

2023 Request for Applications: Post-Undergraduate Training Awards

RFA Released: Wednesday, August 9, 2023

Applications Due: Friday, December 8, 2023 5:00 pm ET

Anticipated start date: July 1 – September 15, 2024

Informational Conference Call (attendance not required):
Friday, September 8, 2023 - 12:00 pm ET
Register HERE

Introduction

The Autism Science Foundation invites applications for a Post-Undergraduate Two Year Research Fellowship award designed to support students who have received a bachelor's degree, and who wish to gain more intense experience in autism research by working full time in a lab environment for two years prior to entry into a graduate program. The application should include a plan for the fellow to spend their time working to advance either an existing research study or help launch a new research project with significant guidance and support by a mentor, advisor, and other more experienced research staff in a well-established autism lab. Applicants need not already be accepted to graduate school.

The proposed training should be scientifically linked to autism, but may be broadened to include training in a closely related area of scientific research. The Autism Science Foundation will consider all areas of related basic and clinical research, including but not limited to: human behavior and co-occurring medical conditions across the lifespan (language, learning, behavior, communication, social function, motor skills & planning, epilepsy, sleep, repetitive disorders); neurobiology (anatomy, development, neuroimaging); pharmacology; studies that address disparities in access, care and research; neuropathology; genetics and gene/environment interactions; epigenetics; immunology; molecular and cellular mechanisms; studies employing model organisms and systems; intervention research (behavioral, pharmacological or a combination of the two), and studies of treatment and service delivery.

ASF welcomes scientific research in all fields. However, we are especially interested in projects which address previously under researched communities. These include: profound

autism, those with severe and challenging behaviors, and autism disparities in racial and ethnic minority groups or those with socioeconomic challenges.

II. Awards

The Autism Science Foundation will make a number of awards determined by its available financial resources. Each award will provide \$30,000/year for two years. No portion of these funds shall be used to cover indirect university costs or other expenses, unless at the expressed permission of ASF prior to submitting the application.

III. Eligibility:

Applicant:

- Applicants for the Post-Undergraduate Two Year Fellowship must have completed a
 bachelor's degree by project start date and be willing to work in a mentored lab for a
 period of no less than 2 years. They may not be enrolled in a university program or
 have any other academic responsibilities.
- Applicants should be in at least their senior year of college. The fellow will likely be working on a project that extends past the funding period and has not been specifically designed around their existing skill set, however, there must be specific goals and accomplishments stated as part of the fellowship. The selected awardee also must spend 100% of his/her professional time engaged exclusively in the autism research activities stipulated in the application for the duration of the award, and cannot simultaneously hold another fellowship award during the support period.
- ASF <u>requires</u> applicants email ASF's Chief Science Officer Alycia Halladay (<u>ahalladay@autismsciencefoundation.org</u>) prior to submission to confirm the eligibility of their sponsoring institution.
- U.S. citizens affiliated with institutions inside or outside of the United States are eligible to apply. Non-U.S. citizens affiliated with institutions based inside or outside of the U.S. are also eligible to apply.

<u>Mentor</u>:

 The proposed mentor must hold a tenured or tenure-track faculty appointment (or equivalent) at an accredited institution of higher education or health/medical/research institution, and must be an established and active investigator in some aspect of autism research. Each mentor may sponsor only one candidate (either one post undergraduate candidate OR one predoctoral candidate (separate RFA) OR one postdoctoral candidate (separate RFA) per application round. Each candidate may select only one mentor.

Advisor:

• The candidate may have an advisor in addition to the mentor. It is not required, but highly suggested. This mechanism allows for an advisor that would work on a day-to-day basis with training and oversight. This could include a post-doctoral fellow or other research staff. This is not mandatory, but if the mentor is unable to provide day-to-day support to the fellow, it is highly suggested. The advisor may also provide expertise or opportunities outside the mentor's specific field, and should also work directly with the mentor. We recommend that a faculty member with more autism experience serve as the mentor while those who provide day-to-day support and guidance serve as the advisor. If the mentor is able to take on this responsibility, an advisor is not needed. The advisor's name should be included on the title page, and his/her role in the training of the fellow should be explicitly stated in the training plan. The CV for the advisor should be included in the application.

IV. Proposals Using Post-Mortem Tissue

Proposals using post-mortem tissue for research must provide documentation that the necessary tissue is or will be available at the research site at the time of the award and is not dependent on ASF funding. It should not be assumed that because the mentor has published on post-mortem brain tissue samples that such samples are available for other projects. Proposals without proper documentation will be returned without review.

V. Use of Model Systems

Model systems, specifically animal models, should be utilized in a way that provides maximum benefit to research. ASF encourages researchers utilizing animal models to understand behavior and to study behavior as an outcome of treatment studies. Researchers using animal models should review and consider guidelines and recommendations provided in a recent paper in Gene, Brain and Behavior.

VI. Resubmissions

Proposals reviewed during the 2022 cycle may be resubmitted for consideration. In addition to the proposal, the applicant should provide a one-page, single spaced letter addressing the changes made in response to the reviewers' comments. The one-page, single spaced letter will not be included in the proposal page limit, but it should only contain information relevant to the reviewers' previous comments and suggestions. The revised proposal should be submitted without track changes or other editing notations.

VII. Proposal Preparation

The entire proposal, excluding the letter of recommendation and CVs, must be submitted in 12-point Arial font, 1.5 spacing and should have margins of 0.5 inch or greater. The

applicant's last name must appear in the header on every page of the application. Number the pages as indicated. In order to provide continuity to reviewers, if pages are not used, the words "page intentionally left blank" must appear as a watermark on that page. For example, if the training plan only requires four pages, page #8 should be numbered and watermarked with "page intentionally left blank."

A proposal must include the following sections:

Page 1: Title Page

Each proposal must include a title page with the applicant's name and full contact information (including a permanent, non-school affiliated email address), mentor name and full contact information, name of advisor (if applicable) and full contact information, title of the project and name of the sponsoring institution (where the research will take place). Indicate on the title page that the application is for a post undergraduate research fellowship award. We also ask that you include your race, ethnicity, and gender. Proposals without a title page may be returned without review.

FOR RESUBMISSIONS, INSERT LETTER ADDRESSING REVISION HERE (this page should not be numbered, but should be labeled as the "Resubmission Letter")

Pages 2-3: Proposal Abstract (Max. 500 words) & Lay Abstract (Max. 250 words)

The proposal abstract should indicate the proposed research and training goals and means, describe the training environment, and stress the relevance of the research to individuals with autism and their families. (*Maximum 500 words*)

The lay abstract must be intelligible to a knowledgeable layperson or non-expert. It should not include jargon and should clearly and succinctly state the goals of the project and the expected impact on people with autism. (*Maximum 250 words*)

Pages 4-8: Research Plan (Maximum 5 pages)

The plan should describe the specific autism research project, including hypotheses to be tested, specific aims, background/preliminary studies, methods, participant characterization (if applicable), expected results and timeline for completion. Including a budget is not necessary. This may be part of an existing, ongoing research study in the mentor's lab and under the advisor's guidance, however, the research plan should be tailored to allow for the fellow to gain sufficient expertise in a specific field. In other words, do not copy and paste sections from an existing grant where the work is aimed at a postdoctoral-level scientist with the expectation that the fellow already has several years of research experience. The research plan should include broader goals, but have fellow-specific activities in mind.

Pages 9-12: Bibliography (Maximum 4 pages)

Include complete literature citations including titles and all authors.

Pages 13-14: Personal Statement (Maximum 2 pages)

The applicant should submit a personal statement describing her/his background, experience, and qualifications for this award, as well as his/her career plans in autism research. The statement

should describe how the proposed project and selected mentor will foster the candidate's progress toward the stated career goal in autism research.

Pages 15-18: Transcript of Applicant

You need to include a copy of your most recent transcript from your graduating university or institution.

Pages 19-26: Candidate Specific Training Plan (Maximum 8 pages)

The training plan highly impacts the review and award decisions. It should be *prepared by the mentor and advisor (if applicable) in collaboration with the fellow.* The mentor should provide a thorough description of a training program that includes a clear plan of professional development for a future career in autism research specific to the applicant, as well as a comprehensive summary of the mentor's autism research and experience mentoring other students and postdocs. This should include exposure to both clinical and basic sciences, and should take advantage of opportunities outside the university, including community based training. If an advisor is included in the project, his/her expertise and role on the career development of the applicant in autism research should be described. The training plan should be specific to autism, not just a training plan in science. In past grant cycles, highly qualified applicants have been rejected due to mentors submitting inadequate, overly generic training plans. "Journal Club" is not a training plan.

While there is no allocation for time for coursework, the training plan should include any opportunities within or outside the institution or organization that provides specific, measurable and attainable outcomes as well as the opportunities to attend academic conferences, training opportunities, and other courses for skill development. These can be attended as non-matriculated and are meant to enhance and expand the skillset of the trainee.

Mentors should also indicate current funding source(s), total award amounts, award durations (inclusive dates), project titles and clearly explain the extent to which currently funded research projects will overlap, complement and/or contribute to the training of the Awardee. Mentors may also choose to list recent (last 3 years) as well as pending grant support relevant to autism research.

Pages 27 – 32: CV of Mentor (NIH format required)

Page 33: Letter of Commitment

The proposed mentor must provide a letter providing his/her endorsement of the applicant and stating his/her commitment that a fellowship recipient will spend 100% of his/her professional time engaged exclusively in the autism research described in the application for the duration of the award.

Pages 34-39: CV of Advisor (NIH format required)

If applicable - if no advisor is included, write "pages left intentionally blank" on these pages.

Pages 40 - xxx: Appendix

All applicants may submit a list of web links to a maximum of 5 peer-reviewed research publications, essays, blog posts, posters, or other materials on which they are an author. Note: Appendix links and manuscripts are provided as a courtesy to the reviewers who are under no obligation to read or consult them in evaluating a proposal.

*Note: Proposals must adhere to the page limits provided. In order to provide continuity to reviewers, if pages are not used, the words "page intentionally left blank" must appear as a watermark on that page. Applications with one or more sections that are longer than the page limit may be returned without review.

Letter of Recommendation:

One letter of recommendation should be provided by an individual (it **cannot** be the mentor or advisor) who is familiar with the applicant and addresses his/her education, research training and experience, and professional career goals in autism research. **Applicants should arrange to have** no more than one letter of recommendation submitted, and it should be submitted directly by the recommender as a PDF document on official letterhead. Please read that sentence again. One letter sent directly by the recommender and **not** included in your application packet. Letters received as a word document will not be accepted.

VIII. Submission of Proposals

Proposals should be submitted as a single PDF document with all materials (including those of the mentor), **except** the letter of recommendation, bundled together. Submit the PDF by email to <u>Grants@autismsciencefoundation.org</u> with the subject line (Last Name/Institution/PostUndergrad/App).

Example: Martin/Tulane/PostUndergrad/App

Letters of recommendation should be sent by the recommender directly to ASF by email to <u>Grants@autismsciencefoundation.org</u>. Please ask your recommender to use the subject line (Applicant Last Name/PostUndergrad/Rec).

Example: Martin/PostUndergrad/Rec

Successful electronic submission of proposals and letters of recommendation will be confirmed by email notification to the sender. Please note that notification is not immediate and may take a few hours.

Proposals are due on or before **Friday, December 8, 2023 5:00 PM ET**. Proposals will not be accepted after the due date unless prior permission is obtained, and only then for exceptional circumstances. It is the applicant's responsibility to ensure that the proposal complies with the conditions prescribed in the RFA. It is also the applicant's responsibility to ensure that their letter of recommendation is received by the deadline.

Autism Science Foundation reserves the right to return any proposal without review. This includes proposals found not to be in compliance with the conditions prescribed in the RFA, proposals that are not responsive to ASF's research goals and proposals that exceed the stated funding levels, and those that are submitted from a research institution that ASF cannot negotiate a grant with. ASF also reserves the right to return any proposal from

applicants whose mentors have a previous history of submitting reports late or from universities whose ASF-funded students have, in the past, submitted late final reports.

The Autism Science Foundation reserves the right to make changes to this RFA at any time. Changes will be posted at https://autismsciencefoundation.org/grants-awards-fellowships/. We advise applicants to check this webpage frequently.

Award notifications will be made in April 2024. Award projects must be started between July 1, 2024 and September 15, 2024.

IX. Payment of Awards

Awards will be paid in two installments; the first within 30 days of the start date and the second at the one year point, provided we receive a satisfactory progress report from the applicant. Payment will be contingent upon acceptance (by an official authorized to act for the institution receiving the award) of the Autism Science Foundation award terms and conditions without amendment (provided at the time of the award) and receipt by ASF of all required certifications. An award cannot be transferred to another investigator, laboratory, or sponsoring institution without prior written approval from Autism Science Foundation, even if the new investigator is working with the same mentor. Similarly, awardees cannot change mentors without prior written approval from Autism Science Foundation.

Human Subjects and Animal Welfare Certifications must be documented with a copy of an official letter of approval that identifies the Principal Investigator, project title and date of approval, and is signed by the Review Committee Chair or equivalent responsible institutional/government official. These certifications are required before any payments can be made. Prior certification for another project CANNOT be substituted, but can be officially amended to include the proposed project. **IRB and IACUC certifications are NOT required to submit an application, but are required before an award will be made.**

A one-time, six-month no-cost extension from the termination date of the award in order to complete necessary work (including data analysis and preparation/submission of dissertation and/or manuscripts for publication) will be considered upon request. Awardees must submit written reports to the Autism Science Foundation at the midpoint and at conclusion of the award, documenting the status of the research funded. A template will be provided by the Autism Science Foundation for this purpose and can be found online. Failure to provide a midterm report by the due date will result in forfeiture of funds. Failure to submit a final report by the due date will disqualify the sponsoring Institution from future award opportunities

All post-award forms, including progress reports, final reports and no-cost extensions can be found here: https://autismsciencefoundation.org/grantee-resources/

X. Review Process and Evaluation Criteria

Proposals will be reviewed by members of Autism Science Foundation Scientific Advisory Board as well as active and experienced investigators recruited from the scientific community for their expertise in the research areas of the proposals. Proposals may also be reviewed by a panel of experienced laypersons (parents, individuals with autism, other advocates) who will provide input to the Scientific Advisory Board. Since the purpose of these awards is to train committed young scientists in an environment conducive to beginning a career in autism research, the following criteria will be used to evaluate how well a proposal will provide a research experience and an environment suitable to training a future autism investigator:

- **Significance of the Research**: The quality of the proposed research project in terms of providing meaningful information for individuals with autism and their families and caregivers, as well as its potential to advance the scientific understanding of autism.
- Applicant Qualifications: Applicant's expertise and experience in autism research and his/her demonstrated commitment to autism research as a career path, even prior to admission to a graduate program.
- Mentor and Advisor Qualifications: Mentor and advisor's expertise and experience in autism research; quality and productivity of current autism research program; experience training graduate students and postdoctoral fellows.
- Training Plan: The quality of the proposed training plan, including the proposed fellowship research project, its link to autism research and potential for development of a dedicated career path in autism research. It should include information about the mentor and advisor's involvement in the research, the plans to integrate the fellow into the project, and the unique contributions that the fellow can make in the facilitation of the completion or development research project.
- Resources and Facilities: Evidence of sufficient research support and adequate facilities and resources to provide an appropriate training environment; institutional research programs and/or clinical assets that enhance training in the multidisciplinary complexity of autism spectrum disorders.

Please review our "Frequently Asked Questions" for additional help. For any outstanding questions about proposal submission, proposal content and review, or applicant eligibility, please email Alycia Halladay, Chief Science Officer, ahalladay@autismsciencefoundation.org.

Frequently Asked Questions

1. Does ASF fund internationally?

Yes. U.S. citizens affiliated with institutions inside or outside of the United States are eligible to apply. Non-U.S. citizens affiliated with institutions based inside or outside of the U.S. are also eligible to apply.

2. Can I get feedback on whether ASF would be interested in funding my project before actually applying?

We can provide feedback on whether the research question matches the mechanism, but no specific recommendations on how to construct your application (other than what is provided in the webinar) can be provided. We cannot comment on what your research plan should look like.

3. Do you have an example title page/application for reference?

Yes. You can find a sample application here:

https://autismsciencefoundation.org/wp-content/uploads/2022/07/Sample-Application.pdf

4. Do I have to have an advisor on my application?

No, but it is strongly recommended.

5. Can I have multiple mentors/advisors on my application?

You may have only one mentor but you can have multiple advisors. Be judicious though, you need to justify their role in your application

6. My mentor has two students he wants to apply with - one predoctoral (separate RFA) and one post-undergrad - is that allowed?

No, each mentor can only be submitted as the mentor on one grant application per cycle. This includes pre-doctoral, post-doctoral and post-undergraduate applications.

7. Can my advisor apply on multiple applications?

Yes, your advisor can appear on multiple applications.

8. Can my mentor apply as the mentor on my application and the advisor on another application?

Yes, this is possible, however, it is very rare for ASF to offer multiple awards that are similar in scope and from the same institution in the same cycle.

9. My mentor's biosketch does not fit in the allotted space on the application. What should I do?

Tell your mentor that you need a shorter biosketch.

10. Can I submit more than one letter of recommendation?

No. Each applicant may only have one letter of recommendation submitted on their behalf. As a reminder, the letter of recommendation CANNOT be from the mentor or advisor. It must be emailed directly to Grants@autismsciencefoundation.org and is not to be included in the application bundle.

11. How will I know if my letter of recommendation has been received?

The recommender will receive email confirmation upon successful receipt of the letter. Please confirm directly with them.

12. Do I need to submit IRB/IACUC approval with my application?

IRB and IACUC certifications are NOT required to submit an application, but are required before an award will be made. Offer letters will be sent in April 2024 so projects must have IRB/IACUC approval by then.

13. My proposal uses post mortem tissue. Where do I include the appropriate documentation in the application?

A letter provided by the Autism BrainNet or any other brain tissue resource centers verifying that you have or will be receiving tissue relating to the project should be included in the appendix. Your mentor will be able to obtain this documentation for you.

14. When is the application due?

Applications are due Friday, December 8, 2023 by 5:00 PM ET. Any applications received at 5:01 PM ET or after will not be reviewed. Be mindful of the time zone!

- **15.** I noticed an error in my application but I've already submitted. What should I do? If there is still time before the deadline, you are welcome to resubmit the revised application. If the deadline has passed, no corrections or changes will be accepted.
- 16. I applied in 2022 and want to resubmit, but never asked for feedback on my application. Can I get feedback now? If not, do I still need to write a resubmission letter?

No, you cannot request feedback now. If you choose to resubmit, you still need to include a letter that addresses the changes you have made since your original submission.