

Resource Summary Report

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HIRN Human Pancreas Analysis Program

RRID:SCR_016202

Type: Tool

Proper Citation

HIRN Human Pancreas Analysis Program (RRID:SCR_016202)

Resource Information

URL: <https://hpap.pmacs.upenn.edu>

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Description: Program is performing deep phenotyping of human endocrine pancreas and its interaction with immune system to better understand cellular and molecular events that precede and lead to beta cell loss in Type-1 Diabetes (T1D) and islet dysfunction in Type-2 Diabetes (T2D).

Abbreviations: HIRN-HPAP, HPAP

Synonyms: Human Pancreas Analysis Program (HIRN-HPAP), PANC-DB

Resource Type: database, data or information resource

Defining Citation: [PMID:31127054](#)

Keywords: pancreas, endocrinology, immunology, molecular, biology, human, t1d, beta, cell

Related Condition: Type 1 diabetes, Diabetes

Funding: NIDDK ;
NIDDK U01 DK104162;
NIDDK UC4 DK112217;
NIDDK UC4 DK112232

Resource Name: HIRN Human Pancreas Analysis Program

Resource ID: SCR_016202

Old URLs: <https://hirnetwork.org/consortium/hpap>

Record Creation Time: 20220129T080329+0000

Ratings and Alerts

No rating or validation information has been found for HIRN Human Pancreas Analysis Program.

No alerts have been found for HIRN Human Pancreas Analysis Program.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 120 mentions in open access literature.

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

Préfontaine C, et al. (2026) Insulin production is sustained during DNA damage-mediated senescence in adult human beta cells. *Diabetologia*, 69(2), 421.

Liu X, et al. (2025) TMEM55A-mediated PI5P signalling regulates alpha cell actin depolymerisation and glucagon secretion. *Diabetologia*, 68(7), 1509.

Kale A, et al. (2025) Regulating islet stress responses through CD47 activation. *Diabetologia*, 68(6), 1279.

Schukarucha Gomes A, et al. (2025) Molecular correlates of glycine receptor activity in human β cells. *Molecular metabolism*, 96, 102156.

Virgilio E, et al. (2025) Recessive TMEM167A variants cause neonatal diabetes, microcephaly, and epilepsy syndrome. *The Journal of clinical investigation*, 135(22).

Niederlova V, et al. (2025) Imbalance of stem-like and effector T cell states in children with early type 1 diabetes across conventional and regulatory subsets. *Nature communications*, 16(1), 11301.

Varghese SS, et al. (2025) Developmental control of DNA damage responses in β - and α -cells shapes the selective beta-cell susceptibility in diabetes. *bioRxiv : the preprint server for biology*.

Zhu W, et al. (2025) SEL1L-HRD1 ER-Associated Degradation Facilitates Prohormone Convertase 2 Maturation and Glucagon Production in Islet β Cells. *bioRxiv : the preprint server for biology*.

Golden GJ, et al. (2025) Immune perturbations in human pancreas lymphatic tissues prior to and after type 1 diabetes onset. *Nature communications*, 16(1), 4621.

Dos Santos T, et al. (2025) Altered immune and metabolic molecular pathways drive islet cell dysfunction in human type 1 diabetes. *The Journal of clinical investigation*, 135(23).

Nanaware PP, et al. (2025) The antigen presentation landscape of cytokine-stressed human pancreatic islets. *Cell reports*, 44(8), 115927.

Suleiman M, et al. (2025) Functional recovery of islet β cells in human type 2 diabetes: Transcriptome signatures unveil therapeutic approaches. *Science advances*, 11(41), eads2905.

Lim C, et al. (2025) Regulatory element modules as universal features for single-cell chromatin analysis. *bioRxiv : the preprint server for biology*.

Wagner LE, et al. (2025) IFN- γ Induces Heterogenous ROS Production in Human β -Cells. *bioRxiv : the preprint server for biology*.

Tondello C, et al. (2025) The XCL1/XCR1 axis is upregulated in type 1 diabetes and aggravates its pathogenesis. *JCI insight*, 10(7).

Geravandi S, et al. (2025) The Hippo terminal effector YAP boosts enterovirus replication in type 1 diabetes. *Nature communications*, 16(1), 8882.

Kang RB, et al. (2025) Human pancreatic β -cell heterogeneity and trajectory inference analyses reveal SMOC1 as a β -cell dedifferentiation gene. *Nature communications*, 16(1), 8434.

Su Z, et al. (2025) Gut-tropic $\gamma\delta\gamma\delta^+CD8^+$ T cells contribute to pancreatic β cell destruction in type 1 diabetes. *Frontiers in immunology*, 16, 1623428.

Xiong Y, et al. (2025) Diet-induced obesity promotes endothelial cell desensitization to VEGF-A and permanent islet vessel dysfunction in mice. *The Journal of clinical investigation*, 135(15).

Qadir MMF, et al. (2025) Supervised machine learning identifies impaired mitochondrial quality control in β cells with development of type 2 diabetes. *bioRxiv : the preprint server for biology*.