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Medicine

AF STFP & NRC RAP: Preparing a Competitive Fellowship Application Webinar

December 9, 2025

Host: Sierra Jackson, PhD

Moderator: Jennifer Griffiths, PhD

Please note that this session is being recorded



Fellowship & Application Process Webinar Sessions

- Intro to the Fellowship and Application Process - September 30th (recording [available](#))
- Eligibility & Benefits Deep Dive - November 18th (recording [available](#))
- AF STFP & NRC RAP: Preparing a Competitive Fellowship Application – **December 9th**

FELLOWSHIP & APPLICATION PROCESS WEBINAR SERIES

AF STFP & NRC RAP: Preparing a Competitive Fellowship Application



December 9th 2025

2:00 PM ET

Register

nas.edu/rap

rap@nas.edu

The National Academy of Sciences Office of Fellowships

- The National Academy of Sciences (NAS) was created by an Act of Incorporation by Congress in 1863 with the stated goal:
“...the Academy shall, whenever called upon by any department of the Government, investigate, examine, experiment, and report upon any subject of science or art...”
- The National Research Council (NRC) was created within NAS in 1916 to address the scientific needs of the nation during World War I
- The NRC first began administering fellowships in 1919, starting with *The National Research Fellowships*, which were postdoctoral fellowships funded by the Rockefeller Foundation
- The Office of Fellowships administers postdoctoral and senior fellowship awards on behalf of government agencies, supporting researchers throughout the application and award process.



The original headquarters of the National Academy of Sciences located along the National Mall with the Lincoln Memorial in the background. Photograph from the 1923-1924 NAS Annual Report.



The Keck Center is located in downtown Washington DC and serves as the current headquarters of the National Academies of Sciences, Engineering, and Medicine

NRC Research Associateship Program/Air Force Science & Technology Fellowship Program

The NRC Research Associateship Programs (RAP) were established in 1954, modeled after the National Research Fellowship

The National Bureau of Standards (now NIST) was the first sponsor, followed by the Naval Research Laboratory in 1955.

AF STFP applications and awards are managed and administered in line with the NRC RAP awards.

The objectives of the programs are:

- To provide postdoctoral scientists and engineers of unusual promise and ability opportunities for research on problems largely of their own choice that are compatible with the interests of the sponsoring laboratories.
- To contribute to the overall efforts of the federal laboratories.



Speakers



Jennifer Griffiths, PhD,
Senior Program Officer,
Office of Fellowships,
National Academies of
Sciences, Engineering &
Medicine



Marisa McDonald, PhD,
Associate Program Officer, Air
Force Studies Board, National
Academies of Sciences,
Engineering & Medicine



Albert Epshteyn, PhD, Head
of the Materials Synthesis and
Processing Section, US Naval
Research Laboratory



Stephen M. Holmes, PhD,
Professor of Chemistry &
Director of Graduate
Admissions, University of
Missouri-St. Louis

Agenda

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Review

3

Decision

4

Q&A



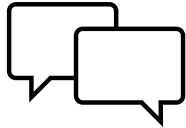
Application

Review

Decision



Find
research
opportunities



Reach out
to advisor



Prepare
documents



Review
process



Award decision

Key Resources for Applicants

FELLOWSHIP/PROFESSIONAL DEVELOPMENT PROGRAM

NRC Research Associateship Programs

The NRC Research Associateship Programs (RAP) are prestigious postdoctoral and senior research awards designed to provide promising scientists and engineers research opportunities at federal laboratories and affiliated institutions. a comprehensive experience, including mentorship and access to state-of-the-art facilities, all geared toward enhancing the research career development of the Res

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Applications open

Until Feb 2, 2026 5:00 PM

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[Applicant Resource](#)

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Application Components

Guide has instructions for:

- Creating your account and profile
- Choosing a Research Opportunity
- Required uploads:
 - Research proposal
 - Dissertation abstract
 - Previous and current research description
 - Publications and presentations list
 - Transcripts and supporting documents
 - Reference letters

NRC Research and Fellowship Programs Applicant Guide

This guide provides step-by-step instructions for applicants to the NRC Research Associateship Programs (NRC RAP) and the Air Force Science and Technology Fellowship (AF STFP). Applications must be complete and submitted by the designated deadline in order to be considered for review.

Please note that all application materials become the property of the National Academies of Sciences, Engineering, and Medicine and will not be returned. Applicants should retain copies of all submitted application materials for their personal records.

Register an Account (New Users)

1. Visit <https://nrc58.nas.edu/InfoRAP20/Home/SignIn.aspx?c=RAPApplicants>.
2. Select **Registration** and create log in credentials. Returning users should select **sign in**.
3. Sign in and select **Apply** for the review you wish to apply to.

Complete Profile Information Section Pages

1. Select **Profile Information** in the left navigation menu and enter information for the **Email, Phone, Address, Demographics, and Confidential** tabs. *This information will not be shared with reviewers.*
2. Select **Education History** and enter the required information: institution, enrollment dates, degree type, degree date awarded/expected, and research field for all undergraduate and graduate institutions attended or currently attending as of the current review cycle. See [Prepare and Upload Required Documents/Transcripts](#) at the end of this document for detailed information on required transcripts.
3. Select **Employment History** and **Honors & Awards** in the left navigation menu and enter information (optional).
4. See [Prepare and Upload Required Documents/Profile Uploads](#) at the end of this document for detailed information on the formatting and content of the Dissertation Abstract (Postdoctoral applicants only), Previous and Current Research, and Publications and Presentations.

PLEASE NOTE:

Applicants must first complete the Confidential tab on the Profile Information page and the Education History page in order to determine eligibility and to select a Research Opportunity in the Applications Section of the online application.

All materials should present a clear and consistent narrative!

Everything starts with the Research Opportunity!

RAP opportunity at Naval Research Laboratory NRL

Solid Electrolyte Fuel Cell Technologies

Location

Naval Research Laboratory, DC, Chemistry

opportunity	location
64.15.15.C0571	Washington, DC 203755321

Advisers

name	email	phone
Albert Epshteyn	@us.navy.mil	202.

Description

Future Navy will require compact and high-power energy sources for mobile platforms. To that end, NRL is interested in developing new energy conversion technologies enabling rapid production of electricity from chemical energy storage mediums such as hydrogen or hydrocarbons. Ongoing projects focus on novel electrolyte and catalyst materials for the development of new fuel cell technologies providing robust and inexpensive alternative solutions to Navy energy needs. Candidates with a background in chemistry, materials chemistry, materials engineering, electrochemical devices, electrocatalysis, fuel cell technology, and related disciplines are invited to apply.

key words

fuel cell; proton conductor; electrocatalysis; oxygen reduction reaction

Eligibility

citizenship

Open to U.S. citizens and permanent residents

The research proposal

- ≤10 pages, including citations and figures
- Innovative, technically sound, feasible to complete in 2-3 years
- Represents the applicant's own intellectual effort
- Details any anticipated and innovative outcomes that can be published, furthering knowledge in a field of science or engineering
- Key elements:
 - Statement of the problem
 - Background and relevance to previous work
 - General methodology
 - New or unusual methods
 - Expected results and significance
 - Literature cited

More details can be found
in the [Applicant Guide](#)!

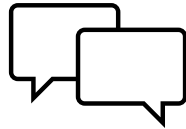
Application

Review

Decision



Find
research
opportunities



Reach out
to advisor



Prepare
documents



Review
process



Award decision

Selection Process

Selection criteria

Review Panels

Applications for awards from the NRC Research Associateship Programs (RAP) are reviewed by panels of experts in the following broad discipline areas:

- Chemistry
- Earth and Atmospheric Sciences
- Engineering, Applied Sciences, and Mathematics
- Life Sciences
- Physics

All applications are evaluated by at least three reviewers on a 100-point scale, with the final score an average of all the reviews

Application evaluation elements

1. Academic and Research Record

- Educational background
- Previous research experience
- Publications and presentations

2. Letters of Recommendation

- At least three letters from individuals who have worked with the applicant and/or are acquainted with the applicant's professional background
- Postdoctoral applicants must include dissertation adviser

3. Scientific Merit of the Proposed Research

- Clarity of objectives and methodology
- Technical/innovative quality of the work plan
- Feasibility of success in the proposed timeframe
- Qualifications of the applicant relative to the proposed research

4. Host Laboratory/Center Review

- Comments from the prospective Adviser and the Laboratory/Center's program committee or representative
- Outlines the importance of the proposed research to the mission of the laboratory and capacity of the laboratory to support the research

Q&A

Thank you for joining!

Enter questions in the chat or use the raise hand feature to be called on

Key Dates

Application Opens	Deadline* (5 PM ET)	Review Finalized
December 1	February 1	Early March
March 1	May 1	Early June
June 1	August 1	Early September
September 1	November 1	Early December

**If a deadline falls on a weekend or federal holiday, the deadline is moved to the next business day.*

Information/Contact

NRC Research Associateship Programs

Website: <https://www.nas.edu/rap>

Email: rap@nas.edu

Air Force Science & Technology Fellowship Program

Website: <https://www.nas.edu/afstfp>

Email: afstfp@nas.edu

Other NASEM Opportunities

<https://www.nationalacademies.org/fellowships-and-grants>