

The Simons Foundation Autism Research Initiative (SFARI): Request for proposals: 2021 Human Cognitive and Behavioral Science

Unrestricted funding opportunities

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Website: <https://www.sfari.org/grant/2021-human-cognitive-and-behavioral-science-request-for-applications>
Submission Limitations: None
Foundation Deadline: Application deadline is **May 3, 2021, 5:00 p.m. EST**

Please contact your RAS unit ***and Nicole Dancz to inform them of your intent to submit.***

Overview

- The mission of the Simons Foundation Autism Research Initiative (SFARI) is to improve the understanding, diagnosis and treatment of autism spectrum disorders (ASD) by funding innovative research of the highest quality and relevance.
- To better understand the cognitive and behavioral foundations of ASD, SFARI is now launching a new, annual, investigator-initiated request for applications (RFA) that is specifically dedicated to clinically relevant research of ASD. SFARI will use this grant mechanism to more explicitly outline their scientific priorities, and tailor grant budgets and review processes to support the unique opportunities and challenges inherent to studies that directly involve individuals with ASD. The goal of this grant mechanism is to improve the quality and number of investigator-initiated human cognitive and behavioral projects, and to better align this research with other ongoing SFARI efforts.

Scientific Priorities and Scope

- The Human Cognitive and Behavioral Science RFA prioritizes research that produces foundational knowledge about the neurobehavioral differences associated with ASD, which will directly inform the development or refinement of tools needed for translational efforts, such as biomarkers and outcome measures.
- Special emphasis is placed on objective, quantitative measures that may be used in conjunction with standardized clinical measures and genomic information to better triangulate phenotypic and neurobiological variability within and across individuals with ASD.
- In particular, they encourage studies which capitalize on approaches to behavioral analysis that are informed by recent advances in computer vision and machine learning, as well as psychophysics and non-invasive neuroscience techniques (e.g., EEG and MRI).
- SFARI has a strong interest in developmentally focused studies in areas that include, but are not limited to, communicative, social and ritualistic/stereotyped behavior, as well as sensory and motor function.
- SFARI also recognizes the importance of domains of function, such as attention, learning and memory, and sleep, in influencing core ASD diagnostic domains. Applications may propose either laboratory-based or real-world measures of behavior (i.e., wearables/"digital phenotyping").
- They encourage proposals conceptualized within rigorously defined theoretical/computational or neurobiologically-grounded frameworks. Importantly, proposals addressing current theories of autism should include experiments to directly examine falsifiable hypotheses. They also welcome studies which deepen the understanding of cognitive constructs that are often modeled in experimental animals. These may include, but are not limited to, learning and memory, attention, repetitive behaviors, stereotypy, sensory processing and motor function.
- SFARI considers the following as out-of-scope for this RFA: studies with a primary focus on developing new clinical rating scales of survey-based assessments or online adaptations of traditional paper and pencil tests, such as cognitive (IQ) or social-cognitive tests. In addition, they discourage applications with a primary focus on psychosocial factors, or those proposing interventional clinical trials or medical treatments.

Participant Recruitment and Sample Sizes

- Given the heterogeneity and multifactorial causes of ASD, SFARI places a premium on the use of well-characterized and sufficiently powered cohorts. SFARI is particularly interested in research study designs that stratify participants by genetic etiologies or other biologically meaningful criteria.
- To facilitate recruitment of well-characterized ASD cohorts, SFARI has developed [Research Match](#), a robust in-house program to help investigators recruit participants from Simons collections, including [SPARK](#) and [Simons Searchlight](#). RFA applicants are strongly encouraged, but not required, to use Research Match as part of their participation recruitment strategy.
- Through this grant mechanism, SFARI expects to support projects of varying scales, from small, proof-of-principle studies to larger studies that examine additional ASD-relevant parameters or subpopulations. However, when possible, we encourage iterative study designs that move quickly from pilot studies to more scalable approaches, which will lead to more generalizable findings.

Funding

- The total budget is \$750,000 or less, inclusive of 20 percent indirect costs, over a period of up to three (3) years. For projects that propose 2–3 years of research, progress will be critically evaluated at the end of each annual funding period before support for the upcoming year will be approved. Allowable indirect costs to the primary institution for subcontracts are not included in the \$750,000 total budget threshold
- They strongly encourage investigators to tailor their requested budgets and duration to levels appropriate for the scope of their specific aims. As with all SFARI-funded projects, it is at the foundation's discretion to modify final budgets as needed. It is to the investigator's advantage to include realistic budget estimations in their initial grant application.

Eligibility

- All applicants and key collaborators must hold a Ph.D., M.D. or equivalent degree and have a faculty position or the equivalent at a college, university, medical school or other research facility.
- Principal investigators (PIs) who do not have substantial ASD clinical expertise should include a close collaborator with such expertise on their grant application (e.g., multi-PI application).
- SFARI recognizes the importance of diverse viewpoints for scientific advancement. As such, SFARI strongly encourages the inclusion of researchers who span institutions, career stages and groups historically underrepresented in science.
- Applications may be submitted by domestic and foreign nonprofit organizations; public and private institutions, such as colleges, universities, hospitals, laboratories, and units of state and local government; and eligible agencies of the federal government. There are no citizenship or country requirements.

Application Guidelines

- The Simons Foundation uses an electronic grants submission process. All interested grant applicants must submit their applications online.
- To submit an application, you must complete the following [proposalCENTRAL](#) sections:
 1. Title Page: Please provide the following information:
 - a. Project title
 - b. Indicate use of Simons Collections patient recruitment (e.g., [Research Match](#)), biospecimens, or data.
 2. Download Templates and Instructions: All templates necessary to complete your proposal are available for download.
 3. Enable Other Users to Access This Proposal: This section allows you to give other users access to your grant application. You have the option of giving them one of three levels of permission: View, Edit or Administrator.
 4. Applicant/PI: The principal investigator (PI) should be listed here. For grants with multiple PIs, the contact PI should be listed here.
 5. Organization/Institution: Contact information for the signing official and the financial/fiscal officer from your institution is required; select the correct person or enter new names in this section.

6. Key Personnel: Indicate key personnel, including but not limited to: PIs, co-investigators, consultants and postdoctoral research associates. In rare circumstances, the applicant organization may designate multiple PIs who share the authority and responsibility for leading the project, intellectually and logistically.
7. Abstract: Enter your abstract as text in this section.
8. Budget Period Detail: Enter your budget period detail in this section.
 - a. Award start date: Proposals selected for funding will be announced in August 2021, and funding will begin on September 1, 2021; October 1, 2021; or November 1, 2021. Please note that grants may not activate without current ethical approval documentation for human participants and/or animal research, unless given prior approval by SFARI staff.
 - b. Personnel: Please provide the name, role, appointment type, percent effort, institutional base salary, requested salary, fringe rate and requested fringe for all personnel.
Other considerations: Please note that there is no salary cap for PIs or other faculty on a Simons Foundation grant; however, the compensation is prorated according to the individual's percent effort on the grant. There is no minimum percent effort required for PIs or other personnel on any SFARI award type, but it is expected that the PI will commit sufficient effort to this project to provide a leading intellectual and guiding role on the project. PIs committing less than 15 percent effort to their project should justify their effort level in detail. SFARI funds may be used only for personnel considered employees of the grantee institution who are eligible for benefits. Funds may not be used for stipend or benefit supplementation unless specifically authorized under the terms of the program from which funds are derived. The Simons Foundation reserves the right to modify budgets when an application has been selected for an award.
 1. Please do not use the field marked "For Internal Use Only-Estimated Cost for Simons Collections Biospecimens" below the "Indirect Costs" section in the "Budget Period Detail."
 2. Investigators interested in recruiting human participants, including those from a Simons Collection, must complete and submit a Human Participants Study Information Sheet.
 - c. Indirect costs (IDCs): Indirect costs to the primary institution are limited to 20 percent of direct costs with the following exceptions: equipment, tuition and any portion of each subcontract in excess of \$25,000. The primary institution may take indirect costs on the first \$25,000 modified total direct costs of each subcontract. Indirect costs paid to a subcontractor may not exceed 20 percent of the modified total direct costs paid to the subcontractor.
 - d. Equipment: The Simons Foundation (SF) will own equipment purchased with foundation grant funds with a unit cost of \$50,000 or more. At the end of the grant funding period or in the case of grant termination for any reason, the foundation reserves the right to retain ownership or cede ownership to the PI's institution. Equipment with a unit cost of less than \$50,000 shall be the property of the institution.
 - e. Biospecimens: If the proposal includes the use of Simons Collection biospecimens (i.e., from the [Simons Simplex Collection \(SSC\)](#) or [Simons Searchlight](#)), the Simons Foundation will review the estimated cost based on the [price list](#) on SFARI.org. Biospecimen costs will be considered separately from other project costs. Enter the projected figure in the field marked "Simons Collections Biospecimens (No IDC)" in the "Budget Period Detail" section, under "Other Expenses." A description of use, including the number and type of biospecimens, should be included in the proposal narrative and budget justification (see the "Proposal Attachments" section below). Biospecimen costs must be excluded from the IDC cost calculation.
 - f. Budget: The total budget is \$750,000 or less, inclusive of 20 percent indirect costs, over a period of up to three (3) years. For projects that propose 2–3 years of research, progress will be critically evaluated at the end of each annual funding period before support for the upcoming year will be approved.
They strongly encourage investigators to tailor their requested budgets and duration to levels appropriate for the scope of their specific aims. As with all Simons Foundation funded projects, it is at the foundation's discretion to modify final budgets as needed. As such, it is to the investigator's advantage to include realistic budget estimations in their initial grant application.
 - g. Multiple PIs: The applicant PI will be the designated contact PI for the project. The contact PI will be responsible for directing the project and will coordinate all administrative deliverables.

Principal investigators (PIs) who do not have substantial ASD clinical expertise should include a close collaborator with such expertise on their grant application (e.g., multi-PI application).

1. Applications with multiple PIs from different institutions who would like to be paid separately must upload in the “Proposal Attachments” section:
 - i. Signed signature page for each PI (available for download in the “Proposal Attachments” and “Download Templates and Instructions” sections).
 - ii. Budget template for each non-applicant PI (available for download in the “Proposal Attachments” and “Download Templates and Instructions” sections).
 - iii. The direct and indirect costs for all non-applicant PIs. Direct costs must be included in the “Budget Period Detail” section in the “Consortium & Contractual Direct” section, and indirect costs should be included in the “Indirect Costs” section. Please add a separate line for direct costs and one for indirect costs for each non-applicant PI.

Applications with multiple PIs from different institutions who will be paid directly by the contact PI’s institution are considered subcontracts. Please refer to the subcontract instructions in the “Subcontracts” section below.

Applications with multiple PIs from the same institution do not need to submit additional materials. Additional non-applicant PIs should be listed as key personnel in both the “Key Personnel” and “Budget Period Detail” sections, and only one signature page is needed.

- h. Subcontracts: Applications with subcontracts (including PIs who will be paid directly by the contact PI’s institution) must submit:
 1. Subcontract detailed budget (available for download in the “Proposal Attachments” and “Download Templates and Instructions” sections) for each subcontract.
 2. Subcontract direct and indirect costs. Subcontract direct costs must be included in the “Consortium & Contractual Direct” section, and subcontract indirect costs should be included in the “Indirect Costs” section. Please add a separate line for direct costs and one for indirect costs for each subcontract.

1. Budget Summary: The budget summary will populate from the saved detailed budget.
2. Organization Assurances: Indicate use of human participants or vertebrate animals in this section and status of approval from the Institutional Review Board or Institutional Animal Care & Use Committee. Grants cannot activate without current human participant and/or animal research ethical approval.
3. Proposal Attachments: The following documents are to be uploaded in this section, where they are also available for download:
 - a. Specific Aims Page: The Specific Aims Page should not exceed one (1) page and should be a summary of the proposed project focused on the research aims of the project, including a concise rationale for the hypothesis, description of preliminary data and experimental approach, and impact on autism research.
 - b. Proposal Narrative: The Proposal Narrative should not exceed five (5) pages of single-spaced, 11-point text, 0.5-inch margins. The Proposal Narrative should be considered an expanded version of the Specific Aims Page and used to provide more detail on the following:
 1. Relevant scientific background
 2. Preliminary results when applicable
 3. Specific aims
 4. Experimental design
 5. Pitfalls and alternative strategies
 6. Project significance and relevance to autism
 7. Timeline and milestones

Figures, figure legends and references should follow the narrative text and will NOT count towards the page limit. References should be in *Journal of Neuroscience* format, including full author list, title and a

link to the PubMed publication. Figures are limited to five (5), each fitting on a single page. Please attach them at the end of the five-page narrative in the same PDF file.

- c. Human Participants Study Information Sheet:
Applicants are strongly encouraged, but not required, to use SPARK or Simons Searchlight [Research Match](#) as part of their participation recruitment strategy.
 - d. Biographical sketch of key personnel
 - e. Budget justification
Note: SPARK and Simons Searchlight [Research Match](#) includes services for identifying and contacting participants on behalf of your study. As such, some study team costs that are typically budgeted to a PI's grant may be reduced with the use of Research Match. Simons Foundation will work with applicants selected for funding through this RFA to negotiate mutually agreeable budget terms, as needed.
 - f. Budget templates:
 - 1. Multiple PIs: Applications with multiple PIs from different institutions who would like to be paid separately must submit a signed budget template for each PI institution.
 - 2. Subcontract: Applications with subcontracts must submit a budget template.
 - g. Research environment and resources
 - h. Renewable reagents and data-sharing plan
 - i. Current and pending support: Please upload current and pending support both for PIs and for key personnel.
 - j. 501(c)(3) determination or equivalency letter (foreign institutions only): Please upload, if available, a copy of your U.S. IRS 501(c)(3) determination or equivalency letter as part of the application (see [Simons Foundation policies](#)).
 - k. Signed signature page: Applications with multiple PIs from different institutions who would like to be paid separately must submit a signed signature page from each PI institution.
4. PI data sheet: Your professional profile will populate this section of the application. If revisions are required, please select "Edit Professional Profile" and go to the "Personal Data for Applications" section.
5. Signature page(s): The signed signature page is available for download in this section and must be signed by the signing official, then re-uploaded in the "Proposal Attachments" section. Applications with multiple PIs from different institutions who would like to be paid separately must submit a signed signature page for each PI institution.