2019 2nd Quarter Update

UF | Diabetes Institute UNIVERSITY of FLORIDA

Our Mission



Research



Patient Care



Education



Outreach

UFDI News



Desmond Schatz, M.D., professor and medical director of the UF Diabetes Institute was **appointed interim chair of the UF Department of Pediatrics.**



UF Health **Pediatric Diabetes and Endocrinology** specialty is nationally **ranked #19** (up from 27th) in the U.S. News & World Report 2019-20 Best Children's Hospitals rankings.



The UF Diabetes Institute welcomed **Kimberly Driscoll**, **Ph.D.**, associate professor in the Department of Clinical Health Psychology, as the **new director of behavioral research for the Institute**.



The UF Diabetes Institute partnered with the Department of Computer & Information Science & Engineering to promote research and development of virtual and augmented reality applications in diabetes, both type 1 and type 2.

Grants & Awards



\$7.69M award from The Helmsley Charitable Trust, in collaboration with Stanford University to determine if ECHO programs -Extension for Community Health Care Outcomes- can

reduce HbA1c levels, hospitalizations and Emergency Department visits for underserved patients with diabetes and lack of access to endocrinologists.

Michael Haller, M.D. (Pediatrics) and Ashby Walker, Ph.D. (HSRMP) are Co-Pl's.



Laura Jacobsen, M.D. received an NIH NIDDK Supplemental Grant in conjunction with Todd Brusko, Ph.D.'s current R01, which focuses on the CD226 and TIGIT costimulatory axis in type 1

diabetes. The objective is to characterize the T cell receptor repertoire and autoreactive T cells in subjects with Type 1 Diabetes who have a genetic risk variant within the *CD226* locus, which could be a potential target for cellular therapies.



UF Diabetes Institute affiliate and Department of Biomedical Engineering assistant professor, **Edward Phelps**, **Ph.D.**, received an **award from JDRF**, in collaboration with the University of

Colorado. The objective of this project is to induce localized immune tolerance to transplanted human beta cells derived from renewable stem cell sources as a potential treatment for type 1 diabetes (T1D).



Todd Brusko, Ph.D. and Daniel Perry, Ph.D., have been awarded a JDRF grant in collaboration with Benaroya Research Institute for single cell RNA sequencing of islet-reactive T cell clonotype and

transcript signatures. In addition, **Wen-I Yeh, Ph.D.**, also from Todd Brusko's lab, has been awarded a **JDRF grant** to engineer T follicular regulatory cell (Tfr) "avatars" to block autoantibody development and progression of type 1 diabetes.



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Featured Publications

UF Diabetes Institute afilliate and BME professors Cherie Stabler, Ph.D. and Benjamin Keselowsky, Ph.D., co-authored the review paper, Engineering Immunomodulatory Biomaterials for Type 1 Diabetes" recently published in Nature Reviews Materials. (https://doi.org/10.1038/s41578-019-0112-5).

Michael Haller, M.D., professor and chief of the Division of Pediatric Endocrinology within the Department of Pediatrics, recently reported the two-year results of the TrialNet ATG-GCSF trial (TN19) in patients with new-onset type 1 diabetes (https://doi.org/10.2337/db19-0057).

Arch Mainous, Ph.D., chair of the Department of Health Services Research, Management and Policy and Desmond Schatz, M.D., interim chair of the Department of Pediatrics, co-authored the review paper, "Is it Time to Prioritize Diabetes Prevention in Practice?" (https://doi.org/10.3122/jabfm.2019.04.190114).

Additional Info & Updates

- A HubMAP & Nanoscience collaboration has been formed that has the potential to provide for substantial NIH and NSF funding; this, around the CT initiatives in Engineering.
- Jack Payne, Ph.D., senior vice president for agriculture and natural resources at IFAS, has announced his retirement. In his remaining time at UF, he has committed to ensure that IFAS and the UF Diabetes Institute are connected.
- Allison O'Kell, D.V.M., M.S., DACVIM, clinical assistant professor in the College of Veterinary Medicine, is conducting a metabolomics study of canine diabetes. Here, we believe a novel biomarker has been developed and are actively working with UF Office of Technology Licensing to address this question.
- The JDRF/Helmsley Charitable Trust supported Network for Pancreatic Organ donors with Diabetes (nPOD) program recently reached its 500th organ donor case in the program's 12 years of existence.
- Arch Mainous, Ph.D., chair of the Department of Health Services Research, Management and Policy recently published the review paper, "Perception of Risk of Developing Diabetes Among Patients with Undiagnosed PreDiabetes: The Impact of Health Care provider Advice" (https://doi.org/10.2337/cd18-0050).
- The T32 Interdisciplinary Program in Type 1 Diabetes (T1D) and Biomedical Engineering (BME) is recruiting new students with three seats currently open. This program is focused on training predoctoral students in didactic subject matter, experimental design, and technical skills spanning the disciplines of BME and T1D research in order to prepare a generation of scientists to provide bioengineering and immune-therapy based solutions to autoimmune diseases, such as T1D.
- Lisa Scarton, Ph.D., R.N., assistant professor of the Department of Family, Community and Health Systems Science in the College of Nursing published the article "Developing a culturally tailored multi-generational intervention to prevent and manage type 2 diabetes in American Indian families living in rural settings: Findings from a focus group study. Research in Nursing & Health (https://doi: 10.1002/nur.21941).

Outreach



NBA Player, Corey Brewer, recently hosted the 10th annual Back2Back Basketball Camp in Gainesville, FL benefitting the UF Diabetes Institute. This created a remarkable degree of goodwill and hopes for a dramatic philanthropic increase in the future. This year, the **UFDI** awarded scholarships to lowincome children to attend the camp. The event was supported by Novo Nordisk, Campus USA Credit Union, Subway, Mi Apa, Domino's, Tower Hill Insurance. ThermoFisher Scientific, Putting Families First. UF Health and the Gainesville Housing Authority.

Working together for a diabetes-free world