

A 10-YEAR ANNIVERSARY SYMPOSIUM  
ORGANIZED BY THE HUMAN ISLET RESEARCH NETWORK

# Changing the Course in Type 1 Diabetes

January 13-14, 2025

Bethesda, Maryland

*Registration open to all*



## AGENDA

**Location: NIH Main Campus Building 45 (Natcher)**

### Monday, January 13, 2025

8:00 a.m. – 9:00 a.m.

- **Arrival, Registration, and Poster Setup**

9:00 a.m. – 9:25 a.m.

- **Meeting Prelude**  
Griffin P. Rodgers, M.D., MACP, Director, National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

John Kaddis, Ph.D., Associate Professor, Department of Diabetes & Cancer Discovery Science, Arthur Riggs Diabetes & Metabolism Research Institute, City of Hope

9:25 a.m. – 10:00 a.m.

- **Plenary I: The Historical Frontier of Type 1 Diabetes Research**  
Mark Atkinson, Ph.D., Professor, Departments of Pathology and Pediatrics; Director, University of Florida Diabetes Institute, University of Florida

10:00 a.m. – 10:20 a.m.

- **Refreshment Break**

10:25 a.m. – 11:00 a.m.

- **Plenary II: A New Dawn in Type 1 Diabetes Research**  
Audrey Parent, Ph.D., Associate Professor, Diabetes Center, School of Medicine, University of California, San Francisco

Holger Russ, Ph.D., Associate Professor, Department of Pharmacology and Therapeutics, University of Florida

11:00 a.m. – 1:00 p.m.

- **Lunch/Poster Session I**  
Pickup pre-ordered lunch (labeled with name)

1:05 p.m. – 3:30 p.m.

- **Session I: Emerging Approaches and Discoveries in Type 1 Diabetes Research**

Moderators: Juan Alvarez, Ph.D., Assistant Professor of Cell and Developmental Biology,  
University of Pennsylvania Perelman School of Medicine

Rohit N. Kulkarni, M.D., Ph.D, Professor of Medicine, Harvard Medical School;  
Diabetes Research & Wellness Foundation Endowed Chair; Senior Investigator and  
Associate Director (DRC), Joslin Diabetes Center

*“Engineering Microphysiological Systems to Study Diabetes: Current Progress and Future Directions”*

Cherie Stabler, Ph.D., Professor and Chair, J. Crayton Pruitt Family & UF Foundation Preeminence  
Professor, Department of Biomedical Engineering, College of Engineering, University of Florida

*“The Menage à Trois between Beta Cells, T Cells and Interferons”*

Roberto Mallone, M.D., Ph.D., Professor, Clinical Immunology, Université Paris Cité, France; Adult  
Diabetologist, Cochin Hospital, France; Senior Investigator, Indiana Biosciences Research Institute

*“Restoring Alpha Cell Function in Type 1 Diabetes”*

Julia Panzer, Ph.D., Research Assistant Professor, Department of Diabetes Immunology, Arthur Riggs  
Diabetes & Metabolism Research Institute, City of Hope

*“DYRK1A Inhibitors and Pancreatic Beta Cell Regeneration”*

Adolfo Garcia-Ocaña, Ph.D., Professor and Chair, Department of Molecular & Cellular Endocrinology,  
Arthur Riggs Diabetes & Metabolism Research Institute, City of Hope

3:30 p.m. – 3:50 p.m.

- **Refreshment Break**

3:50 p.m. – 4:50 p.m.

- **Breakout Session I**

1. Innovative Technologies in Type One Diabetes Research

- Location: Natcher Building, Meeting Room D
- Moderator: Jeffrey Millman, Ph.D., Washington University in Saint Louis
- Panelists: Matthew Ishahak, Ph.D., Washington University in Saint Louis  
Emily Sims, M.D., Indiana University School of Medicine  
Julie Sneddon, Ph.D., University of California, San Francisco

2. Debate on Immunomodulation Strategies

- Location: Natcher Building, Balcony B
- Moderator: Eddie James, Ph.D., Benaroya Research Institute
- Panelists: Remi Creusot, Ph.D., Columbia University  
Sally Kent, Ph.D., University of Massachusetts Chan Medical School  
Everett Meyer, M.D., Ph.D., Stanford University  
Qizhi Tang, Ph.D., University of California, San Francisco

3. Translational Research Collaboration
  - Location: Natcher Building, Balcony A
  - Moderator: Anath Shalev, M.D., the University of Alabama at Birmingham
  - Panelists: Juan Dominguez-Bendala, Ph.D., University of Miami  
Patrick MacDonald, Ph.D., University of Alberta  
Alvin Powers, M.D., Vanderbilt University  
Hongjun Wang, Ph.D., Medical University of South Carolina
  
4. Career-based: How to Transition and Start a Career in Type One Diabetes
  - Location: Natcher Building, Meeting Room C
  - Moderator: Alok Joglekar, Ph.D., University of Pittsburgh
  - Panelists: Sangeeta Dhawan, Ph.D., City of Hope  
Holger Russ, Ph.D., University of Florida  
Megan Sykes, Ph.D., Columbia University
  
5. Career-based: Navigating Leadership Opportunities in the Transition to the Mid-Career Phase
  - Location: Natcher Building, Meeting Room A
  - Moderator: Amelia Linemann, Ph.D., Indiana University School of Medicine
  - Panelists: Rafael Arrojo e Drigo, Ph.D., Vanderbilt University  
Maureen Gannon, Ph.D., Vanderbilt University  
Lori Sussel, Ph.D., University of Colorado Denver Anschutz Medical Campus
  
6. Discussion and Demonstration of the Pancreas Knowledgebase Program (PanKbase)
  - Location: Natcher Building, Balcony C
  - Moderators: Marcela Brissova, Ph.D., Vanderbilt University  
Noël Burt, Broad Institute  
Anna Gloyn, DPhil., Stanford University  
Jie Liu, Ph.D., University of Michigan

4:55 p.m. – 5:40 p.m.

- **Keynote Presentation I**

Moderator: Klaus Kaestner, Ph.D., Thomas and Evelyn Suor Butterworth Professor in Genetics;  
Associate Director of the Diabetes Research Center (DRC), University of Pennsylvania  
Perelman School of Medicine

*“The Vulnerable Period for Islet Autoimmunity”*

Anette-Gabriele Ziegler, M.D., Director of the Institute of Diabetes Research at Helmholtz Munich,  
German Research Center for Environmental Health, Helmholtz Munich; Chair, Diabetes and Endocrinology,  
Medical Faculty, Technical University Munich, Germany

5:40 p.m.

- **Adjournment**

6:30 p.m. – 8:30 p.m.

- **Group Dinner**

Bethesdan Hotel (Pre-registration Required)

## Tuesday, January 14, 2025

8:00 a.m. – 8:30 a.m.

- **Arrival, Registration, and Poster Setup**

8:30 a.m. – 8:50 a.m.

- **Introduction and Overview of NIDDK Support and Research Objectives**  
William Cefalu, M.D., Director, Division of Diabetes, Endocrinology, & Metabolic Diseases, NIDDK

8:50 a.m. – 11:10 a.m.

- **Session II: Exploring the Cellular and Molecular Etiology of Type 1 Diabetes**  
Moderators: Romina Bevacqua, Ph.D., Assistant Professor, Diabetes, Obesity and Metabolism Institute, Icahn School of Medicine at Mount Sinai, NY  
  
Lori Sussel, Ph.D., Professor of Pediatrics, University of Colorado Denver Anschutz Medical Campus; Research Director of the Barbara Davis Center for Diabetes  
  
*“Are we Missing Something? The Small Things Really do Matter in Type 1 Diabetes”*  
Sarah Richardson, Ph.D., Professor of Cellular Biomedicine, University of Exeter, England  
  
*“The Many Faces of Type 1 Diabetes: Understanding Cell and Tissue Specific Contributions to Disease Pathogenesis”*  
Carmella Evans-Molina, M.D., Ph.D., Eli Lilly and Company Professor of Pediatric Diabetes at Indiana University (IU) School of Medicine; Director of the IU Center for Diabetes and Metabolic Diseases and the Indiana Diabetes Research Center  
  
*“Unlocking Early Detection of Type 1 Diabetes through Multiome Profiling and Machine Learning”*  
Golnaz Vahedi, Ph.D., Associate Professor of Genetics, Department of Genetics, University of Pennsylvania Perlman School of Medicine  
  
*“Beta Cell Protection by Nature”*  
Bart Roep, Ph.D., Professor of Medicine & Professor of Diabetology, Immunopathology and Intervention, Leiden University Medical Center

11:10 a.m. – 1:10 p.m.

- **Lunch/Poster Session II**  
Pick up preordered lunch (labeled with name)

1:15 p.m. – 2:15 p.m.

- **Breakout Session II**
  1. Introduction to Research Groups and Funding Opportunities
    - Location: Natcher Building, Balcony A
    - Moderator: Kristin Abraham, Ph.D., NIH NIDDK
    - Panelists: Cassandra Bazile, Ph.D., Breakthrough T1D  
John Kaddis, Ph.D., City of Hope  
Jay Tinklepaugh, Ph.D., Breakthrough T1D  
Monica Westley, Ph.D., The Sugar Science  
Ben Williams, Ph.D., The Leona M. and Harry B. Helmsley Charitable Trust

2. Debate on “Why Beta Cells”
  - Location: Natcher Building, Balcony B
  - Moderator: Feyza Engin, Ph.D., University of Wisconsin at Madison
  - Panelists: Amit Choudhary, Ph.D., Broad Institute  
Raghu Mirmira, M.D., Ph.D., University of Chicago  
Bart Roep, Ph.D., Leiden University Medical Center  
Jordan Wright, Ph.D., Vanderbilt University
  
3. Career-based: Tips on Transitioning for Graduate Students and Postdocs in Academia, Industry and Non-Profits
  - Location: Natcher Building, Meeting Room D
  - Moderator: Karla Leavens, M.D., Ph.D., Children’s Hospital of Philadelphia
  - Panelists: Juan Alvarez, Ph.D., University of Pennsylvania  
Romina Bevacqua, Ph.D., Icahn School of Medicine at Mount Sinai, NY  
Albert Hwa, Ph.D., NIH NIDDK  
Matthias von Herrath, M.D., University of Miami; Novo Nordisk  
Bei Wang, M.D., Ph.D., Regeneron Pharmaceuticals  
Matthew Wortham, Ph.D., University of Colorado Denver Anschutz Medical Campus
  
4. Career-based: Speed Networking for Early Career Investigators
  - Location: Natcher Building, Meeting Room C
  - Moderators: Vira Kravets, Ph.D., University of California, San Diego  
Anna Gloyn, DPhil., Stanford University  
Joyce Niland, Ph.D., City of Hope
  
5. Demonstration of PANC-DB, the Data Portal for the Human Pancreas Analysis Program (HPAP)
  - Location: Natcher Building, Balcony C
  - Moderator: Nilanjana Samanta, MPH, MS, University of Pennsylvania

2:15 p.m. – 2:30 p.m.

- **Refreshment Break**

2:35 p.m. – 4:55 p.m.

- **Session III: Shaping Therapeutics for Type 1 Diabetes**

Moderators: Karla Leavens, M.D., Ph.D., Assistant Professor of Pediatrics, Division of Endocrinology and Diabetes, Children’s Hospital of Philadelphia

Cristina Nostro, Ph.D., Associate Professor, Department of Physiology, University of Toronto; Senior Scientist, McEwen Stem Cell Institute at University Health Network (UHN)

*“Development of Durable Beta-Cell Replacement Therapy for Type 1 Diabetes”*

Michael Rickels, M.D., Willard and Rhoda Ware Professor in Diabetes and Metabolic Diseases, Division of Endocrinology, Diabetes & Metabolism, University of Pennsylvania Perelman School of Medicine

*“Optimizing Stem Cell Derived Beta Cell Functions”*

Matthias Hebrok, Ph.D., Director, Center for Organoid Systems, Technical University Munich, Germany; Director of the Institute of Diabetes and Organoid Technology, Helmholtz Diabetes Center, Germany

*“Creating Localized Immune Tolerance in Type 1 Diabetes Using Chimeric Antigen Receptor Regulatory T Cells”*

Leonardo Ferreira, Ph.D., Assistant Professor, Department of Microbiology and Immunology, Medical University of South Carolina

*“Engineering Human Islet-specific Tregs for the Treatment of Type 1 Diabetes”*

Qizhi Tang, Ph.D., Professor of Immunology, School of Medicine, University of California, San Francisco

5:00 p.m. – 5:45 p.m.

- **Keynote Presentation II**

Moderator: Anna L. Gloyn, D.Phil., Professor of Pediatrics (Endocrinology) and Genetics at Stanford University

*“Transforming Diabetes Research and Care Using Deep Data and Remote Monitoring”*

Michael Snyder, PhD, Stanford W. Ascherman Professor in Genetics; Director, Stanford Center for Genomics and Personalized Medicine, School of Medicine, Stanford University

5:45 p.m. – 5:50 p.m.

- **Closing Remarks**

Rafael Arrojo e Drigo, Ph.D., Assistant Professor, Department of Molecular Physiology and Biophysics, Vanderbilt University

5:50 p.m.

- **Adjournment**

**Thank you to the NIH NIDDK for hosting the meeting.**

**Thank you to our Sponsors for providing the refreshments during the breaks.**

