Post-doctoral Fellowships

Alison K. Hall, Ph.D
Associate Dean, Research Workforce Development
Sharon George, Ph.D., Postdoctoral Fellow
James McDonald, Ph.D., Postdoctoral Fellow

Science Career and Professional Development Series
February 27, 12-1pm
602 Ross Hall
At the end of today’s discussion, you will be able to:

1. Describe where to find postdoc fellowship opportunities
2. Create a strategy for your application
3. Identify common elements in fellowship applications
4. Discuss key elements of the application:
   - AHA post-doctoral fellowship
   - NIH NRSA F32 post-doctoral fellowship
5. Address what reviewers are looking for
Federal and foundation sources differ

- Research mission
- Citizenship/ Eligibility
- Application deadlines

Plan to apply to several...

IBS website

Explore Possible Fellowships

Sample applications, tips
Who might fund my research?

Federal (NIH, NSF, Dept of Defense…)

*Often*:
- Broad research mission
- 3 submission dates
- Citizenship requirements

Foundations--a family or corporation
Public Charitable Organizations
- MDA, AHA, ACS support from the public

*Often*:
- Focused mission area
- 1 date per year
- US citizens as well as visa-holders
Communicate:
- Submitted through **GW Cayuse**
- Dept administrator
- 5-7 days before deadline
- **eRA Commons** (NIH)

Identify your administrator…

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**Office of the Vice President for Research**

**eRA Commons User Registration**

OVPR will use the information provided on this form for registration in NIH eRA Commons. Once OVPR has registered the user in NIH eRA Commons, the user will receive an e-mail notification message creating his or her account and password. [https://public.era.nih.gov/commons](https://public.era.nih.gov/commons)

- **New Account**
- **User ID:**
- **First Name:**
- **Middle Name (Optional):**
- **Last Name:**
- **GW E-Mail:**
- **Role Requested:**

***If you choose the PI role, your eRA Commons user ID will follow you throughout your career, regardless of a future change in institutional affiliation***

**eRA Commons User Roles** - [https://era.nih.gov/files/eRA_Commons_Roles.pdf](https://era.nih.gov/files/eRA_Commons_Roles.pdf)

Forgot Password/Unlock Account?
Plan ahead--several months, part-time

Do you have
• Time to focus
• Pilot data
• Appointment status
• A deadline in mind
• Individual Development Plan & goals
• Advisor/committee/recommenders/peers

Be sure to give others a chance to help with their parts
Sharon George, Ph.D. applied to AHA Postdoctoral Fellowship

- B.E. - Biomedical Engineering, Anna University, Chennai, India (2007-2011)
- PhD - Biomedical Engineering, Virginia Tech, Blacksburg, VA (2011-2016)
- Postdoctoral Scientist, The George Washington University (2016 - Present)
- In Efimov Lab
AHA Postdoctoral Fellowship

**Application Deadline:** Thursday, Nov. 2, 2017

Enhances the integrated research and clinical training of postdoctoral applicants who are not yet independent. The applicant must be embedded in an appropriate research group with the mentorship, support, and relevant scientific guidance of a research supervisor.
## Success Rates 2017

### March - July 2017

<table>
<thead>
<tr>
<th>Program Type</th>
<th>Funded</th>
<th>Total Applications</th>
<th>Success Rate</th>
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<tbody>
<tr>
<td>AHA Institutional Research Enhancement Award (AIREA)</td>
<td>13</td>
<td>59</td>
<td>22</td>
</tr>
<tr>
<td>Clinical Health Profession Student Training Program</td>
<td>10</td>
<td>45</td>
<td>22.2</td>
</tr>
<tr>
<td>Clinical Scientist Training Program</td>
<td>6</td>
<td>31</td>
<td>19.4</td>
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<tr>
<td>Collaborative Sciences Award</td>
<td>8</td>
<td>71</td>
<td>11.3</td>
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<tr>
<td>Fellow-to-Faculty Transition Award</td>
<td>6</td>
<td>29</td>
<td>20.7</td>
</tr>
<tr>
<td>Grant-in-Aid</td>
<td>126</td>
<td>745</td>
<td>16.9</td>
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<tr>
<td>Institute - Bayer Discovery Grant</td>
<td>3</td>
<td>29</td>
<td>10.3</td>
</tr>
<tr>
<td>Institute - Catalyst Renewal Grant</td>
<td>2</td>
<td>9</td>
<td>22.2</td>
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<tr>
<td>Institute - Data Grant</td>
<td>8</td>
<td>30</td>
<td>26.7</td>
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<tr>
<td>Mentor-AHA Mentee Award</td>
<td>3</td>
<td>6</td>
<td>50</td>
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<tr>
<td>Mentored Clinical &amp; Population Research Program</td>
<td>16</td>
<td>47</td>
<td>34</td>
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<tr>
<td>Merit Award</td>
<td>2</td>
<td>18</td>
<td>11.1</td>
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<tr>
<td>Postdoctoral Fellowship</td>
<td>154</td>
<td>654</td>
<td>23.5</td>
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<tr>
<td>Predoctoral Fellowship</td>
<td>84</td>
<td>402</td>
<td>20.9</td>
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<tr>
<td>Scientist Development Grant</td>
<td>78</td>
<td>355</td>
<td>22</td>
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<tr>
<td>Strategically Focused Research Network</td>
<td>32</td>
<td>196</td>
<td>16.3</td>
</tr>
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</table>
Know the Funder’s Mission

Foundation Center

“…discover the funders most likely to support you, learn about their interests and perspectives, and gain the knowledge you need to win funding from them.”

Talk to funder

Foundations often responsive to public perception
Postdoctoral fellow
- have completed a doctoral degree, including M.D., Ph.D., D.O., D.V.M., Pharm. D., or equivalent.
- have no more than five years postdoctoral research training or experience (excl clinical training)
- This award is not intended for individuals of faculty rank.
- International applicants with visa ok
Application Nov 1, award activation July 1

Applicant
- Research Plan (5 pages)
- Biographical Sketch (5 pages)
- Academic Record (no page limit)
- Literature Cited (no page limit)
- Publications or Abstracts (3 count)
- Vertebrate Animals (no page limit)

Third Party Personnel
- Sponsor’s Biosketch (5 p)
- Sponsor’s Past/Current Trainees (3p)
- Sponsor’s Training Plan (3 pages)
- Research Project Environment (no limit)
- Collaborator Biosketch (5 p)
- Collaborator Letter (5 p)
- Consultant Letter (5 P)
- Reference Report (3#, 4 pages each)

AHA does not require but strongly encourages institutions to develop and use Individual Development Plans (IDPs) for AHA training programs.
AHA does not pay indirect costs on fellowships

Annual Stipend – matches the NIH scale
2017 (year 0) $47,484 + $1,000 for health insurance

Project Support
$3,000 per year, in addition to the stipend; travel, computer, equipment, etc. International travel is permitted

Award Duration
One or two years; may apply for a second 2 year award
AHA Peer Review Criteria

Criterion 1: Evaluation of the Applicant
Potential for a research career, career plan, academic record, reference letters and sponsor’s assessment, research experience and publication

Criterion 2: Sponsor/Training Plan and Environment
Sponsor’s track record and experience, funding Institutional facilities and commitment

Criterion 3: Evaluation of the Proposal
Applicant has experience and skills to complete the proposal Significance and Innovation Impact

Criterion 4: Potential Impact of Work on AHA Mission
Applicants are required to be AHA/ASA member or pay application fee per submission.

Lay reviewers added to study sections to “evaluate the impact of research to the mission of the AHA.”

Applicants are strongly encouraged to ensure the lay summary document portion speaks clearly…language that can be understood by a non-scientist.
James McDonald PhD applied to NIH F32

- B.S. Biochemistry, Seattle Pacific University
- Ph.D. Molecular Genetics & Genomics, Washington University
- Postdoc with Kate Chiappinelli
The NIH invests in support for research training and education at institutions around the nation. These grants include:

- Training and fellowship (T32; F30, F31, F32)
- Career Development (K08, K23 and others)

Funding Opportunity Announcement: PA-16-307
# F32 Review and Award

**NIH F32 due dates**

- April 8, August 8, December 8

## Review and Award Cycles

<table>
<thead>
<tr>
<th></th>
<th><strong>Cycle I</strong></th>
<th><strong>Cycle II</strong></th>
<th><strong>Cycle III</strong></th>
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<tbody>
<tr>
<td>Application Due Dates</td>
<td>January 25 - May 7</td>
<td>May 25 - September 7</td>
<td>September 25 - January 7</td>
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<tr>
<td>Scientific Merit Review</td>
<td>June - July</td>
<td>October - November</td>
<td>February - March</td>
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<tr>
<td>Advisory Council Round</td>
<td>August or October *</td>
<td>January</td>
<td>May</td>
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<tr>
<td>Earliest Project Start Date</td>
<td>September or December *</td>
<td>April</td>
<td>July</td>
</tr>
</tbody>
</table>
Identify the NIH Institute, staff contact in FOA

**Email first:** “I plan to submit an F32 fellowship, and I have a few questions. My draft aims/idea/mentor name are below. Could we schedule a **phone call** to discuss my application? Would you be available Tuesday at 1PM?.”

**Sample discussion topics:**
- Is this fellowship right for me?
- Are the research aims a good fit for your Institute?
- How much preliminary data is important for this application?
- How will the application be reviewed?
- What should I consider in describing my training goals?
- Do you have advice about preparing a strong application?
What’s in the NRSA F32 application?

Applicant’s Background and Goals (6 page)
  research experience, training goals and objectives,
  activities planned under this award
Biographical Sketch (fellowship, 5 page limit)
Specific Aims (1 page)
Research Strategy (6 page limit)
Sponsor and Co-Sponsor Statement (6 page limit)
Letters of Support/ email contacts
Institutional Environment and Commitment to Training
  (2 page limit)
Training and Responsible Conduct of Research
  …and more!
F32 Stipends, Tuition, Institutional Allowance

<table>
<thead>
<tr>
<th>Career Level</th>
<th>Years of Experience</th>
<th>Actual Stipend for FY 2016</th>
<th>Stipend for FY 2017</th>
<th>Monthly Stipend</th>
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<tr>
<td>Postdoctoral</td>
<td>0</td>
<td>$43,692</td>
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<td>$55,296</td>
<td>$56,400</td>
<td>$4,700</td>
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<td>7 or More</td>
<td>$57,504</td>
<td>$58,560</td>
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</table>

Tuition and Fees
60% of level requested up to $4,500 (or $16,000 degree)

Institutional Allowance for Fellows ($8850 including health insurance)
Common Elements in Applications

- Applicant Biosketch
- Applicant Background
- Academic Record
- Publications or Abstracts
- Research Plan
- Literature Cited
- Vertebrate Animals
- Sponsor/Collaborator’s Biosketch
- Sponsor’s Past/Current Trainees
- Sponsor’s Training Plan
- Research Project Environment
- Collaborator Letter
- Consultant Letter
- Reference Report

Study section review
“AHA does not require but strongly encourages institutions to develop and use Individual Development Plans (IDPs) for AHA training programs. IDPs provide a structure for the identification and achievement of career goals.”

NIH F32 requires annual RPPR progress reports that ask how IDPs are used at University; fellowship review criterion, “Does the training plan take advantage of the applicant's strengths and address gaps in needed skills? Does the training plan document a clear need for, and value of, the proposed training?”

My IDP
Goal-setting & IDPs presentation Nov 2017
Postdoc Association
Applications require a biosketch that describes education, professional appointments, honors, publications and previous funding.

This is *different* from your CV:


**NIH Biosketch**

| Biographical Sketch Format Page (fellowship) | Prepare biographical sketches for applications and progress reports for fellowship applications and awards. | Blank biosketch format page - fellowship | Biosketch instructions - fellowship | Sample for Predoctoral Fellowship Sample for Postdoctoral Fellowship Try SciENcv to help you develop your biosketch and automatically format it according to NIH requirements. |
Tips for Applicant’s Background

Doctoral Dissertation and Research Experience
Training Goals and Objectives
Activities Planned Under this Award

• Interest in research, research career & how this application will assist in your goals
• IDP and goal setting
• Address any personal factors that affected advancement
• Fellowships are not designed to make better teachers
• Include a *training timeline*
• Sponsor describes training and career development plan in detail; your “training goals” and “activities” should be similar.
Tips for Specific Aims

- Provide 2 or at most 3 aims
- Define the question you will answer
- Address a hypothesis that is logical, testable, focused, informative, simple

Sample structure:
- First paragraph: Capture attention, what’s known, the gap you will address, why it’s important
- Second Paragraph: Introduce your solution to fill the gap
- Each Aim: Devote a short paragraph to each aim
- Summary Paragraph: What new things we will know, why the application should be supported
- Consider: Models/Charts/Diagrams
Tips for Sponsor Statement

- Research support available
- Sponsor/Co-Sponsor’s Previous Fellows/Trainees
- Training plan, environment, research facilities
- Number of fellows to be supervised during fellowship
- Applicant’s qualifications and potential for a research career
Tips for Training Plan

Sponsor identifies a unique plan for career goals!

- individual development plan, plan to address gaps
- Specific skills needed for your career
  - short course or workshop (CSHL, MBL)
  - advanced statistics, imaging, clinical populations
- New research skills, perhaps with a collaborator or core
- Skill-building in manuscript and grant-writing, speaking
- Presentations at national meetings, name target societies
- Goals for publications, name target journals
- Describe lab meetings, research in progress explicitly--meeting content and frequency
“It is expected that the mentored training experience will provide:

- A strong foundation in research design, methods, and analytic techniques appropriate to the proposed research;
- Enhanced ability to conceptualize and think through research problems with increasing independence;
- Experience conducting research using appropriate, state-of-the-art methods, as well as presenting and publishing the research findings as first author;
- The opportunity to interact with members of the scientific community at appropriate scientific meetings and workshops;
- Skills needed to transition to the next stage of the applicant’s research career; and
- The opportunity to enhance the applicant’s understanding of the health-related sciences and the relationship of his/her research to health and disease.”
• Each member reads 5-10 grants in advance (overlap)
• Reviewers submit initial scores in advance
• NIH 1 (great) to 9 (not great); don’t discuss higher than 5
• Primary reviewer presents application and review
• Your application gets about 15 minutes
• All members in group score each grant
• NIH staff take notes-your program officer might attend
Reviewers are:

- Smart
- Accomplished
- Dedicated
- Fair

- Busy
- Overworked
- Skeptical
- May not be knowledgeable about the details

Phyllis McBride, Ph.D.
p-mcbride@tamu.edu
Funding announcements describe review criteria. Answer each item!

(EXAMPLES—see announcement for full details)

**Fellowship Applicant**
- Are the applicant’s academic record and research experience of high quality?
- Does the applicant have the potential to develop into an independent and productive researcher?
- Does the applicant demonstrate commitment to a research career in the future?

**Sponsors, Collaborators, and Consultants**
- Are the sponsor(s’) research qualifications (including recent publications) and track record of mentoring individuals at a similar stage appropriate for the needs of the applicant?
- Is there evidence of a match between the research and clinical interests (if applicable) of the applicant and the sponsor(s)? Do(es) the sponsor(s) demonstrate an understanding of the applicant’s training needs as well as the ability and commitment to assist in meeting these needs?
- Is there evidence of adequate research funds to support the applicant’s proposed research project and training for the duration of the research component of the fellowship?

**Research Training Plan**
- Is the proposed research project of high scientific quality, and is it well integrated with the proposed research training plan?
- Based on the sponsor’s description of his/her active research program, is the applicant’s proposed research project sufficiently distinct from the sponsor’s funded research for the applicant’s career stage?
- Is the research project consistent with the applicant’s stage of research development?
- Is the proposed time frame feasible to accomplish the proposed training?

**Training Potential**
- Are the proposed research project and training plan likely to provide the applicant with the requisite individualized and mentored experiences in order to obtain appropriate skills for a research career?
- Does the training plan take advantage of the applicant’s strengths and address gaps in needed skills? Does the training plan document a clear need for, and value of, the proposed training?
Search “preparing an NIH fellowship application” for institutional guides, sample applications, sample review summary statements and useful videos.

• **Quick Start guide** F31 (Yale)
• Sample proposals on IBS fellowship site

Yuan et al 2016 Ten Simple Rules for Writing a Postdoctoral Fellowship, PLOS Comp Biol

Contact: Alison Hall, PhD
Associate Dean Research Workforce Development
[akhall@gwu.edu](mailto:akhall@gwu.edu)