

Best Practice Sharing 1: European Experiences on Citizen Science Acculturation

Rooting Citizen Science with the aid of coherent policy, training, communication – and common excitement!

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Definition for Citizen Science in Finland

- Citizen science is scientific research that is partly or entirely carried out by ordinary people. Citizen science involves the public in scientific research. It has been utilized especially in natural and technical sciences. Practical examples of research conducted by citizens are birdwatching and participating in archaeological digs.

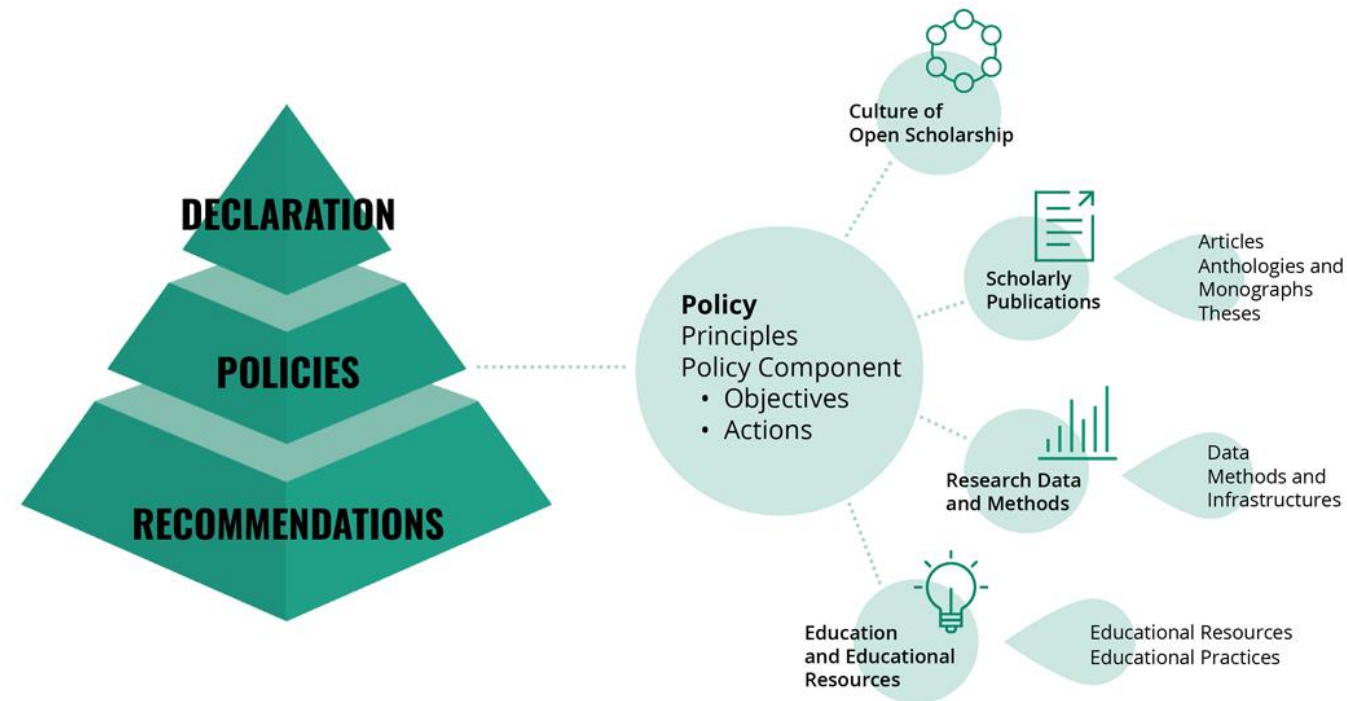
The role of citizen scientist:

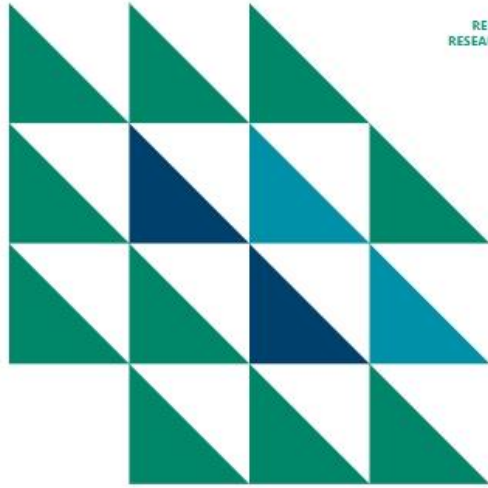
- Citizen scientists are involved at least at one stage of the research.
- Citizen scientists are not the objects of the research but the co-researchers.
- Research must usually be led by a trained researcher.

Policy and Structure in Finland



Open
Science





RESPONSIBLE
RESEARCH SERIES
6:2025

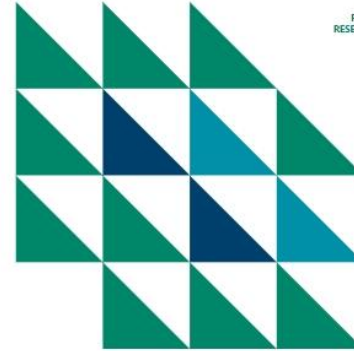
DECLARATION FOR OPEN SCIENCE AND RESEARCH 2025–2030

COMMITMENTS

By signing the declaration, the signatories from the higher education and research community commit to the following objectives, while taking into account their own specific characteristics:

1. Culture for open scholarship

- 1.1. We develop and maintain the practices and services of responsible openness in research, teaching and development and innovation.
- 1.2. We recognise societal interaction of research, company collaboration, **citizen science** and other participatory practices as merits in the assessment and career advancement.



RESPONSIBLE
RESEARCH SERIES
2:2022

POLICY FOR OPEN SCHOLARSHIP

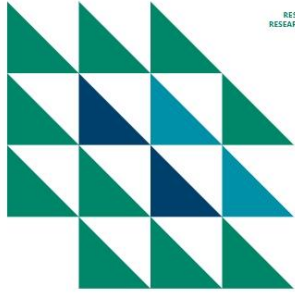
3. CITIZEN SCIENCE

The organisation promotes the operational preconditions for citizen science by providing sufficient and appropriate support and training to the involved researchers and other parties.

Actions required by the objective:

- a. **Raising awareness.** The organisation increases the personnel's awareness of the starting points, methods and preconditions of open science in research conducted using methods of citizen science.
- b. **Guidelines.** The organisation offers researchers clear guidelines for citizen science projects.
- c. **Training.** The organisation takes citizen science into account in its open science training programmes.
- d. **Data management.** The organisation supports the preparation of a data management plan in citizen science projects.

- e. **Communication.** The organisation supports the researcher in publishing and communicating in a sufficiently popular manner in accordance with the principles of citizen science.
- f. **Publication and communication plan.** The organisation supports the researcher in drawing up the publication and communication plan in the early stages of the citizen science project.
- g. **Responsible conduct of research.** The organisation ensures that the researcher leading a citizen science project takes care of the implementation of responsible conduct of research.
- h. **Systems.** The organisation ensures that the systems supporting citizen science projects are brought to an adequate level.



RECOMMENDATION FOR CITIZEN SCIENCE

OBJECTIVES

OBJECTIVE	MINIMUM LEVEL	OPTIMAL LEVEL
Visibility of citizen science within the organisation	The organisation has guidelines on citizen science available.	The organisation has a policy on citizen science as its own policy or as part of another policy on open science.
Enabling interactive citizen science	Organisations arrange support for researchers to support non-technical communication during and after citizen science projects.	Finnish organisations work together to draw up an interaction plan (including good practices and a process description), which will enable researchers to maintain and develop ways of interacting with citizens throughout the project and for a sufficiently long time after the project has come to an end.
Funding (means should be considered in advance)	<p>The organisation must ensure that the funding opportunities of citizen science projects are equal to those of other research projects.</p> <p>(Organisations must indicate the need for citizen science funding so that funding organisations can better meet the funding needs of citizen science projects and take into account, such things as, the longer duration of research projects.)</p> <p>Domestic funding organisations must reach the same level as international research funders. (We could fare better in EU framework programmes, if citizen science projects were funded)</p>	The organisation has processes for funding citizen science projects.
Training	The organisation offers researchers and staff the opportunity to participate in citizen science training as part of other personnel training. The training must include guidance on both methods and practical implementation.	Organisations provide guidance and courses on citizen science to raise public awareness. Educational institutions include citizen science as part of the curriculum of degree programme students.
Legal support	The organisation must ensure that legal services are available to citizen science projects on an equal basis with other projects.	Organisations have a legal expert who is familiar, in particular, with the law concerning citizen science projects. This resource can be shared by organisations or, for example, employed by the Federation of Finnish Learned Societies.
Systems	The organisation provides support for the most common systems and platforms used in citizen science.	The organisation has the possibility to build and/or localise systems to facilitate data collection.

A Citizen Science Guide for Researchers in Finnish and Swedish



KANSALAISTIETEN OPAS TUTKIJALLE

Citizen science: What is citizen science?

What is citizen science?

Citizen science in Finland

Citizen science around the world

Read about citizen science

Materials open to everyone

Suomeksi [↗](#)

Ask about citizen science

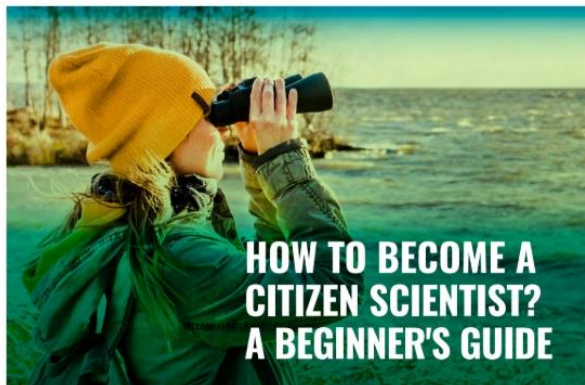
Citizen science, open science: oa@tuni.fi

Research data management, data management plan (DMP) : researchdata@tuni.fi



New: A guide for beginners

Check out the new guide: [How to become a citizen scientist? A beginner's guide](#)



Citizen science is part of open science



The Open Science Policy of Tampere University (pdf) highlights citizen science as:

"Research and science communications, business partnerships and citizen science can promote interaction and openness. Open Science also means that people who are not members of the academic community are encouraged to join research processes when appropriate. Citizen science increases societal interaction, innovations, continuous learning, and sustainable development as well as the impact of research and science."

The Open RDI operation guidelines and principles of Tampere University of Applied Sciences highlights the citizen science perspective as:

"The openness of science includes the participation of individuals not belonging to the actual university community in RDI processes when it is appropriate. Various general events, for example in projects, increase societal interaction, innovations, continuous learning, and sustainable development, as well as the impact of RDI activities."

The Ten Principles of Citizen Science

The European Citizen Science Association has developed the principles of citizen science:

Celebration and Communication

University of Helsinki Open Science Award to multidisciplinary Helsinki Urban Rat Project

The theme for this year's Award is citizen science.



From left to right: Minna Niemi-Grundström, Anne Remes, Tuomas Alvelo, Heta Lahdesmäki, and Karolina Lukaski. (Image: Jussi Männistö)

Citizen science projects are implemented at the University of Helsinki in several research fields, and the goal in this year's Open Science Award is to highlight these projects and their diversity. Nominee proposals for the Award were requested from University units, from the University community via the Flamma intranet, and this year also from people outside the community who had participated in University-organized citizen science projects. Nominations were requested for a research group at the University of Helsinki that had advanced citizen science in an exemplary manner.

The criteria for the Award included development of technology for the crowdsourced gathering of research data, cooperation with wider communities and organizations in addition to citizens, development of forms of cooperation, communication and training, and broad utilization of the possibilities of open science.

The award jury decided to grant the award to the [Helsinki Urban Rat Project](#), whose merits were in the multidisciplinary and diversity of its activities, its extensive cooperation network, and especially its training of secondary school students in gathering data.

The jury consisted of University Librarian [Minna Niemi-Grundström](#), Professor [Tiina Onikki-Rantajääskö](#) from the Helsinki Term Bank for the Arts and Sciences, Curator [Jari Valkama](#) from the Finnish Museum of Natural History, and Senior Advisor [Tiina Käkelä](#) from the University of Helsinki Research services.

Helsinki city rats as research objects

The Helsinki Urban Rat Project is a multidisciplinary research project established in 2018 to understand the life of Helsinki city rats and their interaction with humans. The project's research covers, for example, detecting the distribution of rat population distribution detection, urban rat parasites, and human-rat interaction.

Rats have always provoked strong emotional reactions from humans, and systematic attempts are often made, however unsuccessfully, to repel or eradicate rat populations. The Helsinki Urban Rat Project has approached this conflict between humans and rats not only from the perspective of urban rodent control, but also via ethnographic methods – for example, by gathering stories from city dwellers about their encounters with rats.

In close cooperation with the project, an art performance about the relationship between humans and rats was produced at the University of Arts in Helsinki. Other cooperation partners of the research project include City of Helsinki and The Foundation for Municipal Development.

Case examples are important and interesting!



URBAN RATS

Multidisciplinary research project on ecology, evolution, genetics, history, visual arts, educational sciences and social sciences of urban rats in Helsinki

WE SHARE OUR CITIES WITH MANY ANIMALS BUT KNOW QUITE LITTLE ABOUT THEM

Rats have lived with humans since the beginning of agriculture. Rats have also been studied by scientists in laboratories around the globe and we know quite a lot about them. Nevertheless, we do not really know what they are doing when they live wild in city parks, sewers and tunnels, in their evolutionary new and ever-changing habitat. Our research project aims to uncover the spatio-temporal variation in rat populations, how rats share and spread parasites and pathogens and how humans feel and think about rats in urban setting.



The nature walks were very popular, with over twenty library patrons interested in citizen science joining in. Many were surprised to learn that the app is part of citizen science. The concept of citizen science was unfamiliar to many, but approaching it through hands-on activities made it more accessible. "Citizen science is a good motivator for outdoor hobbies. It also offers an opportunity to learn more about nature, about species, how to recognize them, and how to contribute to research."