

Lightning Talk J2 - FAIROS Program of the U.S. National Science Foundation (NSF)

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NSF CISE OAC Public Access Program

- **High-level NSF Public Access goal**
 - Funding projects that advance the understanding of, provide resources for, and/or encourage practices toward enhancing access
- **OAC-led public access program**
 - Development of NSF Public Access Plan 2.0: Ensuring Open, Immediate and Equitable Access to National Science Foundation Funded Research (NSF 23-104) in 2023 (*response to 2022 OSTP Memo*)
 - Series of public access and open science webinars during the 2023 Year of Open Science
- **NSF funding for public access projects**
 - Campus Cyberinfrastructure (CC*) (NSF 24-530)
 - Pathways to Enable Open-Source Ecosystems (POSE) (NSF 23-556)
 - Geosciences Open Science Ecosystem (GEO OSE) (NSF 23-534)
 - **Findable, Accessible, Interoperable, Reusable Open Science Research Coordination Networks (FAIROS RCN) (NSF 22-553)**
 - Dear Colleague Letter: Supporting Open Polar Research Software (NSF 23-053)
 - Dear Colleague Letter: Reproducibility and Replicability in Science (NSF 23-018)
 - Dear Colleague Letter: Open Science for Research Data (NSF 20-068)
 - Dear Colleague Letter: Effective Practices for Data (NSF 19-069)



What is the NSF Research Coordination Networks (RCN) program?

“The goal of the RCN program is **to advance a field** or create new directions in research or education **by supporting groups of investigators** to communicate and **coordinate their research**, training and educational activities **across disciplinary**, organizational, geographic, and international **boundaries.**” – NSF Research Coordination Networks



Development of the FAIROS Program

Findable, Accessible,
Interoperable,
Reusable Open
Science (FAIROS) RCN

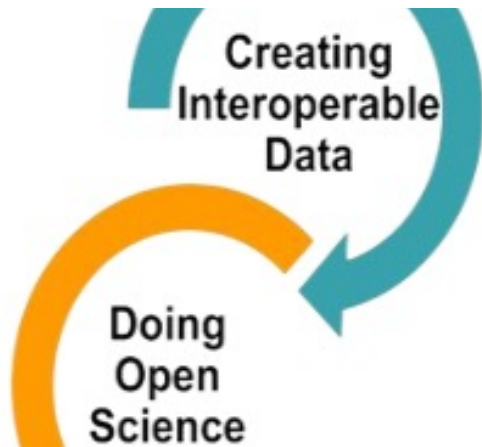
- Fiscal Year 2022 (inaugural FAIROS RCN)
- 10 RCNs; \$12.5 million
- Catalytic strategic investments

EARly-concept Grants
for Exploratory
Research (EAGER)

- Fiscal Year 2023 (Public Access Initiative)
- 7 EAGERS; 2 Conferences; 1 Workshop
- Total awards: \$1,781,676



Examples of Funded FAIROS RCNs



FAIROS RCN

Example 1 – OAC 2226368

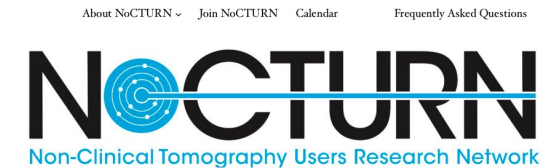
**Ethical Open Science
for Past Global Change
Data**



FAIROS RCN

Example 2 – OAC 2226453

**FARR: FAIR in ML, AI
Readiness, &
Reproducibility RCN**

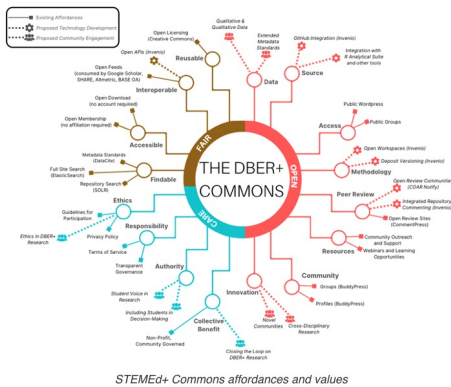


FAIROS RCN

Example 3 – OAC 2226184

**NoCTURN: Non-Clinical
Tomography Users
Research Network**

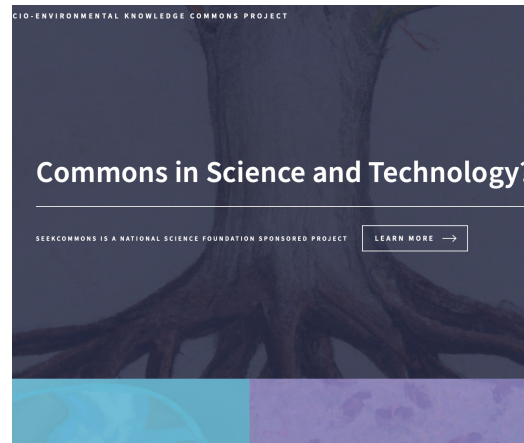
Examples of Funded FAIROS RCNs



FAIROS RCN

Example 4 – OAC 2226271

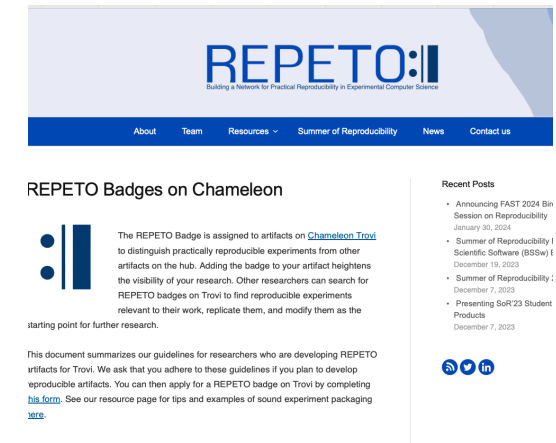
STEMEd+ Commons



FAIROS RCN

Example 5 – OAC 2226425

SEEKCOMMONS



FAIROS RCN

Example 6 – OAC 2226406

REPETO:|



Public Access Program Development

Advanced Cyberinfrastructure(CI) Funding Opportunities

1. Strategic Investments

- a. Special Opportunities
- b. Cross-cutting and national initiatives
- c. **CI for Public Access and Open Science (CI PAOS)**
 - a. Collaboration with other programs and divisions on projects co-funding support

2. Types of Awards

- a. Mid to large-scale
- b. Standard Research
- c. Collaborative/RCNs

3. Dear Colleague Letter (special focus area/theme)

- a. Pilot to small-scale
- b. EAGER (exploratory) (up to \$300k)
- c. Conferences and Workshops (up to \$50K)



Program Description: Cyberinfrastructure for Public Access and Open Science (CI PAOS)

The Cyberinfrastructure for Public Access and Open Science (**CI PAOS**) program within the Office of Advanced Cyberinfrastructure (OAC) **aims to catalyze** new and transformative **socio-technical partnerships** supporting research data infrastructure ecosystems **across domains** through early-stage collaborative activities **between cyberinfrastructure researchers, scientists,** research computing experts, **data management experts,** research labs, **university libraries,** and **other communities of practice.**



References

1. ARL Views. (2023). US National Science Foundation Shows Commitment to Year of Open Science with Strategic Investments in Infrastructure and Learning. <https://www.arl.org/blog/us-national-science-foundation-shows-commitment-to-year-of-open-science-with-strategic-investments-in-infrastructure-and-learning/>
2. **FAIROS RCN Example 1 (Ethical Open Science for Past Global Change Data)** - <https://eos-rcn.github.io/web/>
3. **FAIROS RCN Example 2 (FARR: FAIR, AI Readiness & Reproducibility)** - <https://www.farr-rcn.org>
4. **FAIROS RCN Example 3 (NoCTURN)**- <https://nocturnetwork.org>
5. **FAIROS RCN Example 4 (STEMEd+ Commons)** - <https://stemedplus.commons.msu.edu>
6. **FAIROS RCN Example 5 (SEEKCOMMONS)** - <https://seekcommons.org>
7. **FAIROS RCN Example 6 (REPETO: |)** - <https://repeto.cs.uchicago.edu>
8. FAIROS RCN Example 7 (FAIR Facilities and Instruments) - <https://ncar.github.io/FAIR-Facilities-Instruments/>
9. Findable Accessible Interoperable Reusable Open Science Research Coordination Networks (FAIROS RCN) NSF 22-553 - <https://www.nsf.gov/pubs/2022/nsf22553/nsf22553.htm>
10. U.S. National Science Foundation Advanced Search Results for Reference Code 121Z (NSF Public Access Initiative) - <https://www.nsf.gov/awardsearch/advancedSearchResult?PIId=&ProgRefCode=121Z>
11. U.S. National Science Foundation Public Access Initiative - <https://new.nsf.gov/public-access>
12. U.S. National Science foundation Public Access Repository (NSF-PAR) - <https://par.nsf.gov>
13. U.S. National Science Foundation Research Coordination Networks (RCN) - <https://new.nsf.gov/funding/opportunities/research-coordination-networks>
14. U.S. National Science Foundation National Artificial Intelligence Research Resource (NAIRR) Pilot - <https://new.nsf.gov/focus-areas/artificial-intelligence/nairr>

