

Science-i: Bridging Worlds Competition and Workshop 2024



A Pathway to turn your Big Ideas into Tangible Research Discoveries

- Submit your idea to our Global Competition
- Discuss your research ideas at a two-day workshop
- Receive state-of-the-art research support
- Publish your big discovery in high-impact journals

Purpose of the Global Competition:

"Science-i: Bridging Worlds" workshop is sponsored by the National Science Foundation, Purdue University, and Science-i as a pivotal event dedicated to advancing collaborative research in Forest Science. As Phase I of this event, we are calling for "Big Ideas in Translational Forest Research."

Who Should Participate

All Science-i members and the general public, especially underrepresented researchers from indigenous and rural communities, as well as countries in the Global South, are encouraged to enter this global competition.

The Award

The three leading competitors will be awarded a certificate and the esteemed privilege to participate in the "Science-i: Bridging Worlds" workshop at Purdue University (USA), in May 2024, with comprehensive travel support.

This distinguished gathering provides an unparalleled opportunity to delve into the practical implementation of their groundbreaking ideas, evolving visionary ideas into significant scientific breakthroughs.

In addition, the leading competitors will benefit from:

- Exclusive access to the largest global terrestrial biodiversity database.
- Collaborative support from an esteemed international network of specialists in forestry and forest sciences.
- Utilization of cutting-edge cyberinfrastructure, encompassing advanced supercomputing resources. HPC resources will be made available via the [NSF ACCESS program](#) for computing-intensive analyses

How to participate

To participate in this Global Competition, please fill out the competition web form with one's biography and details of the Big Idea:

https://purdue.ca1.qualtrics.com/jfe/form/SV_3h2HjIPE4nIaCSq

or scan the QR code:



Alternatively, one can also fill out the attached PDF form and email it back to <jjliang@purdue.edu>.

Timeline

- Deadline for submitting the Big Idea: Friday, February 23th, 2024
- February 24th-29th: All submissions will be evaluated and scored
- March 1st-4th: Announcement of the Winners
- May 6th-7th: Winners will attend the Science-i: Bridging Worlds Workshop
- May 2024-May 2026: Winners will be supported by Science-i to turn their ideas into tangible research discoveries.

Evaluation

- Science-i [Board of Advisors](#), which is comprised of renowned scientists and community leaders, will jointly evaluate all Big Ideas entries.
- The evaluation will be based on:
 - Scientific merits, including innovation, feasibility, potential for impact, and interdisciplinary collaboration
 - Alignment with the missions and resources of Science-i.

For details and updates:

<https://science-i.org/bridging-worlds-2024/>

Background

Science-i (<https://science-i.org/>) is an innovative initiative designed to revolutionize collaborative forest research by integrating advanced cyberinfrastructure, data analytics, and inclusive knowledge systems. It aims to address the urgent global challenges of climate change, biodiversity loss, and deforestation by leveraging the critical role of forest ecosystems in maintaining environmental balance and sustainability.

Since its establishment in 2016, Science-i and its partner Global Forest Biodiversity Initiative (GFBI) have published [numerous high-profile publications](#) in Science, Nature, PNAS, and other top journals. Science-i is currently supporting 20 research projects.

Core Objectives of Science-i:

1. **Enhancing Computing Capacity:** Science-i seeks to provide the computational power necessary for processing large datasets and complex models, enabling researchers to tackle intricate environmental problems with greater efficiency and accuracy.
2. **Promoting FAIR Data Access:** The initiative is committed to ensuring that forest research data is Findable, Accessible, Interoperable, and Reusable (FAIR), facilitating open and collaborative science.
3. **Bridging Knowledge Gaps:** By integrating traditional ecological knowledge with cutting-edge scientific research, Science-i aims to foster a more holistic understanding of forest ecosystems, recognizing the invaluable contributions of indigenous and local communities to conservation efforts.
4. **Fostering Global Collaboration:** Science-i is built on the principle of collaboration, bringing together a diverse community of scientists, researchers, policymakers, and community leaders to work towards common goals in forest conservation and sustainability.
5. **Driving Innovation:** With a focus on innovative technologies and methodologies, Science-i is poised to lead breakthroughs in forest research,

from remote sensing and big data analytics to machine learning and AI-driven insights.

Science-i represents a forward-thinking approach to environmental science, emphasizing the power of collaborative research, the importance of diverse knowledge systems, and the need for innovative technological solutions to address pressing global challenges. Through its efforts, Science-i aims to empower the scientific community, enrich the diversity of voices and perspectives in research, and contribute significantly to the sustainable management and conservation of the world's forest resources.

Workshop Sponsors:

National Science Foundation (award# 2311762),

Purdue Institute for a Sustainable Future,

Purdue Rosen Center for Advanced Computing,

Purdue Department of Forestry and Natural Resources,

Science-i