

# **Funding Opportunity Announcement**

## **TSC Alliance Biosample Seed Grants 2023**

The TSC Alliance announces a funding opportunity for 2023 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, 2023. 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, 2023, the TSC Biosample Repository has received:

- 432 buccal cell samples for DNA isolation
- 944 blood samples from which plasma and white blood cells have been isolated
- 188 tissue samples
- **560** 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 <a href="mailto:ecassidy@tscalliance.org">ecassidy@tscalliance.org</a> AND <a href="mailto:biosample@tscalliance.org">biosample@tscalliance.org</a> no later than 11:00 pm Eastern (US/Canada) on Monday, October 16, 2023.

#### Required components:

- 1) 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 2023.

#### **QUESTIONS**

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



# APPLICATION FOR BIOSAMPLE ACCESS: BSR SEED GRANTS

## **Data Sharing Statement**

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.

 $\Box$  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			
Institution:		Department:	
Address Line 1:		Address Line 2:	

City:	State:	-	Zip:			
Country:	Institution's Federal Congressional District:					
Funding source(s) to support the	proposed work, inc	cluding specific a	award numbers:			
Date of Request:						
PI Demographics (Optional)	The Land Country of the Country	A III' a sa a da sa a sa				
This information is optional but is the equity, diversity, and inclusion						
disclosed or disseminated to anyo						
The information will not be used to		•				
Gender						
☐Male ☐Female ☐Prefer	not to disclose	☐Prefer to self	-describe: Click or tap			
here to enter text.						
Race						
☐ American Indian or Alaska Native☐ Native Hawaiian or Other Pacific		□Black or Afric				
disclose	islander 🗆 whi	te or Caucasian	□Prefer not to			
	☐Prefer to self-describe: Click or tap here to enter text.					
Ethnicity						
	ispanic or Latinx	□Prefer not to	disclose			
□Prefer to self-describe: Click or	tap here to enter te	ext.				
Shipping Information						
Lab contact/Recipient:	tion					
☐ Check if the same as PI Informa	ILION					
First Name:	Middle Name:		Last Name:			
Salutation:	Degree(s):		Title:			
	3 (-,-					
Phone:	Alt. Phone:		Fax:			
Priorie.	Ait. Priorie.		rax.			
- Frank	CC Empile					
Email:	CC Email:					
Shipping Address						
☐ Check if the same as PI Informa	tion					
Institution:		Department:				
Address Line 1:		Address Line 2:				
City:	State:		Zip:			
-			•			

Country:
Study Information 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?:
Data Sharing - Please describe the specific data elements that will be provided back to the TSC Biosample Repository for each sample analyzed:
Data Sharing – Please describe any other ways you plan to share the data, results, and resources that are generated:
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: Click or tap here to enter text. □ Other (please explain):
Nucleic Acid ( <i>please specify source</i> )  □ DNA from Blood □ DNA from Buccal Swabs □ DNA from Tissue  Minimum quantity: Maximum quantity:  Minimum concentration: Maximum concentration:

Minimum volume:	□mL	□μL		
Tissue ( <i>select all that a</i> below)  ☐ Frozen ☐ FFPE	pply; please specify tissu	ue origin in 'Other Preparation Details'		
☐ Tissue Curls	Thickness:	# of curls:		
☐ Glass Slides	# of unstained slides:	# H&E stained slides:		
Other Preparation Det Please describe, including Any other considerations	g specifics as appropriate:			
Natural History Database (NHD) Data Will your project also use data stored in the NHD?				
□ YES □ NO				
If YES, please fill out the s	shortened NHD DATA REQU	EST FORM 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
<ul> <li>□ Renal (angiomyolipoma, cysts, polycystic kidneys and associated treatments)</li> <li>□ 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 contactLiz Cassidy, MPH at ecassidy@tscalliance.org.</li> </ul>
□ Reproductive