

Funding Opportunity Announcement

TSC Alliance Biosample Seed Grants 2024

The TSC Alliance announces a funding opportunity for 2024 Biosample Seed Grants to support research using blood, tissue, cells, DNA, and/or RNA from samples in the TSC Biosample Repository. The award may support laboratory supplies, personnel costs, services, or equipment necessary to conduct the proposed research. Funds requested can be up to \$20,000. Funding period is one year. Funding must be distributed to awardees by December 31, 2024. Applicants may request a Material Transfer Agreement (MTA) and Draft Award Agreement upon submission of the application to allow institutional tech transfer offices sufficient time to review the agreements.

The TSC Biosample Repository houses human biological materials linked to detailed clinical data in the TSC Natural History Database. High-quality biosamples and their associated clinical data enable researchers to discover biomarkers, establish human cell lines or tissue arrays for drug testing, and search for clues to understand why TSC is so different from person to person.

As of August 1, 2024, the TSC Biosample Repository has received:

- 479 buccal cell samples for DNA isolation
- 1131 blood samples from which plasma and white blood cells have been isolated
- **194** tissue samples
- **627** blood samples (PREVeNT, RDCRN) and 389 DNA samples (TACERN) from TSC Clinical Research Consortium projects, some of which may be available via application to the projects' Biosample Use Committee. *Please specify in your application if these samples are of interest.*
- Please see a detailed inventory here:
 https://docs.google.com/spreadsheets/d/17FdKgGrWBL2DvP9RbQ-TCOKXU-KlwzC9ecgadKlQyJg/edit#gid=0

REQUIREMENTS/ELIGIBILITY

- To build the dataset associated with each biosample and avoid duplication of work in the future, applicants will be required to share data generated on each sample back to the TSC Biosample Repository.
 - Data can be embargoed for a period of time to be defined in the Material Transfer Agreement to provide time to publish, protect intellectual property, etc.

- This opportunity is open to all investigators at established academic or research institutions worldwide.
 - Researchers at start-up pharmaceutical or biotech companies are eligible if they are unable to utilize TSC biosamples in absence of seed funding.
- Researchers residing in the United States need not be U.S. citizens to apply.
- We welcome applications from tenure-track faculty or equivalent, non-tenure-track faculty, and postdoctoral (PhD or MD) fellows.

APPLICATION COMPONENTS

Compile the following into a single PDF file and email to Liz Cassidy, MPH at ecassidy@tscalliance.org AND biosample@tscalliance.org no later than 11:00 pm Eastern (US/Canada) on Monday, November 4th, 2024.

Required components:

- Complete the Application for Biosample Access located below this FOA. The "Study Information" section may be up to two pages in length to fully explain the rationale, objectives, and experimental design. Preliminary data are encouraged to demonstrate feasibility of the approach. Complete the Natural History Database Data Request Form if applicable located below the Application for Biosample Access.
- 2) Include a "Statement of Impact" up to a half-page in length describing how this seed funding will advance your research. For example, where will this lead if the experiment is successful, or how will these results be used to apply for a larger grant?
- 3) Include a **one-page budget and justification** for direct costs requested. Limited salary support may be included if required by the institution, but salary support must be strongly justified given the short-term nature of seed funding.
- 4) Principal investigator's NIH-style biosketch or short CV, not exceeding 5 pages.
- 5) IRB approval letter, exemption letter from an institutional official or department chair, or statement that the project has been submitted to your IRB and is awaiting a decision.

EVALUATION CRITERIA

Criteria used to evaluate and prioritize applications for seed funding will include, but are not necessarily limited to:

- Relevance to TSC. Biosamples may be used in studies together with samples from individuals with related disorders for the mutual benefit of multiple disorders, including TSC. However, biosamples will not be provided for use as "control" samples in studies primarily focused on other disorders.
- Impact on TSC research and the TSC community.
- Leveraging data from the Natural History Database linked to each biosample to enhance experimental design, interpretation of results, and impact of the study.

FUNDING NOTICE

Successful applicants will be notified by late November 2024.

QUESTIONS

Please contact Liz Cassidy, MPH (ecassidy@tscalliance.org) with any questions.



APPLICATION FOR BIOSAMPLE ACCESS: BSR SEED GRANTS

Data Sharing Statement

Institution:

City:

Address Line 1:

Along with the biosamples, you will be entitled to receive any data generated by other investigators using these samples. In return, you are required to share data generated on each sample with the TSC Biosample Repository. Data can be embargoed for a period to be defined in the Material Transfer Agreement to provide time to publish, protect intellectual property, etc. You can describe your data sharing plan in the application below.

□ Please check here to acknowledge that you have read and understand the data sharing statement.

Application Form
Principal Investigator Information

First Name: Middle Name: Last Name:

Salutation: Degree(s): Title:

Phone: Alt. Phone: Fax:

Email: CC Email:

Mailing Address

State:

Department:

Address Line 2:

Zip:

Country:	Institution's Federal Congressional District:		
Funding source(s) to support the pro	pposed work, including	specific award num	bers:
Date of Request: PI Demographics (Optional) This information is optional but is vita diversity, and inclusion of our research anyone outside of the Steering Common whether a specific application is approximately application is approximately approximate	ch programs. The informatitee and the TSC Allia oved or not. Fer not to disclose Properties Plack or Affander White or Content to enter text.	mation will not be dince. The information will not be dince. The information will not be dinced to self-describe frican American	isclosed or disseminated to on will not be used to decide
Shipping Information Lab contact/Recipient: ☐ Check if the same as PI Information	n		
First Name:	Middle Name:		Last Name:
Salutation:	Degree(s):		Title:
Phone:	Alt. Phone:		Fax:
Email:	CC Email:		
Shipping Address ☐ Check if the same as PI Information	n		
Institution:		Department:	
Address Line 1:		Address Line 2:	
City:	State:		Zip:
Country:			

Study Information

Please complete information below in a separate attachment if needed for space. Please state "please see study information attachment" in your application should you decide to do this.

Study Title:
Specific Aims:
Long-term study objectives (please include potential impact to TSC community):
Overall Project Summary (please include experimental design and methods):
<u>Justification for Numbers:</u> Example: volume or quantity of samples requested. Please include statistical power analysis, if applicable.
How soon will you use the samples once received?:
<u>Data Sharing - Please describe the specific data elements that will be provided back to the TSC Biosample Repository for each sample analyzed:</u>
<u>Data Sharing – Please describe any other ways you plan to share the data, results, and resources that are generated:</u>
Sample Request Information: Donor Details Donor Demographics Biological Sex:
Total Number of Donors Requested:
Sample Preparation Details Blood Prep Type ☐ Plasma Volume: ☐ mL ☐ μL ☐ White Blood Cell Pellets Number of cells per sample: ☐ Other (please explain):
Nucleic Acid (please specify source) □ DNA from Blood □ DNA from Buccal Swabs Minimum quantity: Minimum concentration: Minimum volume: □ DNA from Tissue Maximum quantity: Maximum concentration: □ mL □ μL Tissue (select all that apply; please specify tissue origin in 'Other Preparation Details' below)
☐ Frozen ☐ FFPE

□ Tissue Curls	Thickness:	# of curls:		
☐ Glass Slides	# of unstained slides:	# H&E stained slides:		
Other Preparation Det	ails			
Please describe, including specifics as appropriate:				
Any other considerations w	e should be aware of?			
,				
Natural History Databa	se (NHD) Data			
Will your project also use d	ata stored in the NHD?			
☐ YES				
□ NO				
If YES, please fill out the sho	ortened NHD DATA REQUEST F	ORM found below.		



TSC Natural History Database Data Request Form: BSR SEED GRANTS

Data Variables Requested

□ Ophthalmological

Explanation: Click or tap here to enter text.

Please check all data variables that you are requesting from the NHD for your Biosample Seed Grant Application.

The categories below list example fields in each category. For a full variable list, please reach out to Liz Cassidy, MPH at ecassidy@tscalliance.org.

*For all data exports, the TSC Alliance exports "age at" specific encounters rather than exporting dates for data privacy. If your project needs dates exported, including date of birth of participant, please check this box and explain below:

□

☐ Cardiovascular ☐ Comorbidities (includes chronic infections, diabetes, autoimmune and more) □ COVID-19 Data (applies only to participants with a confirmed positive test) ☐ Demographics (biological sex, race, ethnicity) □ Dental ☐ Dermatological ☐ Diagnosis (clinical or molecular) ☐ Family Participation ☐ Genetics ☐ Liver ☐ Mortality ☐ Neurological (epilepsy, SEGA, SENs, tubers and associated treatments) ☐ Additional data on a subset of participants in a subproject including SEGA imaging dates/data, epilepsy surgery, SEGA shunt, and VNS. For full variable list, please contact Liz Cassidy, MPH at ecassidy @tscalliance.org. ☐ Antiepileptic drugs ("snapshot" – if participant has ever received drug and if it is ongoing) ☐ Neuropsychiatric (intellectual ability, psychiatric disorders, learning disorders, behaviors) □ Psychoactive drugs ("snapshot" – if participant has ever received drug and if it is ongoing)

☐ Other TSC conditions (non-renal abdominal hamartoma, other TSC-related condition not captured
elsewhere)
☐ Perinatal (prenatal history)
□ Pulmonary
☐ Rare Conditions
☐ Renal (angiomyolipoma, cysts, polycystic kidneys and associated treatments)
☐ Additional data on a subset of participants in a subproject including angiomyolipoma imaging
dates/data, nephrectomy, eGFR, and serum creatinine. For full variable list, please contact Liz
Cassidy, MPH at ecassidy@tscalliance.org.
□ Reproductive