



The Human Pancreas Analysis Program (HPAP) Data Repository

HPAP Website: <https://hpap.pmacs.upenn.edu>

Nilanjana Samanta¹, Jake Bergren¹, Paul Kopeć¹, Jason H. Moore¹, Klaus H. Kaestner², and Ali Naji³

¹Institute for Biomedical Informatics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

²Department of Genetics, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA

³Department of Surgery, Perelman School of Medicine, University of Pennsylvania, Philadelphia, PA, USA



HOW TO REGISTER

1. Registration is required only when you wish to download data. You do not need to register to navigate the HPAP website.
2. Visit <https://hpap.pmacs.upenn.edu> to reach the HPAP website.
3. Click on “**For Investigators**”.
4. Click on “**Register**” in the upper right corner and enter the required information.
5. Read the User Agreement and then check the box that you agree.
6. To submit the form, click on the “**Register**” button.
7. You will be sent an email address verification link. Please make sure to check your email inbox or spam/junk folder for the verification link. The subject should state “HPAP Account Verification”.
8. Once verified, you can now log into the website and download data.



Website QR Code:

See reverse side for the list of available data in HPAP data repository.

DATA AVAILABLE

1. Donor characteristics (clinical data)
2. Documentation of workflow
3. Standard operating protocols
4. Tissue histology images
5. Molecular phenotyping of whole and dispersed islets
 - a. ATAC-seq
 - b. Single-cell RNA-seq
 - c. Sorted alpha and beta cell RNA-seq
 - d. Whole genome methylation analysis
6. Islet physiology analysis of whole and dispersed islets
 - a. Morphology and Viability
 - b. Perfusion to measure hormone secretion
 - c. Calcium imaging
 - d. Oxygen consumption
 - e. Electrophysiology (patch clamp)
7. B and T Immune cell characterization by Flow cytometry (5 panels with focus on: Immune Lineage, B cells, CD4 T cells, CD8 T cells and Cytokines)
 - a. Spleen
 - b. Peripheral blood
 - c. Pancreatic lymph nodes
8. Immune repertoire analysis
 - a. Single cell sequencing (paired VH/VL or Va/Vb)
 1. Unsorted
 2. Sorted subsets
 3. Antigen-specific
 - b. Bulk sequencing (VH and/or Vb)
 1. Spleen
 2. Peripheral blood
 3. Pancreatic lymph nodes
9. Imaging mass cytometry (with 33 distinct antibodies)
10. Splenic Treg cell isolation and Treg suppressive function assay