

Researcher Profiles as Part of a National CRIS – Updates from Research.fi

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This paper explores the recent developments regarding researcher profiles in the Finnish national CRIS system Research.fi. The Finnish implementation of aggregating researcher-related information into Research.fi from organisational CRIS systems and other sources is unique, as it is built on the MyData approach¹², where individual researchers can verify the source of every information record, control their public profile, and consent to the use of information regardless of their current affiliation. This paper introduces the current development work, including the CV Tool and the AI-assisted personal bio feature, now available to researchers in Research.fi.

We wish to underline the important role national research information systems can play in lessening the administrative burden of individual researchers when cooperation between relevant stakeholders is active and forward-looking. The focus in this paper is therefore on features that support researchers by simplifying administrative processes and enabling national-level interoperability.

Background

Large amounts of research information are produced and stored across many different systems—including organisational CRIS systems, library repositories, publishers, and funders' registers. Because these systems are not well connected, metadata about publications, datasets, funding and infrastructures often ends up scattered in separate silos, making it difficult to locate or reuse information.³ The same challenge applies to researcher-level information, such as activities, roles, awards, or profile descriptions, which may appear in institutional CRIS systems or external services like ORCID and ResearchGate. Although ORCID supports a user-controlled MyData-oriented approach, metadata quality

¹ MyData.org. MyData 101.

² 2. Kuikkaniemi, K., Poikola, A., & Honko, H. (2015). MyData – A Nordic Model for human-centered personal data management and processing.

³ Sivertsen, G. (2019). Developing Current Research Information Systems (CRIS) as Data Sources for Studies of Research. In: Glänzel, W., Moed, H.F., Schmoch, U., Thelwall, M. (eds) Springer Handbook of Science and Technology Indicators. Springer Handbooks. Springer, Cham. https://doi.org/10.1007/978-3-030-02511-3_25

varies, especially in self-curated sections. Inaccuracies also arise because organisations cannot formally update information on behalf of researchers, unlike in institutional CRIS systems.

In Finland, some organizations do push data from their CRIS systems directly into ORCID, improving the coverage and quality of researcher profiles. Similar challenges and motivations have been documented internationally, where integrated CRIS infrastructures are seen as essential for improving interoperability and reducing administrative burdens.

Finnish Research Information Hub and the Research.fi Portal

The Finnish Research Information Hub collects and connects information on Finnish research from a variety of authoritative sources. It is provided by the Ministry of Education and Culture and developed by CSC – IT Center for Science Ltd.⁴ The Research.fi service⁵, launched in 2020, is the most visible part of the Hub and aims to provide an overview of Finland's research landscape, improve discoverability, enable reuse in other systems, and support the visibility of researchers' diverse activities and outputs. A key principle is that all data flows automatically from source systems, reducing duplication of work and ensuring consistency.

The need for improved national-level research information management had been identified earlier: information was fragmented, metadata from various systems unlinked, and there was no single comprehensive access point for research conducted in Finland. Research.fi addresses these gaps, and a major part of this effort is the development and adoption of researcher profiles.⁶

Researchers' Profiles in Research.fi and Recent Developments

Researcher profiles were implemented in spring 2023. Researchers can compile information into one public profile in Research.fi. The prerequisites are (1) Suomi.fi strong e-identification, the national identification system for Finnish public-sector digital services and (2) an ORCID profile. This makes it possible to recognise the same person across CRIS systems and related services, enabling connections between information pieces. The profile is independent of affiliation and can include contact information, activities, education and qualifications, as well as research outputs such as publications or datasets.

ORCID iDs⁷ play a central role. No content can be entered or edited manually; instead, it is transferred from existing sources once the researcher gives consent. Researchers may connect information from ORCID and their home organisation's CRIS system, after which the data is automatically imported and made public if they so choose. Earlier work has also

⁴ 3. Haapamäki, J. (2024). Developing Research Information Hub in Finland, a view from the Ministry. *Procedia Computer Science*, 249, 15–20. <https://doi.org/10.1016/j.procs.2024.11.044>

⁵ <https://research.fi/en/>

⁶ Puuska, H. M., Suominen, T. (2020). The New Finnish Research Information Hub Provides a Comprehensive View of Finnish Research, <https://info.orcid.org/the-new-finnish-research-information-hub-provides-a-comprehensive-view-of-finnish-research/>.

⁷ <https://info.orcid.org/what-is-orcid/>

described the foundations of this approach, outlining how researcher profiles integrate information from organisational CRIS systems and PID-based sources.⁸

Work on an Openness Profile has begun but is still incomplete, especially regarding activity classification and definitions.⁹ Given this early stage, this abstract includes only a brief mention. Related work in the GraspOS pilot has explored how openness-related indicators and Openness Profile concepts could be integrated into national CRIS infrastructures such as Research.fi.

CV Tool Development

At the end of 2025, a CV Tool was added to researcher profiles. It enables researchers to create their CV and publication list based on information already aggregated from various sources to their profile. At this stage, the CV is produced as a Word document, but future includes a dynamic CV would allow exchanging profile information to other systems. The current Word document output follows the template recommended by the Finnish National Board on Research Integrity (TENK), which is required by most Finnish funders and organizations.¹⁰

Research.fi is currently piloting the use of profile information and the CV Tool within a funder's system. When applying for funding, the researcher can permit the funder's system to retrieve relevant information directly from their profile. Identity verification is handled by ORCID. This reduces repetitive data entry and helps keep CV and publication data consistent across systems.

AI-Assisted Personal Bios

Another way to ease researchers' administrative workload is to support writing personal bios. Researchers want their Research.fi profile to reach a different audience from institutional CRIS or ORCID profiles. An AI-assisted personal bio feature was developed as a proof of concept using a retrieval-augmented LLM approach. The system proposes a draft bio based on existing profile information; researchers can edit the suggestion and translate it into Finnish, Swedish or English.

The proof of concept uses the Finnish LLM Poro2 running on the CSC's LUMI HPC environment via CSC's Aitta inference platform. All computation remains within CSC infrastructure, and the feature adheres to MyData principles: users opt in, their information is not used to train the model, and they retain full control over the final text.

⁸ Nikkanen, J., Puuska, H.M. (2022). Researchers' profiles in Finnish Research Information Hub. *Procedia Computer Science* 211: 206-210. <https://doi.org/10.1016/j.procs.2022.10.193>

⁹ Himanen, L. (2025) Towards the implementation of an Openness Profile: the case of Research.fi. <https://doi.org/10.5281/zenodo.17720660>

¹⁰ Finnish National Board on Research Integrity (TENK). (2020). TENK CV Template. <https://tenk.fi/>

Discussion

Researchers face increasing administrative burden, particularly due to competitive funding processes requiring frequent updates to CVs, publication lists and personal details. While research plans cannot be automated, the surrounding administrative steps can be supported. Prefilling applications, automatically generating CVs and publication lists, and offering AI-assisted communication tools save researchers time and reduce institutional costs.

The developments presented here—researcher profiles, the CV Tool, funder-integration pilots and AI-assisted personal bios—represent important progress toward more efficient national-level support for researchers. Next steps include expanding funder integrations, developing the dynamic CV, maturing openness-related activity classification, and improving multilingual tools. Keeping AI inference on-premise at CSC complements the MyData approach by ensuring data flows remain controlled and transparent.