2022 Request for Applications: Pre- and Postdoctoral Training Awards Medical Student Gap Year Research Training Awards

RFA Released: Monday, August 9, 2021
Applications Due: Friday, December 10, 2021 5:00 pm EST
Anticipated start date: July 1 – September 15, 2022

Informational Conference Call: Thursday, September 9, 2021 - 12:00 pm EST Register HERE

I. Introduction

The Autism Science Foundation invites applications for its Pre- and Postdoctoral Training Awards from graduate students, medical students and postdoctoral fellows interested in pursuing careers in basic and clinical research relevant to autism spectrum disorders.

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.

II. Awards

The Autism Science Foundation will make a number of awards determined by its available financial resources. The term of the award will be a period of one year and will include:

For predoctoral and medical students: \$35,000 For postdoctoral students: \$50,000

This award cannot be used to cover tuition payments. No portion of these funds shall be used to cover indirect university costs.

III. Eligibility:

Applicant:

- Applicants for Predoctoral Awards must be enrolled students in good standing in a
 program leading to a research doctorate, such as a Ph.D. or Sc.D., or a dual degree,
 such as an M.D./Ph.D., in an academic department at an accredited university or
 health/medical institution.
- Applicants for Medical School Gap Year Research Training Awards should be enrolled at an accredited university medical school. Medical school applicants must apply prior to graduation from medical school, but the gap year may be taken immediately after graduation.
- Applicants for Postdoctoral Awards must have completed their doctoral or medical degree and have been accepted as a postdoctoral fellow in good standing in a program as of the award start date (July - September 2022).
- Applicants may apply at any point during their training. The fellow may work on a
 project that extends past the funding period; however, there must be specific goals
 and accomplishments stated as part of the fellowship. The selected awardee also
 must spend 80% 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.
- U.S. citizens enrolled in universities inside or outside of the United States are eligible to apply. Non-U.S. citizens enrolled in universities based inside or outside of the U.S. are also eligible to apply.

Mentor:

 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 predoctoral candidate OR one postdoctoral candidate OR one medical school gap year candidate) per application round. Each candidate may select only one mentor.

<u>Advisor</u>:

• The candidate should also have an advisor in addition to the mentor. This is not mandatory, but highly suggested. The advisor may provide expertise or opportunities outside the mentor's specific field, and may be at a different university or other organization. We recommend that the faculty member with more autism experience serve as the mentor. 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. Resubmissions

Proposals reviewed during the last cycle may be resubmitted for consideration. If from an earlier cycle, it would be considered a new submission. 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.

VI. Proposal Preparation

Proposals must be submitted in 12-point Arial font 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 4 double spaced pages, page 8 should be numbered and watermarked with "page intentionally left blank."

A proposal must include the following sections:

A. Sections Prepared by Applicant

- 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 whether the proposal is for a predoctoral, postdoctoral, medical gap year award or post baccalaureate award. We also ask that you include your race, ethnicity, and gender. This is optional, however, it helps ASF ensure that we are receiving applications from a diverse community. Proposals without a title page may be returned without review. In the past, applications have been rejected because of failure to include a title page.

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, single spaced*)

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, single spaced*)

- Pages 4-8: Research Plan (Maximum 5 doubled spaced 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. Budget is not necessary.
- Pages 9-12: Bibliography (Maximum 4 single spaced pages)
 Include complete literature citations including titles and all authors.
- Pages 13-14: Personal Statement (Maximum 2 doubled spaced 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: CV of Applicant (NIH format neither preferred nor required)

B. Sections Prepared by Mentor

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

The training plan highly impacts the review and award decisions. It should be *prepared by the mentor in collaboration with the trainee.* 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. Special attention should be given to the interaction between the advisor and the trainee if the advisor is at a different organization or research institution. 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.

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 80% 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 (if applicable) (NIH format required)

- Pages 40 - xxx: Appendix

All applicants may submit a list of web links to a maximum of 5 peer-reviewed research publications on which they are an author. Postdoctoral applicants may attach up to two manuscripts under review as part of the application, indicating whether the manuscript is in press or under review and the journal. 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.

C. <u>Letter of Recommendation:</u>

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.

VII. 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 ApplyForGrants@autismsciencefoundation.org with the subject line (Last Name/Institution/ Pre or Post/Application).

Example: Martin/Tulane/Post/Application

Letters of recommendation should be sent by the recommender directly to ASF by email to ApplyForGrants@autismsciencefoundation.org. Please ask your recommender to use the subject line (Applicant Last Name/Pre or Post/Recommendation).

Example: Martin/Post/Recommendation

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 10, 2021 5:00 PM EST**. 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. 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 www.autismsciencefoundation.org/ApplyForaGrant.html. We advise applicants to check this webpage frequently.

Award notifications will be made in April 2022. Award projects must be started between July 1, 2022 and September 15, 2022.

VIII. Payment of Awards

Awards will be paid in two installments; the first within 30 days of the start date and the second at the six month 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. 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/resources/resources-for-grantees/standard-forms-templates/

IX. 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.
- Mentor Qualifications: Mentor'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.
- 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.

The Autism Science Foundation will hold an informational webinar regarding the predoctoral, postdoctoral and medical school fellowship RFA on Wednesday, September 8th, 2021 at 12:00pm EST. The webinar will outline best practices for completing the application. Participation on the webinar is NOT required for application. We will not take attendance and the webinar will not be recorded. You can participate via phone or via your computer. Please register by clicking here:(insert link here)

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 enrolled in universities inside or outside of the United States are eligible to apply. Non-U.S. citizens enrolled in universities 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 vague input, but no specific recommendations on how to construct your application (other than what is provided in the webinar) or 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/2021/07/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 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 and one postdoctoral. Is that allowed?

No, each mentor can only be submitted as the mentor on one grant application per cycle.

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 do 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 ApplyForGrants@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 2022 so applicants 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.

14. When is the application due?

Applications are due Friday, December 10, 2021 by 5:00 PM EST. Any applications received at 5:01 PM EST 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 do 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 back in 2019 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 should reconsider your research questions and study design given everything that has changed since you submitted, and submit as a new application.