

	Date of your presentation	Name (First)	Name (Last)	Supervisor Name	Title of Paper or Work In Progress
1	2023-12-12	Samantha	Mar	Francis Lynn	Human Pancreatic $\alpha$ -Cell Heterogeneity and Trajectory Inference Analysis Using Integrated Single Cell- and Single Nucleus-RNA Sequencing Platforms
2	2023-12-07	Jia	Zhao	Tim Kieffer	Enrichment of stem cell-derived pancreatic beta-like cells and controlled graft size through pharmacological removal of proliferating cells
3	2023-12-07	Courtney	Ostromeki	Bruce Verchere	Work in progress: Targeting pro-inflammatory effector functions of islet macrophages using lipid nanoparticles to prevent diabetes
4	2023-11-30	Jamie	Chu	James Johnson	Illuminating the complete $\beta$ -cell mass of the human pancreas - signifying a new view on the islets of Langerhans
5	2023-11-28	Ekaterina	Filatov	Francis Lynn	Follicle-stimulating hormone orchestrates glucose-stimulated insulin secretion of pancreatic islets
6	2023-11-09	Natalie	Nahirney	James Johnson	TFEB and TFE3 control glucose homeostasis by regulating insulin gene expression
7	2023-11-07	Karoliina	Tuomela	Levings	Lymph node sharing between pancreas, gut, and liver leads to immune crosstalk and regulation of pancreatic autoimmunity
8	2023-10-24	Katarina	Zosel	Francis Lynn	Inferring regulators of cell identity in the human adult pancreas
9	2023-10-19	Mikky	Atser	Dr. Jim Johnson	Lactate activates the mitochondrial electron transport chain independent of its metabolism
10	2023-10-05	Alexander	Garner	Tim Kieffer & Francis Lynn	Single Cell RNA-Seq Analysis of Regenerative Drug-Treated Human Pancreatic Islets Identifies A Cycling Alpha Cell Population As Key Beta Cell Progenitors
11	2023-10-03	Sonya	Mangat	Levings	Elevated glucose metabolism driving pro-inflammatory response in B cells contributes to the progression of type 1 diabetes
12	2023-09-26	Bruno	Freitas	Levings and Verchere	Improving stem cell derived beta cell differentiation, maturation and function with regenerative macrophages
13	2023-09-21	Liam	Hall	James Johnson	Moderate-intensity endurance training improves late phase $\beta$ -cell function in adults with type 2 diabetes
14	2023-06-15	Jamie	Chu	James Johnson	Single-Cell Heterogeneity Analysis and CRISPR Screen Identify Key $\beta$ -Cell-Specific Disease Genes
15	2023-06-01	Jia	Zhao	Tim Kieffer	Single-nucleus multi-omics of human stem cell-derived islets identifies deficiencies in lineage specification
16	2023-05-30	Rana	Minab	Bruce Verchere	Fecal microbiome transplantation for type 1 diabetes therapy
17	2023-05-18	Priye	Iworima	Dr. Timothy Kieffer	Understanding cell fate acquisition in stem-cell-derived pancreatic islets using single-cell multiome-inferred regulomes
18	2023-05-16	Raelyn	Gallant	Dr. Bruce Verchere	Polarized macrophages promote gestational beta cell growth through extracellular signal-regulated kinase 5 signalling
19	2023-05-09	Yi-Chun	Chen	Dr. Bruce Verchere	Prolonged culture of human pancreatic islets under glucotoxic conditions changes their acute beta cell calcium and insulin secretion glucose response curves from sigmoid to bell-shaped
20	2023-05-04	Alexander	Garner	Tim Kieffer & Francis Lynn	Stomach-derived human insulin-secreting organoids restore glucose homeostasis
21	2023-05-02	Lindsay	Pallo	Bruce Verchere	Ionizable lipid nanoparticles deliver mRNA to pancreatic $\beta$ cells via macrophage-mediated gene transfer
22	2023-04-27	Mikky	Atser	Dr. James D. Johnson	Pyruvate-supported flux through medium-chain ketothiolase promotes mitochondrial lipid tolerance in cardiac and skeletal muscles
23	2023-04-04	Saumadritaa	Kar	Bruce Verchere	Direct reprogramming of human fibroblasts into insulin-producing cells using transcription factors
24	2023-03-15	Aurora	Mattison	Dr. Jim Johnson	Effect of Verapamil on Pancreatic Beta Cell Function in Newly Diagnosed Pediatric Type 1 Diabetes
25	2023-03-14	Helen	Huang	Francis Lynn	Development of a scalable method to isolate subsets of stem cell-derived pancreatic islet cells
26	2023-03-09	Amanda	Rahardjo	Jim Johnson	A single-cell human islet interactome atlas identifies disrupted autocrine and paracrine communications in type 2 diabetes
27	2023-03-07	Jane	Velghe	Dr. Bruce Verchere	Single-cell multi-omics analysis of human pancreatic islets reveals novel cellular states in type 1 diabetes
28	2023-03-02	Jelena	Kolic	Jim Johnson	Palmitoylation couples insulin hypersecretion with $\beta$ cell failure in diabetes
29	2023-02-28	Daniel	Pasula	Dan Luciani	Clearance of p16Ink4a-positive cells in a mouse transgenic model does not change $\beta$ -cell mass and has limited effects on their proliferative capacity
30	2023-02-23	Colin	Miller	Liz Rideout	A fluorescent perilipin 2 knock-in mouse model visualizes lipid droplets in the developing and adult brain
31	2023-02-09	Puja	Biswas	Elizabeth Rideout	Insulin signaling pathway promotes increased body fat in female Drosophila
32	2023-02-07	Samantha	Mar	Francis Lynn	Inhibition of stearyl-CoA desaturase 1 in the mouse impairs pancreatic islet morphogenesis and promotes loss of $\beta$ -cell identity and $\alpha$ -cell expansion in the mature pancreas
33	2023-01-26	Howard	Cen	James Johnson	The dynamic clustering of insulin receptor underlies its signaling and is disrupted in insulin resistance
34	2023-01-24	Marcus	Woodley	Francis Lynn	Pancreatic alpha cell glucagon-liver FGF21 axis regulates beta cell regeneration in a mouse model of type 2 diabetes
35	2023-01-17	Ekaterina	Filatov	Francis Lynn	Co-transplantation of pancreatic islets and microvascular fragments effectively restores normoglycemia in diabetic mice