



*NSF Postdoctoral Research  
Fellowships in Biology (PRFB)*  
NSF: 20-602

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1

These slides provide information on the Postdoctoral Research Fellowships in Biology program and the new solicitation released in 2020. I am Amanda Simcox, and together with my colleagues John Barthell, Gerald Schoenknecht and Diane Jofuku Okamuro, we are the program officers for the postdoctoral fellowship program.



## Outline

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- Overview of NSF Postdoctoral Research Fellowships in Biology
- Specific information on the 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
- General advice for applicants
- Finding detailed information about the program
- Submission requirements

2

These slides will start with an overview of the PRFB and then cover specific information for the 3 competitive areas. To help you plan for an application, we will provide general advice, show you how to get detailed information about the program and the submission requirements.



## Overview of PRFB

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- **Goals:**
  - Support independent research and training of recent recipients of the doctoral degree
  - Foster human resource development in biology
- **Stipend (salary): \$54,000, plus \$15,000 per year for research, training, travel, fringe benefits (health insurance)**
- **Duration of fellowship:**
  - Areas 1 & 2: Two years or three years if there is a significant international component lasting ~ one year
  - Area 3: Three years

3

The goal is to support the training and research of scientists early in their postdoctoral careers in preparation for advanced careers in life sciences. The yearly stipend is 54 thousand dollars and there is also a yearly research allowance of 15 thousand dollars, which is used at the discretion of the fellow to cover costs for research, training and benefits like health insurance. In competitive areas 1, and 2, the fellowship lasts 2 years unless there is an international component lasting about 1 year, in which case the fellowship can be for 3 years. In competitive area 3, the fellowship is for 3 years.



## Program Eligibility

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- You must:
  - Be a US citizen or permanent resident at the time of application
  - Have a PhD in an appropriate field before starting the fellowship (you can apply while still a graduate student)
- You must NOT have:
  - Served in any position requiring a PhD at the time of application (deadline) for more than 12 full-time months
  - Submitted the same research project to another NSF postdoctoral fellowship program

4

To be eligible, you must be a US citizen or permanent resident. Before you start a fellowship, you must have your PhD, but you can apply while you are still a graduate student. For applicants who are already in postdoc positions, or other jobs that require a PhD, you must not have been in that position for more than 12 months. Finally, you can only submit the research project to one NSF fellowship program, and one Competitive Area.

## Area 1: Broadening Participation of Underrepresented Groups in Biology

- Any area of research supported by NSF BIO directorate
- Activities to promote broadening participation of underrepresented groups in biology explicitly at the postdoctoral level

5

Here are the main points about Competitive Area 1, Broadening Participation of Underrepresented Groups in Biology. Research in this area can involve any topic of biology that is supported by the National Science Foundation. The project should also involve activities that promote the involvement of postdocs from groups underrepresented in biology. This is a revision from last year.



## Details for Area 1

### Broadening Participation of Groups Underrepresented in Biology

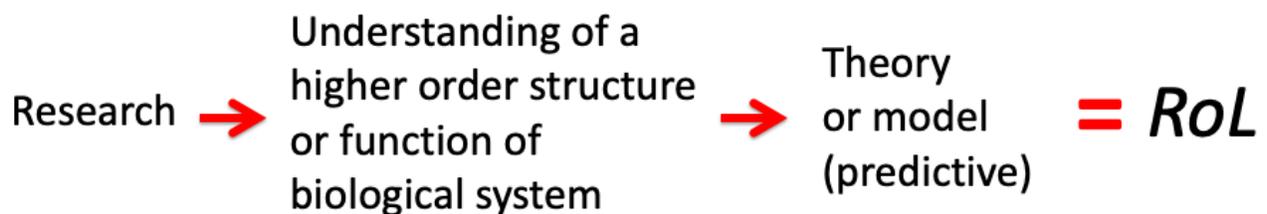
- **Goal: increase participation of members of underrepresented groups in biology, such as:**
  - Native American (including Alaska Native, Native Hawaiian or other Pacific Islander), Black and African American, and Hispanic or Latinx
  - Individuals with disabilities
  - Veterans
- **Must explicitly describe how the fellowship will broaden participation at the postdoctoral level**
  - You do not necessarily have to be from an underrepresented group to apply (NSF does not prevent any application to any program based on race or ethnicity)
- **All areas of basic biology are eligible, from molecules to biomes**

6

This shows more details about the area. The NSF defines underrepresented groups as Native Americans, including Alaskan Natives and Native Pacific Islanders, African Americans, Hispanics and individuals with disabilities. To apply you do not necessarily have to be a member of one of these groups. NSF proposals are split into two main sections—Intellectual Merit and Broader Impacts. As part of the Broader Impacts section, you should describe how your work will increase participation of individuals from one or more of these groups at the postdoctoral level. If you plan to work with another group, for which there is evidence of underrepresentation in biology, contact us to discuss your idea. Finally, you can propose research in any area of biology from molecular biology to ecology.

Area 2: Integrative Research Investigating the Rules of Life Governing Interactions Between Genomes, Environment and Phenotypes ('Rules of Life')

- Involve multiple sub-disciplines of biology
- Span across scales on the continuum of molecules to ecosystems
- Use different methodologies
- Genotype X Environment = Phenotype



7

Competitive Area 2. The title is Integrative Research Investigating the Rules of Life Governing Interactions Between Genomes, Environment and Phenotypes, which I am going to just call Rules of Life! When considering applying to this area, you need to carefully think about whether your project meets the program criteria. Ask yourself a series of questions. Does the work involve more than one sub-discipline of biology? Does it span two or more scales in the hierarchy of life from molecules to cells to organisms to populations to ecosystems? Are different methodologies being used, such as, experiments and computational modeling. Does the work address how phenotypes arise from the interaction of genotypes and the environment? This flow chart captures the expectation that the research will lead to an understanding of the features of a biological system that contribute to its structure and/or function. This information should lead to a theory or model with predictive power and essentially define a Rule of Life.



## Details for Area 2

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

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- **Goal: Discover underlying biological principles (RoLs) operating across hierarchical levels of life (biomolecules to organisms to ecosystems)**
  - Understand how higher order structure/function of biological systems result from interactions between genomes, environments and phenotypes
- **Involve integration of subdisciplines of biology**
- **Span two or more levels in the hierarchy of life**
  - molecules, cells, organisms, populations, communities, ecosystems, biomes
- **Use combinations of approaches**
  - computational, observational, experimental and conceptual
- **Require multidisciplinary training**
  - Appropriate environment and expertise (e.g. co-sponsors)

8

While the goal is to discover a Rule of Life, we can break this down into a more tangible set of parameters. It must involve the integration of two or more subdisciplines of biology, such as molecular biology and ecology and span multiple levels in the hierarchy of life. It must also involve multiple approaches such as computational and experimental. For this reason, many applicants may need more than one sponsor, so that the expertise in the subdisciplines and approaches are available.

## Area 3: Plant Genome Postdoctoral Research Fellowships

- Formerly called the National Plant Genome Initiative (NPGI) Postdoctoral Research Fellowships program
- Research and training must address important scientific questions that fall within the scope of the Plant Genome Research Program (PGRP)
- 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.

9

I am Diane Jofuku Okamuro the lead program officer for Area 3, the Plant Genome Fellowships. Area 3 was first offered in FY 2015 to support interdisciplinary training of the next generation of plant biologists and plant breeders. Importantly, the research and training plan of each fellowship must address important scientific questions within the scope of the goals of the plant genome program and the specific guidelines in this Solicitation.



## Details for Area 3

### *Plant Genome Postdoctoral Research Fellowships*

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*Highly competitive applicants will propose:*

- Genome-scale basic research in plants across the kingdom to address fundamental biological questions in plants and plant processes
- Training that targets interdisciplinary research in plant improvement and associated sciences
  - Encourages training in physiology and pathology, bioinformatics, quantitative genetics and plant synthetic biology

### **Questions about program fit?**

Check out the newly released PGRP solicitation (NSF 21- 507)!

Contact a PGRP Program Director - [dbipgr@nsf.gov](mailto:dbipgr@nsf.gov)

10

When considering submitting a proposal, the applicant is encouraged to "think out of the box" and craft a research project that requires training in multiple disciplines and mentors. The project may be only distantly (or not at all) related to the applicant's thesis work but the associated training is considered key to his/her career goals. Please go to the Plant Genome Research Program (PGRP) [webpage](#) and the most current solicitation (NSF 21-507 for more information and examples of research foci.



## Important Resources

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- BIO Postdoctoral Fellowships Program webpage (*Google: NSF PRFB*) ←  
[https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503622](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503622)
  - Has link to the PRFB Solicitation 20-602  
[https://www.nsf.gov/publications/pub\\_summ.jsp?WT.z\\_pims\\_id=503622&ods\\_key=nsf20602](https://www.nsf.gov/publications/pub_summ.jsp?WT.z_pims_id=503622&ods_key=nsf20602)
- More information about Area 3 and Plant Genome Research Program (PGRP) webpage (*Google: NSF PGRP*)
  - Has link to the PGRP Solicitation 21-507
- NSF Proposal and Award Policies & Procedures Guide (PAPPG)  
[https://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf20001&org=NSF](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf20001&org=NSF)

11

There are resources available. The links are listed here. But if you Google PRFB and NSF, this will take you to the program page. The solicitation is linked from there and in the solicitation, you will find links to the so-called PAPPG, which has important general details about NSF proposals and more information about the Plant Genome Research Program, which will be important for applicants to Area 3.



# Program Description Webpage

## Funding

About Funding

Browse Funding Opportunities A-Z

Due Dates

Find Funding

Merit Review

Policies and Procedures

Preparing Proposals

Recent Opportunities

Small Business

Transformative Research

Home > Funding

Email Print Share

### Directorate for Biological Sciences

## Postdoctoral Research Fellowships in Biology (PRFB)

### PRFB Solicitation Update

Updated August 21, 2020

#### Solicitation Revision Notes

- Former Competitive Area 2, 'Interdisciplinary Research Using Biological Collections' has been discontinued. However, research using biological collections can be proposed under any other competitive area as appropriate.
- 'Integrative Research Investigating the Rules of Life Governing Interactions Between Genomes, Environment and Phenotypes', formerly Competitive Area 4, is Competitive Area 2 in this solicitation.
- Competitive Area 3 has changed its name and is now called the 'Plant Genome Postdoctoral Research Fellowships' program. The previous review criterion for Competitive Area 3 that focused on the National Plant Genome Initiative goals has been removed.
- The Additional Solicitation Specific Review Criteria have changed such that Competitive Area 1 will be evaluated based, in part, on increasing diversity explicitly at the Postdoctoral level. All Competitive Areas will be evaluated based, in part, on plans to increase diversity at any level of STEM training and education.

12

This is the PRFB program page.

## Program Description Webpage

Name	Email	Phone	Room
Amanda A. Simcox (Areas 1 & 2)	<a href="mailto:asimcox@nsf.gov">asimcox@nsf.gov</a>	(703) 292-2532	
John Barthell (Areas 1 & 2)	<a href="mailto:jbarthel@nsf.gov">jbarthel@nsf.gov</a>	(703) 292-2618	
Diane J. Okamuro (Area 3)	<a href="mailto:dokamuro@nsf.gov">dokamuro@nsf.gov</a>	(703) 292-8420	

### PROGRAM GUIDELINES

Solicitation [20-602](#)



### DUE DATES

#### Full Proposal Deadline Date

November 18, 2020

Which has the link to the solicitation.



## Solicitation: Read this document carefully!

### **Postdoctoral Research Fellowships in Biology (PRFB)**

**PROGRAM SOLICITATION**  
NSF 20-602

**REPLACES DOCUMENT(S):**  
NSF 19-597



National Science Foundation  
Directorate for Biological Sciences

**Full Proposal Deadline(s)** (due by 5 p.m. submitter's local time):

November 18, 2020

#### **IMPORTANT INFORMATION AND REVISION NOTES**

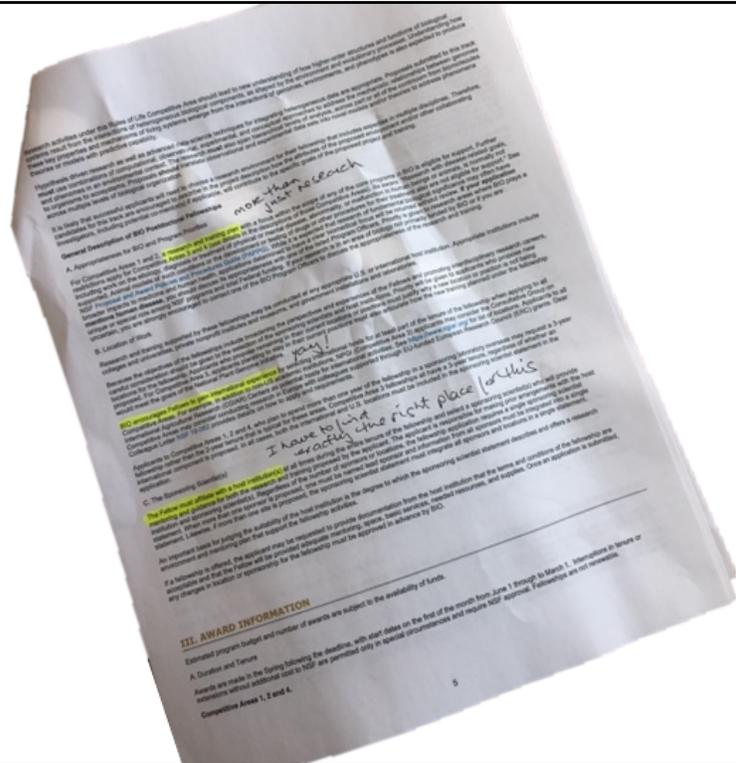
Former Competitive Area 2, Interdisciplinary Research Using Biological Collections has been discontinued. However, research using biological collections can be proposed under any other competitive area as appropriate.

Research Investigating the Rules of Life Governing Interactions Between Genomes, Environment and Phenotypes, formerly Competitive Area 4, is Competitive Area 2 in this solicitation.

14

Read it many times!

In the end yours should look like this or worse!



Until it looks like this, marked up with key reminders to yourself. The most important piece of information we can give you is read the solicitation. Do not miss any instruction, because it is very painful to have your proposal returned without review, for example, because you missed the part that explains biomedical research is not supported by NSF.



# Applying

- Step by Step Guide in the 'How to Apply' document linked from the PRFB program Page

**RELATED URLS**

[How to Apply for Fellowship Applicants](#) ←

[Sponsoring Scientist Statement Instructions](#)

[For PRFB Fellows: Administrative Guide for the PRFB Program \(NSF 20-077\)](#)

[What Has Been Funded \(Recent Awards Made Through This Program, with Abstracts\)](#)

[Map of Recent Awards Made Through This Program](#)

[News](#)

[Events](#)

16

Applying for the fellowship is a stepwise process and begins here by clicking on the link to the 'How to Apply' document.



## How to Apply

### **How to Apply for a Postdoctoral Research Fellowship in Biology in FastLane**

Postdoctoral Research Fellowships in Biology (PRFB) NSF 20-602

Deadline: November 18, 2020

Contacts for Competitive Areas 1 & 2:

Phone: 703 292-8470

Email: [bio-dbi-prfb@nsf.gov](mailto:bio-dbi-prfb@nsf.gov)

Contact for Competitive Area 3:

Phone: 703 292-4400

Email: [dbipgr@nsf.gov](mailto:dbipgr@nsf.gov)

#### **I. Important Proposal Preparation Information.**

**Be sure you are eligible.** An individual is eligible to submit an application for a postdoctoral fellowship if all of the requirements below are met. If you fail to meet any eligibility criterion, your application will be returned without review.

17

The link will take you to this document. Follow it step by step.



## Applying-Key Points

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- Use the step by step guide
- Register as an individual via FastLane
- Prepare and submit via FastLane
  - note this will involve some routing through Research.gov
  - Make sure the application is fully submitted (you will receive an acknowledgement and proposal ID)
- Fill out an Application Form (one of the “GO” buttons)

18

As I mentioned use the guide. Note in particular that you will need to register as an individual and you will get an NSF organizational code that starts with the letter 'P'. There is also an Application Form as part of the proposal.

# The Form Preparation Page

## Form Preparation

To prepare a form, click on the appropriate button below.

Form	Saved	Form	Saved
<a href="#">GO</a> Cover Sheet	08/27/19	<a href="#">GO</a> Project Summary	
<a href="#">GO</a> Table of Contents	N/A	<a href="#">GO</a> Project Description	
<a href="#">GO</a> References Cited		<a href="#">GO</a> Biographical Sketches	
<a href="#">GO</a> Current and Pending Support		<a href="#">GO</a> Add/Delete Letter of Reference Writers	0
<a href="#">GO</a> Status: Letters of Reference	0	<a href="#">GO</a> Application Form	08/27/19
<a href="#">GO</a> How to Apply	N/A		

**Supplementary Documents**

<a href="#">GO</a> Data Management Plan	
<a href="#">GO</a> Mentoring Plan <sup>1</sup>	08/27/19
<a href="#">GO</a> Project Summary with Special Characters	
<a href="#">GO</a> Other Supplementary Docs	

[Go Back](#)

<sup>1</sup>Please be advised that many Postdoctoral Fellowship programs do not require, and may not allow, submission of a separate mentoring plan if the proposal is submitted to NSF by an individual applicant. Please refer to the specific Fellowship program solicitation to determine whether or not submission of the postdoctoral researcher mentoring plan is required.

This is a screen shot of what it will look like when you apply and the arrow marks the Application form I just mentioned. You can navigate through these links and nothing is final until you submit, so do not be afraid to explore so that you can learn the system.



## Goals and Advice

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- Fellowships should provide active mentoring of fellows
- Both research and training components are important
- Location of fellowship should be at an institution different from your doctoral institution
- Focus of research should broaden your scientific expertise
- Sponsoring scientists, departments and institutions should demonstrate how they will support your research project and provide training for the next stage in your career
- Engage with sponsoring scientist(s) to develop an effective plan
- Proposals must address both Intellectual Merit and Broader Impacts

20

This set of bullet points can be summarized by saying that the fellowship should be an opportunity for you to grow as a scientist, better preparing you for the next step in your career, whether this be in academics, industry, government or other advanced careers. The fellowship involves both research and training. To maximize the training potential, fellows should propose to work in a new institution so that you can interact with new scientists and experience a different science culture. The postdoctoral period is a chance to broaden your expertise and add to your scientific credentials by learning new methods and systems. Your sponsor will be key to your training and should use the 3-page statement to explain how they and the institution will support your research, training and career goals. You should work with your sponsor to develop an effective plan. Lastly on this slide don't forget that all NSF proposals must address both Intellectual Merit and Broader Impacts.



## Location of Fellowship

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- Must affiliate with a host institution(s) at all times
- Host may be any appropriate US or international institution
  - Colleges & universities, non-profit institutes, museums, government labs & institutes
- Priority is given to applicants proposing new locations for the fellowship (i.e., different from the PhD institution)
  - Applicant must justify remaining in the same location
- International locations encouraged

21

Where you conduct the research should be well matched to your research and training goals. It can be a US or International Institution. Again, moving to a new institution has many benefits, but if for any reason you can't move, explain why. In all Competitive Areas, international research is encouraged provided the work is an integral part of the research goals.



## Sponsoring Scientist

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- Sponsoring scientist(s) should provide mentoring and guidance for both research and training
- Applicants must make prior arrangements with these scientist(s)
  - Start a dialogue with potential sponsors well in advance
  - Develop a plan integrating research, training, and mentoring
- Applicants may have multiple sponsoring scientists
- Statement should describe how the sponsor and host institution provide a research environment and mentoring plan that support scientific and professional development

22

Spend time selecting a sponsor and discussing your ideas and the proposal. They are integral to the application, so you will need to communicate extensively. Many applicants have more than one sponsor to provide training and research expertise for specific aspects of the proposal. We talked earlier about the importance of the sponsoring statement. It is an opportunity to highlight the mentoring you will receive that is specific to you—both the research you propose and the career path you hope to follow.



## Focus on NSF-supported Biological Research

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- Project must fall within purview of the Directorate for Biological Sciences (see <http://www.nsf.gov/bio>)
- Research may have broader impacts related to medicine and human health, but proposals with a clear biomedical focus are not 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

23

Make sure your proposed research is appropriate for NSF. NSF supports basic biological research from molecules to ecosystems. But research that has a biomedical focus is not supported. Your research may, however, have a broader impact on medicine, because disease processes have their basis on normal biology. If you are unsure contact us.



## Overview of Submission

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- NSF Cover Page
- Application form (unique to postdoc fellowships)
- Project summary (1-page limit)
- Project description (6-page limit, not including references cited)
- Applicant's Biographical Sketch (2-page limit)
- Current and Pending Support
- Supplementary Documentation
  - Data management plan
  - Sponsoring scientist statement
    - $\leq 3$  pages, plus 2-page biosketch for each sponsoring scientist
  - Dissertation abstract
- Two letters of recommendation (submitted directly by references)

There are more details in the “How to Apply” document linked from the PRFB Program page

24

These are the parts to a proposal. The list is also provided as a checklist in the solicitation. We will briefly touch on these.



## Submission Details

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- Project Summary: 1-page limit, must include:
  - Overview, Intellectual Merit, and Broader Impacts
    - Cannot submit without these 3 sections
  - The Project Summary is important because it is the first thing reviewers will read and a key section other panelists refer to during the panel discussion

25

The Project summary is very important. With this single page, you hope to strongly interest a reader in your proposal. It has three sections. Plan them as a whole, but insert them individually into FastLane in three separate boxes. Most scientists know what intellectual merit is—the intrinsic merit of the science. Broader Impacts are not so intuitive. Overall they are the impact of your research other than just the science results you will generate. A later slide has more on this.



## Submission Details (Cont'd)

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- Project Description (Research and Training Plan)
  - 6-page limit, including figures, tables, etc.
    - but not including references cited
  - Present goals for both research and training
  - Describe how proposal aligns with the specific Competitive Area
  - Must include a description of Broader Impacts, beyond your own training (in a separate section headed 'Broader Impacts')
  - Write for an interdisciplinary panel of biologists, free of jargon and unfamiliar acronyms
    - Use the limited space well, be succinct and clear (write for the reader!)

26

In the project description, which is only 6 pages, write clearly and provide both the big picture to showcase the significance, and provide sufficient detail, so that it is apparent you are well prepared to undertake the work. Emphasize the training as well. The 'How to Apply' document has a list of all the aspects you need to cover in an a-h bulleted list—use it! 'g' on this list is Broader Impacts—in addition to what you write in the Summary, you must have separate section, headed BROADER IMPACTS, in which you discuss in more detail the activities you propose. Final writing tip on this slide--write for the reader. This is important, for example, jargon will obscure your meaning and writing in a way that is only appropriate for specialists in your field, means some reviewers will not see the significance of your work.



## Submission Details (Cont'd)

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- References Cited (no length limit)
- Biographical Sketch (2-page limit)
  - Need to follow NSF format (fillable form, or SciENcv—see the NSF Proposal and Award Policies & Procedures Guide (PAPPG))
  - List publications, and submitted papers (also bioRxiv papers and published abstracts)
- Current and Pending Support
  - Need to use NSF form (see PAPPG)
  - List all current funding and planned submissions for funding, including other fellowship programs
- Data management plan (2-page limit)

27

These do not need special explanation, but make sure you cite relevant research, and follow the NSF guidelines for your Biosketch and the Current and Pending document (there are templates for this). The Data Management Plan is required for all NSF proposals and you should prepare it carefully in consultation with your sponsor following the NSF BIO guidelines. Applicants are early scientists and may not have many papers, so also bioRxiv papers and published abstracts.



## Submission Details (Cont'd)

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- Sponsoring Scientist(s) Statement (3-page limit)
  - Work with your sponsoring scientist(s) to develop an effective research, training, and mentoring plan aligned to your career goal
  - If you have more than one sponsoring scientist:
    - One scientist must be designated as lead sponsor
    - Submit only one statement, which integrates all information on sponsors and institutions (3-page limit)
- Biographical Sketch from each scientist (each has 2-page limit)
- Abstract of Dissertation Research (1 page)

28

There is a specific document to help your sponsor prepare their statement, this is linked from the PRFB program page and you should draw your sponsor's attention to it. The statement is 3 pages and gives your sponsor an opportunity to showcase their mentoring plan for you and how it will promote your development as a scientist. You and your sponsors all provide Biosketches using the NSF format. You must upload the Abstract of your thesis as a separate document



## Submission Details (Cont'd)

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- Two letters of recommendation
  - One from your dissertation advisor
  - One from another scientist
    - **NOT your sponsoring scientist(s)**
  - Letters should be submitted directly by the reference writers (not by you!), using FastLane
  - Make sure your referees are aware of the deadline!

29

Two letters of recommendation are needed, one from your thesis advisor. Don't use your sponsor for the other, find another scientist who knows you and your work.

# The Form Preparation Page

## Form Preparation

To prepare a form, click on the appropriate button below.

Form	Saved	Form	Saved
<input type="button" value="GO"/> Cover Sheet	08/27/19	<input type="button" value="GO"/> Project Summary	
<input type="button" value="GO"/> Table of Contents	N/A	<input type="button" value="GO"/> Project Description	
<input type="button" value="GO"/> References Cited		<input type="button" value="GO"/> Biographical Sketches	
<input type="button" value="GO"/> Current and Pending Support		<input type="button" value="GO"/> Add/Delete Letter of Reference Writers	0
<input type="button" value="GO"/> Status: Letters of Reference	0	<input type="button" value="GO"/> Application Form	08/27/19
<input type="button" value="GO"/> How to Apply	N/A		
		<b>Supplementary Documents</b>	
		<input type="button" value="GO"/> Data Management Plan	
		<input type="button" value="GO"/> Mentoring Plan <sup>1</sup>	08/27/19
		<input type="button" value="GO"/> Project Summary with Special Characters	
		<input type="button" value="GO"/> Other Supplementary Docs	

<sup>1</sup>Please be advised that many Postdoctoral Fellowship programs do not require, and may not allow, submission of a separate mentoring plan if the proposal is submitted to NSF by an individual applicant. Please refer to the specific Fellowship program solicitation to determine whether or not submission of the postdoctoral researcher mentoring plan is required.

This shows how where you add the reference writers.



## Review Process

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- **Proposals (applications) will be reviewed by 3 scientists and discussed by all panelists**
- **Panelists are biologists, but not necessarily specialists in your research area**
  - Write the proposal with this in mind, so that the general significance is clear, and the project description is balanced to be accessible to all biologists, but with sufficient detail to highlight required expertise and feasibility
- **Most applicants will be notified within 6 months regarding proposal outcome**

31

Your proposal will be reviewed by a panel of scientists. Three reviewers will read your proposal in more detail, present their assessment to the rest of the panel and write reviews, which you will receive at the end of the process, which should take about 6 months. Remember when writing your proposal, the reviewers, even though they are biologists, may not work in your precise field—make the project accessible.



## Merit Review Criteria

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- Reviewers evaluate:
  - **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to *advance knowledge*; and
  - **Broader Impacts:** The Broader Impacts criterion encompasses the potential to *benefit society* and contribute to the achievement of specific, desired societal outcomes.
- Read the NSF merit review criteria used to evaluate IM and BI in the solicitation and additional review criteria for each competitive area.

32

The NSF merit review is a rigorous process and proposals are considered for both intellectual merit and broader impacts using 5 criteria, these and specific criteria for the competitive areas are listed in the solicitation.



## Broader Impacts

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### What are they?

- Broader impacts come in many forms, including
  - Broadening participation\*
  - Education
  - Benefiting society
    - Public outreach
    - Health

### Resources

- The NSF Office of Integrative Activities Broader Impacts web page: <https://www.nsf.gov/od/oia/special/broaderimpacts/>
- Advancing Research Impact in Society (ARIS)
  - Guiding Principles <https://www.researchinsociety.org/guiding-principles>

\* Additional review criteria for the PRFB, in all competitive areas, include an evaluation of plans to increase diversity at any level of STEM training and education.

33

Broader impacts come in many forms, they stem from your research and ideally should be well integrated. The list shows a few of these; broadening participation to ensure everyone, especially those traditionally underrepresented, get a chance to participate in science; education to improve STEM understanding at any level; benefiting society, for example, public outreach to enhance public engagement in science or promoting health and wellness. Note all competitive areas need a BP element, as this is an additional review criterion.



## What has been funded

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### *Bottom of PRFB program page*

#### RELATED URLS

[How to Apply for Fellowship](#)

[Sponsoring Scientist State](#)

[For PRFB Fellows: Admini](#)

[What Has Been Funded \(Recent Awards Made Through This Program, with Abstracts\)](#)



[Map of Recent Awards Made Through This Program](#)

[News](#)

[Events](#)

If you want to get a feel for the successful projects, find this link at the bottom of the PRFB program page.

## A few 2020 projects

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**[NSF Postdoctoral Fellowship in Biology FY 2020: Mechanisms of sensory reception in the hydrodynamically-adapted skin of cetaceans](#)**

Award Number:2010869; Principal Investigator:Sherri Eldridge; Co-Principal Investigator:; Organization:Eldridge Sherri A;NSF Organization:DBI Start Date:01/01/2021; Award Amount:\$138,000.00; Relevance:58.66;

**[NSF Postdoctoral Fellowship in Biology FY 2020: Genetic and biological substrates facilitating detection and evaluation of potential mates in a novel mammalian model](#)**

Award Number:2010866; Principal Investigator:Ehren Bentz; Co-Principal Investigator:; Organization:Bentz, Ehren James;NSF Organization:DBI Start Date:08/01/2020; Award Amount:\$138,000.00; Relevance:58.66;

**[NSF Postdoctoral Fellowship in Biology FY 2020: Assessing Changes in Microbial Metabolisms Across Environmental Gradients in the Deep Biosphere](#)**

Award Number:2010880; Principal Investigator:Andrew Montgomery; Co-Principal Investigator:; Organization:Montgomery, Andrew;NSF Organization:DBI Start Date:03/01/2021; Award Amount:\$138,000.00; Relevance:58.66;

**[NSF Postdoctoral Fellowship in Biology FY 2020: Building quantitative models for plant transcription using convolutional neural networks for de novo promoter design](#)**

Award Number:2009093; Principal Investigator:Andy Zhou; Co-Principal Investigator:; Organization:Zhou, Andy;NSF Organization:IOS Start Date:11/01/2020; Award Amount:\$216,000.00; Relevance:64.0;

**[NSF Postdoctoral Fellowship in Biology FY 2020: Developmental Regulator-Mediated Gene Editing: A Method to Improve Accessibility and Production of Transgenic Plants](#)**

Award Number:2010445; Principal Investigator:Jon Cody; Co-Principal Investigator:; Organization:Cody, Jon Phalen;NSF Organization:IOS Start Date:08/01/2020; Award Amount:\$216,000.00; Relevance:64.0;

Here are some of last year's projects. You will see even in this snapshot there are many different topics.



## Contact Us!

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### Program Officer Contacts:

- Areas 1, & 2 (Broadening Participation and Rules of Life):
  - Amanda Simcox ([bio-dbi-prfb@nsf.gov](mailto:bio-dbi-prfb@nsf.gov))
  - John Barthell ([bio-dbi-prfb@nsf.gov](mailto:bio-dbi-prfb@nsf.gov))
- Area 3 (Plant Genome Research Postdoctoral Fellowships)
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  - Gerald Schoenknecht ([dbipgr@nsf.gov](mailto:dbipgr@nsf.gov))

***Good luck with the writing!***

36

Any questions? Contact us.