Funding Opportunity:
Data Scholars Award Program (2025)

The Human Islet Research Network (HIRN) announces a new funding initiative to support the use of existing HIRN datasets and resources to explore unique and innovative hypotheses designed to accelerate breakthroughs and advances in type 1 diabetes (T1D) research. The Human Islet Research Network (HIRN) Data Scholars Award (DSA) Program provides:

- Funding for data-science centered or driven projects submitted via a streamlined process to the HIRN Human Islet Research Enhancement Center (HIREC). Projects will use existing datasets from HIRN and related T1D partner programs and/or resources to design studies or create resources that are responsive to specific initiatives in this announcement.

- Opportunities to collaborate with HIRN investigators and programs and efficiently exchange ideas and resources to accelerate innovation in T1D research.

BACKGROUND

Type 1 diabetes (T1D) is a disease caused by the autoimmune destruction of insulin-secreting beta cells in the pancreas. While the incidence of T1D is increasing worldwide, research continues into mechanisms contributing to disease onset and severity, and into development of therapeutic strategies to effectively prevent or intervene in the disease process.

In 2014, NIDDK established the Human Islet Research Network (HIRN; www.hirnetwork.org) to support collaborative research in T1D. HIRN is jointly supported by NIDDK and the type 1 diabetes special funding program, and its overall mission is to better understand how human beta cells are lost in T1D and to find innovative strategies to protect or replace functional beta-cell mass in diabetic patients. The HIRN program is configured as a modular network of research consortia, each defined by a specific set of research priorities. All HIRN research consortia are focused on human disease biology, the use of human cells and tissues, and the development of tools and disease-modeling platforms that can help further our understanding of the human disease process. It is anticipated that HIRN efforts will ultimately lead to new and innovative treatment strategies for T1D patients.

What is the HIRN-DSA program?

The HIRN-DSA program provides funding for the development of data utilities or exceptionally innovative studies led by data scientists, to explore how existing data and resources may be used to address key challenges in T1D research. HIRN-DSA awards are NOT typical Pilot & Feasibility projects for the generation of more preliminary data for traditional NIH applications (e.g., R01), but rather projects designed to address specific data science challenges using (and reusing) existing data and resources that are broadly available to the research community.

What types of funding opportunities exist in the HIRN-DSA program?

The HIRN-DSA program consists of two distinct funding initiatives:

1. ***L**everaging multi-modal human **I**slet research **N**etwork **K**nowledge (**LINK**) competition.* The LINK competition provides funding to early-stage investigators (see definition below) to advance data-driven breakthroughs in T1D research. A key aspect of this competition is the integration of 2 or more datasets from different levels of biology, such as genetic, transcriptomic, or proteomic into a single dataset to gain a more complete understanding of processes or phenomena and the relationship between molecules, cells, tissues, or organs in different pathogenic states. Combining 2 datasets of the same type will not be considered responsive. Examples of datasets from different levels of biology can be found here.

Funding Instrument:	Subcontract, awarded from the Human Islet Research Enhancement Center (HIREC) at City of Hope
Number of Awards:	up to 4 awards.
Award Budget:	Applications may request budgets of up to $50,000 in total costs (direct + indirect) per year for one year
Award Project Period:	The maximum project period is 1 year.
Applicant:	Limited to early stage or mid-career investigators, defined as: Post-doctoral fellows or full-time faculty members (tenure or non-tenure track Assistant or Associate Professors) with PhD and/or MD degrees, or hold an equivalent position at non-academic institutions. Within 10 years of completion of a PhD, excluding parental, military, or medical leaves of absence. No current funding as a PI or MPI on a HIRN grant, issued directly by NIH or awarded through the HIREC.

2. ***De**livering **P**ancreas **O**rgan related data, knowledge, tools, and use cases for **S**haring and **I**nformation **T**ransfer (**DePOSIT**) challenge*. Open to students and graduates who contribute data, knowledge, tools, use cases, and/or to systems available through the PanKbase program. The PanKbase program aims to build a comprehensive knowledgebase of centralized human pancreas datasets for the study of type 1 diabetes. This challenge seeks to enable the compilation of valuable and previously inaccessible data and metadata, tools, or well-reasoned use cases in a rigorous manner though deposition to PanKbase. Contributions considered of high value to PanKbase include data from large/rare cohorts, containing different disease subtypes, with detailed donor

metadata, generated from high-throughput assays, and/or having unique molecular/cellular features. Other high value contributions include computational tools or approaches that can be integrated into the PanKbase computing ecosystem or well-motivated use cases that may help to inform and anchor future strategies.

Funding Instrument:	To be awarded from the Human Islet Research Network (HIRN) Pancreas Knowledgebase Program (PanKbase) from the University of California, San Diego (UCSD)
Number of Awards:	Up to 8 awards.
Award:	Individual Awards of $1,000 each
Award Project Period:	The maximum project period is 1 year
Applicant:	All students or graduates are invited to submit an application, regardless of position or funding status. Applicants must be willing to meet with the PanKbase team at least twice, once at the beginning and another at the end of the award.

Is your research concept a good fit for HIRN- DSA program?

Your concept is likely a good fit for the HIRN-DSA program if you answer YES to at least 2 of the following questions:

1. Will the proposal include the use/reuse of existing data and resources from HIRN? Examples include data available or listed here:
    - Human Pancreas Analysis Program (PancDB, see here)
    - HIRN Resource Browser (see here)
    - Human Pancreas Knowledge Base Program (PanKbase, see here)

2. Does the proposal contribute relevant and previously inaccessible dataset(s) to the PanKbase program?

3. Does the proposal contribute novel computational tools, approaches, or use cases?

4. Will the proposal facilitate the reuse of dataset(s) in a rigorous and reproducible manner or have the potential to lead to groundbreaking results in T1D research?

ELIGIBILITY

General requirements for those applying to either funding opportunity:

- Individuals with the skills, knowledge, and resources necessary to carry out the proposed data-science research are invited to develop an application for support.
- Candidates must be able to propose an original scientific project to be pursued under this initiative. Proposed project should not be an aim or component of a currently funded project. There should be no overlap with any currently funded research.
- Only single PD/PI applications will be allowed.
- Applications are accepted from domestic (US) institutions/ organizations. Non-domestic (non-US) Entities (Foreign Institutions) are NOT eligible to apply.
- Applicants without any current HIRN funding. Anyone currently funded (in part or whole) on a HIRN grant (issued by the NIH or through the HIREC) is ineligible to apply.

KEY DATES

Posted Date:	April 1, 2025
Application Due Date:	May 1, 2025; November 1, 2025
Scientific Review:	June 2025; December 2025
Start Date:	August 2025; February 2026

APPLICATION AND SUBMISSION INFORMATION

Instructions for Application Submission

Applications should be submitted directly to the Human Islet Research Enhancement Center (HIREC) **NOT** to the Division of Receipt and Referral at the NIH. Applicants may access the application package associated with this funding opportunity on the HIRN website under "Funding", specifically at: https://hirnetwork.org/datachallenge2025.

Application

Applications will be submitted online directly at: https://hirnetwork.org/datascholars2025. If submitting multiple applications, applicants must complete one submission per proposed project.

Applications will include the following:

- Applicant Information
  - With upload of Investigator Biographical Sketch (Biosketch) (5 page max length)

- Funding Initiative Category
  - **L**everaging multi-modal human **I**slet research **N**etwork **K**nowledge (**LINK**) competition.
  - **De**livering **P**ancreas **O**rgan related data for **S**haring and **I**nformation **T**ransfer (**DePOSIT**) challenge

- Proposal Information
  - Title
  - HIRN Dataset
  - Project Description
    - If LINK then 2,000 words (3-page limit; significance, innovation, approach)
    - If DePOSIT then ~500 words (1 page limit; what you want to do and how you propose to do it)

- IF submitting for the LINK subaward, the application will require uploading the following:
  - Public Health Service Grant (PHS) 398: Face Page (form page 1)
  - Public Health Service Grant (PHS) 398: Detailed Budget for Initial Budget Period (form page 4)
  - NIH Checklist

Review Process

Applications will be evaluated for scientific and technical merit by reviewers convened by the HIREC using the standard review criteria. Reviewers will provide an overall impact score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following review criteria and additional review criteria (as applicable for the project proposed).

As part of the scientific peer review process, applications:

- May undergo a selection process in which only those applications deemed to have the highest scientific and technical merit (generally the top half of applications under review) will be discussed and assigned an overall impact score.
- Appeals of the HIREC peer review **will NOT** be accepted for applications submitted in response to this funding opportunity.

NIH staff affiliated with HIRN will make final funding decisions, with consideration of the following:

- Scientific and technical merit of the proposed project as determined by scientific review.
- Availability of funds.
- Relevance of the proposed project to program priorities.

Resource Sharing

Individuals are required to comply with instructions for providing Resource Sharing Plans as provided in NIH guidance. Post-award, grantees will be expected to comply with HIRN consortium-specific resource sharing and confidentiality agreements.

Additional Information

For more detailed information, please go to the HIRN website: https://hirnetwork.org/datascholars2025.

Submit questions regarding the HIRN-DSCA Program:

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