The UC San Diego Pediatric Diabetes Research Center (PDRC) and the Institute of Engineering in Medicine (IEM) are proud to present:

**TYPE 1 DIABETES: NEW TECHNOLOGIES AND THERAPEUTICS**

**THURSDAY, JANUARY 19, 2017**

Sanford Consortium for Regenerative Medicine, Duane Roth Auditorium
2880 Torrey Pines Scenic Drive, La Jolla CA 92037

---

7:00 a.m. **Breakfast and Registration**

8:00 a.m. **Welcome**
Maike Sander, MD and David Gough, PhD

8:15 a.m. **KEYNOTE PRESENTATION**
Carla J. Greenbaum, MD – Benaroya Research Center
“Type 1 Diabetes: Disease Progression and Clinical Challenges”

**SESSION 1** **ARTIFICIAL PANCREAS**
Session Chair: Michael Gottschalk, MD, PhD

9:00 a.m. **Edward Damiano, PhD** - Boston University
“The Long and Winding Road to the Bionic Pancreas”

9:30 a.m. **Francis J. Doyle III, PhD** - Harvard University
“Medically-Inspired Algorithm Design for the Artificial Pancreas”

10:00 a.m. **Refreshment Break**

10:30 a.m. **David Gough, PhD** - UC San Diego
“Continuous Glucose Sensing of the Masses”

11:00 a.m. **Howard Zisser, MD** - UC Santa Barbara
“Artificial Pancreas Overview”

**SESSION 2** **STEM CELL THERAPIES**
Session Chair: Robert R. Henry, MD

11:30 a.m. **Jeremy Pettus, MD** - UC San Diego
“Islet Encapsulation: Progress in Clinical Trials”

12:00 p.m. **Clark K. Colton, PhD** - Massachusetts Institute of Technology
“Encapsulated Islets with Enhanced Oxygen Delivery for Long Term Viability and Function”

12:30 p.m. **Postdoctoral Research Presentation**

12:45 p.m. **Lunch**

**SESSION 3** **REGENERATION**
Session Chair: Alberto Hayek, MD

2:00 p.m. **Teresa Rodriguez-Calvo, DVM, PhD** – La Jolla Institute for Allergy & Immunology (Von Herrath Lab)
“Increase in Pancreatic Proinsulin and Preservation of Beta Cell Mass in Autoantibody Positive Donors prior to Type 1 Diabetes Onset”

2:30 p.m. **Neal Devaraj, PhD** - UC San Diego
“Enzymatic Amplification of Imaging Signals for Detecting Beta Cells”

3:00 p.m. **Maike Sander, MD** - UC San Diego
“Novel Pathways for Expanding Beta Cell Mass”

3:30 p.m. **Bryan Laffitte, PhD** - Genomics Institute of the Novartis Research Foundation
“Pharmacological Regulation of Human Beta Cell Proliferation”

3:45 p.m. **Closing Remarks**
Maike Sander, MD and David Gough, PhD

---

Space is limited and advance registration is required – Click [here](#) to register online!
or email Debbie Taheri, detaheri@ucsd.edu