

# Research and Mentoring for Postbaccalaureates (RaMP) in Biological Sciences

*Program Solicitation: NSF 23-514*

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# Important Information and Revision Notes

1. **ETAP.** New recruitment, selection, and retention and dissemination plans sections are required. BIO RaMP PIs must use the NSF [Education and Training Application \(ETAP\)](#) to manage applications and collect participant demographic information.
2. **Proposals must be submitted through Research.gov or Grants.gov.** Details & links to PAPPG and The NSF Grants.gov Application Guide are in the solicitation.
3. **PAPPG.** Any proposal submitted in response to this solicitation should be submitted in accordance with the NSF [Proposal & Award Policies & Procedures Guide \(PAPPG\) NSF 23-1](#) that is in effect for the relevant due date to which the proposal is being submitted.
4. It is the responsibility of the proposer to ensure that the proposal meets the requirements specified in this solicitation and the applicable version of the PAPPG.

**DEADLINE: January 18, 2024 (Thursday) by 5:00 p.m.**





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# Program Goals

1. to establish networks to support full-time research, mentoring, and training for recent college graduates who **have had few or no research or training opportunities during college** in research fields typically supported by the Directorate of Biological Sciences (BIO);
2. foster the growth of a **globally-competitive and diverse research workforce**
  - proposals are expected to create strong evidence-based, inclusive and culturally-aware mentorship programs that will advance the goal of creating a competitive and highly representative STEM workforce in the U.S. with a focus on the biological sciences.
3. to train individuals for a **range of potential career pathways** in the biological sciences
  - pathways can include research-focused M.S. or Ph.D. graduate programs; entry-level positions in industry, federal, tribal, or state agencies, education and research centers, or not-for-profit science-based organizations; or other STEM careers.



# How does RaMP address inequalities in undergrad training?

Individuals from groups underrepresented in STEM, first generation college students, and students at under-resourced institutions frequently have limited opportunities to participate in the undergraduate research experiences that are necessary to be competitive for graduate programs or other STEM career pathways.

This program will provide postbaccalaureate research experiences for cohorts of trainees, either in ongoing research programs, existing research networks, or in new research projects designed specifically for the RaMP networks.



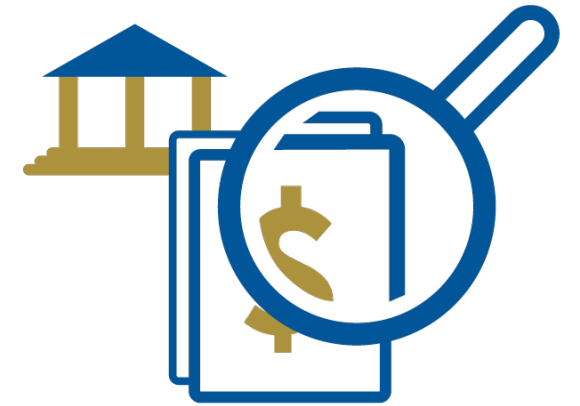
# Network Strategies for Future Success of Postbaccs

- enhancing critical thinking, creativity, interpersonal skills, and overall research skills in a safe research environment with ethically sound research practices;
- improving participants' [career] transition to graduate level programs, industry, federal, tribal, or state agencies, education and research centers, not-for-profit science-based organizations, or other STEM careers;
- providing training in a cohort and network environment with common scientific and professional goals;
- creating an environment that increases participants' science identity, self-efficacy, and sense of belonging in STEM through mentors that have been trained to do so; and
- providing inclusive and comprehensive experiences to develop the next generation of diverse leaders in biological sciences.



# Submitting Institutions

- Institutions of Higher Education (IHEs)
  - 2 and 4-year IHEs (including community colleges) accredited in, and having a campus located in the U.S., acting on behalf of their faculty members.
- Non-profit, non-academic organizations
  - Independent museums, observatories, research labs, professional societies and similar organizations in the U.S. associated with educational or research activities.



# Proposal Requirements – PAPPG NSF 23-1

- Must adhere to PAPPG Chapter II.D Proposal Contents
- This includes Results from Prior NSF Support – required by PAPPG even though not specifically listed in the solicitation (NSF 23-514)





# Components of the Project Description:

## 1. Science Theme

- *Must include* a clearly articulated and cohesive science theme
- Fits within or integrates among the core research areas of the BIO directorate
- *Must* demonstrate capacity to involve participants in advanced, creative, and potentially transformative training and research opportunities with the support, mentorship, and guidance... required at this early career stage
- Focus on research-based inquiry projects that include analytical and technical training and professional development



# Components of the Project Description:

## 2. Network Structure and Collaborative Framework

- May be regional, national, and/or have international components
- Involve and provide clear benefits to (co)mentors from diverse organizations
- Encouraged to leverage established broadening participation programs
- Must describe activities to facilitate networking, professional career opportunities, and dissemination of research products
- Required to schedule at least one annual meeting for all participants



# Components of the Project Description:

## 3. Recruitment, Selection, and Retention Plan

- Use evidence-based practices
- Provide opportunities to post-baccs with limited prior training and research experience
  - mentees must have a baccalaureate degree in a biology-related field and show a demonstrated need for additional training and mentorship
- Must:
  - Show national-level efforts to attract diverse, eligible applicants
  - Use ETAP
  - Outline specific efforts for recruitment of diverse participants



# Components of the Project Description:

## 4. Mentoring Program Plan

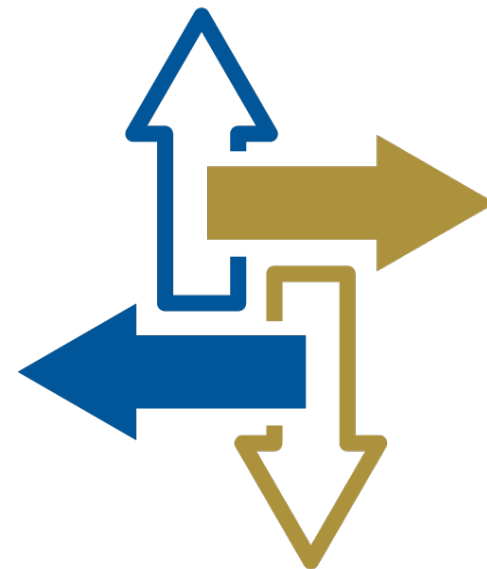
- Inclusive and culturally-aware mentorship should be at the core of the program using evidence-based and effective implementation of successful mentoring models
- Must describe:
  - Generalized mentoring program plan, mentoring compacts
  - Details of proposed research & professional development activities
  - Plans for building & sustaining professional relationships
  - Mentor training



# Components of the Project Description:

## 5. Broader Impacts

- Encourage activities that aim to expand network efforts
- May include:
  - Improving cohort training practices and mentoring programs at participating institutions and network partners
  - Expanding institutional research capacity
  - Reducing factors that limit career transitions and training opportunities for college graduates



# Components of the Project Description:

## 6. Evaluation and Assessment Plan

- Must describe a plan to measure the success of the project in achieving its goals, particularly the degree to which:
  - Postbacc mentees have developed research & professional skills and expanded their knowledge in their research area
  - Mentees made progress in moving forward toward or deciding on their career pathway after the RaMP experience
  - Mentors are effective in their roles and have access to resources needed for effective mentoring
- Post-program tracking is highly desirable
- Follow PAPPG re: IRB requirements



# Components of the Project Description:

## 7. Project Outcomes and Dissemination Plan

Document and describe the outcomes of program strategies in achieving its goals, to extend the reach of the program

- broad dissemination for other interested community members
- appropriate venues such as:
  - social media
  - traditional media
  - peer-reviewed publications
  - professional society communications
  - websites
  - presentations
  - workshops
  - other appropriate strategies



# Other Required Documents

- Data Management Plan, incl. evaluation & assessment data (2 pages)
- Postdoctoral Mentoring Plan (only if applicable) (1 page)
- Project Management Plan (3 page, supplementary document)
  - Explain organizational structure; must describe Coordinator role
  - Must describe strategies to facilitate communication, interaction, & inclusion for all network members
  - Present a code of conduct policy
  - Provide a timeline specifying milestones and expected completion dates
- Letters of Collaboration (supplementary documents)
  - From individuals or organizations that are integral to the proposed project but are neither senior personnel nor subawards
  - Recommended template in the PAPPG Ch II.C.2.d(iv)





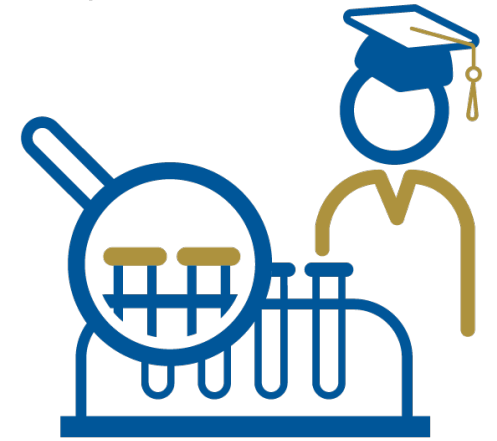
# Organizational Structure

- Principal Investigator (PI, co-PIs)
  - Intellectual leader(s)
  - Responsible for project management, integration, and effective communication
- Project Coordinator
  - Coordinate communication, training, recruitment, selection, evaluation
- Mentors and Co-Mentors
  - Lead training & mentorship of postbacc participants
- Assessor
  - Can be from outside or same institution but must be independent
- *Postbaccalaureate Participants (Mentees)*



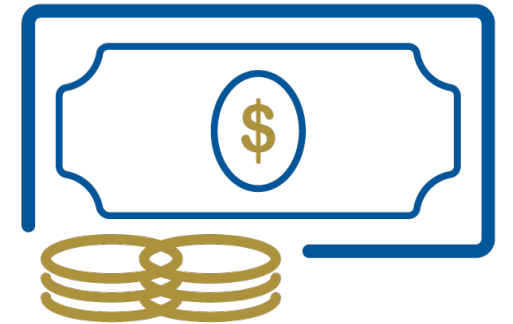
# Postbaccalaureates:

- must be U.S. citizens, U.S. nationals, or permanent residents of the United States
- will spend **one year** developing and executing research projects
- must have a **baccalaureate degree** before the start of the fellowship and be within 4 years of graduation (some exceptions)
- cannot be enrolled in or accepted to graduate school
- Have **limited prior training and research experience**
- show a **demonstrated need for additional training and mentorship**



# Budget and Postbaccalaureate Support

- RaMP networks will engage 8-12 postbaccalaureate participants per year for 3 years (to support approximately 30 participants).
- Stipend should be a minimum of \$32,500 per year.
- The maximum request per eligible network is \$3,000,000 for up to 48 months.
- Funds to support research activities, professional development activities, training, travel are detailed in the [budget guidelines](#) under proposal preparation.



# Budget Guidelines; Participant Support

- All support costs for participants should be listed on Line F, "Participant Support," of the budget.
- Mentee-support research funds, up to \$10,000 per participant per year, may be requested to cover research expenses under participant cost materials.
- Mentee-support professional development funds may be requested, in addition, to support professional development
- Support costs for PI, co-PIs, Senior Personnel and other network members should be listed in the appropriate sections of the budget. Consult your Sponsored Programs Office



# Budget Guidelines; Other Allowed Costs

- Salary and fringe benefits support for a program coordinator
- Salary for lead PI or co-PI(s) and other staff following limits in the PAPPG.
- Funds to support mentors and co-mentors for training, networking, and attendance to a national conference with the mentees
- Mentors and their co-mentors may be provided up to a total of \$10,000 dollars per year in order to support their time commitment to mentoring, training and professional development activities.



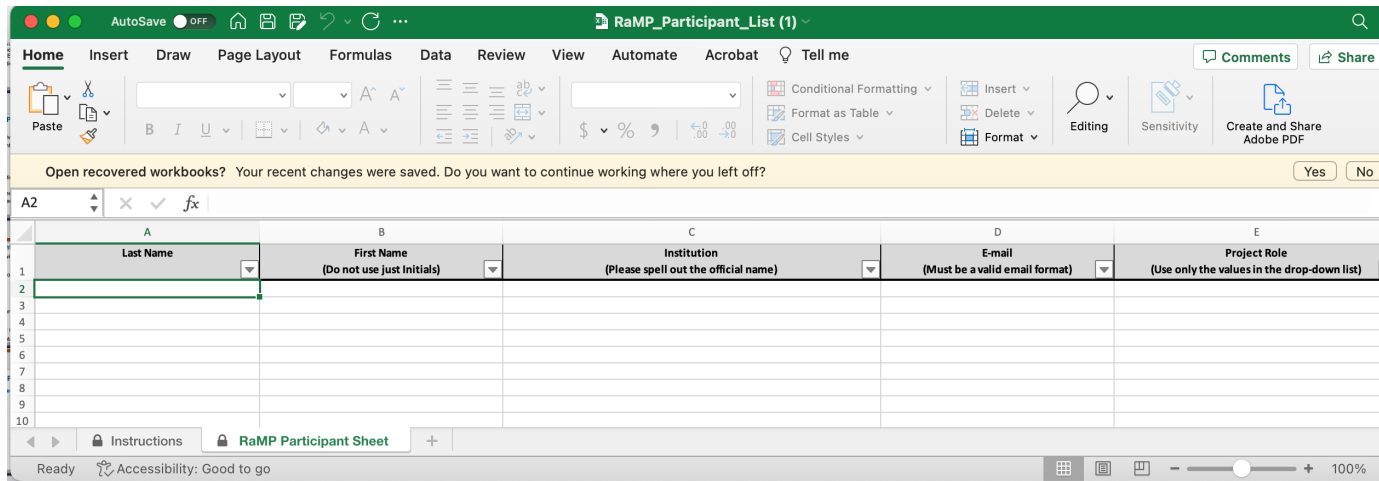
# Budget Guidelines; Other Allowed Costs (cont.)

- The network should schedule an annual required meeting for mentees, mentors, co-mentors, and other network participants to present research outcomes and to facilitate networking opportunities and professional development of all network members.
- Funds are expected to be used to support formal evaluation and assessment activities and workshop development, and/or other related costs that incur direct costs.



# Combined RaMP Participant List

- Includes RaMP Senior Personnel (incl. mentors and co-mentors)
- Use template: [https://www.nsf.gov/bio/dbi/RaMP\\_Participant\\_List.xlsx](https://www.nsf.gov/bio/dbi/RaMP_Participant_List.xlsx)



**REQUIRED**

**Internal Document  
(Not reviewed!)**

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- Due **January 23<sup>rd</sup> 2024** by **5:00 p.m.** (the following Tuesday)
- Return to [ramp@nsf.gov](mailto:ramp@nsf.gov)



# RaMP Questions & Information

- Contact email: [ramp@nsf.gov](mailto:ramp@nsf.gov)
- Program Site: <https://beta.nsf.gov/funding/opportunities/research-mentoring-postbaccalaureates-biological>
- FAQ (NSF 23-045): [https://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf23045](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23045)
- DBI Blog: <https://dbiblog.nsfbio.com/>
- NSF ETAP: <https://etap.nsf.gov>





# BIO Blogs

News, features, highlights, and more from OAD and BIO Divisions

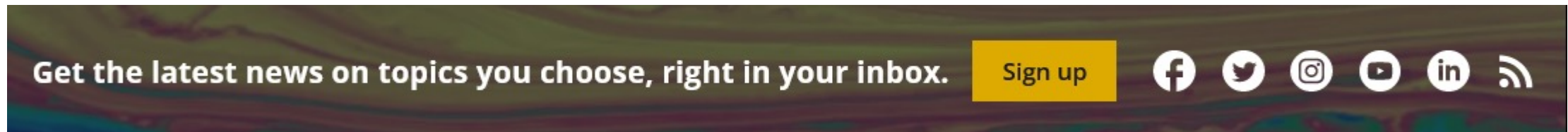
- BIO Buzz (OAD): <https://oadblog.nsfbio.com/>
- **DBInfo (DBI): <https://dbiblog.nsfbio.com/>**
- DEBrieF (DEB): <https://debblog.nsfbio.com/>
- IOS in Focus (IOS): <https://iosblog.nsfbio.com/>
- MCB Blog (MCB): <https://mcbblog.nsfbio.com/>



# BIO News and Updates

Sign-up for emails on new solicitations; events; due date reminders; and BIO's quarterly newsletter, including information on new priorities and solicitations, highlights from the community, and more!

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# Questions and Answers

