

106 W 32ND STREET, SUITE 182 NEW YORK, NY 10001 P: 914-810-9100 AUTISMSCIENCEFOUNDATION.ORG

Request for Applications: 2020 Pre- and Postdoctoral Training Awards & Medical Student Gap Year Research Training Awards

RFA Released: Monday, August 5, 2019

Applications Due: Monday, December 2, 2019 5:00 pm EST

Anticipated project start date: July 1, 2020 – September 15, 2020

Informational Webinar: Wednesday, September 11, 2019 - 12:00 pm EST

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. Autism Science Foundation will consider all areas of related basic and clinical research including but not limited to: human behavior across the lifespan (language, learning, behavior, communication, social function, motor skills & planning, epilepsy, sleep, repetitive disorders), neurobiology (anatomy, development, neuroimaging), pharmacology, behavioral intervention, neuropathology, genetics and gene/environment interactions, epigenetics, genomics, epigenomics, immunology, molecular and cellular mechanisms, studies employing model organisms and systems, and studies of treatment and service delivery, and dissemination of research findings.

Special consideration will be given to projects focusing on traditionally under-researched populations (including those with high support needs and those from racially and ethnically diverse populations), medical comorbidities of autism, those with rare genetic disorders associated with autism, and studies of families with a high probability of receiving a diagnosis.

II. Awards

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: \$25,000 For postdoctoral students: \$35,000

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-Sept 2020).

Pre- and postdoctoral applicants may apply at any point during their training. The fellow may work on a project that extends out past the funding period, however, there must be specific goals and accomplishments stated as part of the one-year 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-US 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.

Advisor:

• The candidate should also have an advisor in addition to the mentor. 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.

 An advisor is not necessary for a successful application, but strongly recommended if parts of the project extend past the mentor's immediate area of expertise.

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 previous 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. Only submissions from the previous year will be considered a resubmission to ASF. The one page 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**. All sections of the proposal **must be double spaced** with the exception of the following sections: title page, proposal abstract, lay abstract, bibliography, applicant CV, advisor CV, mentor CV, letter of commitment and letter of recommendation.

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), title of the project and name of the sponsoring institution. Indicate on the title page whether the proposal is for a predoctoral, postdoctoral or medical gap year award. 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 does not need to be numbered, but should be labeled as the "Resubmission Letter")

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

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. You need to convey why your project is important to families affected with ASD.

Pages 4-8: Research Plan (Maximum 5 double 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

Include complete literature citations, including titles and all authors.

Pages 13-14 Personal Statement (Maximum 2 double 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 or required)

The CV should include the applicant's SAT, ACT, MCAT, and/or GRE scores as well as undergraduate and graduate GPA. Only individuals who received their degree outside of the United States are exempt from providing SAT or ACT scores. Individuals who have taken these exams must locate and provide their scores.

B. Sections Prepared by Mentor

- Pages 19-26: Candidate Specific Training Plan

The training plan 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. Letter of Recommendation

The letter of recommendation must 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. The letter must be on letterhead and signed. In no circumstance will the contents of this letter be shared with the applicant. **Applicants should arrange to have only one letter of recommendation submitted, and it must be submitted directly by the Recommender, not included in the application bundle**. Please read that sentence again. One letter submitted directly by the recommender.

VII. Submission of Proposals

Proposals must 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 grants@autismsciencefoundation.org with the subject line (Last Name/Institution/Pre,Post/Application).

Example: Martin/Tulane/Post/Application

Letters of recommendation must be sent by the recommender directly to ASF by email to grants@autismsciencefoundation.org. Letters of recommendation included in the application bundle will not be accepted. Please ask your recommender to use the subject line (Applicant Last Name/Pre,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 Monday, December 2, 2019 5:00 PM EST. Proposals will not be

accepted after the due date unless prior permission is obtained, and only 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.

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 2020. Awarded projects must be started between July 1, 2020 and September 15, 2020.

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 by 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 environment suitable to training a future autism investigator:

- **Significance and Quality 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 11th, 2019 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:

https://attendee.gotowebinar.com/register/7410416301630072065

Additional questions about proposal submission, proposal content and review, or applicant eligibility should be addressed to Alycia Halladay, Chief Science Officer, ahalladay@autismsciencefoundation.org.