



Autism Speaks Postdoctoral Fellowship 2021 Request for Applications

Deadlines:

Letter of Intent due on or before: January 19, 2021, 8:00 p.m. (U.S. Eastern Time)

Letter of Intent decisions: By the first week of February 2021

Recommendations (see page 6) due on or before: ~~February 24~~, **March 3, 2021 by 8:00 pm (ET)**

Application due on or before: ~~March 3~~ **March 10, 2021 by 8:00 pm (ET)**

Other Important Dates (subject to change):

Peer review panels: Spring/Summer 2021

Notification: August 2021

Earliest Grant start date: November 2021

Autism Speaks is dedicated to promoting solutions, across the spectrum and throughout the life span, for the needs of individuals with autism and their families. We do this through advocacy and support; increasing understanding and acceptance of autism spectrum disorder; and advancing research into causes and better interventions for autism spectrum disorder and related conditions. We empower people with autism and their families with resources, online tools and information covering the life span.

The goal of this program is to support well-qualified postdoctoral scientists pursuing training in autism spectrum disorder (ASD). The program is open to applicants from public or private institutions doing preclinical or clinical research.

Competitive fellowship applications will feature research projects that focus on the following areas of high interest to the science mission at Autism Speaks:

- **Epigenetics**
- **Pre-clinical intervention studies, including gene and RNA editing**
- **Immunology/inflammation**
- **Medical Comorbidities (particularly seizures and GI problems/microbiome) with an emphasis on interventions**
- **Biomarkers and objective measurement of autism and related domains**
- **Adult transition and lifespan development**
- **Challenging behavior**
- **Cognitively disabled and/or non- or minimally verbal**
- *** Innovative implementation of technology to enhance reach and impact of services with an emphasis on diagnosis and intervention in low resource settings, especially among ethnic minority, rural and other marginalized populations**
- **Inclusion of individuals from low-resource communities** (*For research that involves human subjects, Autism Speaks will prioritize study designs that include and better reflect the diversity of the community that we serve.*)

**Timely access to effective services contributes to wellbeing and better outcomes for all individuals and families affected by autism. Yet, recent studies have shown location, SES and other social determinants continue to limit access to needed support for many individuals and their families. Like other health disparities, those associated with autism are only likely to increase during the pandemic. Autism Speaks is interested in innovative implementation of technologies to address these barriers and enhance the*

reach and impact of ascertainment and intervention services, especially among ethnic minority, rural and other marginalized populations.

Awards

Each fellowship is awarded for a period of two years and includes both a competitive **stipend** (see below) and an **\$11,000 annual allowance** intended to cover professional conference travel, research costs and supplies, and/or fringe benefits. Indirect costs are not allowed. Stipend amounts based on years of experience since PhD can be found below, with the year 7 level being the maximum. The latest start year is 5 years.

Fellows are permitted to obtain additional awards or grants to *cover research expenses only*. Fellows may not hold any other award or grant that supplements their stipend.

Years of Experience since PhD	Stipend Amount
0	\$55,000
1	\$55,400
2	\$55,800
3	\$57,000
4	\$60,000
5	\$62,000
6	\$64,000
7	\$66,300

Eligibility

Applicants at U.S. and non-U.S. non-profit and for-profit institutions are eligible for this program. These entities include, but are not limited to, colleges, universities, hospitals, governmental entities and for-profit research & development entities (e.g. biotechnology and pharmaceutical companies). Collaborative projects between public and private entities that diversify the training experience of the applicant are acceptable and encouraged. The site(s) where the applicant will conduct or participate in research training activities for the project must be clearly described in the individualized development plan (IDP; described below). Projects involving for-profit entities require a letter from an authorized company representative declaring that the applicant's work can and will be published, and that publication will not be delayed because of proprietary issues.

Postdoctoral Fellows: The candidate must hold an M.D., Ph.D. or equivalent terminal degree and cannot have more than 5 years of postdoctoral experience at the commencement of the award. The selected postdoctoral fellow must spend at least 80 percent of his/her professional time engaged exclusively on the fellowship research activities for the duration of the award. The fellow may not simultaneously serve in an internship or residency, hold a tenure-track faculty appointment or hold another named fellowship award during the award period. Postdoctoral training in the laboratory where the applicant received his/her graduate degree will not be reviewed.

Mentors: A primary mentor must be identified prior to applying for the research fellowship. All mentors must have Ph.D. and/or M.D. degrees and be scientific investigators with primary appointments at academic, public or private research institutions (e.g., tenured, tenure-track or equivalent). They need to have a record of conducting high quality research, including 1-2 peer-reviewed publications within the past 2 years in the field of the applicant's research project. Prior mentoring experience and adjunct appointments will be considered and must be briefly described in the mentor's biosketch.

If the principal affiliation of the primary mentor is a for-profit institution, then the applicant is strongly encouraged to choose at least one secondary mentor whose chief appointment is at a non-profit college, university, hospital or other research institution including governmental entities. A statement of commitment from the primary mentor must be included with the LOI (see 2.f under "Completing the LOI") and confidential letters of recommendation from all mentors must be submitted as a part of the full

application (see 15 under “Complete the full application”). In addition, all mentors should sign the IDP that the fellow candidate prepares (see #4 under “Complete the full application” below).

Applications are strictly limited to one per postdoctoral fellow or mentor per LOI/application process. This applies whether the mentor is primary or not. Multiple submissions will be returned.

General Information

All applications must be submitted through the web-based Autism Speaks Science Grants System, <https://science.grants.autismspeaks.org>.

Please Note:

1. The fellowship candidate must be the applicant. Go to <https://science.grants.autismspeaks.org> and register with **your institutional email address** (or log in if you have a profile). Complete your profile information. *Note: You should enter the institution where the fellowship will take place, even if you are not located there at the time of LOI submission.*
2. As of February 24, 2020, all users must utilize Google Authenticator in order to log in to the system. There are on screen instructions as well as [this guide](#).
3. It is advisable to review the LOI page and then the Application page in the grant system well in advance of the submission date.
4. All uploaded documents should be 11-point Arial font with 1-inch margins all around (single spacing is acceptable) with the exception of NIH biosketches. Please do not have headers or footers in submitted documents. *Applications exceeding the specified document limits will not be reviewed.*
5. Preferred file type is PDF and must not be encrypted. Movie files are not acceptable.
6. Fellows should use the regular NIH biosketch rather than the fellow biosketch.
7. Applications or LOIs received after the deadline will not be accepted unless permission has been previously granted by the Autism Speaks Grants Office and then only due to rare and unavoidable circumstance. There are no exceptions to this rule. All decisions of Autism Speaks in regard to late submissions will be final. It is the applicant’s responsibility to plan around holidays or any special circumstances at their institution.
8. It is the applicant’s responsibility to contact their Office of Sponsored Projects or Research Administration (or the equivalent) to identify the Responsible Official (RO) for this application. The Responsible Official will review and submit the application. Their submission is their approval of the application on behalf of the institution. LOI forms are to be completed and submitted by the applicant but the RO must be named and will be included on notifications. Full applications can only be submitted by the RO.
9. There are no geographic restrictions on these applications. International applicants are encouraged.

Resubmissions

Candidates are allowed one resubmission of a previously denied Autism Speaks application (within two years). Resubmissions must meet the following requirements to be considered for review:

1. The LOI must indicate that the application is a resubmission and enter the prior ID# in the field provided. Also, it must include an Introduction describing how the resubmitted application will address the comments from the previous review, in the field provided (2500 characters, spaces included).
2. If the LOI is approved, the introduction can be expanded (8,000 characters, spaces included).
3. The new application research plan and other changed documents should indicate all substantive text changes. Changes should be easily identifiable using brackets, indents, or a distinguishable font. Do not underline or shade the changes. If significant portions of the original application research plan or other documents were deleted, the deletion should be explained in the

Introduction. The application should also describe additional work completed since the original submission.

Completing the LOI

Log in and click “Applications” at the top of the profile page or “Go to Applications” at the bottom. Choose ‘Start a new LOI or application’, then ‘Postdoctoral Fellowship 2020 from the Award Type drop down and finally “Start new letter of intent...” The Letter of Intent (LOI) includes two web pages.

1. Basic Information Page includes:

- a. Title: Enter less than 100 characters, spaces included
- b. Scientific Abstract. 1,500 characters, spaces included. Provide a summary of the research project to be conducted and the skills that will be obtained by the trainee during the fellowship.
- c. If the application is a resubmission, select “Yes” and the previous Autism Speaks ID number from the dropdown list of eligible IDs. If there are no available IDs, then you cannot resubmit. The introduction should explain how the resubmission will address the reviewers’ concerns or issues from the original application. (2500 characters, spaces included).
- d. Key Personnel: Expected mentor(s) and consultants (hint: start by entering the last name as many people are already in our database). ***It is important to enter all participants you expect, even if they change later.***
- e. Choose the Responsible Official (Research Administrator) from your institution (see #6 under General Information on page 3). You must have an institutional email address to add a new official.
- f. Choose the keywords that describe this project.
- g. All this information will be available for changing/adding at the application stage.

2. Letter of Intent Form includes:

- a. **PhD/MD Year/Explanation** – Applicants must not have more than 5 years of postdoctoral experience at the commencement of the award.
- b. **Training Plan Summary:** Short summary of the training plan and how it will contribute to the fellow’s career development. Include training activities outside of the research (courses, rotations, conferences, etc) (up to 4,000 characters, spaces included).
- c. Biosketch for the fellow, NIH format not to exceed 5 pages.
- d. Biosketch for the primary mentor, NIH format not to exceed 5 pages.
- e. A statement of commitment from the mentor explaining how they will provide resources essential to achieve the specific aims and career goals of the fellow. The mentor’s expertise, laboratory and/or clinical resources, and their ability to provide a rich training experience should be included. This should **NOT** be a letter of recommendation for the fellow. References are not needed.
- f. Projects involving for-profit entities require a letter from an authorized company representative declaring that the candidate’s work can and will be published and that publication will not be delayed due to proprietary issues.

The LOI is to be submitted by the applicant. Institutional officials must be named but are not directly involved in the submission. The applicant, mentor and responsible official will receive an email confirming submission and a notification after Autism Speaks staff reviews the LOI. Candidates with approved LOIs will be able to move to the full application. ***All LOI decisions are final and no comments will be available.***

Completing the full application

1. Once there is approval for the full application, entries on the Basic Information page can be edited. The rest of the entries listed here on are the application form (the 2nd page). Remember

that the “Introduction for Resubmissions” will expand to 8,000 characters in the application on the “Basic Information” page.

2. **ORCID profiles** – Autism Speaks’ policy requires all applicants and mentors to obtain ORCID profiles. [Link to Help document](#).
 - a. **Applicants** will not be able to work on their application until they have connected their ORCID profile to their Autism Speaks profile. Links in the Autism Speaks Science Grant system will make this step easy.
 - b. **Mentors:** All mentors named on the application must also connect their ORCID profiles to their Autism Speaks profiles. Just having an ORCID profile is not sufficient. (See the [Help document](#).) ***An application will not be reviewed until this is complete.*** All mentors named on an application will receive an email with instructions. However we encourage the applicant to follow up with each individual. (*This is optional but encouraged for consultants and non-mentor referees.*)
3. **Research Plan.** Not to exceed 6 pages. Project Narrative should include:
 - a. Specific aims, background and significance/relevance to autism
 - b. Preliminary data, including images or figures, if applicable. Note that any relevant publications, high resolution photographs or other supporting material can be uploaded under Exhibits.
 - c. Experimental design, methodology and timeline for achievement of specific aims.
 - d. *For research that involves human subjects, Autism Speaks will prioritize study designs that include and better reflect the diversity of the community that we serve.*
4. **Individualized Development Plan (IDP):** Not to exceed 4 pages. The fellowship is designed to encourage the most promising scientists to enter the field of ASD research with a clear plan for research training. Candidates must describe an IDP that **integrates the proposed research training experiences**, mentoring relationships and local educational opportunities (e.g., seminar series, department meetings), with an emphasis on how these components will enable the candidate to develop into a leading ASD researcher. The plan should describe the specific experiences that will be integrated into the fellowship, and the roles of each of the mentors (primary and all secondary).

The training should add value above and beyond previous educational and research experiences. Describe the research training environment(s) and available resources (facilities, equipment, study populations and intellectual activities). ***The candidate must also include a personal statement addressing the value of the proposed fellowship experience and research training program for his or her preparation for a career as an independent, competitive scientist studying topics relevant to autism.***

All mentors must sign the IDP that the fellow candidate prepares.

5. **Responsible Conduct of Research Plan:** Not to exceed 3 pages. Outline all previous, current and future instruction. These plans may include coursework as well as individual and/or group training sessions with faculty and should detail the duration and frequency of instruction. The mentor’s role in promoting and ensuring the responsible conduct of research must be described. Please note, participating in online courses alone will not be considered sufficient instruction in the responsible conduct of research. In addition, while training in professional ethics, ethics in clinical research or the ethical use of vertebrate animals is commendable and recommended, these topics are not sufficient to cover all aspects of responsible research conduct. See Appendix for list of topics.
6. **Bibliography** with complete literature citations including titles and all authors.
7. **Budget:** The applicant must complete the online budget table showing how the research allowance will be spent. Indirect costs are not allowed. Stipends cannot be reallocated to other

parts of the budget nor can other parts of the budget be reallocated to the stipend. Allowable categories are

- a. Tuition Reimbursement
 - b. Fringe benefits
 - c. Research Supplies
 - d. Travel
 - e. Animal/Human Subjects Costs
 - f. Mentor Support – Up to \$500 of the Research Allowance can be allocated for primary mentor's salary support or travel. The explanation of the plans should be included in the Budget Justification.
 - g. Other (must be explained in the budget justification).
8. **Budget Justification:** Provide a detailed justification for each item on the budget. Include calculation(s) used. Uploaded document.
9. **Human Participants and/or Vertebrate Animals:** Applications that use human participants or vertebrate animals must address issues of protections. If no ethics approval is needed for the proposed research, please upload a memo to that effect. *Note that ethical approvals from the applicant organization are required before an award will be made. These approvals do not serve in lieu of the information requested below.*
- a. **HUMAN PARTICIPANTS** (defined as living individuals)
 - i. Scientifically justify the involvement of human participants in the proposed research.
 - ii. Describe in detail the plan for the involvement of human participants in the proposed research
 - iii. Describe in detail the potential risks to participants and measures to be taken to protect participants from those research risks.
 - iv. For clinical trials, describe plans for data and safety monitoring, including the description of a data and safety monitoring board if necessary.
 - b. **VERTEBRATE ANIMALS**
 - i. Describe in detail the proposed use of the animals, including species, strains, ages, sex and number to be used.
 - ii. Justify the use of animals, choice of species and numbers to be used.
 - iii. Provide information on the veterinary care of the animals.
 - iv. Describe procedures for ensuring discomfort, distress, pain and injury is minimized. Please include the method of euthanasia and the reasons for its selection.
10. **Consent forms** (if applicable): If this project will be working with human subjects, upload the planned consent forms which will be used with the participants.
11. **Letters of Collaboration** (optional): Up to two, one-page letters of collaboration may be submitted describing a collaborative arrangement.
12. **Biographical sketches** of all key personnel, not to exceed five pages per individual. Please use the NIH biographical sketch format. There will be individual upload slots for the fellow and primary mentor. All other files will need to be combined into one for upload. (See the application page.) Consultant biosketches are not required but strongly suggested. Biosketches should indicate all active and recently completed public and private funding, including source, total award amount, award duration (inclusive dates) and project title, both for the applicant and the primary mentor. Clearly explain the extent to which currently funded research projects will overlap, complement and/or contribute to the proposed research. Upload document.
13. **Publications:** Upload up to 2 publications that support the research plan. These do not have to

be authored by the fellow or mentor. Publications are reviewed at the discretion of the reviewer.

14. **Exhibits:** Supplemental exhibits that support the research plan can be submitted. Multiple items should be combined into one file. Final file must be less than 4 MB. Items uploaded in this section will be reviewed at the discretion of the reviewer.

15. **A minimum of three confidential recommendations, including all mentors and at least one non-mentor referee (unrelated to the postdoctoral training) are required.** Each recommendation must be submitted in the online form (**no uploads**) in the [Autism Speaks Science Grants System](#) by each mentor/referee. Instructions for applicants and responsible officials can be downloaded [HERE](#). Instructions for mentors/referees can be downloaded [HERE](#). The recommendations must address the following information about the candidate:
 - a.) Commitment to a career focusing on research relevant to ASD;
 - b.) Potential for conducting research;
 - c.) Adequacy of scientific and academic background with specific reference to the candidate's academic and research endeavors, including any publications to date;
 - d.) Evidence of originality;
 - e.) Specific areas of further research training that would support the candidate in achieving a research focus in autism-related topics;
 - f.) Any additional related comments that the referee may wish to provide.

It is the responsibility of the fellow to make sure each referee has the above instructions. These letters must be received on or before the deadline listed on page 1.

Submit the Application

When the application is complete, the applicant will click 'Ready for RO Approval' on the application form page. ***This can be done without all the recommendation letters submitted; however the Responsible Official will not be able to submit the application unless all letters are submitted.*** It is the responsibility of the applicant to contact their Responsible Official who must complete the submission. Applications must be submitted electronically using the Autism Speaks Science Grants System. Applications that are late, incomplete, exceed the document limitations or do not adhere to the required format will not be reviewed. Applications that are faxed or emailed will also not be reviewed.

Autism Speaks reserves the right to return without review any fellowship application that in its judgment is not in compliance with its rules and procedures for application preparation and submission, is not responsive to its research training goals, or exceeds its funding limits or available resources. It is the responsibility of the applicant to ensure that the application is complete and conforms to the guidelines.

Review Process and Evaluation Criteria

Applications will be reviewed by independent peer review panels that will include active and experienced investigators in the research areas of the applications as well as our partners in the broader autism community. Fellowship applications will be reviewed on the merit of the training plan, the proposed research, the strength of the candidate and mentor, and the relevance to the goal of this fellowship.

Notification and Announcements

Applicants will be notified by e-mail after the funding decision process is complete. All grant awards shall be posted on the Autism Speaks website. The outcomes of each award will be posted after completion of the training project.

Post Award

The recipient of any grant from Autism Speaks must use the awarded funds as specified in the approved budget. Any funds not used in the above specified manner must be returned to Autism Speaks. Payment of the awards is contingent on receiving any institutional approvals (IRB or IACUC) that may be required for the research.

Fellowships will be paid half of Year 1 upfront and further payments will be contingent upon completion and submission of the appropriate documents as explained in the grant agreement. A fellowship award cannot be transferred to another mentor, laboratory or sponsoring institution without prior written approval from Autism Speaks. Fellowships cannot be transferred to another fellow.

Study Ethics

Human Participants and Vertebrate Animal Certifications must be documented with a copy of an official letter of approval (or equivalent for non-US applicants) 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. Prior certification for another project cannot be substituted but can be officially amended to include the proposed project (identified by project title).

IMPORTANT: IRB, IACUC or equivalent ethical certification are NOT required to submit an application; however, such ethical certification must be submitted as soon as possible following official notification of an award. Autism Speaks will NOT issue any form of funding until appropriate certifications are received.

Projects using postmortem tissue must provide documentation that the necessary tissue is or will be available at the research site at the time of the award. Applications without proper documentation will be returned without review.

Questions: Joan New, MBA, Grants Manager, 609-228-7313, jnew@autismspeaks.org

APPENDIX: Responsible Conduct of Research Plan

Outline all previous, current and future instruction. These plans may include coursework as well as individual and/or group training sessions with faculty, and should detail the duration and frequency of instruction. The mentor's role in promoting and ensuring the responsible conduct of research must be described.

Please note, participating in online courses alone will not be considered sufficient instruction in the responsible conduct of research. In addition, while training in professional ethics, ethics in clinical research or the ethical use of vertebrate animals is commendable and recommended, these topics are not sufficient to cover all aspects of responsible research conduct.

Responsible Conduct of Research includes most of the professional activities that are related to a research career and specifically encompasses the following **nine** areas:

1. Conflict of interest – personal, professional and financial
2. Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
3. Sponsor/fellow responsibilities and relationships
4. Collaborative research including collaborations with industry
5. Peer review, including confidentiality and disclosure of participation by anyone not directly assigned to the materials under review
6. Data acquisition and laboratory tools; data management, sharing and ownership
7. Research misconduct and policies for handling misconduct
8. Responsible authorship and publication, with topics including fabrication, falsification and plagiarism
9. The scientist as a responsible member of society, contemporary ethical issues in biomedical research and the environmental and societal impacts of scientific research

Document requirements: Word or PDF, 3 pages max, Arial 11 font, 1 inch margins, single space is acceptable.