

Date	First	Last	Supervisor Name	Paper/WIP	Title of Paper or Work In Progress	PMID
2022-01-27	Alexander	Garner	Timothy Kieffer	Paper	RFX6-mediated dysregulation defines human β cell dysfunction in early type 2 diabetes	
2022-01-20	Liam	Hall	James Johnson	Paper	Atlas of exercise metabolism reveals time-dependent signatures of metabolic homeostasis	
2022-01-18	Saumadritaa	Kar	Dr. C Bruce Verchere	Paper	ENTPD3 Marks Mature Stem Cell-Derived β -Cells Formed by Self-Aggregation In Vitro	PMC8564403
2022-01-13	Natalie	Nahrney	Jim Johnson	Paper	Tolerance to Proinsulin-1 Reduces Autoimmune Diabetes in NOD mice	33841427
2021-12-07	Noa	Gang	Dr. Jennifer Bruin	WIP	Investigating potential cross-talk between HIF1 α and AhR signaling in pancreatic beta-cells	
2021-12-09	Nelly	Saber	Dr. Tim Kieffer	Paper	Insulin expression and C-peptide in type 1 diabetes subjects implanted with stem cell-derived pancreatic endoderm cells in an encapsulation device	
2021-12-02	Mikky	Atser	Dr. Jim Johnson	Paper	Enzymatic activation of pyruvate kinase increases cytosolic oxaloacetate to inhibit the Warburg effect	34226744
2021-11-30	Samantha	Mar	Dr. Francis Lynn	WIP	Characterizing the role of gene regulator Med15 in pancreatic alpha cells	
2021-11-18	Peter	Overby	James D Johnson	Paper	ARTICLEActivated but functionally impaired memory Tregs are expanded in slow progressors to type 1 diabetes	34709423
2021-11-04	Mitchell	Braam	Tim Kieffer	Paper	A therapeutic convection-enhanced macroencapsulation device for enhancing β cell viability and insulin secretion	
2021-11-02	Raelyn	Gallant	Dr. Bruce Verchere	Paper	Coordinated interactions between endothelial cells and macrophages in the islet microenvironment promote β cell regeneration	https://doi.org/10.1038/s41536-021-00129-z
2021-10-26	Helen	Huang	Helen	WIP	Utilizing CD19 as a selection marker for the scalable production of stem cell derived β -cells	
2021-10-28	Anni	Zhang	Anni Zhang	Paper	Insulin protects acinar cells during pancreatitis by preserving glycolytic ATP supply to calcium pumps	34282152
2022-01-25	Marcus	Woodley	Francis Lynn	Paper	Ductal Ngn3-expressing progenitors contribute to adult β cell neogenesis in the pancreas	34478642
2021-10-15	Emily	Wilts	Timothy Kieffer	Paper	Injectable hydrogels for islet transplantation: a concise review	
2021-10-05	Austin	Taylor	Bruce Verchere	Paper	Lipid Droplets Protect Human β Cells from Lipotoxic-Induced Stress and Cell Identity Changes	34433630
2021-09-30	Jia	Zhao	Tim Kieffer	Paper	Generation of pancreatic progenitors from human pluripotent stem cells by small molecules	34450037
2021-09-21	Jocelyn	Begin	Jocelyn Begin	Paper	Neonatal exposure to a wild-derived microbiome protects mice against diet-induced obesity	
2021-09-23	Aurora	Mattison	Aurora Mattison	Paper	Loss of Secretory Pathway Ca2+ ATPase (SPCA1) Impairs Insulin Secretion and Reduces Autophagy in the Pancreatic Islet	
2021-09-16	Maria	Glavas	Tim Kieffer	Paper	Isthmin-1 is an adipokine that promotes glucose uptake and improves glucose tolerance and hepatic steatosis	34348115
2021-09-02	Jelena	Kolic	James D. Johnson	Paper	Sex- and age-dependent outcomes of 9-hour time-restricted feeding of a Western high-fat high-sucrose diet in C57BL/6J mice	34407415
2021-08-26	Lisa	Zhan	Timothy Kieffer	Paper	ZBED6 counteracts high-fat diet-induced glucose intolerance by maintaining beta cell area and reducing excess mitochondrial activation	34296320
2021-08-19	Lianna	Wat	Dr. Elizabeth J. Rideout	Paper	The sugar-responsive enteroendocrine neuropeptide F regulates lipid metabolism through glucagon-like and insulin-like hormones in Drosophila melanogaster	34376687
2021-08-05	Evgeniy	Panzhinsky	James D Johnson	Paper	Pancreatic Ppy-expressing γ -cells display mixed phenotypic traits and the adaptive plasticity to engage insulin production	34294685
2021-07-22	Howard	Cen	James D Johnson	Paper	Akt phosphorylates insulin receptor substrate to limit PI3K-mediated PIP3 synthesis	34253290
2021-07-08	Shenghui	Liang	Timothy Kieffer	Paper	CD82 is a marker to isolate β cell precursors from human IPS cells and plays a role for the maturation of β cells	33953224
2021-06-29	Dahai	Zhang	Francis Lynn	Paper	A 3D system to model human pancreas development and its reference single-cell transcriptome atlas identify signaling pathways required for progenitor expansion	34035279
2021-06-17	Jason	Millington	Elizabeth Rideout	Paper	Gut-brain communication by distinct sensory neurons differently controls feeding and glucose metabolism	34043943
2021-06-15	Ben	Vanderkruk	Brad Hoffman	Paper	Reinforcing one-carbon metabolism via folic acid/Folr1 promotes β -cell differentiation	34099692
2021-06-01	Daniel	Pasula	Dan Luciani	Paper	Mitofusins 1 and 2 collaborate to fuel pancreatic beta cell insulin release via regulation of both mitochondrial structure and DNA content	
2021-05-27	Alexander	Garner	Timothy Kieffer	Paper	Heterogenous impairment of α -cell function in type 2 diabetes is linked to cell maturation state	
2021-05-18	Marcus	Woodley	Francis Lynn	WIP	Cell Engineering Approaches for the Improvement of In Vitro β -Cell Developmen	
2021-05-20	Stella	Baehring	Jim Johnson	Paper	Brain insulin sensitivity is linked to adiposity and body fat distribution	32296068
2021-05-13	Queenie	Hui	Dr. Timothy Kieffer	Paper	Alpha to beta cell conversion in the postpartum mouse pancreas involves Igr5 progeny	33906911
2021-05-04	Dan	Gamu	Dr. William T. Gibson	WIP	Tipping a HAT to Brown Fat: Examination of H3K27 Acetyltransferases in Thermogenic Adipose Tissues	
2021-05-06	Peter	Overby	Jim Johnson	Paper	Citrullination of glucokinase linked to autoimmune diabetes	
2021-04-29	Nelly	Saber	Tim Kieffer	Paper	CRISPR-based genome editing in primary human pancreatic islet cells	33893274
2021-04-22	Mikky	Atser	Dr. James Johnson	Paper	FoxO1 inhibition alleviates type 2 diabetes-related diastolic dysfunction by increasing myocardial pyruvate dehydrogenase activity	
2021-04-20	Raelyn	Gallant	Bruce Verchere	Paper	Fatty acid binding protein 4 promotes autoimmune diabetes by recruitment and activation of pancreatic islet macrophages	10.1172/jci.insight.141814
2021-04-27	Helen	Huang	Francis Lynn	Paper	Functional, metabolic and transcriptional maturation of stem cell derived beta cells	
2021-04-15	Emily	Wilts	Timothy Kieffer	Paper	Polymeric Approaches to Reduce Tissue Responses Against Devices Applied for Islet-Cell Encapsulation	
2021-04-08	Anni	Zhang	Dr. James D Johnson	Paper	Single-Nucleus and In Situ RNA-Sequencing Reveal Cell Topographies in the Human Pancreas	33212097
2021-04-06	Samantha	Mar	Francis Lynn	Paper	REST is a major negative regulator of endocrine differentiation during pancreas organogenesis	This article is a preprint.
2021-04-01	Mitchell	Braam	Dr. Timothy Kieffer	Paper	Pre-existing beta cells but not progenitors contribute to new beta cells in the adult pancreas	https://doi.org/10.1038/s42255-021-00364-0
2021-03-30	Austin	Taylor	Dr. Bruce Verchere	WIP	Prohormone processing enzymes Pcsk1 and Pcsk2 in beta-cell function and glucose homeostasis	
2021-03-25	Jenny	Yang	Jim Johnson	Paper	GIP mediates the incretin effect and glucose tolerance by dual actions on α cells and β cells	33712466
2021-03-23	Yi-Chun	Chen	Dr. Bruce Verchere	WIP	Islet prohormone processing enzymes in glucose metabolism and diabetes	
2021-03-18	Aurora	Mattison	Dr. Jim Johnson	Paper	PDX1-LOW MAFA-LOW β -cells contribute to islet function and insulin release	33514698
2021-03-16	Jocelyn	Begin	Dr. Brad Hoffman	WIP	Metabolic regulation of chromatin structure and gene expression in a western diet mouse model	
2021-03-09	Lindsay	Pallo	Dr. Bruce Verchere	Paper	Glucagon blockade restores functional β -cell mass in type 1 diabetic mice and enhances function of human islets	33619103
2021-03-02	Dahai	Zhang	Francis Lynn	WIP	Study of the impact of type 2 diabetes susceptibility gene CDKAL1 on beta cell differentiation in human	
2021-03-04	Jelena	Kolic	James D. Johnson	Paper	Combinatorial transcription factor profiles predict mature and functional human islet α and β cells	none yet. This is a pre-print.
2021-02-23	Yuanjie	Zou	Dan Luciani	WIP	An autophagy enhancer ameliorates diabetes of human IAPP-transgenic mice through clearance of amyloidogenic oligomer	PMC7794419
2021-02-25	Shogo	Ida	Timothy J. Kieffer	Paper	Glucagon Resistance and Decreased Susceptibility to Diabetes in a Model of Chronic Hyperglucagonemia	33239450
2021-02-18	Lianna	Wat	Elizabeth Rideout	Paper	An isocaloric moderately high-fat diet extends lifespan in male rats and Drosophila	33440166
2021-02-11	Sos	Skovso	Dr. James Johnson	Paper	investor counteracts insulin signalling in b-cells to control glycaemia	https://doi.org/10.1038/s41586-021-03225-8
2021-02-09	Samantha	Yoon	Francis Lynn	Paper	Hypothalamic REV-ERB nuclear receptors control diurnal food intake and leptin sensitivity in diet-induced obese mice	33021965
2021-02-02	Ben	Vanderkruk	Brad Hoffman	WIP	H3K4 Methylation in β -cells Prevents Transcriptional Downregulation and Variance Associated with Type 2 Diabetes	
2021-02-04	Priye	Iworima	Dr. Timothy Kieffer	Paper	Aberrant development of pancreatic beta cells derived from human iPSCs with FOXA2 deficiency	33473118
2021-01-28	Evgeniy	Panzhinsky	Dr. James Johnson	Paper	Mitochondrial gene expression in single cells shape pancreatic beta cells' sub-populations and explain variation in insulin pathway	33432158
2021-01-26	Daniel	Pasula	Dan Luciani	WIP	Anti-apoptotic Bcl-xL preserves the transcriptional, morphological and functional integrity of β -cell mitochondria during chronic hyperglycemia	
2021-01-21	Jia	Zhao	Tim Kieffer	Paper	A Nutrient-Sensing Transition at Birth Triggers Glucose-Responsive Insulin Secretion	32375022
2021-01-14	Howard	Cen	James D. Johnson	Paper	Multi-omics profiling of living human pancreatic islet donors reveals heterogeneous beta cell trajectories toward type 2 diabetes	NA