

# Resource Summary Report

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## Human Islet Research Network (HIRN)

RRID:SCR\_014393

Type: Tool

### Proper Citation

Human Islet Research Network (HIRN) (RRID:SCR\_014393)

### Resource Information

**URL:** <https://hirnetwork.org>

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**Description:** Network helps to organize and support collaborative research related to loss of functional beta cell mass in Type 1 Diabetes (T1D). Project consists of four independent research initiatives: Consortium on Beta Cell Death and Survival (CBDS), Consortium on Human Islet Biomimetics (CHIB), Consortium on Modeling Autoimmune Interactions (CMAI), Consortium on Targeting and Regeneration (CTAR), and Human Pancreas Analysis Program (HPAP).

**Abbreviations:** HIRN

**Synonyms:** Human Islet Research Network

**Resource Type:** data or information resource, topical portal, disease-related portal, portal

**Keywords:** islet, human, consortia, functional loss, beta cell, research network, funding resource

**Related Condition:** Type 1 diabetes, Diabetes

**Funding:** NIDDK

**Resource Name:** Human Islet Research Network (HIRN)

**Resource ID:** SCR\_014393

**Record Creation Time:** 20220129T080320+0000

**Record Last Update:** 20260811T043502+0000

### Ratings and Alerts

No rating or validation information has been found for Human Islet Research Network (HIRN) .

No alerts have been found for Human Islet Research Network (HIRN) .

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 247 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [NIF](#) .

Singh S, et al. (2026) Temporal single-cell transcriptional dynamics of murine pancreatic islet remodeling during hyperglycaemia progression. *Molecular metabolism*, 110, 102387.

Fuentes-Páez G, et al. (2026) SPICEY: an R package for quantifying tissue specificity from single cell multi-omics data. *BMC bioinformatics*, 27(1).

Sato G, et al. (2026) Genetic regulation across germline and somatic variation on the Y chromosome contributes to type 2 diabetes. *Nature medicine*, 32(3), 894.

Manduchi E, et al. (2026) Epigenetic adaptation of beta cells across lifespan and disease. *Nature metabolism*, 8(4), 941.

Arevalo-Rios ECE, et al. (2026) Long QT syndrome and hypoglycemia in a postbariatric surgery patient with a likely pathogenic variant in KCNE1. *JCEM case reports*, 4(7), luag094.

Benhayon H, et al. (2026) A web tool for easy and versatile analysis of human endocrine pancreas single-cell RNAseq data. *Diabetes, obesity & metabolism*, 28(2), 1545.

Chen SY, et al. (2026) Biological sex affects human islet gene expression and mitochondrial function in type 2 diabetes. *Endocrinology*, 167(5).

Becker MW, et al. (2026) Beta cell-targeted PD-1 agonist inhibits cell-mediated autoimmunity in pancreas tissue slices. *Science advances*, 12(14), eaec9029.

Yu G, et al. (2026) Activated Human Pancreatic Stellate Cells SignatureCommunication in Type 1 Diabetes. *Research square*.

Roy J, et al. (2026) Synthetic Immunological Niche Reveals Early Immune Dysregulation and Stratifies Therapeutic Response in Type 1 Diabetes. *bioRxiv : the preprint server for biology*.

Zhu W, et al. (2026) SEL1L-HRD1 ER-associated degradation facilitates prohormone convertase 2 maturation and glucagon production in islet  $\beta$  cells. *Nature communications*, 17(1).

Stis AE, et al. (2026) Biosensor Cell Array Reveals Temporal GABA Secretion Dynamics from Pancreatic Islets. *bioRxiv : the preprint server for biology*.

Medina-Serpas MA, et al. (2026) Spatial transcriptomics from pancreas and local draining lymph node tissue reveals a lymphotoxin- $\gamma$  signature in human type 1 diabetes. *Cell reports*, 45(4), 117144.

Erdem N, et al. (2026) Human pancreatic ductal cells from non-diabetic donors function as non-professional antigen-presenting cells upon inflammatory cytokine exposure. *Diabetologia*, 69(8), 2323.

Ramos SA, et al. (2026) Generation of Functional Patient-Specific Thymus Organoids From Human Pluripotent Stem Cells (hPSCs) Using Air-Liquid Interface Culture. *Bio-protocol*, 16(9), e5684.

Evans-Molina C, et al. (2026) Heterogeneous endocrine cell composition defines human islet functional phenotypes. *Nature communications*, 17(1).

Bechi Genzano C, et al. (2026) Modeling immune responses to autologous and allogeneic human stem cell-derived islet grafts in vivo. *JCI insight*, 11(11).

Sellick K, et al. (2026)  $\gamma$ -cell SLC38A5 supports amino acid-induced  $\gamma$ -cell proliferation and glucagon secretion. *Frontiers in endocrinology*, 17, 1830329.

Chung RH, et al. (2026) Elucidating the Epigenetic Landscape of Type 2 Diabetes Mellitus: A Multi-Omics Analysis Revealing Novel CpG Sites and Their Association with Cardiometabolic Traits. *Diabetes & metabolism journal*, 50(1), 153.

Wagner LE, et al. (2026) A mitochondrial ROS-dependent antiviral response promotes  $\gamma$  cell resilience and is diminished in donors with type 1 diabetes. *Science translational medicine*, 18(850), eadx7770.