



Autism Speaks Translational Postdoctoral Fellowship Program 2011 Request for Applications

Deadlines:

Letter of Intent: March 31, 2011, 8:00 p.m. (U.S. Eastern Time)

Letters of recommendation and Application: June 16, 2011 by 8:00 pm (ET)

Other Important Dates (subject to change):

Peer review panels: Fall, 2011

Notification: Winter, 2011-12

Grant start date (earliest): Winter, 2011-12

Autism Speaks announces Postdoctoral Fellowships in Translational Research on Autism Spectrum Disorders

The Autism Speaks Postdoctoral Fellowship in Translational Research is designed to support promising, well-qualified postdoctoral scientists in their pursuit of research training in translational research. Translational research seeks to accelerate the pace at which basic scientific discoveries are translated into novel and effective ways of diagnosing, preventing, and treating conditions. We seek to encourage new investigators to enter into the field of autism spectrum disorders (ASD) translational research by providing funding for multidisciplinary training. This fellowship will support postdoctoral training in research that seeks to move biological science “from bench to bedside” or from experiments conducted in the laboratory into preclinical or clinical trials to real world settings, including hospitals, clinics, and other community settings, with the goal of improving outcomes for individuals with ASD. Specifically, this fellowship will support research training that involves translation of *biological* discoveries toward novel and more effective methods or strategies for treating or diagnosing ASD.

A key motivation behind this fellowship is to remove barriers and develop better communication and collaboration among basic scientists, applied researchers, and clinicians. To this end, this fellowship requires a multidisciplinary setting and training plan that includes experience in both the laboratory and clinical settings. In addition to providing exceptional research training, the fellowship must include opportunities for two-way communication between basic scientists and clinicians. An example is a training plan that involves research on identifying biomarkers in the lab and observations of people with ASD in a clinical setting. Another example is clinical research involving behavioral studies of persons with ASD combined with training by bench scientists who are studying the neural or genetic basis of ASD. Such training and experiences are designed to ensure that basic science mentors provide insights into mechanisms and research tools that ultimately will be useful in clinical settings while clinicians provide insights into the clinical phenomena and needs of the people being served that might then inform basic questions. Thus, trainees are required to have a primary mentor, the faculty member with whom they directly carry out their research, as well as one or more secondary mentors, who will provide integrated training experiences in different disciplines. Together, the mentoring team should offer opportunities for the fellow to learn about both basic laboratory science and people with ASD seen in clinical practice or clinical research.

Postdoctoral Fellowships in Translational Autism Research may include but are not limited to training in research that focuses on the following:

- Discovery of biomarkers (including genes, peptides, metabolites, etc.) with clear potential for improving screening, diagnosis, or optimizing or predicting response to treatment
- Testing of treatments through novel model systems and bioassays
- Exploring novel clinical applications of small molecules, peptides, proteins, and/or antibodies that hold potential for modifying symptoms of ASD
- Use of induced pluripotent stem cells to advance understanding of biomarkers or response to novel compounds
- Identification of high risk genetic and environmental factors for ASD through evaluation of published research and replication studies, with the aim of devising counseling recommendations for at risk families
- Animal model studies exploring novel treatments
- The development of in vitro model systems for new target identification and validation
- Clinical trials that incorporate a biomarker to stratify, predict, or optimize response to treatment
- Clinical trials that combine biological and behavioral interventions
- Neuroimaging and/or electrophysiology studies to uncover basic brain mechanisms or monitor clinical status including response to treatment

Awards

The number of fellowships Autism Speaks will award will be determined by its available financial resources and the fit of the proposed research within the Autism Speaks portfolio. Each award will be for a period of two years and will include a competitive stipend, and a \$10,000 annual allowance for professional conference travel, research costs and supplies, and/or fringe benefits. Indirect costs are not allowed. Stipend ranges can be found below. The second year stipend will be raised to the next level.

The **postdoctoral fellowship stipend** level will be determined by the number of years of postdoctoral experience at the time of the award to a maximum of \$50,000 per year. 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	Stipend Amount
0	\$38,000
1	\$40,000
2	\$43,000
3	\$44,500
4	\$46,000
5	\$48,000
6	\$50,000

The first payment will be contingent upon receipt of the countersigned grant agreement letter and certification of ethics approval, if applicable. Subsequent payments on multiyear grants will be paid annually and will be contingent upon receipt and approval of interim progress and financial reports. Interim reports are due 10 months after the start of the grant (see more detail on Payment of Awards below).

Eligibility and Roles

Postdoctoral Fellows: The candidate must hold an M.D., Ph.D. or equivalent terminal degree, and cannot have more than five years of postdoctoral experience at the commencement of the award. The selected postdoctoral fellow must spend at least 80% of his/her professional time

engaged exclusively in autism research related 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 support period. International applications are encouraged. Postdoctoral training in the laboratory where the applicant received his/her graduate degree will not be reviewed.

Mentors: Prior to application, candidates must have identified a primary mentor and at least one secondary mentor (limit two) for their fellowship. Mentors must have Ph.D. and/or M.D. or equivalent backgrounds, and be a scientific investigator with an academic or research institutional appointments (tenured, tenure-track, or equivalent). Mentors must be affiliated with a nonprofit institution with tax-exempt status under Section 501(c)3 of the Internal Revenue Code, or similar classification outside the United States. Statements of Commitment from all mentors must be included with both the LOI and application. Confidential letters of recommendation from the primary and all secondary mentors must be submitted (see 13 under "Complete the full application"). In addition, the full mentoring team must sign off on the Individualized Development Plan (IDP) that the Fellow candidate prepares (see section 6 below). The IDP will be evaluated for how well it integrates the mentoring experiences to yield a robust training in translational research on ASD.

Applications are strictly limited to one per postdoctoral fellow or mentor per review cycle.

Application Submission

All applications must be submitted through the web-based Autism Speaks Grants Administration System.

Please Note:

1. The Fellowship candidate must be the applicant and must first send an email from their institutional email address to grantadmin@autismspeaks.org indicating their interest to apply, including name, institution, office or lab address and phone #. System access information will be returned by email.
2. It is advisable to review the LOI page and then the Application page in the grant system well in advance of any submission date.
3. Uploaded documents should be 11 point Arial font with 1-inch margins all around. Please do not have headers or footers in submitted documents. *Applications exceeding the specified document limits will not be reviewed.*
4. Do not put headers or footers on submitted documents. The grant system places information in the header and footer when the full application PDF is generated. Applicants can check this by using the Print Packet on the LOI or application page.
5. Preferred file type is PDF. If your file exceeds the upload size limit, try using the Fax to File tool on the Grant site.
6. Applications 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.
7. It is the applicant's responsibility to contact their Office of Sponsored Projects (or the equivalent) to identify the Responsible Official (RO) for this application. The Responsible Official will review and submit the final portion of the application. Their submission is their approval of the application on behalf of the institution. LOI forms can be completed and submitted by the applicant. Full applications can only be submitted by the RO.

Completing the LOI page

Log in and click on Start New Application and then choose Translational Postdoctoral Fellowships 2011. The Letter of Intent (LOI) page requires the following:

1. Application Title: Enter less than 100 characters, spaces included
2. Short summary of the research topic and how it relates to Autism Speaks' priorities (up to 3000 characters, spaces included).
3. 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 3000 characters, spaces included).
4. Biosketch for the fellow, NIH format not to exceed 4 pages.
5. Biosketch for the mentor #1, NIH format not to exceed 4 pages.
6. Biosketch for the mentor #2, NIH format not to exceed 4 pages.
7. Biosketch for the mentor #3, NIH format not to exceed 4 pages. (Optional)
8. Letters from the primary and all secondary mentors providing a statement of commitment to 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 joint ability to provide a rich translational training experience should be included. Letters should be combined into one file for upload.
9. Name and contact information for the Responsible Official from the Fellow's institution.

The LOI page is to be submitted by the applicant. Institutional officials are not required for this submission. The applicant will receive an email 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.***

Complete the full application.

1. **Autism Speaks' priorities** – Choose the primary priority to be addressed and explain how the application will address it. (3000 characters, spaces included)
2. **Scientific Abstract.** Provide a summary of the research project to be conducted and the skills that will be obtained by the trainee during the fellowship. (2500 characters, spaces included)
3. **Lay Abstract.** Provide a lay description of the fellow's research project, the skills that will be obtained during the fellowship, and how those skills will eventually be applied in the fellow's research career for non-experts. If a grant is awarded, the lay abstract may be reprinted on the Autism Speaks web site and/or in other communication materials. (2500 characters, spaces included)
4. **Research Plan.** Not to exceed 4 pages. Project Narrative should include:
 - a. Explain how the specific research proposed is translational in nature and how the research project is an example of the application of a biological discovery to the development of novel and more effective diagnostic and/or treatment methods for Autism Spectrum Disorders (ASD).
 - b. Specific aims, background and significance/relevance to autism
 - c. Preliminary data, if applicable. Note that any relevant publications, figures or other supporting material can be uploaded under Figures.
 - d. Experimental design, methodology, and timeline for achievement of specific aims.

***** IMPORTANT NOTE: Impact will also be measured long-term via Autism Speaks' future surveys on the impact and outcome of the grant (e.g., publications, leveraged grant funding) for at least 3 years after completion of the project. A clear willingness and***

commitment to respond to all outcomes requests is required for awardees.

5. **Figures.** Up to 3 relevant images or figures related to the Research Plan may be uploaded.
6. **Individualized Development Plan (IDP)** - Not to exceed 3 pages. This Postdoctoral Fellowship Program in Translational Research on Autism Spectrum Disorders is designed to encourage the most promising scientists to enter into the field of ASD research in a novel way. The fellowship candidate must complete an IDP that integrates the proposed clinical and basic training experiences and clearly describes the translational focus of the proposed fellowship. The plan should describe the specific laboratory and clinical experiences that will be provided during the fellowship. The roles of each of the mentors (primary and all secondary) should be described.

The IDP may include classes, seminars, and opportunities for interaction with a wide range of researchers. It must include experiences both within and outside the field of primary study and include both laboratory and clinical experiences. If the candidate plans to conduct bench or other laboratory research that does not involve direct contact with persons with ASD, the candidate should describe those clinical experiences that are planned and how they will be mentored. Such clinical experiences can include, but are not limited to, involvement with a clinician in practice, shadowing a clinician or educator, and conducting screening or intake procedures. Alternatively, if the applicant is involved in research involving working directly with persons with ASD, the applicant should describe those experiences that are planned within basic research settings relevant to ASD and how they will be mentored. 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 translational topics relevant to autism.***

****** NOTE that all mentors must sign the IDP and that particular emphasis will be placed on how well it integrates the various training experiences.***

7. **Bibliography** with complete literature citations including titles and all authors.
8. **Budget and Budget Justification.** The applicant must complete the budget form, and provide a written budget justification to detail each item on the budget form. Include calculation(s) used to estimate costs. Indirect costs are not allowed.
9. **Human Participants and/or Vertebrate Animals:** Applications that use human participants or vertebrate animals must address issues of protections. *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 details 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. **Letters of Collaboration** (optional). Up to two one-page letters of collaboration may be submitted describing a collaborative arrangement.

11. **Current and Pending Support**. Indicate funding source, total award amount, award duration (inclusive dates), and project title, both for the applicant and the mentor. Clearly explain the extent to which currently funded research projects will overlap, complement and/or contribute to the proposed research.

12. **Biographical sketches** of the fellow, mentors, and collaborators, not to exceed four pages per individual. Please use the NIH Biographical Sketch format. Multiple files will need to be combined into one for upload – first see the application page.

13. **Exhibits**. Supplemental exhibits that support the Research Plan, including publications, 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.

14. **Three or Four Confidential Letters of Reference, including primary mentor, at least one secondary mentor, and at least one referee unrelated to the postdoctoral training**. Each letter must be 2 pages or less, on institutional letterhead, signed **and sent** by email as a PDF file. The letter should be sent directly from the referees to Joan New at grantadmin@autismspeaks.org. Each letter should have the name of the candidate at the top and the referee's name, title and institution at the bottom. The reference letters should address the following information about the candidate:

- a.) commitment to a career focusing on translational 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 translational research focus in autism-related topics
- f.) any additional related comments that the referee may wish to provide

These files must be received by the deadline listed on page 1.

Submit the Application

When the application is complete, 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 Online Grant Administration 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 members of Autism Speaks Scientific and Treatment Advisory Boards as well as active and experienced investigators recruited from the scientific community for their expertise in the research areas of the applications. Fellowship applications will be reviewed on the merit of training plan, the proposed research, the strength of the candidate and mentors, and the relevance to the goal of this fellowship which is to facilitate translation of biological discoveries into novel and more effective methods for diagnosis, treating, or preventing ASD.

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.

Payment of Awards

The recipient of any grant from Autism Speaks must use the awarded funds for the specific purpose for what they were originally intended. 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. All grantees must agree to participate in an annual survey commencing upon the completion of the project which will assess the outcomes of the research in terms of its findings, impact, publications, communications to the scientific community, and leveraged funding. Failure to respond to the survey may result in the applicant disqualification to apply for future Autism Speaks' research grants.

Awards will be paid annually and payment will be contingent upon registration in the Autism Speaks Grants Administration System of a post-award official authorized to act for the institution receiving the award, and upon acceptance of the Autism Speaks award terms and conditions, including receipt of all required certifications. A fellowship award cannot be transferred to another investigator, laboratory or sponsoring institution without prior written approval from Autism Speaks.

The second year payment will be contingent upon Autism Speaks receiving interim progress and financial reports from the investigator 10 months after the award begins. Final reports are due no more than 60 days after the grant end date. The fellow and mentor may request a one-time only, no-cost extension of up to six months if there is a hiatus in the training. Requests for no-cost extensions must be approved by Autism Speaks prior to the extension period and require submission of a progress report and financial report via the online Grants Administration System.

Miscellaneous

Human Participants and Vertebrate Animal Certifications must be documented with a copy of an official letter of approval (or equivalent for non-US applicants), which 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 a grant contract or 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. Investigators desiring to obtain tissue from the Autism Tissue Program should go to **atpportal.org** for information, application instructions and due dates.

Public Access/Dissemination:

Funded researchers also are required to submit or have submitted for them to the National Institutes of Health's PubMed Central database an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication. This requirement applies to all grants awarded after December 3, 2008, whether Autism Speaks funds the research in whole or in part. The Autism Speaks' public access policy is available here: [Policy Link](#)

Autism Speaks reserves the right to make information about funded grants publicly available. Funded research projects may be subject to data and resource sharing requirements.

Major donors may choose to become "research partners" on specific grants. In this situation, their donation is earmarked to cover the sponsored research and their name becomes associated with that grant (for instance, on the Autism Speaks website and any associated publicity material). Should a grant become sponsored, the PI may be requested to provide very brief updates so the donors are kept apprised of the progress.

Contacts:

Grants Administration/Online Application/Budget Questions:

Joan New, MBA, Senior Grants Administrator, 609-228-7313 email: jnew@autismspeaks.org

Application Development and Budget:

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