Division of Integrative Organismal Systems (IOS) Virtual Office Hour

Welcome! We will begin the Virtual Office Hour soon.

Please submit questions in the Zoom Q&A box.

Division of Integrative Organismal Systems (IOS) Welcome!



Program Directors in attendance today:

- Jodie Jawor (Behavioral Systems Cluster)
- Postdoctoral Research Fellowships Program Directors

Administrative Support & Technical Assistance:

- Elizabeth Bell

IOS Virtual Office Hour Today's Topics

- Updates and reminders
- Recent Solicitations and Dear Colleague Letters (DCLs)
- Postdoctoral Research Fellowships in Biology (PRFB: NSF 23-620)
- Q&A with PRFB program officers



NSF's Broadening Participation Portfolio

Relevant opportunities

Two new programs! Established Program to Stimulate Competitive Research (EPSCoR)

- EPSCoR Collaborations for Optimizing Research Ecosystems (E-CORE) Research Infrastructure Improvement (RII) Program (NSF 23-587)
- EPSCoR Research Incubators for STEM Excellence (E-RISE) RII Program (NSF 23-588)

Centralized information available on NSF's broadening participation portfolio websites:

- https://new.nsf.gov/funding/initiatives/broadening-participation
- https://www.nsf.gov/od/broadeningparticipation/bp_portfolio_dynamic.jsp



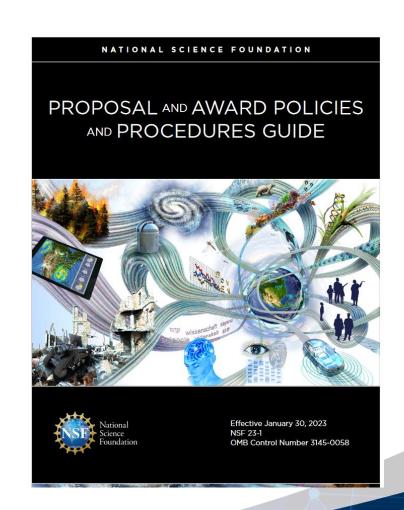
Administrative Updates

- Always be sure you're referencing most up to date solicitation and Proposal & Award Policies & Procedures Guide (NSF 23-01 PAPPG)
- Safe & Inclusive Working Environments for Off-campus or off-site research

If off-campus/off-site research is proposed, the box indicating that **must** be checked on cover page

If you are applying to a BIO CORE solicitation or another program participating in the BIO/GEO SAI plan Pilot, a 2-page plan document is <u>required</u> in lieu of the certification & should be uploaded as a Supplemental Document

See the <u>BIO Homepage</u> for more information and participating programs



Recent Solicitations and DCLs

Core IOS solicitation (23-547), PBI (20-576), and PGRP (21-507) – No deadlines and no submission limits

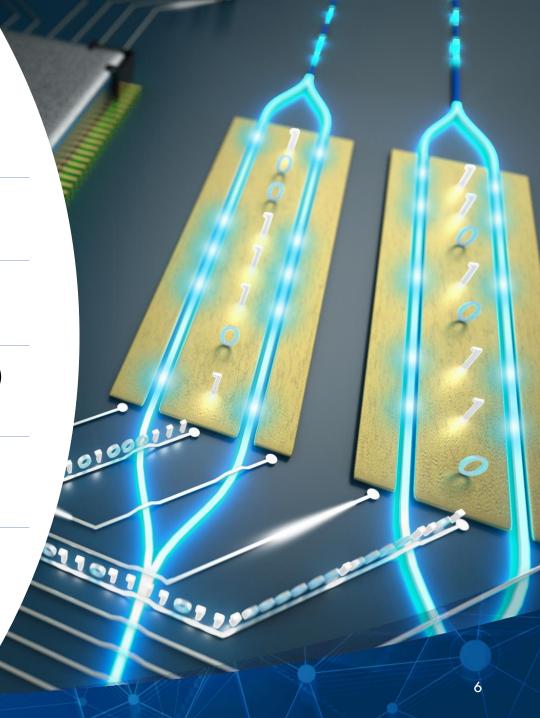
DCL: Bioinspired Design Collaborations to Accelerate the Discovery-Translation Process (BioDesign) (23-055)

Research Experiences for Undergraduates: Sites (REU Sites) (23-601) – Sept. 27, 2023

Organismal Response to Climate Change (ORCC) (**23-622**) – **Dec. 13, 2023**

Graduate Research Fellowship (23-605; Oct. 16, 2023 for Life Sciences

IOS Synthesis Center for Understanding Organismal Resilience (23-564) – preliminary proposal – Jan. 12, 2024



IOS Virtual Office Hour Reminders

- Submit questions in the Zoom Q&A box
- Project-specific questions are best addressed individually by contacting a Program Director
- Next IOS Virtual Office Hour: Oct. 19, 2023
 - Topic: Opportunities for Investigators at Primarily Undergraduate Institutions (PUIs)





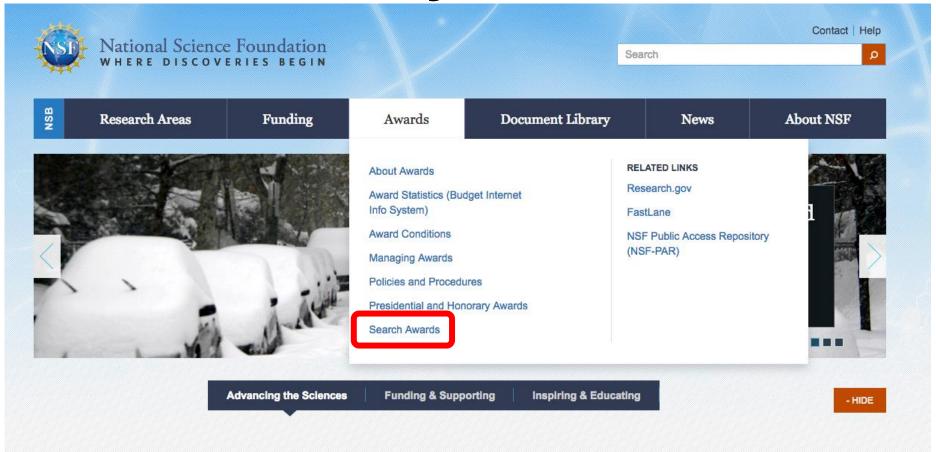
Postdoctoral Research Fellowships in Biology (PRFB)

** Joel Abraham, DBI, jkabraha@nsf.gov
John Barthell, DBI, jbarthel@nsf.gov
Deana Erdner, DBI, derdner@nsf.gov
Matt Herron, DEB/DBI, mherron@nsf.gov
Andrea Holgado, DBI, aholgado@nsf.gov
** Dan Marenda, DBI, dmarenda@nsf.gov
Amanda Simcox, DBI, asimcox@nsf.gov

Diane Jofuku Okamuro, IOS, dokamuro@nsf.gov ** Gerald Schoenknecht, IOS, gschoenk@nsf.gov Kan Wang, IOS, kawang@nsf.gov



Where Does My Research Fit?





BIO Structure

Directorate for **Biological Sciences (BIO)**

Division of Environmental Biology (DEB)

- Ecosystem Sciences
- Evolutionary Processes
- Population and Community Ecology
- Systematics and Biodiversity Science

Division of Molecular and Cellular Biosciences (MCB)

- Cellular Dynamics and Function
- Genetic Mechanisms
- Molecular Biophysics
- Systems and Synthetic Biology

Division of Integrative Organismal Systems (IOS)

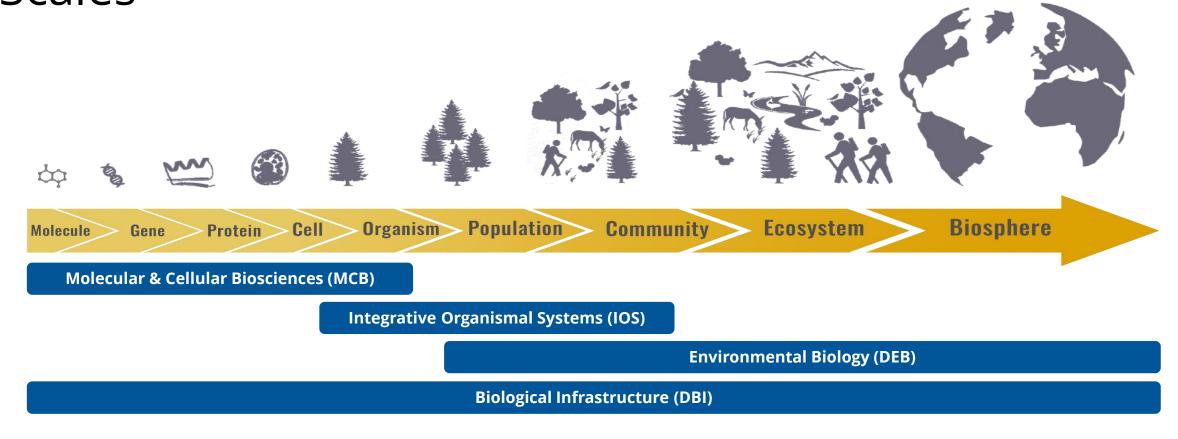
- Behavioral Systems
- Developmental Systems
- Neural Systems
- Physiological and Structural Systems
- Plant Genome Research Program

Division of Biological Infrastructure (DBI)

- Research Resources
- Human Resources
- Centers, Facilities, and Additional Research Infrastructure



How the BIO Divisions Support Research Across Scales





Solicitation: NSF23-620

Areas 1 and 2 Division of Biological Infrastructure (DBI)

Program Officers
Joel Abraham
John Barthell
Deana Erdner
Andrea Holgado
Daniel Marenda
Amanda Simcox

Area 3
Division of Integrative
Organismal Systems (IOS)

Program Officers
Diane Jofuku Okamuro
Gerald Schoenknecht
Kan Wang



Overview of the PRFB Program

- Awards intended to support the independent research and training of recent recipients of the doctoral degree, and to foster human resource development in biology
- Fellowships should provide active mentoring of fellows
- Both research and training components are important
- Sponsoring scientists, departments and institutions should offer a significant opportunity to broaden the research focus and training of the applicant
- Proposals must address both Intellectual Merit and Broader Impacts

Award information

- Stipend (salary): \$60,000
- Research allowance \$20,000
 - for research, training, travel, fringe benefits (e.g. health insurance)
- Duration of fellowship:
 - 3 years for all Areas



Program Eligibility

- Applicants must be US citizens, nationals, or permanent residents at the time of application
- Applicants include graduate students and beginning postdocs with a maximum of 15 months tenure in a position requiring a PhD
- Applicants should have a PhD in an appropriate field before starting the fellowship
- Applicants may <u>not</u> submit the same research project to another NSF postdoctoral fellowship program



Three Competitive Areas

Area 1
Broadening
Participation of Groups
Underrepresented in
Biology

Area 2**
Integrative Research
Investigating the Rules
of Life Governing
Interactions Between
Genomes, Environment
and Phenotypes

Area 3
Plant Genome
Postdoctoral
Research
Fellowships

**It is anticipated that Competitive Area 2 will run for another 2 years, and the last year will be FY2025. It is anticipated there will be a new area for submission in late fall of 2025 (FY 2026). In future years, it is expected that research incorporating the rules of life criteria could be proposed under other Competitive Areas.



Research scope in the PRFB

- Basic biology research within purview of NSF-BIO
 - http://www.nsf.gov/bio)
- Research may have broader impacts related to medicine and human health
 - Proposals with a biomedical research focus are <u>not</u> eligible
- If your application mentions human disease, discuss appropriateness with a Program Officer before you submit
- If you are uncertain about whether your research is appropriate for BIO, contact a Program Officer



Competitive Area 1: Broadening Participation of Groups Underrepresented in Biology

- Goal to increase diversity of scientists explicitly at the postdoctoral level
 - Enhancing diversity at the postdoctoral level will depend on including the participation of the full spectrum of diverse talent in STEM. The goal of the program is to prepare biologists who are underrepresented in their fields and others who share NSF's diversity goals at the post-doctoral level for positions of scientific leadership in academia, industry, and government.
- Describe how the proposal will diversify biology at the postdoctoral level
 - Applicant does **not** have to be a member of an underrepresented group
- All areas of biology eligible, from molecules to ecosystems



Competitive Area 2: Rules of Life

- Goal to understand how higher-order structures and functions of biological systems are formed
 - How key properties and mechanisms of living systems emerge from the interactions of genomes, environments, and phenotypes
- Produce theories or models with predictive capability
- Combine computational, observational, experimental, or conceptual approaches to elucidate the mechanistic relationships between genomes and phenomes in an environmental context
- Span across scales on the continuum of molecules to ecosystems



Competitive Area 3: Plant Genome Postdoctoral Research Fellowships

- Research and training must address important scientific questions that fall within the scope of the Plant Genome Research Program (PGRP)
 - Formerly called the National Plant Genome Initiative (NPGI) Postdoctoral Research Fellowships program
- Overarching Goals of the PGRP:
 - To investigate the **structure and function of plant genomes**, focusing on generating and integrating large scale datasets to provide a comprehensive understanding relevant to economically important plants and plant processes of economic value; and,
 - To develop innovative **tools**, **technologies** and **resources** that are essential to drive plant functional genomics forward.

IOS Cluster and Program Contacts

Behavioral Systems	Suzy Renn	srenn@nsf.gov
Developmental Systems	Anna Allen	akallen@nsf.gov
Neural Systems	Floh Thiels	ethiels@nsf.gov
Plant Genome Research Program	Diane Jofuku Okamuro	dokamuro@nsf.gov
Physiological and Structural Systems	Ted Morgan	tmorgan@nsf.gov



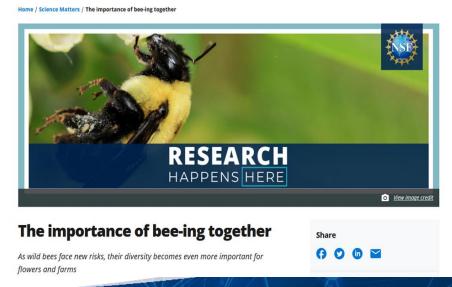
We're listening! Tell us more about you and your research and broader impacts

Investigator Demographic DataWhy provide it in your NSF profile?

- This information helps NSF develop future Broadening Participation opportunities.
- Large gaps in self-reported information make it challenging to evaluate program award scope and impede NSF's ability to track impact and progress.
- Individual demographic data in your NSF profile is not available to panelists or reviewers.

Science Happens Here! #NSFstories

 Share your awesome findings and fantastic outreach experiences https://beta.nsf.gov/about/science-happens-here





BIO Virtual Office Hours

- BIO Directorate and each Division offers VOH
 - **DBI**: third Tuesday, 3-4 p.m. EST
 - **DEB**: second Monday, 1-2 p.m. EST
 - IOS: third Thursday, 1-2 p.m. EST
 - MCB: second Wednesday, 2-3 p.m. EST
- Monthly (or periodic) informational webinar focused on:
 - New and ongoing funding opportunities
 - Topics of general interest
 - Open questions from audience to be answered live
- Log-on information and upcoming topics for Virtual Office Hours can be found in BIO and Division blogs

