

Innovative Medicine and Precision Approaches to Clinical Trials (IMPACT) Network

Request for Applications – Step One

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Innovative Medicine and Precision Approaches to Clinical Trials (IMPACT) Network

Request for Applications – Step One

KEY DATES	
RFA Release Date	May 21, 2025
Grant Portal Opens	Week of June 23, 2025
Pre-Application Submission Deadline	July 14, 2025 at 11:59am ET
Select Applicants Invited to Submit Full Applications	Week of August 18, 2025
Full Application Submission Deadline	October 15, 2025
External Review Period	October 20 - November 24, 2025
Virtual Call with Applicants	December 15-19, 2025
Anticipated Award Notification Date	December 2025
Anticipated Contract Execution Deadline	March 31, 2026
Anticipated Funds Release	Q2 2026

Opportunity

The Aligning Research to Impact Autism (ARIA) initiative envisions the creation of a research and clinical care system working in concert to deliver therapies for people most impacted by autism spectrum disorder (ASD) and related neurodevelopmental conditions (NDCs). Core to this effort is the establishment of the **Innovative Medicine and Precision Approaches to Clinical Trials (IMPACT) Network**, a robust and collaborative network of sites that can accelerate clinical trial readiness and implementation in both syndromic and non-syndromic forms of ASD.

ARIA is pleased to announce a Request for Applications (RFA) for institution-based, collaborative, multidisciplinary clinical research teams to join the first wave of Participating Sites within the IMPACT Network.

About ARIA

[Aligning Research to Impact Autism \(ARIA\)](#) is a new initiative led and managed by the Coalition for Aligning Science (CAS), with scientific direction from Matthew State, MD, PhD, Oberndorf Family Distinguished Professor at the University of California, San Francisco (UCSF).

ARIA intends to serve as a catalyst to de-silo the ASD and neurodevelopment fields, connecting emerging research, insights, and promising technologies from across scientific fields to advance scientific discovery and to create more therapeutic opportunities for people with profound autism and people on the spectrum who seek additional support. This initiative is made possible by the generous support of the Sergey Brin Family Foundation (SBFF).

Mission

To accelerate the understanding and treatment of autism and related NDCs through alignment, collaboration, and cutting-edge research.

Vision

We envision a research and clinical care system working in concert to deliver therapies for people most impacted by autism spectrum disorder and other NDCs.

Approach

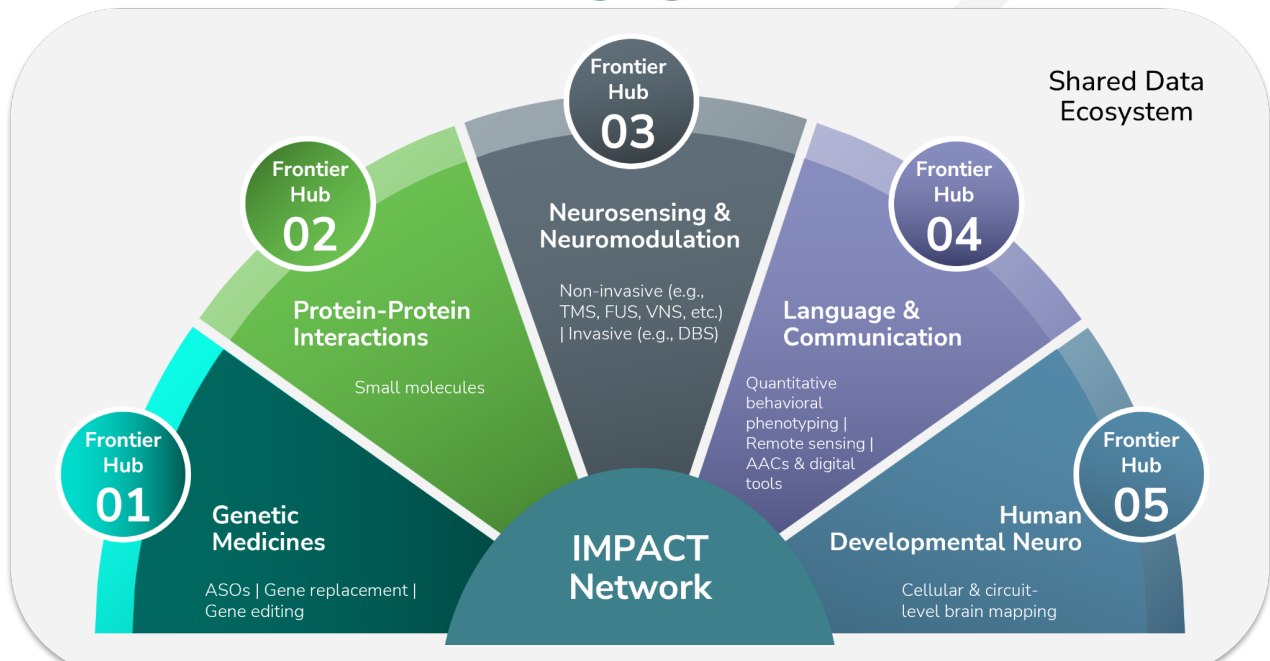
ARIA's approach involves three major categories of activity, as illustrated in the figure below:

1. **Establishing the Innovative Medicine and Precision Approaches to Clinical Trials (IMPACT) Network**, a robust and collaborative international network of sites designed to accelerate clinical trial readiness and clinical trial implementation for syndromic and non-syndromic forms of autism spectrum disorder (ASD). **This component is the subject of this RFA.**
2. **Forming Frontier Science Hubs** to support actionable, cutting-edge research opportunities that will directly support ongoing therapeutic programs and drive the development of new approaches that will eventually integrate into the IMPACT network as the science matures. We are initially launching 5 workstreams to drive research addressing: (1) genetic medicines, (2) protein-protein interactions, (3) invasive/non-invasive neurosensing and neuromodulation strategies, (4) language and communication, and (5) human developmental neuroscience. For more information about the focus of each Frontier Hub, see [Appendix A](#).

3. **Creating a Shared Data Infrastructure** to facilitate open science, data harmonization, and data sharing.

With these activities, we envision a network of networks where multi-scale cross-collaboration activities are strongly encouraged across the entire ARIA initiative, from the IMPACT Network to and from the various Frontier Hubs, where possible.

ARIA's Emerging Framework



ARIA's Strategic Priorities

To drive research progress and improve clinical care in ASD and related NDCs, ARIA's strategic priorities are as follows:

- **Achieve near-term impact.** Rapidly expand evidence-based treatment for patients and families seeking care for ASD and related NDCs.
- **Accelerate translation.** Drive biomarker discoveries to speed up the development of personalized therapies through clinical trial infrastructure.
- **Enhance innovation.** Identify game-changing opportunities to bring to the field of ASD and NDC research, including advancements in remote sensing technology, machine learning, and other cutting-edge modalities.
- **Fuel discovery.** Develop a deeper understanding of human brain development and how it is impacted by NDCs.
- **Harness open science.** Bring together diverse biomedical sectors and perspectives and provide transparency and access to our learnings.

Establishing the ARIA IMPACT Network

Addressing the Challenge

The overarching goal is to establish an integrated pediatric clinical research network that accelerates clinical trial readiness and implementation in syndromic and non-syndromic ASD by creating a robust network of sites uniquely positioned to foster cross-disciplinary collaboration for innovative therapeutic development.

Specifically, the IMPACT Network seeks to enable a) standardized, coordinated quantitative phenotyping across participating sites; b) the capacity to deliver cutting-edge clinical research interventions; c) the opportunity to contribute to foundational collaborative human neuroscience research; and d) the ability to run sufficiently powered clinical trials. This will require close collaboration and coordination with existing family organizations and patient cohorts that include Profound ASD, as well as the establishment of a longitudinal cohort that is deeply phenotyped in a standardized manner across multiple sites – thereby creating a trial-ready population – that can participate in relevant clinical trials as they become available.

Although there have been significant advancements in autism research, effectively translating these discoveries into improved clinical care and better outcomes for autistic people and people with related NDCs remains a significant challenge. This disconnect is driven by several critical roadblocks that hinder the development and implementation of effective therapies, including:

- Lack of clinically meaningful outcome measures.
- Lack of validated biomarkers for predicting and monitoring treatment response.
- Lack of standardized approaches to data collection and analysis.
- Fragmented clinical trial infrastructure, funding, and relevant expertise.
- Limited access to clinical trials for diverse populations.
- Difficulties with recruitment and retention in clinical trials.

ARIA intends to create an ecosystem that leverages the experience and lessons learned from existing clinical research consortia and expands upon them to meet the complex needs of a robust, multicenter clinical trial infrastructure and enable rapid and effective therapeutic development. This network will serve as a foundation and catalyst for all types of therapeutics, from targeted treatments for genetically defined cohorts of individuals with syndromic ASD to large-scale pharmacological and non-invasive neuromodulatory trials in non-syndromic ASD to early behavioral intervention and biomarker development studies.

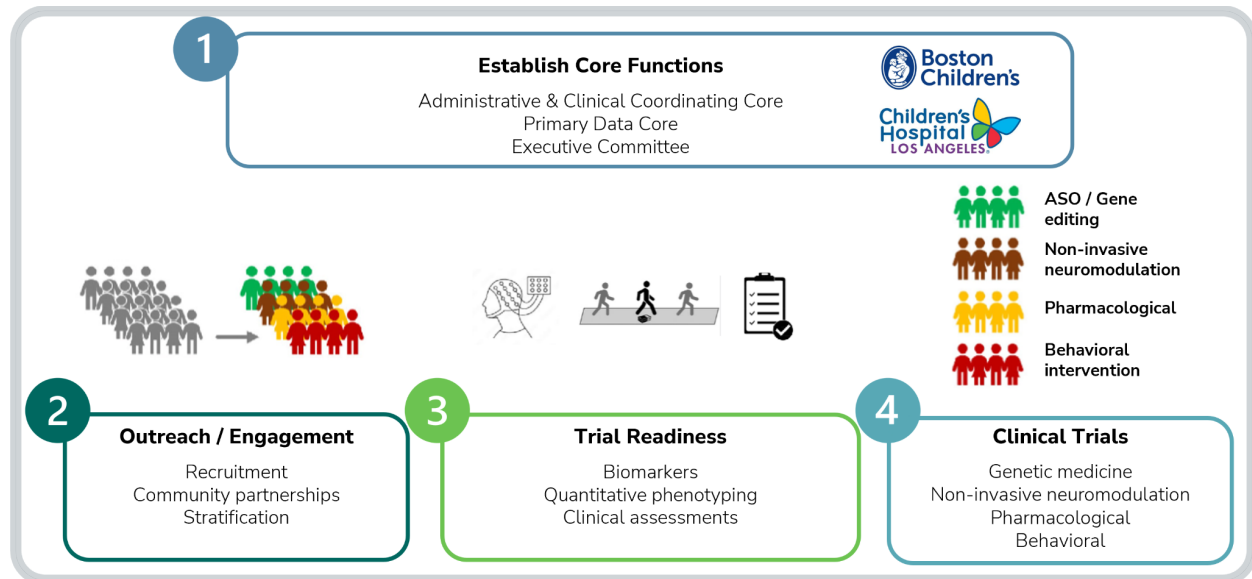
Meeting the Moment

This exciting and innovative initiative aims to:

- **Drive Research and Innovation**
 - Identify and develop biomarkers that translate into novel and meaningful clinical outcome measures and endpoints.
 - Translate scientific discoveries into clinical applications by fostering a collaborative ecosystem that links expert clinical care, clinical-translational research, and basic science.
 - Develop and implement personalized treatments and multi-disciplinary care targeting both core ASD symptoms and associated neurodevelopmental features.
- **Develop Robust Data Infrastructure**
 - Develop data analysis capabilities to ensure consistent high-quality data collection, curation, and interfacing with centralized repositories.
- **Maintain Strategic Alignment**
 - Ensure crosstalk and integration between the IMPACT Network and the Frontier Hubs.
 - Leverage the shared data ecosystem to enable insights across programs.
- **Cultivate Collaboration and Partnerships**
 - Collaborate with key stakeholders, including regulatory agencies, biotech companies, industry partners, and non-profit organizations.
- **Achieve Clinical Trial Excellence**
 - Execute cutting-edge clinical trials using meaningful outcome measures and leveraging the latest scientific advancements.
 - Advance multisite genetic medicine programs.
 - Navigate rare disease and neurodevelopment-specific study barriers to recruitment and retention.

ARIA IMPACT Network Roll-Out

The ARIA IMPACT Network is rolling out its activities in four phases. See schematic below for an overview of anticipated activities.



- **Phase 1: Establish Core Functions** – Please see the description provided in [Appendix B](#). These core functions will precede site selection for the IMPACT Network.
- **Phase 2: Operational Ramp-Up and Maintenance** – This phase will support master protocol alignment and optimize workflows across sites in preparation for Phases 3 and 4. Additionally, community partnerships will be established to support trial enrollment and retention.
- **Phase 3: Trial Readiness** – This phase supports the establishment of a longitudinal cohort that is deeply phenotyped in a standardized manner across multiple sites. This observational multi-center study will be centered on improving biomarker discovery, quantitative human phenotyping, and clinical assessments. This phase is expected to be active in years 2-5; however, if sites are ready to go, this phase could begin in year 1.
- **Phase 4: Trial Implementation** – This phase supports behavioral, pharmacological, and disease-modifying treatment strategies for ASD and is expected to be active in years 3-5. Upon deciding that a trial will be implemented within the network, participating sites will have the opportunity to request the requisite funds at that time. This will allow for maximum flexibility, given that trial implementation costs can vary wildly, and we cannot anticipate which trials will be implemented through the network at this time.

Site Selection: Funding Available

Currently, we are actively establishing the core functions indicated for Phase 1. **This RFA focuses on Phases 2 (Operational Ramp-Up and Maintenance) and 3 (Trial Readiness).** Maximum available funds vary by phase; however, some overlap is expected in phase initiation and implementation. As such, applicants who are invited to submit a full application can request funds up to the full amount per phase, and payment will be tranching based on phase initiation.

- **The allowed funding request for Phase 2 is up to \$1.8 million USD per year, for a maximum of five years, for a total of \$9 million USD over five years in direct costs.** This phase is expected to be active in year 1, with the maintenance of core staff and their related duties continuing in years 2-5.
- **The allowed funding request for Phase 3 is up to \$0.3 million USD per year for a maximum of five years, for a total of \$1.5 million in direct costs over five years.**

Therefore, applicants may submit a **total request of up to \$10.5 million USD over five years** in direct costs to support participation in the IMPACT Network. The indirect cost rate for all entities is 15%.

Note that budgets will be included at the full application stage, using a provided template. As a preview, direct costs may include but are not limited to salary support for all required positions (see [Appendix C](#)), neuropsychological assessments, behavioral and biomarker equipment (based on requirements that will be established), sample collection, and patient travel.

Organizational Eligibility

Applications will be accepted from any public or private-sector organization, including non-profit and for-profit organizations, that provides clinical care for people affected by ASD and related NDCs in the United States (including Territories of the United States), Canada, or the United Kingdom. Site teams can submit applications from a single organization or a group of up to three organizations. Applicants that include more than one institution per application will need to justify the structure based on geographical efficiency, expanded research and/or clinical capabilities, and/or specific personnel and leadership requirements. We expect to prioritize individual institutions with a full range of capabilities relevant to the RFA and future Frontier Science Hubs.

Sites with clinical capacity for profound ASD and genetic syndromes, the ability to integrate translational research into their workstreams, and a history of being collaborative

will be prioritized in the selection process. Qualified applicants must demonstrate the capacity to:

- Lead a collaborative, multidisciplinary team of scientists and clinicians.
- Collaborate across institutions, family groups, and community organizations to recruit participants across the spectrum of ASD.
- Recruit, enroll, and retain at least 50 pediatric participants with ASD per year, for five years, for a minimum total of 250 participants.
- Provide clinical care and engage patients in research protocols for five years. This includes serving a range of already ascertained patients with known genetic syndromes and associated medical co-morbidities.
- Implement, manage, and oversee an IMPACT Network-specific data collection protocol that may include data from electronic health records (EHR), neuroimaging and electrical signal recordings (e.g., MRI, EEG), wearables and/or remote assessments, and other clinical assessments.
- Conduct biomarker discovery, quantitative phenotyping, and clinical assessment for participants with syndromic and non-syndromic ASD.
- Execute phases 2-4 associated with ARIA IMPACT Network activities.
- Conduct investigator-initiated and/or industry-sponsored clinical trials in behavioral and pharmacological interventions.

Application Requirements

The application for this funding opportunity has four steps: (1) an open pre-application (2) an invited full application, (3) an external review, and (4) a finalist interview wherein the applying institution's lead investigator and core team will present key aspects of their application and address any questions based on submitted external reviews.

All applications will be submitted online through a grants portal. The portal will open to all applicants during the week of June 23, 2025. All application questions are included below to allow all interested candidates to prepare their teams and responses in advance of the portal's open date.

Step 1: Pre-application

This pre-application is open to interested eligible institutions. It consists of 11 short-answer questions and prompts designed to assess the capabilities of the applying team and their institutional support.

Organizational & Team Profile

ORGANIZATIONAL PROFILE

Applications can be submitted by a site team represented by at least one organization up to a maximum of three organizations.

1. **Background information** – All organizations represented in the application will provide the following basic information:

	Name of Organization	Type of Organization	Location
Site #1	[dropdown list]	[dropdown list: e.g., Academic Medical Center, Hospital, Research Nonprofit, etc.]	[USA, Canada, UK]
Site #2			
Site #3			

2. **Lay summary** – Provide a lay-level summary describing how your team will help the IMPACT Network achieve the desired level of coordination and care to execute multicenter longitudinal cohort studies and clinical trials successfully. See the [Meeting](#)

[the Moment section above](#) for what success looks like for the IMPACT Network (300-word maximum).

LEADERSHIP AND TEAM PROFILE

Any site team selected to be part of the IMPACT Network must fill ten (10) positions. See [Appendix C](#) for a full description of all ten required positions and the minimum percent effort required for each position.

3. **PI Information** – At the pre-application stage, candidate site teams will be asked to provide the names and corresponding information for the first three principal investigator positions indicated below:
- **Site Lead PI (25%)** must devote a minimum of 25% effort to this role, provide overall site oversight, and collaborate with PIs across IMPACT sites and with ARIA leadership teams. Consider adding expertise in basic/translational neuroscience and genomic medicine.
 - **Clinical Research Lead (Co-PI) (25%)** must devote a minimum of 25% effort to this role and will oversee the site clinical assessment team, recruitment, enrollment, and community outreach.
 - **Biomarker Research Lead (Co-PI) (25%)** must devote a minimum of 25% effort to this role and will oversee the site biomarkers team and activities (imaging, eye tracking, quantitative assessments).

Applicants will complete this table in the grants portal:

Name	Degree(s)	Institution	Position/ Title	Email	Role on Team	Biosketch or CV Upload
[fill-in field]	[fill-in field]	[dropdown list]	[fill-in field]	[fill-in field]	[dropdown list: 1 - Site Lead PI 2 - Clinical Research Lead (Co-PI) 3 - Biomarker Research Lead (Co-PI)]	[pdf upload field]

-
4. **Leadership model** – As ARIA evolves, our vision is for the sites to have the capacity to integrate research and clinical ecosystems to enable real-time exchange of findings and rapid translation of research to the bedside. Therefore, we are interested in sites that can espouse a collaborative, distributed leadership model. Describe your proposed leadership structure and management strategy for your proposed IMPACT Network site team, as well as your ability to integrate basic and translational science at your clinical site related to any of our Frontier Hub priorities (see [Appendix A](#)). (500-word maximum).
 5. **Intra-team collaboration** – To what extent have the three PIs listed above collaborated together? Include relevant examples of leadership of team-based research and/or care delivery, including cross-disciplinary and cross-departmental initiatives within the home institution, as well as any multi-institutional and/or consortia-based experience (500-word maximum).
 6. **Partnership profile** – Describe your leadership team's participation in, contributions to, or partnerships with the following (300-word maximum per sub-question):
 - a. Collaborative efforts in pediatric ASD and related NDCs (e.g., ABC-CT, RDCRN, IBIS, SPARK, ACE, Brain Gene Registry-IDDRC, BSRC, POND Network, ABCD, HBCD, etc.)
 - b. Rare disease organizations, patient advocacy groups, and/or regional academic/community partners that your organization may leverage as a Participating Center.
 - c. Biotech and/or industry companies that your organization may leverage as a Participating Center.

Clinical Profile

CLINICAL CARE

7. **ASD/NDC capacity** – Do any of the organizations represented by your site team have a dedicated ASD or NDC clinic? **[YES, NO]**
 - a. If yes, on average, how many pediatric patients have been evaluated and/or managed per year, over the last five years? What percent of these pediatric patients have a diagnosed genetic variant associated with their ASD or NDC diagnosis (please provide an estimate)?
 - b. If no, please provide an estimate of how many children with an ASD or NDC diagnosis are evaluated and/or managed in your institution per year, over the

last five years. What percent of these pediatric patients have a diagnosed genetic variant associated with their ASD or NDC diagnosis (please provide an estimate)?

8. **Profound ASD capacity** – Do any members of your site team have experience evaluating and treating patients with the following conditions (check all that apply):
- ☐ non-verbal / minimally verbal
 - ☐ intellectual disability
 - ☐ epilepsy

CLINICAL TRIALS

9. **Relevant pediatric trial history** – To understand the pediatric clinical trial experience represented by the leadership of your site team, **please list up to 10 pediatric clinical trials** that any one of your three site team leads has been a part of in the past ten years.

	Pediatric Condition	Trial Stage	Trial Status	Clinicaltrials.gov Link	Number of patients enrolled
1	[write in field]	[1, 2, or 3]	[dropdown: active, ongoing, terminated, ended]	[URL]	[# write in]
2					
3					
4					
5					
6					
7					
8					
9					
10					

10. **Genetic medicine capacity** – From the studies listed in the table above, describe your team’s experience and capacity in coordinating IND-enabling, genetic medicine interventions, and regulatory submissions in trials involving participants with syndromic or non-syndromic ASD (300-word maximum).

CLINICAL BIOMARKERS

11. **Quantitative human phenotyping** – Describe your site team/organization’s clinical research capabilities with quantitative human phenotyping participants across the four different developmental stages indicated in the table below. Check all that apply:

Biomarker Modality	Infancy: 0-1 years	Early Childhood: 1-5 years	Middle Childhood: 6-12 years	Adolescence: 13-18 years
EEG	☐	☐	☐	☐
MRI	☐	☐	☐	☐
Eye tracking	☐	☐	☐	☐
Quantitative motor assessments	☐	☐	☐	☐
Natural language sampling	☐	☐	☐	☐

Step 2: Invited Full Application

Applicants will be notified if they are invited to submit a full proposal. The full application will be shared at that time.

Confidentiality

The review process will be confidential among all parties involved in the application evaluation. Application materials will not be returned to applicants.

Contact Information

Receipt of application materials will be confirmed within 24 hours of submission. If you do not receive confirmation within 24 hours of submitting your application, please check your spam filters and contact grants@aligningscience.com.

For inquiries about scientific priorities, eligibility requirements, and application submission, please contact grants@aligningscience.com. For all other questions, including general and media inquiries related to ARIA, please contact info@aligningscience.com.

DRAFT

Appendix A: Frontier Hubs

Genetic Medicines

Purpose

The Genetic Medicines Frontier Hub seeks to streamline gene-specific learnings across the 200+ ASD-linked genes and help advance the science into accessible medicine. This Hub has three primary goals: to (a) develop therapies, (b) optimize methods development and generate foundational datasets, and (c) harness the capabilities of community partners.

Focus Areas

- **Seeding Patient-centric Partnerships** – The Genetic Medicines Frontier Hub will develop fit-for-purpose partnerships that reflect both the unmet research needs and scientific accomplishments to date of the many monogenic, disorder-focused foundations that constitute the syndromic ASD and NDC space.
- **Launching an Integrated & Scalable Pre-competitive Ecosystem** – The Genetic Medicines Frontier Hub will establish a unified and collaborative ecosystem focused on gene-specific research and development (R&D). This includes clinical trials, scalable methods for developing ASO, CRISPR-based editing, and delivery platforms, as well as gene replacement therapy, along with novel technologies and foundational resources such as datasets and tools to support the broader ARIA ecosystem. This framework will balance open innovation with mechanisms to enable downstream development.

Protein-Protein Interactions

Purpose

The Protein-Protein Interaction (PPI) Frontier Hub aims to uncover and target actionable protein interaction networks associated with high-confidence ASD genes. By harnessing advances in proteomics, structural biology, and computational modeling, the Hub seeks to identify novel, druggable PPIs and accelerate their translation into innovative therapeutic strategies.

Focus Areas

- **Building a Discovery-to-Therapy Pipeline** – The PPI Frontier Hub will implement a two-stage effort to (1) identify and characterize high-value PPIs using scalable screening and modeling platforms, and (2) translate these targets into therapeutic

leads through screening of compound libraries and high-throughput small molecule screening approaches.

- **Facilitating Access to Critical Biosamples for PPI Studies** – This Hub will collaborate with other Frontier Hubs (e.g., Genetic Medicine) to facilitate access to essential biosamples. This access will enable the generation of foundational datasets and ensure integration across discovery science, validation, and translational efforts with the ARIA ecosystem.

Neurosensing and Neuromodulation (NS/NM)

Purpose

The NS/NM Frontier Hub aims to develop therapeutic strategies for sensing and modulating circuit-level activity in humans to address core ASD symptoms and co-morbid, impairing phenotypes. For this effort, we are developing a unique collaborative research environment, leveraging patient cohorts requiring neurosurgery to capture high-density multimodal data, from neurophysiology to autonomic responses, in real-time.

Focus Areas

- **Understanding the Underlying Circuits and Neural Dynamics Enabling Functional Communication** – This Hub seeks to understand the circuits underlying sensory processing that govern how people perceive their environment and generate behavioral outputs for environmental interaction. Investigators will explore whether those circuits can be targeted and modulated for therapeutic benefit.
- **Developing and Building Models** – Following data capture, we plan to develop and build computational models to help us investigate important questions and generate a deeper understanding of brain activity patterns underlying human behaviors for functional communication. We will integrate existing open datasets with our newly generated data to produce more comprehensive and robust models.

Language & Communication (L&C)

Purpose

The goal of this Frontier Hub is to design a fit-for-purpose, cutting-edge research and/or incubator program that advances our understanding of L&C processes in ASD and related

NDCs. Currently, in the scoping phase, we are implementing a collaborative working group (WG) process to identify key research priorities that will drive **quantitative human phenotyping** and **biomarker development**.

Focus Areas

This workstream is structured around 3 working groups (WGs), each led by experts in the field, to ensure a comprehensive and multidisciplinary approach:

- **Neurobiology of Language** – This WG is focused on the core principles of language processes – acquisition, development, production, comprehension, and impairment.
- **Technology Development** – This WG is focused on developing and improving digital health and other technological tools for assessment and intervention.
- **Data Analysis** – This WG is focused on developing methods to collect and analyze comprehensive datasets to generate insights.

Human Developmental Neuroscience

Purpose

The Developing Brain Frontier Hub aims to decode how dynamic, age-dependent neurobiological processes contribute to ASD onset, symptom expression, and treatment response. By anchoring research across critical stages—from mid-fetal life through adolescence—and integrating insights from genetic, cellular, and circuit-level investigations, this Hub will generate foundational knowledge to inform when, where, and how to intervene. This developmental lens will guide the timing and design of next-generation therapeutic strategies and enable model systems that reflect key windows of vulnerability and plasticity.

Focus Areas

- **Building Developmental Brain Maps** – Create cellular atlases and spatial reference maps of the human brain during critical developmental stages, expanding efforts that have focused primarily on adult brains and addressing gaps in early neurodevelopmental knowledge.
- **Harnessing Model Systems Across Scales** – Leverage a range of experimental systems, including animal models, organoids, differentiated cell types, and postmortem tissue, to explore how genetic and molecular changes unfold across developmental windows and brain regions implicated in ASD.

-
- **Linking Development to Therapeutic Timing** – Investigate how changes in neurobiology interact with learning, attention, and affective regulation to identify time-sensitive intervention strategies. This includes exploring neuromodulatory approaches that may enhance receptivity to behavioral therapies at key developmental stages.

Engaging the Patient Community

An effort of this scale and magnitude requires deep engagement and partnership with the rare disease and the NDC community writ large. Recognizing this need, we are:

- **Building relationships:** During the design, scoping and now launch of the ARIA initiative, our staff have been building relationships with several patient groups to learn about their research priorities, understand their pain points, and glean feedback regarding their appetite for engagement with the initiative. As the IMPACT Network infrastructure is being built, we will identify the relevant groups with which to partner to inform decision-making and ideal next steps.
- **Building capacity:** We have launched the ARIA Capacity Grants Framework, which aims to establish strategic organizational partnerships to support cross-effort collaborations that align with our strategic priorities and workstreams. These collaborations are expected to foster synergy, avoid redundancy, and accelerate progress towards shared goals.

Appendix B: Establishing Core Functions

Centralized Services

The ARIA IMPACT Network will utilize centralized services to ensure standardization of clinical and data processes and efficient workflows for future clinical trials. By centralizing certain core activities, we expect to reduce the administrative and cost burden on the site teams, allowing them to focus on recruitment and engagement.

Clinical Research Coordination Core:

The ARIA Clinical Research Coordination Core (CRCC) serves as the nucleus of the ARIA Network and provides clinical research operations, administrative leadership, and oversight. The CRCC's overarching goal is to create an environment where clinical research relevant to ARIA's goals can be effectively and efficiently designed, conducted, and disseminated.

The CRCC is jointly led by [Shafali Jeste, MD](#), at Children's Hospital Los Angeles, and [Mustafa Sahin, MD, PhD](#), at Boston Children's Hospital. They will collaborate with ARIA leadership to manage participating sites and facilitate collaboration and communication amongst site teams in the IMPACT Network.

Data Management and Coordination Core:

The Data Management and Coordination Core (DMCC) will manage all data collected at the Participating Sites, ensuring that data collection is standardized and integrated from multiple sites. It will also create pipelines for rapid data quality control and feedback, and handle all data cleaning, signal processing, and analyses. The DMCC will also provide a user-friendly platform for the sites and participants to view summary data.

Appendix C: Required Positions

Given the ambition, scale, and scope of these projects, the sheer amount of data that will be generated, and the required coordination between funded teams and ARIA staff, each applicant must budget for the following positions, which this award will fully fund.

The site team will focus on the initial longitudinal natural history study, which will serve as the framework for future clinical trials. This funding will provide ongoing fixed costs for essential personnel at IMPACT sites, with the understanding that additional funding and per-patient reimbursement may come with future individual clinical trials. The percent effort indicated below represents the minimum effort required for each position.

1. **Site Lead PI (25%)** must devote a minimum of 25% effort to this role, provide overall site oversight, and collaborate with PIs across IMPACT sites and with ARIA leadership teams. Consider adding expertise in basic/translational neuroscience and genomic medicine.
2. **Clinical Research Lead (Co-PI) (25%)** must devote a minimum of 25% effort to this role and will oversee the site clinical assessment team, recruitment, enrollment, and community outreach.
3. **Biomarker Research Lead (Co-PI) (25%)** must devote a minimum of 25% effort to this role and will oversee the site biomarkers team and activities (imaging, eye tracking, quantitative assessments).
4. **Program Manager (100%)** will manage the day-to-day coordination of all site team member efforts to consistently maintain a high level of functionality and communication to meet all stated deliverables.
5. **Psychologist/Psychometrist (100%)** will serve as the site lead for staff training on all measures, fidelity checks, and administration of testing. They will oversee and conduct review of relevant videotaped administrations, participant research reports, and results disclosure/feedback sessions for participants. directly administer and score behavioral/psychological assessments as per standard operating procedures. They will collaborate with other IMPACT site psychologists to ensure cross-site consistency of battery administration and adherence to best practices.
6. **Biomarker Assessment Coordinator (100%)** will directly oversee and administer imaging and quantitative data procedures as per standard operating procedures. They will also lead the coordination of wearables and home assessments. The coordinator

will facilitate communication with the site study team, including visit scheduling, study data provision, results return, and coordinate activities across IMPACT sites.

7. **Clinical Research Coordinator (100%)** will coordinate daily activities of research studies in accordance with standardized procedures and good clinical practice. They will plan and conduct study visit procedures and collect, manage, and store study data.
8. **Behavioral Specialist (100%)** will have expertise in behavior management of children with NDCs, such as experience with ABA and other interventions. They will assist in developing and implementing protocols to maximize the quality of data acquisition in participants.
9. **Regulatory Specialist (50%)** will act as the site's regulatory expert, providing guidance and assistance on the preparation and maintenance of IRB applications and associated submissions, including site reliance agreements. They will also oversee E-regulatory binder submissions and management, conduct/assist with site regulatory audits, and ensure the provision of appropriate regulatory training to relevant study staff personnel.
10. **Data Manager (100%)** will be responsible for site oversight of data processing, curation, and analysis activities. The Data Manager, as envisioned by this award, is responsible for:
 - Developing and maintaining the Data Management Plan.
 - Developing required documentation to ensure transparency and accessibility, with the end goal of ensuring that other researchers can effectively analyze data from all projects undertaken at this site.
 - Sharing data to the Bridge Analytics architecture and ensuring that documentation is complete.
 - Sitting on the ARIA Data Advisory Board, which will in turn have representation on the Bridge Analytics Data Operating Committee to establish alignment with other members of the ARIA Data Advisory Board on the approach to data curation, ensuring that the initiative's data requirements will be met.

Of note, these positions must be named within three months of the award. If hiring is required for any position, a job announcement must be posted within two months of the award, and hiring must be completed within six months of the award. Successfully filling these required positions is required for the release of a portion of the funds. Full-time positions stated above may be split up for a total effort of 100% per position.

Appendix D: Organizations and Governing Bodies Powering ARIA

Organizations

About SBFF

The Sergey Brin Family Foundation supports efforts to understand and treat central nervous system (CNS) conditions through research and translation through an effort known as the CNS Quest. ARIA will be the third large-scale CNS Quest initiative to launch on behalf of the foundation and is built on the model developed through [Aligning Science Across Parkinson's \(ASAP\)](#) and [Breakthrough Discoveries for Thriving with Bipolar Disorder \(BD2\)](#).

About CAS

The [Coalition for Aligning Science \(CAS\)](#) is a program development and management firm that designs and implements large-scale research programs to accelerate discoveries in biomedical research by guiding strategic philanthropic funding to fuel breakthroughs and catalyze impact. Sergey Brin Family Foundation (SBFF) has retained CAS to develop and manage various aspects of its science philanthropy portfolio, including the CNS Quest. CAS staff will be assigned to execute programmatic components of the ARIA initiative.

About Bridge Analytics

Bridge Analytics is a data services organization that ensures that data generated within the CNS Quest is accessible, harmonized across initiatives, and ready for advanced analytics. Bridge works across CNS Quest initiatives to ensure that funded programs are generating evidence that is useful for therapy developers and can be used to drive decision-making by regulators and payers.

Governing Bodies

ARIA Executive Leadership Team

The ARIA Executive Leadership team is comprised of leaders from the University of California, San Francisco and CAS. Drs. Matthew State (UCSF), Ekemini Riley (CAS), and Sonya Dumanis (CAS) serve as Scientific, Managing, and Deputy Directors, respectively. View bios on the ARIA website [here](#).

ARIA Scientific Advisory Board (SAB)

The SAB will guide ARIA's long-range scientific strategy. Chaired by the Scientific Director, the board consists of multidisciplinary scientists, including physician-scientists, clinical trialists, basic researchers, pediatric psychiatrists, and neurologists. View members and bios on the ARIA website [here](#).

ARIA Data Advisory Board (DAB)

The DAB will advise on all aspects of data curation and analysis. The board will consist of the Data Managers from each team and a few individuals who have data science expertise and/or experience working with various data types that each project team will generate.