City Campus,
Rämistrasse 59, RAA-G-01, Kleine Aula)
12:15-13:30 Standing Lunch (University of Zurich, City Campus,
Rämistrasse 59, RAA-Lichtthof)

Without open infrastructures that enable the sharing of research information (academic data) – including key outputs such as publications – Open Access and Open Science risk becoming mere rhetorical exercises. Only open systems can ensure true accessibility, transparency, reusability, and reliability – key enablers for digital research strategies or a national secondary publication right.

Following Switzerland's 2018 OR strategy revision, such a right is under discussion. While institutional repositories are well established, stronger coordination and common standards are needed to boost national visibility of Switzerland's research output and prepare for potential legislation.

The panel brings together perspectives from three countries. Switzerland will examine their national strategies from both national and institutional viewpoints.

Denmark: Governance and infrastructure for Open Science in Denmark
The Netherlands: Implementing a secondary publication right
Finland: A national platform to share, connect and enhance Finnish research

Discussions will address benefits for institutions, funders and researchers, potential conflicts of interest, and ways to secure coordination and sustainable funding.

This panel is part of the NAIF (National Approach for Interoperable Repositories and Findable Research Results) project funded by Helvetia Foundation.

Register now: <https://ema.uzh.ch/RLX4H>

Places are limited! Deadline: 28 Oct 2025

Logos at the bottom include: EPFL, P+I, unine, and others.

Thank you

NAIF Project and tracks leaders

Pascale Bouton (EPFL)

Dr. Martin Jaekel (ZHAW)

Dr. David Johann (ETH Library, ETH Zurich)

Dr. Andrea Malits (University of Zurich)

Dr. Rüdiger Mutz (CHESS, University of Zurich)

Julien Sicot (EPFL)

Stefan Vogt (University of Zurich)

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APPENDIX

Track 1

Responsible use of quantitative indicators

Track 1: Objectives

- Recommendation of a set of quantitative scientometric indicators and their responsible use for monitoring and research assessment at researcher level, research unit level, institutional level and national level, in line with the intentions of DORA and CoARA.
- Main deliverable: Report with recommendations on the responsible use of indicators

Track 1: SYoS Workshop on the responsible use of QSI

A) Values and conflicts

- Q1. What do we mean by responsible QSI (Quantitative Scientometric Indicators) [...]

B) Statu Quo and Vision for the Future

- Q5. In what situations / how are QSI currently used? (e.g. on the level of research personnel: hiring, promotion, evaluation of proposals; on the level of the research unit: internal assessment of the unit; on the level of the institution: rankings, accreditations, external reporting, internal analysis of the development of research topics and trends)
- Q7. In what situations should QSI be used in the future? In what situations should QSI not be used in the future?

C) Implementation of the vision

- 10. What recommendations regarding the use of QSI can be derived from your vision on the future use of QSI?

Track 1: Next steps

- Online Questionnaire for Libraries:
 - Covering the same topics but from a bit more technical perspective
- Interviews with Research Analytics / internal Research Evaluation Offices
 - Use cases for quantitative scientometric indicators
- Online-/Literatur Survey:
 - Research-on-Research literature regarding use of quantitative scientometric indicators

Track 2

Review of national approaches and development of scenarios for Switzerland

Track 2

- **Panel Discussion (5 November 2025)**
National approaches and expertise from Denmark, the Netherlands, and Finland
- **Report to include**
- Analysis of the added value for Switzerland, including consideration of a possible secondary publication right and related business case(s)
- Outcomes of the workshop and suggestions for potential implementation in Switzerland
- Recommendations for action, including implementation phases, funding models, and sustainability strategies
- Identification of costs and potential benefits of different solutions (including technical aspects), and development of a business model with a sustainability plan

The poster features a network diagram of green nodes and lines at the top. The text is arranged in a clear, professional layout with various font weights and sizes. Logos for the University of Zurich and various research institutions are at the bottom.

Universität Zürich | Open Science Services

From Policy to Practice: Building a National Open Research Information Framework in Switzerland

Lessons for Switzerland from Denmark, the Netherlands & Finland

Wednesday, 5 November 2025
09:00-12:15 Panel Discussion (University of Zurich, City Campus, Rämistrasse 59, RAA-G-01, Kleine Aula)
12:15-13:30 Standing Lunch (University of Zurich, City Campus, Rämistrasse 59, RAA-Lichthof)

Without open infrastructures that enable the sharing of research information (academic data) — including key outputs such as publications — Open Access and Open Science risk becoming mere compliance exercises. Only open systems can ensure true accessibility, transparency, traceability, and reusability — key also for rights retention strategies or a national secondary publication right.

Following Switzerland's 2024 OA strategy revision, such a right is under discussion. While institutional repositories are well established, stronger coordination and common standards are needed to boost national visibility of Switzerland's research output and prepare for potential legislation.

The panel brings together perspectives from three countries. Speakers will examine their national strategies from both national and institutional viewpoints:

- Denmark - Governance and infrastructures for Open Science in Denmark
- The Netherlands - Implementing a secondary publication right
- Finland - A national platform to share, connect and enhance Finnish research

Discussions will address benefits for institutions, funders and researchers, potential conflicts of interest, and ways to secure coordination and sustainable funding.

This panel is part of the NAIF (National Approach for Interoperable Repositories and Findable Research Results) project funded by SNSF.

Register now: https://ema.uzh.ch/RI_X4H

Places are limited! Deadline: 28 Oct 2025

Logos at the bottom: ZORA, University of Zurich, EPFL, ZHAW, PH, UNIL, unine, University of Göttingen, and others.



Please check your inbox for a post-event information.

If you have any questions about ICSTI, please contact ICSTI's executive manager, Addie Cox (addie.cox@icsti.org).

Thank you for attending ICSTI's *Annual Conference*

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