
FRIDAY, NOVEMBER 18, 2022

24TH ANNUAL CONFERENCE

**FRONTIERS IN DIABETES RESEARCH:
A GLIMPSE INTO THE FUTURE:
NEW TRAILBLAZERS IN DIABETES RESEARCH**



COURSE DIRECTORS

Anthony W. Ferrante, MD, PhD

Tilden-Weger-Bieler Professor of Medicine; Co-Director, Naomi Berrie Diabetes Center; Columbia University Vagelos College of Physicians and Surgeons

Robin S. Goland, MD

J. Merrill Eastman Professor of Diabetes (in Medicine, Pediatrics, and the Naomi Berrie Diabetes Center) at CUMC; Co-Director, Naomi Berrie Diabetes Center, Columbia University Vagelos College of Physicians and Surgeons

Rudolph L. Leibel, MD

Christopher J. Murphy Memorial Professor of Diabetes Research; Professor of Pediatrics and Medicine; Head, Division of Molecular Genetics, Columbia University Vagelos College of Physicians and Surgeons

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FACULTY

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Assistant Professor of Pathology and Cell Biology, Naomi Berrie Diabetes Center, Columbia University Vagelos College of Physicians and Surgeons

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Director, Center for Interventional Immunology and Diabetes Program, Benaroya Research Institute

Eddie James, PhD

Assistant Member | Principal Investigator, Translational Immunology Program, Benaroya Research Institute at Virginia Mason

Yan Li, PhD

Associate Professor, Department of Genetics and Genome Sciences, Case Western Reserve University

Robert McGarrah, MD

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Rachel Perry, PhD

Assistant Professor of Cellular & Molecular Physiology and Internal Medicine (Endocrinology), Yale School of Medicine

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Associate Professor of Pediatrics, Pediatric Endocrinology and Diabetology, Indiana University School of Medicine Center for Diabetes and Metabolic Diseases; Assistant Director of Faculty Development and Translational Research, Herman B Wells Center for Pediatric Research; Associate Director, IU Medical Scientist Training Program

Julie Sneddon, PhD

Assistant Professor, UCSF Departments of Cell & Tissue Biology and Anatomy, UCSF Diabetes Center, Broad Center for Regeneration Medicine and Stem Cell Research

Phillip J. White, PhD

Assistant Professor of Medicine, Division of Endocrinology, Metabolism & Nutrition, Duke Molecular Physiology Institute, Duke University School of Medicine

COURSE SCHEDULE

FRIDAY, NOVEMBER 18, 2022

ALL TIMES INDICATED ARE IN EASTERN TIME

- 10:00 a.m. **Welcome and Introduction**
Robin S. Goland, MD and Anthony W. Ferrante, MD, PhD
 β Cells in Health and Disease
- 10:05 a.m. **Single Cell Multi-Omics Analysis of β Cell Heterogeneity**
Yan Li, PhD
- 10:30 a.m. **Recognition of Unconventional Islet Antigenes in Subjects with T1D**
Eddie James, PhD
- 10:55 a.m. **Panel Discussion**
Translational Implications of β Cell Biology
- 11:05 a.m. **Beta Believe It: How Beta Cell Dysfunction Can Inform T1D Prediction and Disease Modifying Therapies**
Emily K. Sims, MD, MS
- 11:30 a.m. **Flame of Hope: A Stem Cell Therapy for Diabetes**
Julie Sneddon, PhD
- 11:55 a.m. **30 Years of Working to Stop Type 1 Diabetes: Reflections and Challenges for the Next Generation**
Carla J. Greenbaum, MD
- 12:20 p.m. **Panel Discussion**
- 12:30 p.m. **Naomi Berrie Award for Outstanding Achievement in Diabetes Research**
Anthony W. Ferrante, MD, PhD
- 12:40 p.m. **Lunch**
Interorgan Crosstalk in Diabetes
- 1:40 p.m. **New Insights into Cardiac Branched-Chain α -Keto Acid Metabolism: Implications for Cardiac Remodeling in Metabolic Disease**
Robert McGarrah, MD
- 2:05 p.m. **Connecting the Branched-Chain α -Keto Acid Regulatory Network to Metabolic Homeostasis**
Phillip J. White, PhD
- 2:30 p.m. **FGF-21 and Metabolism: Old Dog, New Tricks**
Rachel Perry, PhD

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- 2:55 p.m. **Panel Discussion**
Neuronal Regulation of Obesity and Diabetes
- 3:05 p.m. **The Hypothalamus at Single Cell Resolution:
Creating Nucleus-Specific Human
Hypothalamic Neurons**
Claudia Doege, MD
- 3:30 p.m. **Circuits and Mechanisms Underlying
Cue-Induced Feeding: A Pathway to
Treatment and Prevention of Obesity**
Alejandro Ramirez, MD, PhD
- 3:55 p.m. **Panel Discussion**
- 4:05 p.m. **Frontiers Award Presentation**
Utpal B. Pajvani, M.D., Ph.D.
- 4:15 p.m. **Adjourn**
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PROGRAM DESCRIPTION

This annual one-day program is designed for scientists/investigators, students and clinicians with an interest in diabetes. This will be a hybrid meeting – although in-person attendance is encouraged, the conference will also be available by Zoom.

Speakers will discuss topics related to mechanisms and consequences of diabetes and obesity, with emphasis on novel research directions and new investigators. As in the past, emphasis will be on the presentation of new and unpublished data, and on vigorous interactions between the audience and speakers.

THE NAOMI BERRIE DIABETES CENTER

The Naomi Berrie Diabetes Center, combining premier family-centered patient care and education for children and adults with world-class research, opened in October 1998. The Center offers coordinated, multidisciplinary clinical care for adults and children with diabetes. Educational, nutritional and psychosocial counseling help the patient and family to cope effectively with diabetes. Basic and clinical research programs at the Berrie Center focus on the biologic bases for diabetes and obesity. The Naomi Berrie Diabetes Center's commitment to patient care, research and education reflects its mission to improve the lives of people with diabetes and its dedication to finding a cure. For additional information, call the Center at (212) 851-5492 or visit our website: www.nbdiabetes.org

ACKNOWLEDGMENT

The Frontiers in Diabetes Research Symposium and the Naomi Berrie Award for Achievement in Diabetes Research are made possible thanks to the generosity of the Russell Berrie Foundation.

ADDITIONAL INFORMATION

Center for Continuing Medical Education
Columbia University
Vagelos College of Physicians and Surgeons
630 West 168th Street, Unit 39
New York, NY 10032

Telephone: 212-305-3334
Fax: 212-305-5740
Email: cme@columbia.edu
www.ps.columbia.edu/cme

MEETING LOCATION

Columbia University Irving Medical Center
School of Nursing
560 West 168th Street
New York, NY 10032

Parking is available at the Columbia University Irving Medical Center parking lot, located on the southwest corner of Fort Washington Avenue and West 165th Street.

*All in-person attendees will be required to follow the **VISITOR POLICY** and must have proof of vaccination as well as comply with other Columbia University safety protocols. Once registered, instructions will be sent regarding uploading vaccination documentation.*

*For those that would like to view the livestream, a link will be sent to those who select virtual attendance during registration. Please note: the content will **NOT** be posted online after the event.*



TUITION

Tuition: **Free.**

Confirmation of registration will be sent upon receipt of the registration form.

REGISTRATION

Online: <https://cvent.me/V1xaAm>

AMERICANS WITH DISABILITIES ACT

The Columbia University Vagelos College of Physicians and Surgeons fully complies with the legal requirements of the ADA and the rules and regulations thereof. Any participant with special needs must submit a written request to our office at least one month prior to the course date.



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PRESENTED BY THE

NAOMI BERRIE DIABETES CENTER
COLUMBIA UNIVERSITY
VAGELOS COLLEGE OF PHYSICIANS AND SURGEONS