

Researchers' profiles in Finnish Research Information Hub

This paper introduces the ongoing development related to Research.fi and how researchers' information is handled on a national level. Introducing researchers' profiles into Research.fi includes integrating information from organizational CRIS systems, ORCID and Finnish Research Information Hub and combines this into fully working tool, where publicity of researcher related information is controlled by the researcher's consent.

Background

Vast amounts of research information are constantly being collected and stored in various different locations e.g. field-specific services, international databases, universities' systems, libraries, scientific publishers and research funders' registers. The metadata on publications, research data, projects, and infrastructures are typically fragmented in silos behind organizational or topical boundaries. This makes finding research more difficult than it needs to be and especially hinders the reuse of research information by third parties.

Same problematic issues apply for researchers' information (e.g. activities, prizes, descriptions, profile-like information, positions; all researcher-centric information objects that are not published formally) as well. Information on what a certain researcher does or did lies in the system's either set up by their affiliated organizations (*current research information systems*, CRIS) or by ones maintained by the researcher themselves and hosted by non-affiliated organizations (e.g. ORCID, ResearchGate). Of these, the ones that are developed and maintained by commercial actors often lack in visibility and proper interoperability of the data models which in turn might result in shortcomings when researcher would like either to: 1) exchange her information from system to system when affiliation changes and 2) control over which information about herself is given or exposed to which actor or system.

Exception though is the ORCID system which catches the MyData¹ approach very well and let's researcher clearly control on which parts of the profile and activities are shared to which partners or systems. Where ORCID lacks though is in the metadata quality as especially the information on researcher's activities is often lacking as it's up to researchers to fill and curate this information. Also, information about the researcher might be inaccurate, as there is no formal process to update this information by e.g. affiliated organizations contrary to what is done for organizational CRIS systems by the organizations staff directly.

Finnish Research Information Hub and the Research.fi portal

The Finnish Research Information Hub collects and connects information of Finnish research from various sources. The Research.fi service², launched in 2020, is the most visible part of the Research Information Hub. The service collects information on research, the Finnish

¹ <https://mydata.org/mydata-101/>

² <https://research.fi/en/>

research system, and statistics on the development of research resources and impact. The aim of the Finnish Research Information Hub is twofold: 1) to collect and connect information of Finnish research and provide it in a single access point, and 2) to lessen researchers' reporting and administrative work through smooth information flows between systems.³

The need for better management of research information on a national level has been identified already earlier and has to do with following shortcomings in the landscape of research information on a national level: 1) The pieces of information are disintegrated and have been difficult and laborious to locate and utilize 2) Metadata from various databases and information systems have not been linked, resulting in overlap and incomplete information entities 3) Lack of cohesive and complete access point for Research conducted in Finland. The development of Research.fi tries to tackle these issues and one high profile target is the so-called Researcher's profiles to be brought into the Research.fi domain.

Researchers' profiles in Research.fi

The users and stakeholders of the Finnish Research Information Hub have highlighted the need to find experts on particular research topics. As the most significant new feature of Research.fi for the near future will be the researcher profiles implemented into the Research.fi domain during 2022.

ORCID iDs⁴ will play a central role here. The service will introduce a dedicated "MyData service", a profile tool available for all researchers that enables them to create their profiles in Research.fi via e-identification and then connecting profiles to their ORCID accounts. To avoid "yet another profile to maintain," no content will be entered or edited manually but will be transferred from existing sources. Researchers can connect their information both from ORCID and their home organizations' CRISes. After researchers give their consent, the information will be automatically imported from these preferred sources.⁵

Information on researchers include, for example, names, affiliations, contact details, education, expertise, scientific merits, and awards. Also, the researchers will be able to connect previously collected publications, research data, and projects in Research.fi to their profile, even if an ORCID iD was not provided at the time of their collection.

The Research Information Hub provides a way to share researchers' information between different stakeholders. The researchers can choose what information they want to display on Research.fi and decide which third parties (e.g., funders or universities) their information may be disclosed to. The sharing of information to third parties is based on the external REST API that is being developed for Research.fi. Thus, any information that the individual researcher consents for third part use is made accessible via this API.

³ Puuska, H. M. (2021). Research.fi – the Finnish Research Information Hub, presentation in EuroCRIS Spring 2021 series of euroCRIS webinars, <http://hdl.handle.net/11366/1790>.

⁴ <https://info.orcid.org/what-is-orcid/>

⁵ 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/>.

As part of the development, a two-way integration between ORCID and Research.fi is being planned. In first phase the ORCID records are used to provide information on researchers and their activities to Research.fi. Second phase could provide way to input organizational and thus curated CRIS data on researchers via Research.fi to ORCID. This would highly benefit the comprehensiveness and enhance the ORCID records so that information would be up-to-date and source from individual organizations to ORCID.

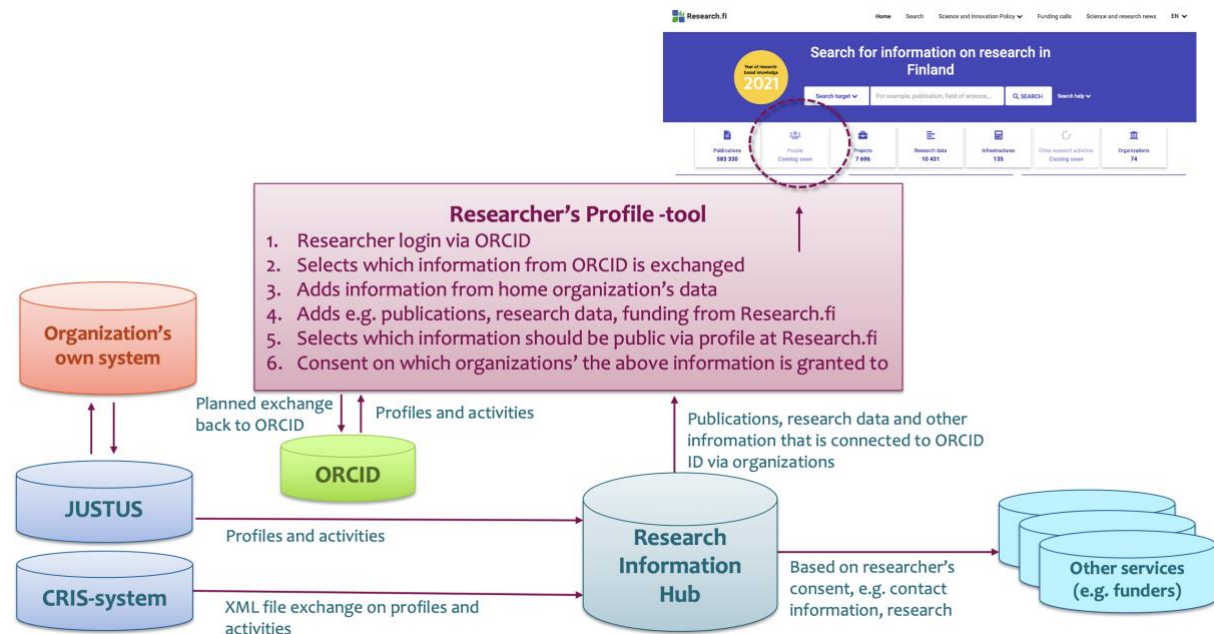


Figure 1: Overview of the planned metadata flows and processes in Research.fi and Researcher's Profile-tool

Conclusions

Achieving the interoperability via this common solution provides for many aspects of research and any related stakeholders. Researchers' information can be brought, on their consent, into many national and international services to both prefill information on researchers or to utilize information in other ways (e.g. reporting, insights). Media representatives, funders and decision-makers have a single channel on which to find information on researchers and they can rely for information to be up-to-date for e.g. contact information as this comes directly from research organization's internal systems. This is however achieved with minimal impact on the researchers' workload – any information visible in Research-fi profile is already described or collected elsewhere. The researchers can highlight their entire career regardless of organizational boundaries or in-between affiliations.

Work also results in better quality metadata on researchers as it allows for the researcher to choose what kind of information is publicly used and in which context, paving way for MyData based approach for researchers' information.