Discovery awaits you at the 81st Scientific Sessions

Final Program
scientificsessions.diabetes.org
#ADA2021
**View The Scientific Sessions**

Closed-Loop Increases Time-in-Range in Older Adults with Type 1 Diabetes Compared with Sensor-Augmented Pump Therapy: A Randomized Crossover Trial

Mcauley | Oral | Sun. 6/27 @ 4:30 pm

Impact of InPen™ smart insulin pen use on real-world glycemic and insulin dosing outcomes in individuals with poorly controlled diabetes

Vigersky | Oral | Sun. 6/27 @ 6:15 pm

Glycemic outcomes of new InPen™ smart insulin pen users who received virtual onboarding

Smith | ePoster

Patient Reported Satisfaction During the Medtronic Extended-Wear Infusion Set (EWIS) Pivotal Trial

Brazg | ePoster

Preclinical study of a combined insulin infusion and glucose sensing device (DUO)

Zhang | ePoster

Durable insulin pumps vs. multiple daily injections for type 1 diabetes: Healthcare utilization and A1C

Shah | ePoster

Infusion Set Survival and Performance During the Medtronic Extended-Wear Infusion Set (EWIS) Pivotal Trial

Buckingham | ePoster

Robust glycemic outcomes after MiniMed™ Advanced Hybrid Closed-Loop (AHCL) System use regardless of previous therapy

Shin | ePoster

**Visit Our Virtual Exhibit**

**Smart MDI Therapy**
Stay on Track with the First Smart MDI System*

**Insulin Pump Therapy**
Automated Insulin Delivery for Improved Glucose Control

**Personalized Service & Support**
Always By Your Side

Visit Our Virtual Exhibit [https://www.medtronic.com/diabetes-exhibit](https://www.medtronic.com/diabetes-exhibit) to find more information on:

**View Our Presentations**

**Product Theater:**
**Shared Decision With Diabetes Technology**
Friday, June 25, 2021 | 10:00 – 11:00 am ET

The introduction of smart insulin pens is bringing the vast majority of people on insulin injection therapy into the digital age. Learn about the rapidly changing insulin delivery landscape including research showing how automated insulin delivery systems are reducing the burden of insulin management while improving outcomes.

**Learning Byte #1:**
**Transitioning From MDI To MiniMed™ 770G System**
**Learning Byte #2:**
**InPen™ Smart Insulin Pen: Product Features and Overview**

**Janice MacLeod, MA, RD, CDCES, FADCES**
Clinical Advocacy, Medtronic Diabetes

**Diana Isaacs, PharmD, BCPS, BC-ADM, CDCES, FADCES**
Cleveland Clinic

**Robert Vigersky, MD**
Chief Medical Officer, Medtronic Diabetes

**Ali Dianaty**
VP Product Innovation, Medtronic Diabetes

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*Smart insulin pens connect to a mobile app to provide dosing calculations, reminders and CGM system integration.

**Important Safety Information for MiniMed™ 770G System:**
The MiniMed™ 770G system is for type 1 ages 2 and over. Prescription required. Individual results may vary. WARNING: Do not use SmartGuard™ Auto Mode for people who require less than 8 units or more than 250 units of insulin/day. For details, please visit [http://www.medtronicdiabetes.com/support/download-library/user-guides](http://www.medtronicdiabetes.com/support/download-library/user-guides) and [www.medtronicdiabetes.com/important-safety-information](http://www.medtronicdiabetes.com/important-safety-information) for complete details.

**Important Safety Information for InPen™**
The InPen is a home-use reusable pen injector for single-patient use by people with diabetes under the supervision of an adult caregiver, or by a patient age 7 and older for the self-injection of a desired dose of insulin and for calculating an insulin dose or carbohydrate intake based on user entered data. A healthcare professional must assist in dosage programming of the device prior to use, based on various patient-specific criteria and targets. The InPen requires a prescription. For additional product and safety information, see User Guide and [http://bit.ly/InPenSafety](http://bit.ly/InPenSafety).

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AMERICAN DIABETES ASSOCIATION

Final Program

81st Virtual Scientific Sessions

June 25-29
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Abstract Embargo Policy

All meeting attendees, members of the media, companies, institutions, organizations, universities, investment advisors, and all other individuals are required to abide by the embargo policy governing the ADA’s 81st Scientific Sessions.

An embargo means that information from any abstract or presentation is confidential and may not be announced, publicized, or distributed before the embargo date and time. This policy applies to all formats of release, including the Scientific Sessions online itinerary planner, meeting app, abstracts published on the journal Diabetes® website, and any other distribution method.

Specific Embargo Dates and Times:

*Oral Presentations:
Abstracts selected for oral presentation are embargoed from the time of submission until conclusion of the presentation at the 81st Scientific Sessions. The ADA reserves the right to adjust the embargo as needed.

*Poster Presentations:
Abstracts selected for poster presentation are embargoed from the time of submission until Friday, June 25, 2021 at 11:30 a.m. U.S. Eastern Time

Published Only:
Abstracts selected for Published Only are embargoed from the time of submission until Friday, June 25, 2021 at 11:30 a.m. U.S. Eastern Time.

*Abstracts included in the ADA’s official 81st Scientific Sessions Press Program are embargoed from the time of submission until conclusion of the News Briefing in which the research is presented or until conclusion of the presentation at the 81st Scientific Sessions, whichever is first. Please contact the ADA Press Office if you have any questions at scisessionspress@diabetes.org.

Abstract Availability: Embargoed text of abstracts will be made available online on Tuesday, June 22, 2021. Note: The abstract embargo still applies; however, abstracts are made available to attendees to assist in creating their itineraries for the meeting.
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<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
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<tr>
<td>11:30 a.m.-</td>
<td>Mini-Symposium</td>
<td>The Impact of COVID-19 on Foot Care in Diabetes</td>
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<tr>
<td>12:30 p.m.</td>
<td>Mini-Symposium</td>
<td>Intersection of Diabetes, Heart Failure, and Kidney Disease — Challenges and New Insights (Includes Live Video Question and Answer Period)</td>
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<td>Mini-Symposium</td>
<td>Could Point-of-Care Devices Prove Useful in the Diagnosis of Diabetic Neuropathy in Clinical Practice?</td>
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<td>Mini-Symposium</td>
<td>The Anatomy of Inter-Disciplinary Integration in Health Care Education</td>
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<td>Mini-Symposium</td>
<td>Carbohydrate Intake and Its Impact on Athletics and Health — A Debate</td>
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<tr>
<td>12:45 p.m.-</td>
<td>Mini-Symposium</td>
<td>We All Know What Causes Hypoglycemia, Don’t We?</td>
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<td>1:45 p.m.</td>
<td>Mini-Symposium</td>
<td>COVID-19 and Lipids — What’s the Connection?</td>
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<td>Mini-Symposium</td>
<td>Identifying Patients at Risk — Kidney Disease Surveillance in Diabetes</td>
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<td>Mini-Symposium</td>
<td>Diabetes Retinopathy Detection and Treatment in Resource-Constrained Areas</td>
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| 2:00 p.m.–4:00 p.m. | **Symposium** Evidence-Based Guidelines for Diabetes and Chronic Kidney Disease  
                  | **Symposium** The Expanded Scope of the Diabetes Care and Education Specialist  
                  | **Symposium** Screening for Gestational Diabetes — Is This Your Final Answer?  
                  | **Symposium** COVID-19 and Diabetes — An Update (Includes Live Video Question and Answer Period)  
                  | **Symposium** Mental Health Disorders in Patients with Diabetes — A Most Challenging Mix  
| 4:15 p.m.–6:15 p.m. | **Symposium** A Primer on Diabetes Foot Management for the Primary Care Provider  
                  | **Symposium** The Molecular Transducers behind the Benefits of Physical Activity  
                  | **Symposium** SGLT2is and GLP-1RAs — Are They Worth It? (Includes Live Video Question and Answer Period)  
                  | **Symposium** Implementing Type 1 Diabetes Immune Intervention in Clinical Practice  
                  | **Symposium** Prevention of Diabetes and Diabetes Complications (With State-of-the-Art Lecture)  
                  | **Symposium** The Genetic Architecture of Diabetes and Dissecting Its Phenotypes (With State-of-the-Art Lecture and ADA Presidents’ Select Abstract Presentation)  
                  | **Symposium** Age, Sex, and Ethnicity — Impact on Type 1 Diabetes Development  
                  | **Symposium** Adipocyte Biology I  
                  | **Symposium** When Time Matters — The Influence of Time-Restricted Feeding  
                  | **Symposium** An (Un)happy Family of Beta-Cell Organelles in Diabetes  

Virtual Exhibits and Poster Hall: Available throughout the Meeting
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<tbody>
<tr>
<td>8:00 a.m.-</td>
<td>Symposium Practice-Changing Trials in Heart Failure and Kidney Disease</td>
<td>Behav. Med., Cln. Nutrition, Ed., &amp; Exercise</td>
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<tr>
<td>10:00 a.m.</td>
<td>with SGLT2 Inhibitors</td>
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<td>Oral Presentations</td>
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<td>Hypoglycemia, Heart, and Mind</td>
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<td>10:15 a.m.-</td>
<td>ADA Chief Executive Officer Remarks; President, Health Care &amp; Education</td>
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<td>11:30 a.m.</td>
<td>Address; and Outstanding Educator in Diabetes Award Lecture</td>
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<td>11:30 a.m.-</td>
<td>Professional Interest Group Discussion on Exercise Physiology—</td>
<td>Professional Interest</td>
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<td>12:30 p.m.</td>
<td>Exercise in Post-COVID Infection—Implications for Treatment, Research,</td>
<td>Group Discussion on Clinical Centers and Programs—Here to Stay?</td>
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<td>and Public Health</td>
<td>Harnessing Telemedicine for Diabetes Care in the COVID-19 Era and Beyond</td>
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<td>Professional Interest Group Discussion on Nutritional Science and</td>
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<td>Metabolism—Food, Nutrition, and Insulin Actions</td>
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<td>Mini-Symposium</td>
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<td>Women’s Interprofessional Network of the ADA (WIN ADA)—Long-Term</td>
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<td>Professional Impact of COVID-19 (Includes Live Video Question and Answer</td>
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<td>12:30 p.m.-</td>
<td>Session Break (Take this opportunity to visit the Virtual Exhibits and</td>
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<td>1:45 p.m.–3:45 p.m.</td>
<td>Symposium Diabetes through a Health Equity Lens (With Richard R. Rubin Award Lecture)</td>
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<td>Oral Presentations Pathogenesis of Atherosclerosis and Its Complications in Diabetes (With Edwin Bierman Award Lecture)</td>
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<td>Symposium Technology in Pregnancy—Continuous Glucose Monitoring (CGM) and Beyond</td>
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<td>Current Issues (1:45 p.m.–2:45 p.m.) Debate — Digital Coaching Systems for Type 2 Diabetes — Are They Worth the Cost?</td>
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<td>Current Issues (2:45 p.m.–3:45 p.m.) Debate — Are the Metabolic Benefits of Roux-en-Y Gastric Bypass Due to Weight Loss Alone?</td>
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<td>Oral Presentations Pediatric Type 1 Diabetes</td>
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<td>Symposium Beyond Genome-Wide Association Studies — Understanding the Function of Variants Associated with Diabetes</td>
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<td>Oral Presentations Novel Biomarkers for Understanding Diabetes Heterogeneity</td>
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<td>4:00 p.m.–6:00 p.m.</td>
<td>Symposium Resolving Key Controversies in Diabetic Neuropathy</td>
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<td>Oral Presentations Diabetic Retinopathy</td>
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<td>Symposium Carbohydrate Counting — Still Useful with Evolving Insulin Delivery Technologies? (Includes Live Video Question and Answer Period)</td>
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<td>Symposium Obesity and Cardiovascular Disease in Type 1 Diabetes</td>
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<td>Current Issues Debate — Joint ADA/AACC Presentation — Point-of-Care HbA1C — Should We Use It to Diagnose Diabetes?</td>
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<td>Oral Presentations Novel Science and Advances in Diabetes in Pregnancy (With Norbert Freinkel Award Lecture)</td>
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<td>Oral Presentations Incretin-Based Therapies (With ADA Presidents’ Select Abstract Presentation)</td>
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<td>Symposium A Global Perspective on Diabetes — Bidirectional Learning for Lower- and Middle-Income and Higher-Income Countries</td>
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<td>Oral Presentations Novel Insights into Type 1 Diabetes Pathogenesis</td>
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<td>Symposium Ratcheting Up Insulin Secretion</td>
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<td>Symposium ES-Derived Beta Cells — From Disease Modeling to Therapeutics</td>
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## DAY-AT-A-GLANCE SCHEDULE
### SUNDAY, JUNE 27, 2021

### 8:00 a.m. - 10:00 a.m. 
**Symposium** New Tools to Examine Diabetes-Related Kidney Disease  
**Oral Presentations** Hypoglycemia by Day and by Night — Mechanisms and Management *(With ADA Presidents’ Select Abstract Presentation)*

### 10:15 a.m. - 11:45 a.m. 
**President, Medicine & Science Address and Banting Medal for Scientific Achievement**

### 12:00 p.m. - 1:00 p.m. 
**Professional Interest Group Discussion on Diabetes and Cardiovascular Disease** — Are We Going to Learn More from Broader Evaluations of New Glycemic Lowering Medications Beyond Cardiovascular Outcome (CVO) Trials? Is It Time to Let Go of “CVO” Trials?  
**Professional Interest Group Discussion on Eye Health** — Ocular Health Care by Telehealth and Artificial Intelligence (AI)

### 1:00 p.m. - 2:15 p.m. 
**Session Break (Take this opportunity to visit the Virtual Exhibits and Poster Hall)**
### Virtual Exhibits and Poster Hall: Available throughout the Meeting

#### DAY-AT-A-GLANCE SCHEDULE
**SUNDAY, JUNE 27, 2021 (CONTINUED)**

| 2:15 p.m.–3:45 p.m. | **Symposium** | The Importance of Triglycerides Continues to Emerge
| **Oral Presentations** | Highlights in Diabetic Kidney Disease Research — Basic, Clinical, and Translational Science |
| 2:15 p.m.–3:00 p.m. | **Award Lecture** | (2:15 p.m.-3:15 p.m.) Efficacy and Safety of Dapagliflozin in Patients with and without Type 2 Diabetes Hospitalized with COVID-19 — Results from the DARE-19 Global Randomized Controlled Trial (Includes Live Video Question and Answer Period)
| 2:15 p.m.–3:45 p.m. | **Symposium** | Reimagining Diabetes Care in the Virtual World
| 2:15 p.m.–3:15 p.m. | **Symposium** | Children with Type 2 Diabetes Are Not Just Little Adults
| 2:15 p.m.–3:00 p.m. | **Symposium** | Personalized Medicine for Immune Therapies in Type 1 Diabetes
| 2:15 p.m.–3:00 p.m. | **Symposium** | Health Disparities among People with Obesity
| 2:15 p.m.–3:00 p.m. | **Symposium** | Insulin Secretion and Macronutrient Metabolism in Humans
| 4:30 p.m.–6:30 p.m. | **Symposium** | Diabetes Retinal Disease — Changing Before Your Eyes
| **Oral Presentations** | The Conundrum of Diabetic Neuropathies — From Mice to Man (With ADA Presidents’ Select Abstract Presentation) |
| 4:30 p.m.–6:30 p.m. | **Symposium** | Disrupting Endocrine Milieu of Pregnancy — Mechanisms of Per- and Polyfluoroalkyl Substances (PFAS) in Maternal-Fetal Health
| 4:30 p.m.–6:30 p.m. | **Symposium** | The Year in Review — Highlights of the Past Year in Basic, Translational, and Clinical Sciences (Includes Live Video Question and Answer Period)
| 4:30 p.m.–6:30 p.m. | **Symposium** | Remote Monitoring and Use of Telehealth — Lessons Learned from a Pandemic
| 4:30 p.m.–6:30 p.m. | **Symposium** | Drugs and Genetics — Pharmacogenomic Approaches to Precision Diabetes Treatment
| 4:30 p.m.–6:30 p.m. | **Symposium** | Joint ADA/EASD Symposium — Novel Insights and Old Controversies around Insulin and Glucagon-Like Signaling
| 4:30 p.m.–6:30 p.m. | **Symposium** | Diabetes and Metabolism across the Lifespan
| 4:30 p.m.–6:30 p.m. | **Symposium** | What’s for Dinner? Dietary Interventions and Beta-Cell Function
| 4:30 p.m.–6:30 p.m. | **Symposium** | All Roads Lead to Insulin
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<tr>
<th>Time</th>
<th>Acute and Chronic Complications</th>
<th>Behavioral Medicine, Clinical Nutrition, Education, and Exercise</th>
<th>Clinical Diabetes/Therapeutics</th>
<th>Epidemiology/Genetics</th>
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<th>Insulin Action/Molecular Metabolism</th>
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<td>8:00 a.m.-10:00 a.m.</td>
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<td>Symposium Oral Presentations Advances from Gene/Variant to Function in Diabetes</td>
<td>Symposium Symposium Clinical and Regulatory Hurdles Facing Islet Transplantation</td>
<td>Symposium Oral Presentations Obesity—Discoveries, Developments, and New Directions</td>
<td>Symposium Oral Presentations Glucagon, Incretins, and Other Hormones in Humans</td>
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<td>10:10 a.m.-11:45 a.m.</td>
<td>National Scientific &amp; Health Care Achievement Awards Presentation and Outstanding Scientific Achievement Award Lecture</td>
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<td>Symposium: Neonatal Hypoglycemia—Overdiagnosed or Underestimated?</td>
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<td>2:15 p.m.</td>
<td>Oral Presentations: New Concepts in Managing Diabetic Foot Complications (With Roger Pecoraro Award Lecture)</td>
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<td>Symposium: Accelerating Care and Education—Digital Health and Diabetes Support—Patient and Provider Perspectives (Includes Live Video Question and Answer Period)</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: Mixing “Omics” in Pregnancy and Beyond (With ADA Presidents’ Select Abstract Presentation)</td>
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<td>Symposium: Communication of Risk in the Era of COVID-19—Public Health and Public Trust</td>
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<td>Oral Presentations: Improvement in Quality of Care in Vulnerable Populations with Diabetes</td>
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<td>Oral Presentations: Imaging How Genetics Alters Risk of Diabetes</td>
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<td>Symposium: The Diabetes Digital Landscape through a Psychosocial and Behavioral Lens</td>
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<td>Oral Presentations: Food is Medicine for People with Diabetes and At-Risk of Diabetes</td>
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<td>Oral Presentations: Results of the Glycemia Reduction Approaches in Diabetes — A Comparative Effectiveness (GRADE) Study (Includes Live Video Question and Answer Period)</td>
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<td>Symposium: COVID-19, Diabetes, and Obesity</td>
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<td>Symposium: The Latest on Incretin/GPCR Signaling in the Islet Cell</td>
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<td>4:30 p.m.</td>
<td>Symposium: Joint ADA/ASN Symposium: New Therapies for Kidney Protection in Diabetes</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: Diabetic Dyslipidemia (With State-of-the-Art Lecture)</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: Imagining How Genetics Alters Risk of Diabetes</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: Social and Environmental Determinates in Diabetes</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: Improvement in Quality of Care in Vulnerable Populations with Diabetes</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: SGLT Inhibitors</td>
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<td>4:30 p.m.</td>
<td>Oral Presentations: Insulin Signaling and Insulin Resistance</td>
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<td>4:30 p.m.</td>
<td>Symposium: COVID-19, Diabetes, and Obesity</td>
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<td>4:30 p.m.</td>
<td>Symposium: The Latest on Incretin/GPCR Signaling in the Islet Cell</td>
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<td>Time</td>
<td>Acute and Chronic Complications</td>
<td>Behavioral Medicine, Clinical Nutrition, Education, and Exercise</td>
<td>Clinical Diabetes/Therapeutics</td>
<td>Epidemiology/Genetics</td>
<td>Immunology/Transplantation</td>
<td>Insulin Action/Molecular Metabolism</td>
<td>Integrated Physiology/Obesity</td>
<td>Islet Biology/Insulin Secretion</td>
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<td>8:00 a.m.-10:00 a.m.</td>
<td>Symposium (8:00 a.m.-9:00 a.m.) Translating Diabetes and Heart Failure Clinical Trial Findings into Clinical Practice</td>
<td>Current Issues (8:00 a.m.-9:20 a.m.) Debate—Precision Nutrition—Are We There Yet?</td>
<td>Symposium (8:00 a.m.-9:30 a.m.) Next Chapter in Incretin-Based Therapies—Tirzepatide, a Novel Dual GIP/GLP-1 Receptor Agonist—Results from the First Phase 3 SURPASS Clinical Trials (Includes Live Video Question and Answer Period)</td>
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<td>Symposium (9:00 a.m.-10:00 a.m.) Translating Diabetes and Kidney Disease Clinical Trial Findings into Clinical Practice</td>
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<td>10:15 a.m.-12:15 p.m.</td>
<td>Symposium Update on SCORED and SOLOIST Cardiovascular and Kidney Outcomes Trials (Includes Live Video Question and Answer Period)</td>
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Virtual Exhibits and Poster Hall: Available throughout the meeting
Scientific Sessions
11:30 a.m.-12:30 p.m.

Mini-Symposium
Theme Area: Acute and Chronic Complications
The Impact of COVID-19 on Foot Care in Diabetes
Chair: Gary M. Rothenberg, DPM, CDCES, CWS
11:30 a.m.-12:00 p.m.  Effects of COVID-19 on the Delivery of Diabetic Foot Care
   Brian M. Schmidt, DPM
12:00 p.m.-12:30 p.m.  Utilizing Telemedicine in Diabetic Foot Care
   Laura Shin, DPM, PhD

Mini-Symposium
Theme Area: Acute and Chronic Complications
Intersection of Diabetes, Heart Failure, and Kidney Disease—Challenges and New Insights (Includes Live Video Question and Answer Period)
Chair: Sanjay Kaul, MD, FACC, FAHA
11:30 a.m.-11:45 a.m.  Heart Failure in Diabetes—New Therapeutic Insights
   Biykem Bozkurt, MD, PhD, FHFS, FACC, FAHA, FACP
11:45 a.m.-12:00 p.m.  Diabetic Kidney Disease—What Is on the Horizon?
   Harriette Van Spall, MD, MPH
12:00 p.m.-12:15 p.m.  Combination Therapy with SGLT2i and GLP-1RA in Mitigating Cardiorenal Metabolic Risk
   Vanita R. Aroda, MD
12:15 p.m.-12:30 p.m.  Live Video Question and Answer Period

Mini-Symposium
Theme Area: Acute and Chronic Complications
Could Point-of-Care Devices Prove Useful in the Diagnosis of Diabetic Neuropathy in Clinical Practice?
Chair: Eva L. Feldman, MD, PhD
11:30 a.m.-12:00 p.m.  Yes
   Bruce A. Perkins, MD, MPH
12:00 p.m.-12:30 p.m.  No
   Brian C. Callaghan, MD, MS

Mini-Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Executive Function in Youth with Type 1 Diabetes—Driven to Diabetes Distraction
Chair: Sarah S. Jaser, PhD
11:30 a.m.-11:50 a.m.  Executive Functioning, Symptoms of Depression and Anxiety, Adherence, and Glycemic Control in Youth with Type 1 Diabetes
   Danny C. Duke, PhD
11:50 a.m.-12:10 p.m.  Work in Progress—Developmental Trajectories of Executive Function across Adolescence
   Maartje de Wit, PhD
12:10 p.m.-12:30 p.m.  Clinical Strategies for Identifying Executive Function Problems and Using Diabetes Technology to Support Youth with Type 1 Diabetes
   Rachel M. Wasserman, PhD
FRIDAY, JUNE 25, 2021

11:30 a.m.-12:30 p.m.
(continued)

**Mini-Symposium**

**Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise**

**The Anatomy of Interdisciplinary Integration in Health Care Education**
Chair: Barbara Schreiner, PhD, RN, CDCES, BC-ADM
11:30 a.m.-12:00 p.m.  *A Model for the Expanded Role of the Diabetes Care and Education Specialist into Clinical Diabetes Care Management*
  Paul Sack, MD
12:00 p.m.-12:30 p.m.  *Panel Discussion—Professional Education and Development to Drive Integration—How Do We Teach and Beyond?*
  Jennifer A. LeBlanc, MS, RN, CDCES
  Nuha Ali El Sayed, MD, MMSc
  Samar Hafida, MD

**Mini-Symposium**

**Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise**

**Carbohydrate Intake and Its Impact on Athletics and Health—A Debate**
Chair: Michael Riddell, PhD
11:30 a.m.-12:00 p.m.  *High/Normal Carbohydrate Intake Optimizes Performance and Glycemia*
  James P. Morton, PhD
12:00 p.m.-12:30 p.m.  *Low Carbohydrate Intake Optimizes Performance and Glycemia*
  Dominic D’Agostino, PhD

**Mini-Symposium**

**Theme Area: Clinical Diabetes/Therapeutics**

**Diabetes Prevention in Vulnerable Populations**
Chair: Matthew J. O’Brien, MD, MS
11:30 a.m.-11:50 a.m.  *Effects of Medicaid Coverage on the Diabetes Prevention Program in California*
  O. Kenrik Duru, MD, MSHS
11:50 a.m.-12:10 p.m.  *U.S. State Efforts to Sustain the National Diabetes Prevention Program*
  Gia E. Rutledge, MPH
12:10 p.m.-12:30 p.m.  *Diabetes in American Indians and Alaska Natives*
  Yvette Roubideaux, MD, MPH

**Mini-Symposium**

**Theme Area: Clinical Diabetes/Therapeutics**

**COVID-19, Diabetes, and Pregnancy—The Perfect Storm?**
Chair: Rebecca A. Simmons, MD
11:30 a.m.-12:00 p.m.  *Diagnosis and Management of Diabetes in Pregnancy during the COVID-19 Pandemic*
  David McIntyre, MD, FRACP
12:00 p.m.-12:30 p.m.  *Telemedicine for Management of Diabetes in Pregnancy during COVID-19 and Beyond*
  Noelia Zork, MD
FRIDAY, JUNE 25, 2021

11:30 a.m.-12:30 p.m.
(continued)

Mini-Symposium
Theme Area: Epidemiology/Genetics
Resources for Interpreting Genetic Variants Associated with Diabetes and Obesity
Chair: Jennifer Posey, MD, PhD
11:30 a.m.-11:50 a.m. Common Metabolic Disease Knowledge Portal
   Noël Burtt, PhD
11:50 a.m.-12:10 p.m. The TIGER Resource for Development and Therapy of Type 2 Diabetes
   Miriam Cnop, MD, PhD
12:10 p.m.-12:30 p.m. ClinGen—Clinical Relevance of Genes and Variants
   Erin M. Ramos, PhD, MPH

Mini-Symposium
Theme Area: Insulin Action/Molecular Metabolism
Dietary Modulation of Nutrient Metabolism in Cancer
Chair: Curtis C. Hughey, PhD
11:30 a.m.-12:00 p.m. Obesity and Cancer—A Metabolic Connection?
   Gen-sheng Feng, PhD
12:00 p.m.-12:30 p.m. Molecular Mechanisms Driving Dietary Cancer Therapy
   Christian Metallo, PhD

Mini-Symposium
Theme Area: Integrated Physiology/Obesity
The Bile Acid Receptor FXR and the Microbiome
Chair: Jessica Ferrell, PhD
11:30 a.m.-11:50 a.m. Probiotics and Bile Acids
   Yu-Jui Yvonne Wan, PhD
11:50 a.m.-12:10 p.m. Gut Microbiota and FXR
   Antonio Moschetta, MD, PhD
12:10 p.m.-12:30 p.m. Pharmacologic Utilization of Bile Acid-FXR Pathway to Treat Nonalcoholic Steatohepatitis
   Grace L. Guo, MBBS, PhD

Mini-Symposium
Theme Area: Islet Biology/Insulin Secretion
Debate—What’s the Hubbub about Beta-Cell Hubs?
Chair: Colin Nichols, PhD
11:30 a.m.-12:00 p.m. Hubs Are Real
   Guy A. Rutter, PhD
12:00 p.m.-12:30 p.m. Hubs Are Not Real
   Patrik Rorsman, BM, PhD, FRS, FMedSci
FRIDAY, JUNE 25, 2021

12:45 p.m.-1:45 p.m.

Mini-Symposium
Theme Area: Acute and Chronic Complications
We All Know What Causes Hypoglycemia, Don’t We?
Chair: Stephanie A. Amiel, BSc, MD, FRCP
12:45 p.m.-1:15 p.m.  Heterogeneity of Responses to Hypoglycemia—Lessons from Animal Models
                     Candace M. Reno, PhD
1:15 p.m.-1:45 p.m.  Disparity of Risk for Impaired Awareness of Hypoglycemia and Severe Hypoglycemia—Exploring the Human Situation
                     Amir Moheet, MBBS

Mini-Symposium
Theme Area: Acute and Chronic Complications
COVID-19 and Lipids—What’s the Connection?
Chair: Carl Grunfeld, MD, PhD
12:45 p.m.-1:15 p.m.  Plasma Lipid Changes in Response to COVID-19 Infection and Implications for Outcomes
                      Kenneth Feingold, MD
1:15 p.m.-1:45 p.m.  Potential Role of Lipids and Lipid Therapies (Statins, Fibrates, HDL-Raising Drugs) in Modulating COVID-19 Infections
                      Alan Remaley, MD

Mini-Symposium
Theme Area: Acute and Chronic Complications
Identifying Patients at Risk—Kidney Disease Surveillance in Diabetes
Chair: Zubin Juzer Modi, MD
12:45 p.m.-1:15 p.m.  Barriers to Kidney Disease Awareness and Testing in People with Diabetes
                      Chi Chu, MD
1:15 p.m.-1:45 p.m.  Geospatial Approach to Chronic Kidney Disease Surveillance in Diabetes—Identifying Disparities and Hotspots
                      Xiaosong Zhang, MS

Mini-Symposium
Theme Area: Acute and Chronic Complications
Diabetes Retinopathy Detection and Treatment in Resource-Constrained Areas
Chair: Kristen Nwanyanwu, MD, MBA, MHS
12:45 p.m.-1:15 p.m.  Implementing a Diabetes Retinopathy Referral Network and Treatment in Peru
                      Omar Salamanca, MD
1:15 p.m.-1:45 p.m.  Implementing a Diabetes Retinopathy Research Network and Treatment in Latin America
                      J. Fernando Arevalo, MD, PhD, FACS
FRIDAY, JUNE 25, 2021

Mini-Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Diabetes “Diets” since the Discovery of Insulin—Looking Back, Then to the Future
Chair: Alison Evert, MS, RDN, CDCES
12:45 p.m.-1:15 p.m. 1921 to 1970s—Starvation Diets to the Exchange System
Melinda D. Maryniuk, MEd, RDN, CDCES
1:15 p.m.-1:45 p.m. 1980s to 2021—Prescribed Macronutrient Percentages to Person-Centered Approaches and Beyond
Hope Warshaw, MMSc, RD, CDCES, BC-ADM

Mini-Symposium
Theme Area: Clinical Diabetes/Therapeutics
Are We There Yet? Initiating SGLT2 Inhibitors and/or GLP-1RAs in the Inpatient Cardiovascular Setting
Chair: Vanita R. Aroda, MD
12:45 p.m.-1:15 p.m. Time to Consider Initiating SGLT2 Inhibitors and/or GLP-1RAs in the Inpatient Cardiovascular Care Setting—And Here’s How
Sandeep Das, MD, MPH
1:15 p.m.-1:45 p.m. Caution before Universally Recommending Initiation of SGLT2 Inhibitors and/or GLP-1RAs in the Inpatient Cardiovascular Care Setting
Jennifer B. Green, MD

Mini-Symposium
Theme Area: Clinical Diabetes/Therapeutics
COVID-19 and Beyond—Viruses in Pediatric Diabetes
Chair: Linda DiMeglio, MD, MPH
12:45 p.m.-1:05 p.m. Epidemiology of COVID-19 and Pediatric Diabetes—New-Onset/Diabetic Ketoacidosis
Mary Pat Gallagher, MD
1:05 p.m.-1:25 p.m. What’s New in Type 1 Diabetes Epidemiology? A View from the Virology World
Kendra Vehik, PhD, MPH
1:25 p.m.-1:45 p.m. Behavioral Interventions for Pediatric Diabetes during COVID-19
Carrie Tully, PhD

Mini-Symposium
Theme Area: Epidemiology/Genetics
Diabetes and the Brain across the Lifespan—Neurocognitive Deficits and Decline
Chair: Elizabeth R. Seaquist, MD
12:45 p.m.-1:15 p.m. Prevention of Cognitive Impairment in Diabetes
Anna Marseglia, PhD
1:15 p.m.-1:45 p.m. Diabetes and the Developing Brain
Fergus Cameron, FRACP, MD
FRIDAY, JUNE 25, 2021

12:45 p.m. -1:45 p.m. (continued)

**Mini-Symposium**
*Theme Area: Immunology/Transplantation*

**Debate—Should Immune Intervention Trials Occur during the COVID-19 Pandemic?**
Chair: Mark A. Atkinson, PhD
12:45 p.m.-1:15 p.m.  *For—Type 1 Diabetes Immune Intervention Trials during COVID-19*
Carla Greenbaum, MD
1:15 p.m.-1:45 p.m.  *Against—Type 1 Diabetes Immune Intervention Trials during COVID-19*
Adriana Weinberg, MD

**Mini-Symposium**
*Theme Area: Integrated Physiology/Obesity*

**Debate—Intergenerational Transmission of Obesity—Focus on the Womb or the Home?**
Chair: Amy E. Rothberg, MD, PhD, DABOM
12:45 p.m.-12:55 p.m.  *Introduction*
Amy E. Rothberg, MD, PhD, DABOM
12:55 p.m.-1:20 p.m.  *Womb*
Peter Gluckman, ONZ, KNZM, FRSNZ, FMedSci, FRS
1:20 p.m.-1:45 p.m.  *Home*
Julie Lumeng, MD

**Mini-Symposium**
*Theme Area: Integrated Physiology/Obesity*

**Influence of Social Inequalities and Social Stress on Metabolic Health (Includes Live Video Question and Answer Period)**
Chair: Alessandro Bartolomucci, PhD
12:45 p.m.-1:05 p.m.  *Social Determinants of Metabolic Health—Evidence from Human Populations*
Mika Kivimäki, PhD
1:05 p.m.-1:25 p.m.  *Social Determinants of Metabolic Health—Evidence from Animal Models*
Carol Shively, PhD
1:25 p.m.-1:45 p.m.  *Live Video Question and Answer Period*

2:00 p.m.-3:20 p.m.

**Symposium**
*Theme Area: Immunology/Transplantation*

**Innovations in Beta-Cell Replacement Therapy**
Chair: Jon S. Odorico, MD, FACS
2:00 p.m.-2:40 p.m.  *Advances in Beta-Cell Replacement from the JDRF Consortium*
Esther Latres, PhD
2:40 p.m.-3:20 p.m.  *Progress in Stem Cell-Derived Islets*
Quinn P. Peterson, PhD
Symposium
Theme Area: Clinical Diabetes/Therapeutics
COVID-19 and Diabetes—An Update (Includes Live Video Question and Answer Period)
Chair: Rodolfo J. Galindo, MD
2:00 p.m.-2:25 p.m.  Role of Hyperglycemia on COVID-19 Outcomes
                      Alberto Coppelli, MD
2:25 p.m.-2:50 p.m.  Managing and Preventing Diabetic Ketoacidosis during the COVID-19 Pandemic
                      Bruce W. Bode, MD
2:50 p.m.-3:15 p.m.  Remote Monitoring of COVID-19 Patients via Continuous Glucose Monitoring
                      Francisco J. Pasquel, MD, MPH
3:15 p.m.-3:45 p.m.  Live Video Question and Answer Period

Symposium
Theme Area: Acute and Chronic Complications
Evidence-Based Guidelines for Diabetes and Chronic Kidney Disease
Chair: Sophia Zoungas, MBBS (Hons), PhD, FRACP
2:00 p.m.-2:30 p.m.  Living with Diabetes and Chronic Kidney Disease
                      Tami Sadusky, BS, MBA
2:30 p.m.-3:00 p.m.  New Kidney Disease Improving Global Outcomes (KDIGO) Guideline for Management of
                      Diabetes in Chronic Kidney Disease
                      Luiza Caramori, MD, MSc, PhD
3:00 p.m.-3:30 p.m.  How Do the ADA, EASD, and KDIGO Guidelines for Diabetes and Chronic Kidney Disease
                      Compare?
                      John B. Buse, MD, PhD
3:30 p.m.-4:00 p.m.  How Will New Clinical Trials Affect Evidence-Based Care for People with Diabetes and Kidney
                      Disease?
                      Peter Rossing, MD, DMSc

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
The Expanded Scope of the Diabetes Care and Education Specialist
Chair: Nancy D’Hondt, RPh, CDCES, FADCES
2:00 p.m.-2:30 p.m.  Outcomes of Digital Health—Lessons Learned
                      Nicole Bereolos, PhD, MPH, MSCP, CDCES
2:30 p.m.-3:00 p.m.  Preparing Diabetes Care and Education Specialists in 2021 and Beyond
                      Jane K. Dickinson, RN, PhD, CDCES
3:00 p.m.-3:30 p.m.  Pharmacy—Increase Access to Diabetes Self-Management and Support Services on the
                      Front Lines
                      Staci-Marie Norman, PharmD, CDE
3:30 p.m.-4:00 p.m.  Integrating Mental Health Strategies into Practice
                      Susan Guzman, PhD
Symposium
Theme Area: Clinical Diabetes/Therapeutics
Screening for Gestational Diabetes—Is This Your Final Answer?
Chair: Patrick Catalano, MD
2:00 p.m.-2:30 p.m. Gestational Diabetes Mellitus Screening Strategies—Answers from Randomized Controlled Trials
Christina M. Scifres, MD
2:30 p.m.-3:00 p.m. Gestational Diabetes Mellitus Screening Strategies—Can We Get Pragmatic Answers?
Teresa Hillier, MD, MS
3:00 p.m.-3:30 p.m. Preanalytical Blood Samples Handling during Gestational Diabetes Testing—How Much Does It Change Results?
Christopher J. Nolan, PhD, FRACP
3:30 p.m.-4:00 p.m. Should We Have Different Gestational Diabetes Mellitus Screening Strategies Depending on Prepregnancy Body Mass Index and Other Risk Factors?
Dorte Møller Jensen, MD, PhD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Mental Health Disorders in Patients with Diabetes—A Most Challenging Mix
Chair: David A. Baidal, MD
2:00 p.m.-2:30 p.m. Depression in Patients with Diabetes—Prevalence, Impact on Glycemic Control, and Strategies for Comanagement
Jeffrey S. Gonzalez, PhD
2:30 p.m.-3:00 p.m. Challenges in Managing Diabetes in Patients with Psychotic Disorders
John W. Newcomer, MD
3:00 p.m.-3:30 p.m. Practical Approaches for Eating Disorders in Diabetes
Ann E. Goebel-Fabbri, PhD
3:30 p.m.-4:00 p.m. Anxiety Disorders and Diabetes—What Is the Relationship?
Tina Drossos, PhD

Symposium
Theme Area: Epidemiology/Genetics
Health Care as a Social Justice Issue in the Diagnosis and Management of Diabetes
Chair: Tiffany L. Gary-Webb, PhD, MHS
2:00 p.m.-2:30 p.m. Ten Years of the Affordable Care Act—Implications for Diabetes Diagnosis and Management
J. Frank Wharam, MD, MPH
2:30 p.m.-3:00 p.m. Diabetes, Social Vulnerability, and Health Outcomes
Shivani Agarwal, MD, MPH
3:00 p.m.-3:30 p.m. Disentangling Social and Biological Risk Factors from a Social Epidemiology Perspective
Shakira F. Suglia, ScD, MS
3:30 p.m.-4:00 p.m. Innovation in Health Care Financing to Mitigate Disparities in Diabetes
Monica E. Peek, MD, MPH, MSc
FRIDAY, JUNE 25, 2021

2:00 p.m.-4:00 p.m.
(continued)

Symposium
Theme Area: Insulin Action/Molecular Metabolism
Fructose Metabolism and Disease—Intestine, Microbiota, and Liver
Chair: Samir Softic, MD
2:00 p.m.-2:30 p.m. Microbial Fructose Fermentation and Metabolic Disease
Kathryn E. Wellen, PhD
2:30 p.m.-3:00 p.m. Just Passing Through—Pre- and Postportal Fructose Metabolism
Cholsoon Jang, PhD
3:00 p.m.-3:30 p.m. Fructose—Fueling the Fire of Tissue Injury in Nonalcoholic Fatty Liver Disease
Michael Karin, PhD
3:30 p.m.-4:00 p.m. Poised for Trouble—The Challenge Posed by Excess Fructose
Mark A. Herman, MD

Symposium
Theme Area: Integrated Physiology/Obesity
Autonomic Nervous System (ANS) Control of Peripheral Metabolism and Metabolic Diseases
Chair: Alessandro Bartolomucci, PhD
2:00 p.m.-2:30 p.m. Sex Differences in the ANS Control of Energy Expenditure
Stephanie Correa, PhD
2:30 p.m.-3:00 p.m. Sympathetic Neuroimmunity in Obesity
Ana Domingos, PhD
3:00 p.m.-3:30 p.m. Striatal Dopamine Controls Hepatic Glucose Production via the ANS
Susanne E. La Fleur, PhD
3:30 p.m.-4:00 p.m. ANS Control of Adipose Tissue Function
Heike Muenzberg-Gruening, PhD

Symposium
Theme Area: Islet Biology/Insulin Secretion
Functional Consequences of Islet Non-beta Cells
Chair: David A. Jacobson, PhD
2:00 p.m.-2:30 p.m. Arginine Vasopressin (AVP) Regulation of Glucagon Secretion
Linford J.B. Briant, PhD
2:30 p.m.-3:00 p.m. Metabolic Specialization of Alpha Cells and How Glucose Regulates Glucagon Secretion
Jakob G. Knudsen, PhD
3:00 p.m.-3:30 p.m. Epsilon Cells
Jenny Tong, MD, MPH
3:30 p.m.-4:00 p.m. Delta-Cell Regulation of Islet Hormone Secretion and Beta-Cell Replication
Vincent Poitout, DVM, PhD
FRIDAY, JUNE 25, 2021

4:15 p.m.-5:45 p.m.

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
The Molecular Transducers behind the Benefits of Physical Activity
Chair: Laurie J. Goodyear, PhD
4:15 p.m.-4:45 p.m. MoTrPAC—Overview of Research on Molecular Transducers of Physical Activity
Wendy M. Kohrt, PhD
4:45 p.m.-5:15 p.m. Preclinical Animal Studies—Molecular Responses to Acute Exercise and Training
Karyn A. Esser, PhD
5:15 p.m.-5:45 p.m. The “Omics” Approach—Responses to Acute Exercise and Training
K. Sreekumaran Nair, MD, PhD

4:15 p.m.-6:15 p.m.

Symposium
Theme Area: Acute and Chronic Complications
A Primer on Diabetes Foot Management for the Primary Care Provider
Chair: Latricia L. Allen, DPM, MPH, FACPM
4:15 p.m.-4:55 p.m. Why Safety, Quality, and Value Matter in the Management of the Diabetic Foot
Priti Lakhani, DPM
4:55 p.m.-5:35 p.m. The Three-Minute Diabetes Foot Exam for the Primary Care Provider
John D. Miller, DPM, DABFAS
5:35 p.m.-6:15 p.m. How to Make the Multispecialty Team Approach Work for Your Patients with Diabetes
Rachel H. Albright, DPM, MPH

Symposium
Theme Area: Clinical Diabetes/Therapeutics
SGLT2is and GLP-1RAs—Are They Worth It? (Includes Live Video Question and Answer Period)
Chair: Neda Laiteerapong, MD, MS, FACP
4:15 p.m.-4:45 p.m. SGLT2is and GLP-1RAs—What Are the Benefits?
Jason Alexander, MD
4:45 p.m.-5:15 p.m. SGLT2is and GLP-1RAs—What Are the Costs and Cost-Effectiveness?
Hui Shao, MD, PhD
5:15 p.m.-5:45 p.m. SGLT2is and GLP-1RAs—Equity and Value
Aaron N. Winn, PhD
5:45 p.m.-6:15 p.m. Live Video Question and Answer Period

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Implementing Type 1 Diabetes Immune Intervention in Clinical Practice
Chair: Jay S. Skyler, MD, MACP
4:15 p.m.-4:45 p.m. Determining Genetic Risk
Ezio Bonifacio, PhD
4:45 p.m.-5:15 p.m. Antibody Screening for Type 1 Diabetes
Andrea Steck, MD
5:15 p.m.-5:45 p.m. Assessing Glycemia
Darrell M. Wilson, MD
5:45 p.m.-6:15 p.m. Choosing an Intervention
Stephen E. Gitelman, MD
**Symposium**
*Theme Area: Immunology/Transplantation*

**Age, Sex, and Ethnicity—Impact on Type 1 Diabetes Development**
Chair: Hubert M. Tse, PhD

4:15 p.m.-4:45 p.m.  
*Type 1 Diabetes Incidence by Age and Ethnicity*  
Jasmin Divers, PhD

4:45 p.m.-5:15 p.m.  
*Type 1 Diabetes Genetic Risk Score by Ancestry*  
Maria J. Redondo, MD, PhD, MPH

5:15 p.m.-5:45 p.m.  
*Type 1 Diabetes Immunopathology across Ancestries*  
John Kaddis, PhD

5:45 p.m.-6:15 p.m.  
*Panel Discussion—The Influence of Age, Sex, and Ethnicity on Type 1 Diabetes*  
Jasmin Divers, PhD  
Maria J. Redondo, MD, PhD, MPH  
John Kaddis, PhD

**Symposium**
*Theme Area: Integrated Physiology/Obesity*

**When Time Matters—The Influence of Time-Restricted Feeding**
Chair: Lisa S. Chow, MD, MS

4:15 p.m.-4:39 p.m.  
*Timing of Food Intake and Fasting—Circadian Rhythms and Biological Mechanisms That Mediate Health Benefits*  
Dorothy D. Sears, PhD

4:39 p.m.-5:03 p.m.  
*Metabolic Response to Time-Restricted Feeding*  
Amandine Chaix, PhD

5:03 p.m.-5:27 p.m.  
*Impact of Intermittent Fasting on Health, Aging, and Disease*  
Leonie Heilbronn, PhD

5:27 p.m.-5:51 p.m.  
*Drug Metabolism and Timing*  
Manjunath Pai, PharmD

5:51 p.m.-6:15 p.m.  
*How and Why Would Time-Restricted Feeding Lead to Weight Loss in Humans? Results of Clinical Trials and Practical Considerations*  
Courtney M. Peterson, PhD, MSc, MA, MS
FRIDAY, JUNE 25, 2021

4:15 p.m.-6:15 p.m.
(continued)

Oral Presentations
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Challenges and Successes with Health Inequities and Health Disparities in Diabetes
Chair: Stephanie L. Fitzpatrick, PhD

4:15 p.m.-4:30 p.m.
1-OR A Social Media-Based Intervention Improves Glycemic Control in a Low-Income Older Immigrant Population
LU HU, NADIA ISLAM, ANNA Y. KHARMATS, KOSUKE TAMURA, SHUWEN YANG, XINYI XU, BAOLUN FAN, MARY ANN SEVICK, Baltimore, MD, Bethesda, MD, New York, NY

4:30 p.m.-4:45 p.m.
2-OR Reducing Racial/Ethnic Inequities in Youth with T1D: Novel Interventions in Children’s Healthcare (NICH)
DAVID V. WAGNER, CELESTE JENISCH, WINNIEBELLE C. CADIZ, JUSTINE LELY, ANNETTE CANTU, SOPHIE BALTHAZAAR, MICHAEL A. HARRIS, Portland, OR

4:45 p.m.-5:00 p.m.
3-OR Racial/Ethnic Disparities in Diabetes Technology Use in Young Adults (YA) with Type 1 Diabetes (T1D): Multidisciplinary Stakeholder Perspectives and Solutions
SHIVANI AGARWAL, GLADYS CRESPO-RAMOS, STEPHANIE LEUNG, MOLLY FINNAN, TINA PARK, JEFFREY S. GONZALES, JUDITH A. LONG, Bronx, NY, New York, NY, Philadelphia, PA

5:00 p.m.-5:15 p.m.
4-OR Racial/Ethnic Disparities in Diabetes Self-Care in Young Adults (YA) with Type 1 Diabetes (T1D)
RABAIL SADIQ, MELISSA FAZZARI, SHADI NAHVI, CHINAZO CUNNINGHAM, SHIVANI AGARWAL, Bronx, NY

5:15 p.m.-5:30 p.m.
5-OR Health Disparities in People with and without Diabetes during the COVID-19 Pandemic
BARBARA A. MYERS, RACHEL KLINKENSMITH, MARY DE GROOT, Indianapolis, IN

5:30 p.m.-5:45 p.m.
6-OR Psychological Comorbidities and Racial/Ethnic Disparities in Preventable Hospitalizations among Medicaid-Enrolled Adults with Type 2 Diabetes
AARON A. LEE, YIQIAO ZHANG, SUJITH RAMACHANDRAN, Oxford, MS

5:45 p.m.-6:00 p.m.
7-OR Racial/Ethnic Differences in Barriers to Type 1 Diabetes (T1D) Self-Management between Non-Hispanic Black and Hispanic Young Adults (YA)
MOLLY FINNAN, GLADYS CRESPO-RAMOS, SHIVANI AGARWAL, Bronx, NY

6:00 p.m.-6:15 p.m.
8-OR Depression and Diabetes Distress in African American and Latino Parents of Children with Type 1 Diabetes (T1D)
SAMANTHA A. CARREÓN, JASMINE N. JONES, ARIADNE REYES GARCIA, KEYISHI S. PETERS, KRYSTAL K. CHRISTOPHER, MARISA E. HILLIARD, ASHLEY BUTLER, Houston, TX
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Prevention of Diabetes and Diabetes Complications (With State-of-the-Art Lecture)
Chair: David A. Baidal, MD

4:15 p.m.-4:45 p.m.
State-of-the-Art Lecture

Diabetes Prevention—Is It Realistic?
Hertzel C. Gerstein, MD, MSc, FRCPC

4:45 p.m.-5:00 p.m.
9-OR Personalized Diets by Prediction of Glycemic Responses Improve Glycemic Control in Subjects with Newly Diagnosed T2D
MICHAL S. REIN, ORLY BEN-YACOV, ANASTASIA GODNEVA, SMADAR SHILO, SHIRA ZELBER-SAGI, ERAN ELINAV, ERAN SEGAL, Haifa, Israel, Rehovot, Israel

5:00 p.m.-5:15 p.m.
10-OR In Women with Prior Gestational Diabetes Mellitus, the Glucagon-Like Peptide-1 Receptor Agonist Liraglutide Improves Glucose Tolerance Irrespective of Body Weight Loss after Five Years of Treatment, but Effects Are Lost after Wash-Out
EMILIE S. ANDERSEN, SIGNE FOGHSGAARD, LOUISE VEDTOFTE, MARIE H. PEDERSEN, JULIE FORMAN, ELISABETH R. MATHIESEN, JENS SVARE, JENS J. HOLST, TINE D. CLAUSEN, PETER DAMM, FILIP K. KNOP, TINA VILSBØLL, Copenhagen, Denmark, Virum, Denmark, Hellerup, Denmark

5:15 p.m.-5:30 p.m.
11-OR Assessments of Prediagnostic Metabolic Measures as Surrogate Endpoints for Type 1 Diabetes (T1D) Prevention Trials
EMILY K. SIMS, DAVID D. CUTHBERTSON, LAURA M. JACOBSEN, KEVAN C. HEROLD, JAY SOSENKO, Indianapolis, IN, Tampa, FL, Gainesville, FL, New Haven, CT, Miami, FL

5:30 p.m.-5:45 p.m.
12-OR Metabolic Effects of Two Oral Insulin Dosing Regimens in Individuals at High Risk for Type 1 Diabetes (T1D)
MARIA J. REDONDO, JAY SOSENKO, EMILY K. SIMS, DAVID D. CUTHBERTSON, EDDIE A. JAMES, S. ALICE LONG, WILLIAM KWOK, LIPING YU, AARON W. MICHELS, ÅKE LERNMARK, PETER GOTTLIEB, Houston, TX, Miami, FL, Indianapolis, IN, Tampa, FL, Seattle, WA, Aurora, CO, Lund, Sweden

5:45 p.m.-6:00 p.m.
13-OR Effects of Randomized Statin Therapy vs. Placebo on Plasma Branched-Chain Amino Acids (BCAAs) and Type 2 Diabetes (T2D) Risk: Secondary Analysis of the JUPITER Trial
DEIRDRE K. TOBIAS, PAUL RIDKER, ROBERT GLYNN, SAMIA MORA, Boston, MA

6:00 p.m.-6:15 p.m.
14-OR Risk of Acute Kidney Injury in Real-World Use of Dapagliflozin
CATHERINE JOHANNES, J. BRADLEY LAYTON, DANIEL C. BEACHLER, RYAN M. ZIEMIECKI, LING LI, HEATHER E. DANYSH, JADE DINH, PHILLIP R. HUNT, CECILIA KARLSSON, HUNGTA CHEN, ALICIA GILSENAN, Research Triangle Park, NC, Wilmington, DE, Waltham, MA, Arlington, VA, Gaithersburg, MD, Mölndal, Sweden
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Pediatric Type 2 Diabetes/Obesity/Maturity-Onset Diabetes of the Young
Chair: Jeanie B. Tryggestad, MD

4:15 p.m.-4:30 p.m.

15-OR The COVID-19 Pandemic and New-Onset Pediatric Type 2 Diabetes
BRYNN E. MARKS, ANEKA KHILNANI, ABBY MEYERS, DORIS E. ESTRADA, JENNIFER BOUGHTON, JIAXIANG GAI, RANDI STREISAND, MAUREEN MONAGHAN, Washington, DC, Washington, DE

4:30 p.m.-4:45 p.m.

16-OR Endocrine Manifestations of Pediatric HNFB-MODY (MODY 5)
MEGHAN E. CRAVEN, VANEETA BAMBA, ANDREW C. CALABRIA, SARA E. PINNEY, Philadelphia, PA

4:45 p.m.-5:00 p.m.

17-OR Mathematical Model Disposition Index (mDI) Predicts Dysglycemia in Obese Youth
JOON HA, JOON YOUNG KIM, ARTHUR SHERMAN, SILVA A. ARSLANIAN, Bethesda, MD, Syracuse, NY, Pittsburgh, PA

5:00 p.m.-5:15 p.m.

18-OR Longitudinal Changes in Vascular Stiffness and Heart Rate Variability (HRV) in Young Adults with Type 2 Diabetes (T2D): The TODAY Study
AMY S. SHAH, LAURE EL GHORMLI, SAMUEL GIDDING, KARA S. HUGHAN, LORRAINE E. KATZ, DORIT KOREN, JEANIE B. TRYGGESTAD, FIDA BACHA, BARBARA H. BRAFFETT, SILVA A. ARSLANIAN, ELAINE M. URBINA, Cincinnati, OH, Bridgewater Corners, VT, Pittsburgh, PA, Philadelphia, PA, Boston, MA, Oklahoma City, OK, Houston, TX, Rockville, MD

5:15 p.m.-5:30 p.m.

19-OR Maternal Diabetes Is Associated with Adverse Diabetes Characteristics and Accelerated Onset of Complications in Youth with Type 2 Diabetes (T2D) in TODAY
ELVIRA M. ISGANAITIS, RACHANA SHAH, STEVEN CHERNAUSEK, RYAN M. FARRELL, MITCHELL GEFFNER, JOYCE Keady, MEGAN M. KELSEY, BEREKET TESFALDET, JEANIE B. TRYGGESTAD, MICHELLE A. VAN NAME, Boston, MA, Canada, Philadelphia, PA, Cleveland, OH, Los Angeles, CA, Aurora, CO, Rockville, MD, Oklahoma City, OK, New Haven, CT

5:30 p.m.-5:45 p.m.

20-OR A New Model to Assess Lactate Synthetic Rate during an Oral Glucose Tolerance Test
JACOPO BONET, BRITTANY GALUPPO, NICOLA SANTORO, CHIARA DALLA MAN, New Haven, CT, Padova, Italy

5:45 p.m.-6:00 p.m.

21-OR Real-World Treatment Escalation from Metformin Monotherapy in Youth-Onset Type 2 Diabetes Mellitus: A Retrospective Cohort Study
MARY ELLEN VAJRAVELU, TALIA A. HITT, SANDRA AMARAL, LORRAINE E. KATZ, JOYCE M. LEE, ANDREA KELLY, Philadelphia, PA, Ann Arbor, MI

6:00 p.m.-6:15 p.m.

22-OR Exploring the Association between Physical Activity Levels and Sedentary Behaviors with Risk of T2DM from Childhood to Adolescence: A Causal Inference Analysis
SOREN HARNOIS-LEBLANC, ANDRAEAA VAN HULST, TRACIE A. BARNETT, MARIE-EVE MATHIEU, GILLES PARADIS, MARIE-PIERRE SYLVESTRE, MÉLANIE HENDERSON, QUALITY RESEARCH GROUP, Montreal, QC, Canada
Oral Presentations

Theme Area: Epidemiology/Genetics

The Genetic Architecture of Diabetes and Dissecting Its Phenotypes (With State-of-the-Art Lecture and ADA Presidents' Select Abstract Presentation)

Chair: Jennifer Wessel, PhD, MPH

4:15 p.m.-4:45 p.m.

State-of-the-Art Lecture

The Evolving Landscape of the Genetics of Diabetes, Its Complications, and Treatment

Alessandro Doria, MD, PhD, MPH

5:00 p.m.-5:15 p.m.

23-OR

ADA Presidents' Select Abstract Presentation: Genetic Architecture and Novel Genes Implicated in Youth-Onset Type 2 Diabetes


5:15 p.m.-5:30 p.m.

24-OR

Time-to-Event GWAS for Incident Cardiovascular Disease in Type 2 Diabetes Patients

SOO HEON KWAK, PEITAO WU, JAMES B. MEIGS, ON BEHALF OF THE CHARGE DIABETES WORKING GROUP, Seoul, Korea, Republic of, Boston, MA

5:30 p.m.-5:45 p.m.

25-OR

Role for TBC1D30 in Secretion of Mature Insulin

VICTORIA A. PARSONS, SWAROOPARANI VADLAMUDI, ANNE H. MOXLEY, KAREN L. MOHLKE, Chapel Hill, NC

5:45 p.m.-6:00 p.m.

26-OR

Meta-analyses of Genome-Wide Association Studies for Proinsulin Provide Insight into Glycemic Trait Dysregulation

K. ALAINE BROADAWAY, XIANYONOG YIN, ALICE WILLIAMSON, EMMA WILSON, MAGIC INVESTIGATORS, Chapel Hill, NC, Ann Arbor, MI, Cambridge, United Kingdom

6:00 p.m.-6:15 p.m.

27-OR

Genome-Wide Association Analysis Identifies Ancestry-Specific Genetic Variation Associated with Medication Response in the Study to Understand the Acute Response to Metformin and Glipizide in Humans (SUGAR-MGH)

JOSEPHINE H. LI, VARINDERPAL KAUR, LAURA BRENNER, JOSEP M. MERCADER, JOSE C. FLOREZ, Boston, MA, Cambridge, MA

6:15 p.m.-6:30 p.m.

28-OR

Identification of Ancestry-Specific Alleles in a Genome-Wide Association Study (GWAS) for Metformin (MET) Response in the Diabetes Prevention Program (DPP)

FRIDAY, JUNE 25, 2021

4:15 p.m.-6:15 p.m.
(continued)

Oral Presentations
Theme Area: Insulin Action/Molecular Metabolism
Adipocyte Biology I
Chair: Kristin I. Stanford, PhD

4:15 p.m.-4:30 p.m.
29-OR  Regulatory Loop of IR Signaling for Adipocyte Mitochondrial Homeostasis
MASAJI SAKAGUCHI, SHOTA OKAGAWA, YUMA OKUBO, KAZUKI FUKUDA, MOTOYUKI IGATA, JUNJI KAWASHIMA, TATSUYA KONDO, EIICHI ARAKI, Kumamoto, Japan

4:30 p.m.-4:45 p.m.
30-OR  Identification of LRG1 as an Insulin Sensitizing Adipokine
CHAN HEE J. CHOI, WILL BARR, MASCHA KOENEN, ZERAN LIN, SARAH SZWED, PAUL COHEN, New York, NY

4:45 p.m.-5:00 p.m.
31-OR  ACSL1 in Smooth Muscle Cells Regulates High-Fat Diet-Induced Obesity and Thermogenesis in Mice
GUANG REN, MARTIN YOUNG, JEONGA KIM, Birmingham, AL

5:00 p.m.-5:15 p.m.
32-OR  Receptor-Mediated Gq Signaling in Adipocytes as a Critical Modulator of Systemic Glucose and Lipid Homeostasis
TAKEFUMI KIMURA, SAI PRASAD PYDI, LEI WANG, YINGHONG CUI, OKSANA GAVRILOVA, JÜRGEN WESS, Bethesda, MD, North Bethesda, MD

33-OR  WITHDRAWN

5:15 p.m.-5:30 p.m.
34-OR  Role of Arid5b in Thermogenesis and Adipose Tissue Browning
MENGISTU LEMECHA SHUKARE, RUI HUANG, ALI EHSANI, GUOXIANG ZHANG, JAYA PRAKASH CHALISE, ROBERT H. WHITSON, KEIICHI ITAKURA, Duarte, CA

5:30 p.m.-5:45 p.m.
35-OR  Epigenetic Regulation of White Adipose Tissue Browning by HMGN Proteins
RAVIKANTH NANDURI, TAKASHI FURUSAWA, ALEXEI LOBANOVB, OKSANA GAVRILOVA, MICHAEL BUSTIN, Bethesda, MD, North Bethesda, MD
Oral Presentations
Theme Area: Islet Biology/Insulin Secretion
An (Un)happy Family of Beta-Cell Organelles in Diabetes
Chair: Dan S. Luciani, PhD

36-OR WITHDRAWN

4:15 p.m.-4:30 p.m.
37-OR Mitofusins 1 and 2 Collaborate to Fuel Pancreatic Beta-Cell Insulin Release via Regulation of Both Mitochondrial Structure and DNA Content
VAIBHAV SIDARALA, JIE ZHU, GEMMA PEARSON, SCOTT SOLEIMANPOUR, Ann Arbor, MI

4:30 p.m.-4:45 p.m.
38-OR Deletion of the Mitofusins 1 and 2 (Mfn1 and Mfn2) from the Pancreatic Beta Cell Disrupts Mitochondrial Structure and Impairs Glucose-, but Not Incretin-, Stimulated Insulin Secretion
ELENI GEORGIADOU, CHARANYA MURALIDHARAN, PAULINE L. CHABOSSEAU, ALEJANDRA TOMAS, THEODOROS STYLIANIDES, CRISTINA LEGIDO-QUIGLEY, NOUR ALSABEEH, CÉLINE CRUCIANI-GUGLIELMACCI, CHRISTOPHE MAGNAN, MARK IBBERSON, ISABELLE LECLERC, AMELIA K. LINNEMANN, YUSUF ALI, TRISTAN RODRIGUEZ, GUY A. RUTTER, Indianapolis, IN, London, United Kingdom, Loughborough, United Kingdom, Gentofte, Denmark, Los Angeles, CA, Paris, France, Lausanne, Switzerland, Singapore, Singapore

4:45 p.m.-5:00 p.m.
39-OR Pancreatic Beta Cell SERCA2 Deficiency Impacts ER-Golgi Vesicle Trafficking and Ceramide Metabolism
TATSUYOSHI KONO, HITOSHI IIDA, CHIH-CHUN LEE, PREETHI KRISHNAN, PETER ARVAN, IRIS LINDBERG, CARMELLA EVANS-MOLINA, Tokyo, Japan, Indianapolis, IN, Ann Arbor, MI, Baltimore, MD

5:00 p.m.-5:15 p.m.
40-OR Effect of Naturally Occurring Genetic Variations in Incretin Receptors on Glucose Homeostasis
ANIRUDH GAUR, Davis, CA

5:15 p.m.-5:30 p.m.
41-OR Roles of Transcription Factor EB (TFEB) in β-Cell Function and Survival Under Stress
YUANJIE ZOU, DANIEL PASULA, BRUCE VERCHERE, DAN S. LUCIANI, Vancouver, BC, Canada

5:30 p.m.-5:45 p.m.
42-OR Effects of Oxidative Phosphorylation Complexes Defects on Beta-Cell Function
ANNA L. LANG, NADEE NISSANKA, ALEJANDRO M. TAMAYO, CARLOS T. MORAES, ALEJANDRO CAICEDO, Miami, FL

5:45 p.m.-6:00 p.m.
43-OR Islet Autophagic Flux Is Impaired Prior to the Onset of Type 1 Diabetes
AMY L. CLARK, ZIHAN YAN, MARIA S. REMEDI, ABHINAV DIWAN, St. Louis, MO
SATURDAY, JUNE 26, 2021

Scientific Sessions
8:00 a.m.-9:00 a.m.

Symposium
Theme Area: Clinical Diabetes/Therapeutics
“STEP” against Obesity—Once-Weekly Semaglutide 2.4 mg Clinical Development Program for Weight Management
Chair: Julio Rosenstock, MD
8:00 a.m.-8:02 a.m. Welcome and Introduction
Lee M. Kaplan, MD, PhD
8:02 a.m.-8:12 a.m. From the Mechanism of Action of Semaglutide 2.4 mg to the STEP Program
Melanie J. Davies, CBE, MB, ChB, MD, FRCP, FRCGP, FMedSci
8:12 a.m.-8:27 a.m. Results from the STEP Trials in People with Obesity
Robert F. Kushner, MD
8:27 a.m.-8:42 a.m. Cardiometabolic Outcomes in People with Prediabetes and Type 2 Diabetes
John Wilding, DM, FRCP
8:42 a.m.-8:50 a.m. Clinical Implications of Semaglutide for Obesity Care
Lee M. Kaplan, MD, PhD
8:50 a.m.-9:00 a.m. Panel Discussion
Lee M. Kaplan, MD, PhD
Melanie J. Davies, CBE, MB, ChB, MD, FRCP, FRCGP, FMedSci
John Wilding, DM, FRCP

8:00 a.m.-9:25 a.m.

Symposium
Theme Area: Epidemiology/Genetics
ADA Diabetes Care Symposium—Learning to Minimize Risks for People with Diabetes in the COVID-19 Pandemic
Chair: Matthew C. Riddle, MD
8:00 a.m.-8:35 a.m. Diabetes and COVID-19 at 18 Months—Trouble Ahead, Trouble Behind
Edward W. Gregg, PhD
8:35 a.m.-9:10 a.m. COVID-19 and Type 1 Diabetes—Maintaining Control and Addressing Concerns
Linda DiMeglio, MD, MPH
9:10 a.m.-9:25 a.m. Presentation of Profiles in Progress Awards
Matthew C. Riddle, MD

8:00 a.m.-9:30 a.m.

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Diabetes and Brain Health
Chair: Stefano Del Prato, MD
8:00 a.m.-8:30 a.m. Brain Changes in Type 2 Diabetes
Geert Jan Biessels, MD, PhD
8:30 a.m.-9:00 a.m. Cognitive Decline and Dementia in Diabetes
Florin Despa, PhD
9:00 a.m.-9:30 a.m. Approaches to Prevention and Treatment of Brain Consequences of Diabetes
Jose A. Luchsinger, MD, MPH
SATURDAY, JUNE 26, 2021

8:00 a.m.-10:00 a.m.

**Symposium**
*Theme Area: Acute and Chronic Complications*

**Practice-Changing Trials in Heart Failure and Kidney Disease with SGLT2 Inhibitors**
Co-Chairs: Javed Butler, MD, MPH, MBA and David Cherney, MD, PhD

**Landmark Trials in Heart Failure**
8:00 a.m.-8:30 a.m.  *Landmark Trials in Heart Failure—DAPA-HF and EMPEROR-Reduced—Do We Have All the Answers for SGLT2 Inhibitors in Heart Failure with Reduced Ejection Fraction?*
Carolyn S.P. Lam, MBBS, PhD

8:30 a.m.-9:00 a.m.  *Landmark Trials in Heart Failure—DELIVER and EMPEROR-Preserved—Will SGLT2 Inhibitors Succeed in Heart Failure with Preserved Ejection Fraction?*
Muthiah Vaduganathan, MD, MPH

**Landmark Trials in Kidney Disease**
9:00 a.m.-9:30 a.m.  *Landmark Trials in Kidney Disease—CREDENCE—Lessons Learned from the First Trial in Nearly Two Decades to Improve Cardiorenal Outcomes in Diabetic Kidney Disease*
Brendon L. Neuen, MBBS (Hons), MSc

9:30 a.m.-10:00 a.m.  *Landmark Trials in Kidney Disease—DAPA-CKD—Extending the Benefits of SGLT2 Inhibition to and beyond Diabetic Kidney Disease*
David C. Wheeler, MD

**Symposium**
*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

**Making Physical Activity Accessible and Doable for Everyone**
Chair: Sheri Colberg, PhD, FACSM
8:00 a.m.-8:30 a.m.  *Home-Based Exercise and Other Strategies to Remove Barriers to Physical Activity*
Matthew Cocks, PhD

8:30 a.m.-9:00 a.m.  *Reducing and Breaking Up Sitting Time—Does This Work?*
David Dunstan, PhD

9:00 a.m.-9:30 a.m.  *Aiming High—How Feasible Is High-Intensity or Interval Training for Everyone?*
Jonathan P. Little, PhD

9:30 a.m.-10:00 a.m.  *How Can We Get Everyone Active? Stop Telling, Start Listening*
Mary Jung, PhD

**Symposium**
*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

**ADA Education Recognition Program Symposium—VHA and DoD Virtual Diabetes Self-Management Training (DSMT)—A Novel, Learner-Centered, Avatar-to-Avatar Remote Alternative for Providing Remote Certified Diabetes Education**
Chair: Darrick Beckman, MD
8:00 a.m.-8:30 a.m.  *DSMT in the Virtual World—A Paradigm Shift for Diabetes Education?*
Brian V. Burke, MD, FACP

8:30 a.m.-9:00 a.m.  *VHA’s Virtual DSMT—Training the Trainer for Virtual DSMT*
Mary M. Julius, RDN, LD, CDCES

9:00 a.m.-9:30 a.m.  *VA/DoD Virtual DSMT—Population Served and the Patient Experience*
Stephanie De Leon Ansley, MS, RD, CSSD, LD, CDCES

9:30 a.m.-10:00 a.m.  *The Nuts and Bolts of Building the VA Virtual Medical Center*
Brian James, MEd
Symposium
Theme Area: Clinical Diabetes/Therapeutics
Including Social Determinants of Health in Diabetes Care
Chair: Marshall Chin, MD, MPH
8:00 a.m.-8:30 a.m.  Understanding and Addressing Food Insecurity in Diabetes Management
Seth A. Berkowitz, MD, MPH
8:30 a.m.-9:00 a.m.  Effects of Housing Insecurity
Margot Kushel, MD
9:00 a.m.-9:30 a.m.  Effects of Neighborhood and Built Environment
Brittany L. Smalls, PhD, MHSA
9:30 a.m.-10:00 a.m. Effects of Structural Violence
Janet Page-Reeves, PhD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Systemic Racism and Disparities in Pediatric Diabetes Management (Includes Live Video Question and Answer Period)
Chair: K.M. Venkat Narayan, MD
8:00 a.m.-8:25 a.m.  Disparities in Pediatric Diabetes Treatment
Terri H. Lipman, PhD, CRNP
8:25 a.m.-8:50 a.m.  The State of Disparities in Pediatric Diabetes Care
Ananta Addala, DO, MPH
8:50 a.m.-9:15 a.m.  ECHO-Diabetes—Delivering Care to the Underserved
Ashby F. Walker, PhD
9:15 a.m.-9:40 a.m.  Advocacy as a Means to Rebuild Systems and Improve Outcomes
Andrea Gerard Gonzalez, MD
9:40 a.m.-10:00 a.m. Live Video Question and Answer Period

Symposium
Theme Area: Insulin Action/Molecular Metabolism
The Immune–Metabolism Interface
Chair: Emily Goldberg, PhD
8:00 a.m.-8:30 a.m.  Metabolic Conditioning of Skeletal Muscle to Endurance Exercise
Chih-Hao Lee, PhD
8:30 a.m.-9:00 a.m.  Immune–Adipose Cross Talk via Nicotinic Acetylcholine Receptor Signaling
Jun Wu, PhD
9:00 a.m.-9:30 a.m.  Glucose Links SARS-CoV-2 Infection to Monocyte Response in Diabetes
Jean-François Gautier, MD
9:30 a.m.-10:00 a.m. Meteorin-Like 2 Mediates Immune Regulation of Muscle Repair
James White, PhD

Symposium
Theme Area: Integrated Physiology/Obesity
Polycystic Ovary Syndrome (PCOS)—Towards Personalized Medicine—Advances in PCOS Diagnosis and Care
Chair: Melanie Cree-Green, MD, PhD
8:00 a.m.-8:30 a.m.  Functional Genomics and the Pathophysiology of PCOS
Jerome F. Strauss III, MD, PhD
8:30 a.m.-9:00 a.m.  Is Exercise in PCOS the Same?
Erik A. Richter, MD, DMSci
9:00 a.m.-9:30 a.m.  New Approaches for Treatment of PCOS—GLP-1 or DPP-4?
Karen Elkind-Hirsch, MS, PhD
9:30 a.m.-10:00 a.m. Consideration of Mood Changes When Treating Metabolic Health in PCOS
Anuja Dokras, MD, PhD
SATURDAY, JUNE 26, 2021

8:00 a.m.-10:00 a.m.
(continued)

Symposium
Theme Area: Integrated Physiology/Obesity
Joint ADA/Chinese Diabetes Society Symposium—Novel Mechanisms and Targets
Chair: Jiandie Lin, PhD
8:00 a.m.-8:30 a.m.  Adipose Cell-Cell Signaling in Obesity and Inflammation
Meilian Liu, PhD
8:30 a.m.-9:00 a.m.  Amino Acid Regulation and Lipid Metabolism
Feifan Guo, PhD
9:00 a.m.-9:30 a.m.  Gestational Diabetes in China and the Effect of Intrauterine Environment
Miao Yu, MD, PhD
9:30 a.m.-10:00 a.m.  β-Cell Function and Diabetes
Xiaomu Li, MD, PhD

Symposium
Theme Area: Islet Biology/Insulin Secretion
Beta-Cell Senescence/Stress
Chair: Cristina Aguayo-Mazzucato, MD, PhD
8:00 a.m.-8:30 a.m.  Insulin Misfolding Activates Beta-Cell ER-Phagy
Billy Tsai, PhD
8:30 a.m.-9:00 a.m.  Beta-Cell Senescence in Type 1 Diabetes
Peter Thompson, MSc, PhD
9:00 a.m.-9:30 a.m.  Humanized MafA Mouse—A Model of Senescence
Emily May Walker, PhD
9:30 a.m.-10:00 a.m.  Comprehensive Proteomics Analysis of Stressed Human Islets
Ernesto Nakayasu, PhD, BS
SATURDAY, JUNE 26, 2021

8:00 a.m.-10:00 a.m.  
(continued)

Oral Presentations
Theme Area: Acute and Chronic Complications
Hypoglycemia, Heart, and Mind  
Chair: Pratik Choudhary, MD

8:00 a.m.-8:15 a.m.
44-OR  Severe Hypoglycemia-Induced Fatal Cardiac Arrhythmias Are Mediated by the Ryanodine Receptor in Rodents  
CANDACE M. RENO, YIQING HUANG, CAMILLE G. CHRISTENSEN, SIMON FISHER, Salt Lake City, UT

8:15 a.m.-8:30 a.m.
45-OR  Hypoglycemia, Glycemic Variability, and Risk of Cardiac Arrhythmias in Insulin-Treated Patients with Type 2 Diabetes  
ANDREAS ANDERSEN, JONATAN I. BANNER, SR., SAMUEL K. SØRENSEN, MARIA POMPEA ANTONIA BALDASSARRE, ULRIK PEDERSEN-BJERGAARD, JULIE FORMAN, GUNNAR GILASON, TOMMI B. LINDHARDT, FILIP K. KNOP, TINA VILSBØLL, Gentofte, Denmark, Hellerup, Denmark, Chieti, Italy, Hillerød, Denmark, Copenhagen, Denmark

8:30 a.m.-8:45 a.m.
46-OR  Hypoglycemia Increases the Left Ventricular Ejection Fraction in People with Diabetes and Healthy Controls  
THERESE W. FABRICIUS, CLEMENTINE E. VERHULST, MALENE WIENBERG, ANTHONIE L. DUJINHOUWER, PETER L. KRISTENSEN, BASTIAAN E. DE GALAN, ULRIK PEDERSEN-BJERGAARD, Nijmegen, Netherlands, Maastricht, Netherlands, Hillerød, Denmark

8:45 a.m.-9:00 a.m.
47-OR  Acute Fluctuations in Plasma Glucose Affect Echocardiographic-Derived Measures of Systolic Function in Patients with Type 1 Diabetes  
CHRISTINE R. ANDREASEN, ANDREAS ANDERSEN, PER G. HAGELQVIST, KIRSTEN U. ABELIN, JULIUS V. LAURITSEN, PETER G. JØRGENSEN, SUSANNE ENGBERG, JENS J. HOLST, ULRIK PEDERSEN-BJERGAARD, FILIP K. KNOP, TINA VILSBØLL, Hellerup, Denmark, Gentofte, Denmark, Hillerød, Denmark, Copenhagen, Denmark

9:00 a.m.-9:15 a.m.
48-OR  Changes in Global Cerebral Blood Flow in Response to Hypoglycemia in Type 1 Diabetes Do Not Influence Awareness Status  
PETER JACOB, OWEN ODALY, STEPHANIE A. AMIEL, PRATIK CHAUDHARY, London, United Kingdom

9:15 a.m.-9:30 a.m.
49-OR  Changes in Regional Cerebral Blood Flow during Hypoglycemia in T1DM  
DONALD C. SIMONSON, NICOLAS R. BOLO, JEAN THEBERGE, GAIL MUSEN, ALAN M. JACOBSON, Boston, MA, London, ON, Canada, Mineola, NY

9:30 a.m.-9:45 a.m.
50-OR  Validation of Fear of Hypoglycemia Screener: Results from the T1D Exchange Registry  
JINGWEN LIU, JIAT LING POON, JEFFREY BISPHAM, MAGALY PEREZ-NIEVES, ALLYSON HUGHES, KATHERINE S.M. CHAPMAN, BETH MITCHELL, FRANK J. SNOEK, LAWRENCE FISHER, Boston, MA, Indianapolis, IN, Amsterdam, Netherlands, San Francisco, CA

9:45 a.m.-10:00 a.m.
51-OR  Driving Performance after Intake of Glucose vs. Aspartame in Patients with Postprandial Hypoglycemia following Gastric Bypass Surgery  
AFRODITI TRIPYLA, VERA LEHMANN, DAVID HERZIG, JASMIN MEIER, NICOLAS BANHOLZER, MARTIN MARITSCH, STEFAN FEUERRIEGEL, FELIX WORTMANN, LIA BALLY, Bern, Switzerland, Zurich, Switzerland, St. Gallen, Switzerland
SATURDAY, JUNE 26, 2021

10:15 a.m.-11:30 a.m.

ADA Chief Executive Officer Remarks
Tracey D. Brown, MBA, BChE

and

President, Health Care & Education Address
*The Changing Face of Pediatric Diabetes—How the Pandemic Brought an Epidemic to Light*
Cynthia E. Muñoz, PhD, MPH

and

Outstanding Educator in Diabetes Award Lecture
*It Takes a Brain, a Heart, Courage,...Support*
Denise Charron-Prochownik, PhD, CPNP, RN, FAAN

11:30 a.m.-12:30 p.m.

**Professional Interest Group Discussion**
*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

Professional Interest Group Discussion on Exercise Physiology—Exercise in Post-COVID Infection—Implications for Treatment, Research, and Public Health
Chair: Ian R. Lanza, PhD
11:30 a.m.-11:35 a.m.  *Introduction*
Ian R. Lanza, PhD
11:35 a.m.-12:00 p.m.  *Parameters for Post-COVID Participant Enrollment and Participation in MoTrPAC*
Wendy M. Kohrt, PhD
12:00 p.m.-12:30 p.m.  *Roundtable Discussion*
Jane E.B. Reusch, MD
Steven Kenneth Malin, PhD
Ian R. Lanza, PhD

**Professional Interest Group Discussion**
*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

Professional Interest Group Discussion on Nutritional Science and Metabolism—Food, Nutrition, and Insulin Actions
Chair: Guoxun Chen, PhD
11:30 a.m.-11:34 a.m.  *Introduction*
Guoxun Chen, PhD
11:34 a.m.-12:02 p.m.  *Lipotoxicity or Glucotoxicity? Roles of Lipids and Carbohydrates in Insulin Resistance*
Philipp E. Scherer, PhD
12:02 p.m.-12:30 p.m.  *Lipids and Carbohydrates—Food Sources, Quality, Costs, and Beyond*
Jackie L. Boucher, MS, RDN
Mini-Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Women’s Interprofessional Network of the ADA (WIN ADA)—Long-Term Professional Impact of COVID-19 (Includes Live Video Question and Answer Period)
Co-Chairs: Brenda Montgomery, RN, MSHS, CDE and Darleen A. Sandoval, PhD
11:30 a.m.-11:35 a.m.  Introduction
   Brenda Montgomery, RN, MSHS, CDE
   Darleen A. Sandoval, PhD
11:35 a.m.-11:50 a.m.  The Impact of the COVID-19 Pandemic on Academia and Clinical Trials
   Laura C. Alonso, MD
   Sharon Edelstein, ScM
11:50 a.m.-12:05 p.m.  Long-Term Professional Impact of COVID-19 on Clinical Care
   Cynthia E. Muñoz, PhD, MPH
   Jennifer Baldwin, BSN, RN, CPN, CDCES
12:05 p.m.-12:20 p.m.  The Women’s Leadership Gap in Diabetes—History and Data from the COVID-19 Era
   Jessica L. Dunne, PhD
   Amanda Posgai, PhD
12:20 p.m.-12:30 p.m.  Live Video Question and Answer Period

Professional Interest Group Discussion
Theme Area: Clinical Diabetes/Therapeutics
Professional Interest Group Discussion on Clinical Centers and Programs—Here to Stay? Harnessing Telemedicine for Diabetes Care in the COVID-19 Era and Beyond
Chair: Edward C. Chao, DO
11:30 a.m.-11:33 a.m.  Introduction
   Edward C. Chao, DO
11:33 a.m.-11:52 a.m.  Outpatient Opportunities
   Michelle L. Griffith, MD
11:52 a.m.-12:11 p.m.  Inpatient Insights
   Robert J. Rushakoff, MD
12:11 p.m.-12:30 p.m.  The Future Is Now
   Athena Philis-Tsimikas, MD

Professional Interest Group Discussion
Theme Area: Islet Biology/Insulin Secretion
Professional Interest Group Discussion on Islet Biology, Development, and Function—Rising Stars of Diabetes Research
Chair: Brian T. Layden, MD, PhD
11:30 a.m.-11:35 a.m.  Introduction
   Brian T. Layden, MD, PhD
11:35 a.m.-11:50 a.m.  The Role of BAII3 Adhesion G-Protein Coupled Receptor in Insulin Secretion and Glucose Tolerance
   Haifa Alsharif, MS
11:50 a.m.-12:10 p.m.  IL-1β-Induced Transcription of Nf-kB Target Genes Is Repressed by Bet Bromodomain Inhibitors in Pancreatic β Cells
   Joshua Nord, PhD
12:10 p.m.-12:30 p.m.  Novel Roles of Pyruvate Kinase in the Insulin Secretory Pathway
   Matthew J. Merrins, PhD
SATURDAY, JUNE 26, 2021

12:30 p.m.-1:45 p.m.
Session Break

Take this opportunity to visit the Virtual Exhibits and Poster Hall

1:45 p.m.-2:35 p.m.

Current Issues
Theme Area: Clinical Diabetes/Therapeutics
Debate—Digital Coaching Systems for Type 2 Diabetes—Are They Worth the Cost?
Chair: Julio Rosenstock, MD
1:45 p.m.-2:10 p.m. Yes
Anne L. Peters, MD
2:10 p.m.-2:35 p.m. No
Kasia J. Lipska, MD, MHS, BS

1:45 p.m.-3:45 p.m.

Symposium
Theme Area: Acute and Chronic Complications
The Pros and Cons of New Approaches to Prevent and Manage Hypoglycemia in Diabetes Therapies
Chair: Elizabeth R. Seaquist, MD
1:45 p.m.-2:15 p.m. Smart Insulins to Reduce Hypoglycemia Risk
Danny Hung-Chieh Chou, PhD
2:15 p.m.-2:45 p.m. Glucagon in the Prevention and Treatment of Hypoglycemia
Jennifer Sherr, MD, PhD
2:45 p.m.-3:15 p.m. The Limitations of Hybrid Closed-Loop Insulin Delivery Systems in Hypoglycemia Avoidance
Steven J. Russell, MD, PhD
3:15 p.m.-3:45 p.m. Psychological Hurdles to Optimal Hypoglycemia Management
Nicole de Zoysa, DClin, Psych

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Diabetes through a Health Equity Lens (With Richard R. Rubin Award Lecture)
Chair: Stephanie L. Fitzpatrick, PhD
1:45 p.m.-2:17 p.m. Richard R. Rubin Award Lecture—Diabetes Prevention and Treatment in the American Southwest
David G. Marrero, PhD
2:17 p.m.-2:39 p.m. Structural Inequities and Diabetes
Tiffany L. Gary-Webb, PhD, MHS
2:39 p.m.-3:01 p.m. Obesity Prevention and Intervention with Latino Families Living in the Texas-México Border Region
Deborah Parra-Medina, MPH, PhD, FAAHB
3:01 p.m.-3:23 p.m. Racism/Discrimination Getting Under the Skin—Impact on Glycemic Control
Sherita Golden, MD, MHS
3:23 p.m.-3:45 p.m. The Power of Evidenced-Based Diabetes Treatment and Prevention—Drawing on the Strengths of Biomedicine and Culture in Native Communities
Spero M. Manson, PhD
Symposium
Theme Area: Clinical Diabetes/Therapeutics
Technology in Pregnancy—Continuous Glucose Monitoring (CGM) and Beyond
Chair: Denice Feig, MD, MSc, FRCP
1:45 p.m.-2:09 p.m.  CGM in Pregnancy—Real-World Data in Type 1 Pregnancy
Kerstin Berntorp, MD, PhD
2:09 p.m.-2:33 p.m.  Analyzing Temporal Profiles from CGM in Pregnancy—Importance for Clinical Outcomes
Eleanor M. Scott, BM, BS, MD, FRCP
2:33 p.m.-2:57 p.m.  CGM and Biomarkers for Prediction of Pregnancy Outcomes—Which Is Better?
C. L. Meek, MB, ChB, MRCP, FRCP, PhD
2:57 p.m.-3:21 p.m.  Use of CGM in Women with Gestational Diabetes Mellitus
Dessi Zaharieva, PhD
3:21 p.m.-3:45 p.m.  Performance of CGM—Is It Reliable?
Carol J. Levy, MD, CDE

Symposium
Theme Area: Epidemiology/Genetics
Beyond Genome-Wide Association Studies—Understanding the Function of Variants Associated with Diabetes
Chair: Karen L. Mohlke, PhD
1:45 p.m.-2:15 p.m.  The Human Pancreas Analysis Program (HPAP)—From Massive Data to New Insights
Klaus H. Kaestner, PhD, MS
2:15 p.m.-2:45 p.m.  From Discovery to Function in Obesity
Inês Barroso, PhD
2:45 p.m.-3:15 p.m.  Exploring Enhancer-Promoter Interactions in Human Pancreas Cells
H. Efsoon Arda, PhD
3:15 p.m.-3:45 p.m.  Decoding Variant Effects on (Patho)physiologic Cellular Responses
Michael L. Stitzel, PhD

Symposium
Theme Area: Immunology/Transplantation
Current Role of Pancreas Transplantation in the Treatment of Diabetes
Chair: Peter G. Stock, MD, PhD
1:45 p.m.-2:25 p.m.  New Indications for Pancreas Transplantation—an Overview
Ty B. Dunn, MD
2:25 p.m.-3:05 p.m.  Pancreas Transplantation for Type 2 Diabetes
Jon S. Odorico, MD, FACS
3:05 p.m.-3:45 p.m.  Emerging Trends and Controversies in Pancreas Transplantation
Eelco J.P. de Koning, MD, PhD

Symposium
Theme Area: Insulin Action/Molecular Metabolism
Insulin at Its 100th Birthday (Includes Live Video Question and Answer Period)
Chair: Barbara E. Corkey, PhD
1:45 p.m.-2:10 p.m.  Historical Overview
David M. Harlan, MD
2:10 p.m.-2:35 p.m.  Insulin Biosynthesis
Peter Arvan, MD, PhD
2:35 p.m.-3:00 p.m.  What We Know about How Insulin Works—100 Years Later
C. Ronald Kahn, MD
3:00 p.m.-3:25 p.m.  The Future of Insulin as a Therapy
Michael A. Weiss, MD, PhD, MBA
3:25 p.m.-3:45 p.m.  Live Video Question and Answer Period
Symposium

Theme Area: Islet Biology/Insulin Secretion

ES-Derived Beta Cells—From Disease Modeling to Therapeutics

Chair: Senta Georgia, PhD

1:45 p.m.-2:15 p.m.  Generation of Beta Cells from Stem Cells—State of the Art
                      Jeffrey R. Millman, PhD

2:15 p.m.-2:45 p.m.  Successes and Challenges for Stem Cell Therapy in Diabetes
                      Julie B. Sneddon, PhD

2:45 p.m.-3:15 p.m.  Noncoding Disease Modifier Effects on Beta Cells Informed from Patient Cell Lines
                      Paul Gadue, PhD

3:15 p.m.-3:45 p.m.  Using Patient-Derived Stem Cells to Study the Cell Biology and Function of Human Endocrine
                      Cells in Nutrient Homeostasis
                      James Wells, PhD
Oral Presentations
Theme Area: Acute and Chronic Complications
Pathogenesis of Atherosclerosis and Its Complications in Diabetes (With Edwin Bierman Award Lecture)
Chair: Rama Natarajan, PhD, FAHA, FASN

1:45 p.m.-2:15 p.m.
Edwin Bierman Award Lecture
Posttranslational Control of HMG CoA Reductase—The Molecular Target of Cholesterol-Lowering Statins
Russell A. Debose-Boyd, PhD

2:15 p.m.-2:30 p.m.
52-OR Risk Factors and Incidence over Time for Lower Extremity Amputations in Persons with Type 1 Diabetes: An Observational Cohort Study of 46,008 Patients from the Swedish National Diabetes Registry
SARA HALLSTRÖM, SR., ANN-MARIE SVENSSON, ALDINA PIVODIC, ARNDIS F. OLAFOSSDOTTIR, MAGNUS LONDAHL, HANS WEDEL, MARCUS LIND, Gothenburg, Sweden, Uddevalla, Sweden, Lund, Sweden

2:30 p.m.-2:45 p.m.
53-OR Structural Grey Matter Alterations and Cognitive Function in Diabetes: A UK Biobank Study
JAMIE BURGESS, SIMON S. KELLER, IOANNIS N. PETROPOULOS, DINESH SELVARAJAH, SOLOMON TESFAYE, UAZMAN ALAM, Liverpool, United Kingdom, Doha, Qatar, Sheffield, United Kingdom

2:45 p.m.-3:00 p.m.
54-OR Nucleolin Autoantibody Accelerates Atherosclerosis in Type 1 Diabetes
KYOUNGMIN PARK, QIAN LI, HYUNSEOK PARK, JIALIN FU, STEPHAN KISSLER, ERNESTO MADALONI, I-HSIEN WU, ANDREW H. LICHTMAN, GEORGE L. KING, Rome, Italy, Boston, MA

3:00 p.m.-3:15 p.m.
55-OR Targeted Deletion of Insulin Receptor in Vascular Smooth Muscle Cells Promoted Atherosclerosis and Unstable Plaque
QIAN LI, JIALIN FU, KYOUNGMIN PARK, I-HSIEN WU, GEORGE L. KING, Boston, MA

3:15 p.m.-3:30 p.m.
56-OR Fibro-inflammatory Plasma Biomarkers and Relation to Cardiovascular Remodeling in Type 2 Diabetes (T2D)
EMER M. BRADY, GAURAV S. GULSIN, LAVANYA ATHITAN, JOSEPH HENSON, THOMAS YATES, MELANIE J. DAVIES, GERRY P. MCCANN, PRATHAP KANAGALA, LEONG NG, EVGENY MIRKES, KELLY PARKE, Leicester, United Kingdom, Liverpool, United Kingdom, University of Leicester, United Kingdom

3:30 p.m.-3:45 p.m.
57-OR Predictive Role of Atherosclerosis Biomarkers on Carotid Plaque Extension in Type 2 Diabetes
SIMONE LEONETTI, DOMENICO TRICO, ISABEL GONCALVES, ANGELA SHORE, FAISEL KHAN, JAN NILSSON, ANDREA NATALI, Pisa, Italy, Exeter, United Kingdom, Dundee, United Kingdom, Malmö, Sweden
SATURDAY, JUNE 26, 2021

1:45 p.m.-3:45 p.m.
(continued)

Oral Presentations

Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise

The Value Framework for Certified Diabetes Care and Education Specialists (With State-of-the-Art Lecture)
Chair: Lucille Hughes, DNP, MSN/ED, CDCES, BC-ADM, FADCES

1:45 p.m.-2:15 p.m.

State-of-the-Art Lecture

Value Framework of the CDCES
Kellie M. Rodriguez, RN, MSN, MBA, CDCES

2:15 p.m.-2:30 p.m.

58-OR Pathways of Health Literacy, Empowerment, Self-Care Activities to Quality of Life and Glycemic Control in Patients with Type 2 Diabetes
XIAOYAN ZHAO, LI CHENG, Shenzhen, China, Guangzhou, China

2:30 p.m.-2:45 p.m.

59-OR The Diabetes Garage: Using Automotive Maintenance Analogies to Engage Mexican-American Men to Participate in a Diabetes Self-Management and Education Program
JEANNIE B. CONCHA, GREGORY SCHOBER, DENISE N. PORTILLO, ROSALBA F. RUIZ, REBECA RAMOS, RAQUEL L. ROMERO, ARMANDO LOPEZ, PAULA WINKLER, El Paso, TX, Edinburg, TX, San Antonio, TX

2:45 p.m.-3:00 p.m.

60-OR Patient Engagement in Diabetes Self-Management Education and Support (DSME/S) Using Immersive Virtual World Technology
SUZANNE MITCHELL, ALEXA BRAGG, MICHAEL WINTER, PAULA GARDINER, JESSICA M. HOWARD, LANCE D. LAIRD, Boston, MA

3:00 p.m.-3:15 p.m.

61-OR Glycemic Control and Depressive Symptoms among Minority Women with Type 2 Diabetes Enrolled in the Women In Control (WIC2) Diabetes Medical Group Visit (DMGV) Study
PAULA GARDINER, BARBARA M. CRUZ, ALEXA BRAGG, MICHAEL WINTER, KATHERINE MELO, JESSICA M. HOWARD, SUZANNE MITCHELL, Boston, MA

3:15 p.m.-3:30 p.m.

62-OR Fostering Sustainability through Diabetes Self-Management Support in African-American Churches: Results of the Praise Diabetes Project
GRETCHEI PIATT, ANTHONY M. PROVENZANO, ROBIN NWANKWO, DIANA HALL, KATHERINE A. KLOSS, JACLYNN M. HAWKINS, MARTHA M. FUNNELL, Ann Arbor, MI

3:30 p.m.-3:45 p.m.

63-OR Focused Educational Screening Improves Knowledge of Diabetes as a Leading Risk Factor for Chronic Kidney Disease
LISA VO, MELANIE PARIS, MOLLY ALAWODE, MICHAEL SPIGLER, Rockville, MD
SATURDAY, JUNE 26, 2021

1:45 p.m.-3:45 p.m.
(continued)

Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Pediatric Type 1 Diabetes
Chair: Laura M. Jacobsen, MD

1:45 p.m.-2:00 p.m.
64-OR Metformin Improves Cardiac and Aortic Parameters in Adolescents with Type 1 Diabetes
ALEXANDER NGUYEN, UYEN TRUONG, MICHAL SCHAFAER, AMY BAUMGARTNER, ALEX J. BARKER, KENDALL S. HUNTER, DALE BURKETT, JANE E. REUSCH, KRISTEN J. NADEAU, Aurora, CO

2:00 p.m.-2:15 p.m.
65-OR Autoantibody Levels at Seroconversion Improve Prediction to Type 1 Diabetes Beyond Autoantibody Type and Number
KENNEY NG, VIBHA ANAND, RiITTA VEUjOLA, MARLENA MAZIARZ, KATHLEEN WAUGH, WILLIAM HAGOPIAN, PETER ACHENBACH, T1DI STUDY GROUP, Cambridge, MA, Oulu, Finland, Malmö, Sweden, Aurora, CO, Seattle, WA, Munich, Germany

2:15 p.m.-2:30 p.m.
66-OR A Longitudinal Assessment of Diabetes Autoantibodies in the SEARCH for Diabetes in Youth Study
LINA MERJANEH, LAWRENCE M. DOLAN, CYNTHIA SUERKEN, RALPH DAGOSTINO, JR., GIUSEPPINA IMPERATORE, SHARON SAYDAH, ALISSA J. ROBERTS, SANTICA M. MARCOVINA, ELIZABETH J. MAYER-DAVIS, DANA DABELEA, CATHERINE PIHOKER, Seattle, WA, Cincinnati, OH, Winston-Salem, NC, Atlanta, GA, Chapel Hill, NC, Aurora, CO

2:30 p.m.-2:45 p.m.
67-OR Oral Minimal Mode Testing Reveals Early Impairment of Insulin Sensitivity in Type 1 Diabetes Autoantibody Positive, Nonobese, Nondysglycemic Youth
ALFONSO GALDERISI, ANTOINETTE MORAN, CARMELLA EVANS-MOLINA, MARIANGEA MARTINO, NICOLA SANTORO, SONIA CAPRIO, CLAUDIO COBELLi, Padova, Italy, Minneapolis, MN, Indianapolis, IN, New Haven, CT

2:45 p.m.-3:00 p.m.
68-OR Artificial Intelligence and Disparities in Pediatric Type 1 Diabetes Care: Predictive Model Performance Varies by Age and Sex
DIANA FERRO, DAVID D. WILLIAMS, SUSANA R. PATTON, RYAN MCDONOUGH, MARK A. CLEMENTS, Kansas City, MO, Jacksonville, FL

3:00 p.m.-3:15 p.m.
69-OR Early CGM Initiation Improves A1C in Youth with T1D: Teamwork, Technology, Targets, and Tight Control (4T) Study
PRIYA PRAHALAD, VICTORIA DING, BRIANNA LEVERENZ, JULIE HOOPER, ANNETTE CHMIELEWSKI, BARRY P. CONRAD, JEANNINE LEVERENZ, ANOLI MARTINEZ-SINGH, PIPER SAGAN, JULIANNE SENALDI, ALEX FREEMAN, ANANTA ADDALA, DESSI P. ZAHARIEVA, KOREY K. HOOD, DAVID SCHEINKER, MANISHA DESAI, DAVID M. MAAHS, Palo Alto, CA, San Jose, CA, Stanford, CA, San Rafael, CA

3:15 p.m.-3:30 p.m.
70-OR Evaluation of the Omnipod 5 Automated Insulin Delivery System in Very Young Children with Type 1 Diabetes (T1D)
JENNIFFER SHERR, BRUCE W. BODE, GREGORY P. FORLENZA, LORI M. LAFFEL, SUE A. BROWN, BRUCE A. BUCKINGHAM, AMY B. CRIEGO, DANIEL DESALVO, SARAH A. MACLEISH, DAVID W. HANSEN, TRANG T. LY, OMNIPOD 5 IN PRESCHOOLERS STUDY GROUP, New Haven, CT, Atlanta, GA, Aurora, CO, Boston, MA, Charlotteville, VA, Palo Alto, CA, Minneapolis, MN, Houston, TX, Cleveland, OH, Syracuse, NY, Acton, MA

(continued on next page)
3:30 p.m.-3:45 p.m.

**71-OR** Youth with Type 1 Diabetes and Their Parents Report Improved Quality of Life with the Omnipod E Automated Insulin Delivery System

KOREY K. HOOD, WILLIAM H. POLONSKY, SARAH A. MACLEISH, CAROL J. LEVY, LAUREN M. HUYETT, TODD VIENNEAU, TRANG T. LY, Stanford, CA, San Diego, CA, Cleveland, OH, New York, NY, Oakville, ON, Canada, Acton, MA
SATURDAY, JUNE 26, 2021

1:45 p.m.-3:45 p.m.
(continued)

Oral Presentations
Theme Area: Epidemiology/Genetics
Novel Biomarkers for Understanding Diabetes Heterogeneity
Chair: Alexis Wood, PhD, FAHA

1:45 p.m.-2:00 p.m.
72-OR HDL Particle Concentration Predicts Incident Coronary Artery Disease (CAD) in Type 1 Diabetes (T1D)
TINA COSTACOU, TOMAS VAISAR, KARIN BORNFELDT, TREVOR J. ORCHARD, JAY HEINECKE, Pittsburgh, PA, Seattle, WA

2:00 p.m.-2:15 p.m.
73-OR Clonal Hematopoiesis of Indeterminate Potential (CHIP), Glycemic Traits, and Type 2 Diabetes (T2D) Risk
DEIRDRE K. TOBIAS, ALISA MANNING, JENNIFER WESSEL, KENNETH E. WESTERMAN, SRIDHARAN RAGHAVAN, LAURA RAFFIELD, JOSEE DUPUIS, ALEXANDER BICK, PEITAO WU, DANIEL A. DICORPO, BRUCE M. PSATY, ALANNA C. MORRISON, VASAN S. RAMACHANDRAN, L. ADRIENNE CUPPLES, LESLIE LANGE, ADOLFO CORREA, CHARLES L. KOOPERBERG, LESLEY F. TINKER, BARBARA V. HOWARD, ALEX REINER, JEROME I. ROTTER, JASON M. COLLINS, JAMES B. MEIGS, JOANN E. MANSON, Cambridge, MA, Indianapolis, IN, Denver, CO, Chapel Hill, NC, Nashville, TN, Boston, MA, Houston, TX, Aurora, CO, Jackson, MS, Seattle, WA, Washington, DC, Torrance, CA

2:15 p.m.-2:30 p.m.
74-OR Islet Autoantibodies in Youth with Diabetes from South Asia
KIMBER SIMMONS, ERIN M. YOUNGKIN, ANGELA CONDIE, AIMON ALKANANI, KRISTEN MCDANIEL, LI-PING YU, GRAHAM D. OGLE, AARON W. MICHELS, Aurora, CO, Abbottabad, Pakistan, North Epping, Australia

2:30 p.m.-2:45 p.m.
75-OR Marked Heterogeneity in Nondiabetic, Autoantibody-Positive (Ab+) Individuals with Dysglycemia: Implications for Type 1 Diabetes (T1D) Staging
MARIA J. REDONDO, DAVID D. CUTHBERTSON, BRANDON M. NATHAN, EMILY K. SIMS, MUSTAFA TOSUR, INGRID LIBMAN, JAY S. SKYLER, CARMELLA EVANS-MOLINA, MARK A. ATKINSON, JAY SOSENKO, Houston, TX, Tampa, FL, Minneapolis, MN, Indianapolis, IN, Pittsburgh, PA, Miami, FL, Gainesville, FL

2:45 p.m.-3:00 p.m.
76-OR LIVERFASt Has Similar Performance to Liver Biopsy for the Screening of NASH Fibrosis in T2DM
VICTOR DELEDINGHEN, ADELE DELAMARRE, BRIGITTE LEBAI, HORTENSE MARRAUD-DES-GROTTES, MARIE IRLÈS-DEPÉ, MARIE DECRAECKER, JULIETTE FOUCHER, JEAN-BAPTISTE HIRIART, RONALD QUIAMBAO, MONA MUNTEANU, IMTIAZ ALAM, Bordeaux, France, Talence, France, Orlando, FL, Austin, TX

3:00 p.m.-3:15 p.m.
77-OR Circulating MicroRNAs Predict Glycemic Improvement and Response to a Behavioral Intervention
ELENA FLOWERS, ISABEL D. ALLEN, ALKA M. KANAYA, BRADLEY AOUZERAT, San Francisco, CA, New York, NY

3:15 p.m.-3:30 p.m.
78-OR Aβ Classification in Children with New-Onset Diabetes
MUSTAFA TOSUR, SAIMA DEEN, SERIFE UYSAL, MARCELA ASTUDILLO, FAROOK JAHOOR, MARIA J. REDONDO, ASHOK BALASUBRAMANYAM, Houston, TX

(continued on next page)
SATURDAY, JUNE 26, 2021

3:30 p.m.-3:45 p.m.

**79-OR** Butyrate Producing Bacteria and Insulin Homeostasis: The Microbiome and Insulin Longitudinal Evaluation Study (MILES)
JINRUI CUI, TIAN TIAN ZHU, ELIZABETH T. JENSEN, OSA L. CRAGO, GAUTAM RAMESH, KEVIN ALBERT M. SANDOW, YII-DER IDA CHEN, JEROME I. ROTTER, JOSEPH PETROSINO, MARK O. GOODARZI, Los Angeles, CA, Winston-Salem, NC, La Jolla, CA, Torrance, CA, Houston, TX
Oral Presentations
Theme Area: Integrated Physiology/Obesity
Semaglutide and Clinical Outcomes
Chair: David Cherney, MD, PhD

1:45 p.m.-2:00 p.m.

80-OR  Treatment with Once-Weekly Semaglutide 2.4 mg Improves Cardiometabolic Risk Factors in Adults with Overweight/Obesity and Type 2 Diabetes: STEP 2 Post-hoc Analysis
ROBERT F. KUSHNER, MELANIE J. DAVIES, JOHN DEANFIELD, W. TIMOTHY GARVEY, OLE JEPPESEN, USMAN KHALID, MIKHAIL N. KOSIBOROD, PETER N. LAURSEN, DOMENICA RUBINO, SUBODH VERMA, Chicago, IL, Leicester, United Kingdom, London, United Kingdom, Birmingham, AL, Kansas City, MO, Søborg, Denmark, Arlington, VA, Toronto, ON, Canada

2:00 p.m.-2:15 p.m.

81-OR  Once-Weekly Semaglutide 2.4 mg Improved Glucose Metabolism and Prediabetes in Adults with Overweight/Obesity in the STEP 1 Trial
LEIGH PERREAULT, MELANIE J. DAVIES, JUAN P. FRIAS, PETER N. LAURSEN, ILDIKO LINGVAY, SRIRAM MACHINENI, ANETTE VARBO, JOHN WILDING, SIGNE O.R. WALLENSTEIN, CAREL LE ROUX, Aurora, CO, Leicester, United Kingdom, Los Angeles, CA, Søborg, Denmark, Dallas, TX, Chapel Hill, NC, Liverpool, United Kingdom, Dublin, Ireland

2:15 p.m.-2:30 p.m.

82-OR  Effect of Semaglutide 2.4 mg on Glucose Metabolism and Body Weight in Adults with Overweight/Obesity and Type 2 Diabetes in the STEP 2 Trial
LEIGH PERREAULT, MELANIE J. DAVIES, LOUISE FÆRCH, OLE JEPPESEN, ARASH PAKSERESHT, SUE PEDERSEN, JULIO ROSENSTOCK, IICHIRO SHIMOMURA, ADIE VILJOEN, THOMAS A. WADDEN, ILDIKO LINGVAY, Aurora, CO, Leicester, United Kingdom, Søborg, Denmark, Calgary, AB, Canada, Dallas, TX, Osaka, Japan, Stevenage, United Kingdom, Philadelphia, PA

2:30 p.m.-2:45 p.m.

83-OR  Influence of Baseline Characteristics on Weight Loss with Semaglutide 2.4 mg in Adults with Overweight/Obesity and Type 2 Diabetes (STEP 2)
ILDIKO LINGVAY, LOUISE FÆRCH, ANNA KOROLEVA, ROBERT F. KUSHNER, CAREL LE ROUX, SOO LIM, OFRI MOSENZON, THOMAS A. WADDEN, SIGNE O.R. WALLENSTEIN, W. TIMOTHY GARVEY, Dallas, TX, Søborg, Denmark, Chicago, IL, Dublin, Ireland, Seoul, Korea, Republic of, Jerusalem, Israel, Philadelphia, PA, Birmingham, AL

2:45 p.m.-3:00 p.m.

84-OR  Semaglutide 2.4 mg Improves Health-Related Quality of Life in Adults with Overweight/Obesity and Type 2 Diabetes in the STEP 2 Trial
DOMENICA RUBINO, LOUISE FÆRCH, HENRIK H. MEINCKE, ROBERT F. KUSHNER, SUE PEDERSEN, DONNA H. RYAN, SEAN WHARTON, NIELS ZEUTHEN, RONETTE KOLOTKIN, Arlington, VA, Chicago, IL, Calgary, AB, Canada, New Orleans, LA, Toronto, ON, Canada, Søborg, Denmark, Durham, NC

3:00 p.m.-3:15 p.m.

85-OR  Semaglutide 2.4 mg Improves Patient Reported Outcome Measures of Physical Functioning in Adults with Overweight/Obesity and Type 2 Diabetes in the STEP 2 Trial
SEAN WHARTON, HENRIK H. MEINCKE, ROBERT F. KUSHNER, TUGCE KALAYCI ORAL, SUE PEDERSEN, DOMENICA RUBINO, DONNA H. RYAN, NIELS ZEUTHEN, RONETTE KOLOTKIN, Toronto, ON, Canada, Chicago, IL, Søborg, Denmark, Calgary, AB, Canada, Arlington, VA, New Orleans, LA, Durham, NC
SATURDAY, JUNE 26, 2021

2:45 p.m.-3:45 p.m.

**Current Issues**
*Theme Area: Clinical Diabetes/Therapeutics*

**Debate—Are the Metabolic Benefits of Roux-en-Y Gastric Bypass Due to Weight Loss Alone?**
Chair: Fatima Cody Stanford, MD, MPH, MPA, FAAP, FACP, FAHA, FTOS
2:45 p.m.-3:10 p.m. **Yes, the Metabolic Benefits of Roux-en-Y Gastric Bypass Are Due to Weight Loss Alone**
Samuel Klein, MD
3:10 p.m.-3:35 p.m. **No, the Metabolic Benefits of Roux-en-Y Gastric Bypass Extend Beyond the Weight Loss Effect**
Blandine Laferrère, MD, PhD
3:35 p.m.-3:40 p.m. **Rebuttal**
Samuel Klein, MD
3:40 p.m.-3:45 p.m. **Rebuttal**
Blandine Laferrère, MD, PhD

4:00 p.m.-5:30 p.m.

**Symposium**
*Theme Area: Clinical Diabetes/Therapeutics*

**Obesity and Cardiovascular Disease in Type 1 Diabetes**
Chair: Deborah J. Wexler, MD, MSc
4:00 p.m.-4:30 p.m. **Epidemiology of Obesity and Cardiovascular Comorbidities in Type 1 Diabetes**
Tina Costacou, PhD
4:30 p.m.-5:00 p.m. **The Current Management of Cardiovascular Risk Factors in Type 1 Diabetes**
Yehuda Handelsman, MD

**Debate—Should Type 2 Diabetes Medications with Proven Cardiovascular Benefits Be Used in Type 1 Diabetes to Prevent Atherosclerotic Cardiovascular Disease?**
5:00 p.m.-5:30 p.m. **No**
Vivian Fonseca, MD

4:00 p.m.-6:00 p.m.

**Symposium**
*Theme Area: Acute and Chronic Complications*

**Resolving Key Controversies in Diabetic Neuropathy**
Chair: Rodica Pop-Busui, MD, PhD
4:00 p.m.-4:30 p.m. **Getting Lost in Translation—The Murky Path from Curing Neuropathy in Diabetic Rodents to Success in Clinical Trials**
Nigel A. Calcutt, PhD
4:30 p.m.-5:00 p.m. **Statin Treatment and Risk of Neuropathy in Diabetes—Friend or Foe?**
Fabiana Picconi, MD
5:00 p.m.-5:30 p.m. **How Does Neuropathy Affect the Risk of Falls and Fractures?**
Karolina S. Khan, MD, PhD
5:30 p.m.-6:00 p.m. **Social and Psychological Determinants of Health and Impact on Peripheral and Autonomic Neuropathy**
Kara R. Mizokami-Stout, MD
Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Carbohydrate Counting—Still Useful with Evolving Insulin Delivery Technologies? (Includes Live Video Question and Answer Period)
Chair: Hope Warshaw, MMSc, RD, CDCES, BC-ADM
4:00 p.m.-4:25 p.m. Real-World Perspective on Carbohydrate Counting for Bolus Insulin Decision-Making
   Becky Sulik, RDN, LD, CDCES
4:25 p.m.-4:50 p.m. From Carbohydrate-Centricity to Factoring in Protein, Fat, Fiber, Glycemic Index, and More to Determine and Teach Bolus Insulin Dosing
   Kirstine Bell, APD, CDE, PhD
4:50 p.m.-5:15 p.m. Using Continuous Glucose Monitoring Data to Optimize Food Intake and Glycemic Management
   Holly Willis, PhD, RDN, LD
5:15 p.m.-5:40 p.m. What’s the Future of Diabetes Nutrition Management Using Evolving Insulin Delivery Technologies?
   Bruce A. Buckingham, MD
5:40 p.m.-6:00 p.m. Live Video Question and Answer Period

Current Issues
Theme Area: Clinical Diabetes/Therapeutics
Debate—Joint ADA/AACC Presentation—Point-of-Care Hba1c—Should We Use It to Diagnose Diabetes?
Chair: M. Sue Kirkman, MD
4:00 p.m.-4:40 p.m. Point-of-Care Hba1c—Methods and Performance
   Randie R. Little, PhD
4:40 p.m.-5:20 p.m. We Should Use Point-of-Care Hba1c to Diagnose Diabetes
   Jay H. Shubrook, DO, FACOFP, FAAFP
5:20 p.m.-6:00 p.m. We Should Not Use Point-of-Care Hba1c to Diagnose Diabetes
   David B. Sacks, MB, ChB

Symposium
Theme Area: Epidemiology/Genetics
A Global Perspective on Diabetes—Bidirectional Learning for Lower- and Middle-Income and Higher-Income Countries
Chair: Nikhil Tandon, MD, PhD
4:00 p.m.-4:30 p.m. A Global Perspective on Food and Nutrition Policies and Diabetes
   Lindsay M. Jaacks, PhD
4:30 p.m.-5:00 p.m. A Global Perspective on Cardiovascular Disease Complications in Diabetes
   Kavita Singh, PhD
5:00 p.m.-5:30 p.m. A Global Perspective on the Increasing Prevalence of Diabetes and the Role of the Environment
   Frank Hu, MD, PhD
5:30 p.m.-6:00 p.m. A Global Perspective on Prevention of Diabetic Ketoacidosis at Type 1 Diabetes Diagnosis
   Pradeep A. Praveen, MPH, PhD
Symposium
Theme Area: Integrated Physiology/Obesity
Nutrient Sensing and Macronutrient Metabolism
Chair: David A. Guertin, PhD
4:00 p.m.-4:30 p.m. Amino Acid Metabolism as a Major Sex-Discriminating Factor in the Liver
Adriana Maggi, PhD
4:30 p.m.-5:00 p.m. Liver FGF21 as an Endocrine Signal of Protein and Amino Acid Restriction
Christopher Morrison, PhD
5:00 p.m.-5:30 p.m. Brain Amino Acid Sensing and Appetite Control
Clemence Blouet, PhD
5:30 p.m.-6:00 p.m. Targeting Hepatocyte Carbohydrate Transport to Mimic Fasting and Calorie Restriction
Brian DeBosch, MD, PhD

Symposium
Theme Area: Islet Biology/Insulin Secretion
NIDDK Symposium—Heterogeneity in Diabetes Mellitus—Developing a More Stratified Medical Approach from the Bench to Bedside
Co-Chairs: Olivier Blondel, PhD and Miranda Broadney, MD, MPH
4:00 p.m.-4:04 p.m. Welcome Remarks from the NIDDK Director
Griffin Rodgers, MD, MACP
4:04 p.m.-4:05 p.m. Introduction of Beta-Cell Biology Presentations
Olivier Blondel, PhD
Beta-Cell Biology and Implications for the Bedside
4:05 p.m.-4:23 p.m. Preclinical Molecular Markers of Beta-Cell Stress in Type 1 Diabetes/Molecular Mechanisms Contributing to β-Cell Dysfunction and the Development of Diabetes
Emily K. Sims, MD, MS
4:23 p.m.-4:41 p.m. Identifying Endogenous Modulators of β-Cell Function for Potential Treatment
Emilyn Alejandro, PhD
4:41 p.m.-4:59 p.m. Mapping the Association of Beta-Cell Longevity and Cell Senescence in Diabetes Mellitus
Rafael Arrojo e Drigo, PhD
4:59 p.m.-5:00 p.m. Introduction of Clinical Research Presentations
Miranda Broadney, MD, MPH
Gene-Driven Physiology and Population Heterogeneity in Management of Glucose Metabolism
5:00 p.m.-5:18 p.m. Leveraging Genomics to Understand the Physiology of Hyperglycemia in Pregnancy
Camille E. Powe, MD
5:18 p.m.-5:36 p.m. GCK-MODY Management and Outcomes during Pregnancy
Rochelle N. Naylor, MD
5:36 p.m.-5:56 p.m. The Role of Adrenal Hormones in Type 2 Diabetes
Joshua J. Joseph, MD, MPH, FAHA
5:56 p.m.-6:00 p.m. Session Wrap-up
Olivier Blondel, PhD
Miranda Broadney, MD, MPH
SATURDAY, JUNE 26, 2021

4:00 p.m.-6:00 p.m.
(continued)

Oral Presentations
Theme Area: Acute and Chronic Complications
Diabetic Retinopathy
Chair: Lucia Sobrin, MD, MPH

4:00 p.m.-4:15 p.m.

86-OR Primary Results from Two Phase 3 Trials of Faricimab for Diabetic Macular Edema (DME): YOSEMITE and RHINE
ALLEN HU, JEFFREY R. WILLIS, ZDENKA HASKOVA, DAVID SILVERMAN, JANE IVES, KAREN BASU, HUGH LIN,
Hagerstown, MD, South San Francisco, CA, Birlingame, CA, Welwyn Garden City, United Kingdom, Dublin, Ireland

4:15 p.m.-4:30 p.m.

87-OR Vitreous Retinol Binding Protein 3 Is Increased in Patients without Advanced Diabetic Retinopathy in Type 1 and
Type 2 Diabetes
WARD FICKWEILER, HYUNSEOK PARK, KYOUNGMIN PARK, TAHANI BOUMENNA, JOHN GAUTHIER, I-HSIEN WU,
JERRY D. CAVALLERANO, LLOYD P. AIELLO, JENNIFER SUN, GEORGE L. KING, Boston, MA

4:30 p.m.-4:45 p.m.

88-OR Evaluation of a New Neural Network Classifier for Diabetic Retinopathy
OR KATZ, DAN PRESIL, LIZ COHEN, ROI NACHMANI, NAOMI KIRSHNER, DAVID R. OWENS, TSVI H. LEV, AVIEL
HADAD, Herzliya, Israel, Swansea, United Kingdom, Beersheba, Israel

4:45 p.m.-5:00 p.m.

89-OR Cardiovascular and Mortality Risk with Intravitreal Anti-Vascular Endothelial Growth Factor (VEGF) Inhibitors in
Patients with Diabetic Retinopathy (DR)
MIIN ROH, HELEN TESFAYE, LLOYD P. AIELLO, SEOYOUNG C. KIM, ELISABETTA PATORNO, Boston, MA

5:00 p.m.-5:15 p.m.

90-OR Vision-Threatening Diabetic Retinopathy (DR) Is Associated with Modifiable Risk Factors in Children with Type 1
Diabetes (T1D)
CRIS MARTIN JACOBA, KONSTANTINA SAMPANI, CATHERINE GILBERT, PAOLO S. SILVA, JOYCE Keady, LORI M.
LAFFEL, LLOYD P. AIELLO, JENNIFER SUN, Boston, MA

5:15 p.m.-5:30 p.m.

91-OR Visit-to-Visit Variability of Glycated Albumin Was Associated with the Risk of Diabetic Retinopathy in Patients with
Type 2 Diabetes
JIANG ZHOU, DONGJUN DAI, YUN SHEN, JINGYI LU, YUFEI WANG, WEI ZHU, YUQIAN BAO, GANG HU,
Shanghai, China, Baton Rouge, LA

5:30 p.m.-5:45 p.m.

92-OR Increased Disease Detection, Yet Treatment Barriers Identified, with Point-of-Care Retinopathy Screening
MATTHEW WAHL, JULIE NEUBERGER, MICHELLE L. LITCHMAN, GLADYS S. ADJI-POKU, ANGELA FAGERLIN, MARY
ELIZABETH HARTNETT, SIMON FISHER, Salt Lake City, UT

5:45 p.m.-6:00 p.m.

93-OR Muller Glial-Derived Zfp36 Expression Protects the Retina from Diabetes-Induced Damages in the Early Stage of
Diabetic Retinopathy
SUI WANG, Palo Alto, CA
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Novel Science and Advances in Diabetes in Pregnancy (With Norbert Freinkel Award Lecture)
Chair: Mary R. Loeken, PhD

4:00 p.m.-4:30 p.m.
Norbert Freinkel Award Lecture
Therapeutic Advances in Pregnancy for Women with Preexisting Diabetes—How Far Have We Come?
Denice Feig, MD, MSc, FRCPC

4:30 p.m.-4:55 p.m.
94-OR Reappearance of C-Peptide during the Third Trimester in Type 1 Diabetes Pregnancy: Pancreatic Regeneration or Fetal Hyperinsulinism?
CLAIRE L. MEEK, RICHARD A. ORAM, TIMOTHY J. MCDONALD, DENICE FEIG, ANDREW T. HATTERSLEY, HELEN R. MURPHY, Cambridge, United Kingdom, Exeter, United Kingdom, Toronto, ON, Canada, Norwich, United Kingdom

4:55 p.m.-5:00 p.m.

5:00 p.m.-5:15 p.m.
96-OR Parameters of Glycemic Variability as Predictors of LGA in Pregnant Women with Well-Controlled Type 1 Diabetes (T1D)
RAFAL SIBIAK, BEATA MRZEWKA-ROGACZ, URSZULA MANTAJ, PAWEL GUTAJ, EWA WENDER-OZEGOWSKA, Poznan, Poland

5:15 p.m.-5:30 p.m.
97-OR Relationship between Time-in-Range and Laboratory HbA1c in Pregnant Women with Type 1 Diabetes Mellitus PING LING, CHAOFAN WANG, DAIZHI YANG, SIHUI LUO, XUEYING ZHENG, JING LV, JINHUA YAN, WEN XU, BIN YAO, JIANPING WENG, Hefei, China, Guangzhou, China

5:30 p.m.-5:45 p.m.
98-OR Gestational Glucose Intolerance without Gestational Diabetes Is a Risk Factor for Type 2 Diabetes
DARYL J. SELEN, TANAYOTT THAVEETHAI, SARAH HSU, KAITLYN JAMES, ANJALI KAIMAL, JAMES B. MEIGS, CAMILLE E. POWE, Boston, MA

5:45 p.m.-6:00 p.m.
99-OR Effects of Early Time-Restricted Feeding during Gestation on Offspring Glucose Homeostasis in Mice
MOLLY E. CARTER, NOURA EL HABBAL, DETRICK S. SNYDER, JEANNA R. REED, BRIGID GREGG, DAVE BRIDGES, Denver, CO, Ann Arbor, MI
SATURDAY, JUNE 26, 2021

4:00 p.m.-6:00 p.m.
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Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Incretin-Based Therapies (With ADA Presidents' Select Abstract Presentation)
Chair: Neda Rasouli, MD

4:00 p.m.-4:15 p.m.

100-OR ADA Presidents' Select Abstract Presentation: Efficacy and Safety of Once-Weekly Tirzepatide, a Dual GIP/GLP-1 Receptor Agonist vs. Placebo as Monotherapy in People with Type 2 Diabetes (SURPASS-1)
JULIO ROSENSTOCK, CAROL H. WYSHAM, JUAN P. FRIAS, SHIZUKA KANEKO, CLARE LEE, LAURA FERNANDEZ LANDO, HUZHANG MAO, XUEWEI CUI, VIVIAN THIEU, Dallas, TX, Spokane, WA, Los Angeles, CA, Takatsuki, Japan, Indianapolis, IN

4:15 p.m.-4:30 p.m.

101-OR Efficacy and Safety of Once-Weekly Semaglutide 2.0 vs. 1.0 mg for Type 2 Diabetes: SUSTAIN FORTE Randomized Trial
JUAN P. FRIAS, PERNILLE AUERBACH, HARPREET S. BAJAJ, YASUSHI FUKUSHIMA, ILDIKO LINGVAY, STANISLAVA MACURA, ANETTE L. SØNDERGAARD, TSVETALINA TANKOVA, NIKOLAOS TENTOLOURIS, JOHN B. BUSE, Los Angeles, CA, Brampton, ON, Canada, Tokyo, Japan, Dallas, TX, Søborg, Denmark, Sofia, Bulgaria, Athens, Greece, Chapel Hill, NC

4:30 p.m.-4:45 p.m.

102-OR Efficacy and Safety of Once-Weekly Efpeglenatide vs. Placebo as Monotherapy in Patients with Type 2 Diabetes (AMPLITUDE-M)
SEUNGJAEBAEK, JUAN P. FRIAS, LUIZA POPESCU, ELISABETH NIEMOELLER, ISABEL MUEHLEN-BARTMER, JULIO ROSENSTOCK, Seoul, Korea, Republic of, Los Angeles, CA, Bucharest, Romania, Frankfurt, Germany, Dallas, TX

4:45 p.m.-5:00 p.m.

103-OR The Glucagon-Like Peptide-1 Analog, Liraglutide Is a Safe and Effective Treatment of Bile Acid Malabsorption: A Proof of Concept Study
MARTIN L. KÅRHUS, ANDREAS BRØNDEN, JULIE FORMAN, ANNE HAABER, EBBE LANGHOLZ, TINA VILSBØLL, DAVID P. SONNE, FILIP K. KNOP, Hellerup, Denmark, Herlev, Denmark, Copenhagen, Denmark

5:00 p.m.-5:15 p.m.

104-OR Novel GIP/GLP-1/Glucagon Receptor Agonist LY3437943: A First-in-Human Dose Study in Healthy Subjects
SHWETA URVA, YU DU, MELISSA K. THOMAS, ZVONKO MILICEVIC, TAMER COSKUN, CHARLES BENSON, CORINA LOGHIN, Indianapolis, IN

5:15 p.m.-5:30 p.m.

105-OR An Exploratory Phase 2a, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Effect of Cotadutide on Energy Balance in Overweight and Obese Subjects with Type 2 Diabetes Mellitus
RAJNA GOLUBIC, JANE KENNET, VICTORIA E. PARKER, DARREN ROBERTSON, DAN LUO, LARS HANSEN, LUTZ JERMUTUS, PHILIP AMBERY, ADRIAN PARK, MARK EVANS, Cambridge, United Kingdom, Gaithersburg, MD, Gothenburg, Sweden

5:30 p.m.-5:45 p.m.

106-OR A First-in-Human Single Ascending Dose Study of Oxyntomodulin Analog LY3305677 in Healthy Subjects
LAI-SAN THAM, MELISSA K. THOMAS, CHARLES BENSON, ROSS BRAY, CHENG CAI TANG, CORINA LOGHIN, San Diego, CA, Singapore, Singapore, Indianapolis, IN

(continued on next page)
107-OR  Six-Day Subcutaneous GIP Infusion Increases Circulating Free Fatty Acids without Altering the Adipose Tissue Transcriptome, Adipocyte GIP Receptor Levels, or Circulating Inflammation Markers in Patients with Type 1 Diabetes

SEBASTIAN M. NGUYEN HEIMBURGER, BJØRN HOE, CHRIS N. NIELSEN, BOLETTE HARTMANN, JENS J. HOLST, FLEMMING DELA, ANNE JULIE OVERGAARD, JOACHIM STØRLING, TINA VILSBØLL, THOMAS F. DEJGAARD, CHARLES PYKE, MIKkel B. CHRISTENSEN, FILIP K. KNOP, Hellerup, Denmark, Gentofte, Denmark, Copenhagen, Denmark, Måløv, Denmark
Oral Presentations

Theme Area: Immunology/Transplantation

Novel Insights into Type 1 Diabetes Pathogenesis
Chair: Maria Bettini, PhD

4:00 p.m.-4:15 p.m.

108-OR Islet-Derived Preproinsulin T Cell Receptor Sequences Are Present throughout the Stages of Type 1 Diabetes Development
ERIN E. BASchal, ANGELA M. MITCHELL, KRISTEN MCDANIEL, AIMON ALKANANI, TAYLOR ARMSTRONG, LAURIE LANDRY, KATHLEEN WAUGH, MARIAN REWERS, MAKI NAKAYAMA, AARON W. MICHELS, Aurora, CO

4:15 p.m.-4:30 p.m.

109-OR T-Cell Responses to Hybrid Insulin Peptides Precede Type 1 Diabetes Development
ANGELA M. MITCHELL, AIMON ALKANANI, KRISTEN MCDANIEL, LAURA PYLE, KATHLEEN WAUGH, ANDREA STECK, MAKI NAKAYAMA, LIPING YU, PETER GOTTlieb, MARIAN REWERS, AARON W. MICHELS, Aurora, CO

4:30 p.m.-4:45 p.m.

110-OR MDAS5-Dependent Responses Can Influence Spontaneous and Virus-Accelerated T1D Onset
SAMUEL I. BLUM, YI-GUANG CHEN, HUBERT M. TSE, Birmingham, AL, Milwaukee, WI

4:45 p.m.-5:00 p.m.

111-OR Macrophage IPIA2ß-Derived Lipid (IDL) Signaling Promote Type 1 Diabetes Development
ABDULAZIZ ALMUTAIRI, YING GAI, XIAOYONG Y. LEI, DANIEL STEPHENSON, CHARLES CHALFANT, SASANKA RAMANADHAM, Tampa, FL, Birmingham, AL

5:00 p.m.-5:15 p.m.

112-OR Adoptive Transfer of CD4+ T Cells with Reduced iPLA2b Expression Mitigates T1D Development
TAYLEUR WHITE, SASANKA RAMANADHAM, CHARLES CHALFANT, TERESA DILORENZO, Birmingham, AL, Tampa, FL, Bronx, NY

5:15 p.m.-5:30 p.m.

113-OR Identification of Sorafenib for the Treatment of Type 1 Diabetes
QIN ZENG, JIANFENG SONG, XIAOXIAO SUN, DANDAN WANG, YANG XIAO, ZHIGUANG ZHOU, TUO DENG, Changsha, China

5:30 p.m.-5:45 p.m.

114-OR Overexpression of Alpha-1 Antitrypsin in MSCs Delays Onset of Type 1 Diabetes in the NOD Mice by Increasing Their Antinflammatory and Protection Functions
HUA WEI, WENYU GOU, CHARLIE STRANGE, HONGJUN WANG, Charleston, SC

5:45 p.m.-6:00 p.m.

115-OR Microbiome Antigens as a Vaccination Strategy in Type 1 Diabetes
ALEKSANDAR KOSTIC, Boston, MA
SATURDAY, JUNE 26, 2021

4:00 p.m.-6:00 p.m.  
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Oral Presentations  
Theme Area: Insulin Action/Molecular Metabolism  
Adipocyte Biology II  
Chair: Jacqueline M. Stephens, PhD

4:00 p.m.-4:15 p.m.  
116-OR  
Lipocalin-Type Prostaglandin D2 Synthase Depletion Induces Adipose Tissue Dysfunction in Response to High-Fat Diet  
ANKITA SRIVASTAVA, THOMAS PALAIA, CHRIS HALL, JENNY LEE, MATTHEW STEVENSON, LOUIS RAGOLIA, Mineola, NY

4:15 p.m.-4:30 p.m.  
117-OR  
Inhibition of Endothelial ROCK2 Induces Fat Browning and Improves Metabolic Dysfunction  
YUSUKE TAKEDA, KEIICHIRO MATOBA, YOSUKE NAGAI, RIKAKO UKICHI, KENSUKE SEKIGUCHI, TOMOYO AKAMINE, YASUSHI KANAZAWA, KAZUNORI UTSUNOMIYA, RIMEI NISHIMURA, Minato, Japan, Tokyo, Japan

118-OR  
WITHDRAWN

4:30 p.m.-4:45 p.m.  
119-OR  
Ankyrin-B Modulates Lipid Metabolism in Brown Adipocytes  
ASHLEY AGUILLARD, JOYCE TZENG, DAMARIS LORENZO, Chapel Hill, NC

4:45 p.m.-5:00 p.m.  
120-OR  
Dapagliflozin Increases Adiponectin and Its Receptors, and Reduces Inflammation and Ceramide Synthesis Enzymes in the Obese Prediabetic Dog  
MORVARID KABIR, RICHARD N. BERGMAN, V. SASHI GOPAUL, HSIUCHIUNG YANG, CATHRYN M. KOLKA, Los Angeles, CA, Gothenburg, Sweden

5:00 p.m.-5:15 p.m.  
121-OR  
Activation of FoxO1 Induces Akt Phosphorylation and Mimics the Metabolic Functions of Insulin without Proliferative Effects on 3T3-L1 Adipocytes  
TOMOHIRO OHNO, HIRAKU ONO, KENJI TAKEDA, KOUTARO YOKOTE, Chiba, Japan

5:15 p.m.-5:30 p.m.  
122-OR  
Insulin and C-Peptide in Human Choroid Plexus of Type 1 Diabetes Mellitus  
QING-RONG LIU, MIN ZHU, CAIO MAZUCANTI, STEFANO MARENCO, JOSEPHINE M. EGAN, Baltimore, MD, Bethesda, MD
### Saturday, June 26, 2021

**Oral Presentations**

*Theme Area: Islet Biology/Insulin Secretion*

**Ratcheting Up Insulin Secretion**

Chair: Sakeneh Zraika, PhD

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
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<tr>
<td>4:00 p.m. - 4:15 p.m.</td>
<td>Deletion of Both Pcsk1 And Pcsk2 in Beta Cells: Lack of Mature Insulin Drives Beta-Cell Expansion and Dysfunction, but Not Severe Diabetes in Mice</td>
<td>Austin Taylor, Yi-Chun Chen, Daniel Pasula, Dan S. Luciani, Bruce Verchere</td>
<td>Vancouver, BC, Canada</td>
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<tr>
<td>4:15 p.m. - 4:30 p.m.</td>
<td>Repetitive Ca2+ Waves Emanate from a Stable Leader Cell in Mouse Islets</td>
<td>Pauline L. Chabosseau, Aida Martinez-Sanchez, Isabelle Leclerc, Victoria Salem, Guy A. Rutter</td>
<td>London, United Kingdom</td>
</tr>
<tr>
<td>4:30 p.m. - 4:45 p.m.</td>
<td>Synaptotagmin 9 Regulates Tomosyn-2 Protein Abundance to Affect Early Phase of Insulin Secretion</td>
<td>Asmita Pathak, Haifa Alsharif, John E. Trombley, MD Mostafizur Rahman, Sushant Bhatnagar</td>
<td>Birmingham, AL</td>
</tr>
<tr>
<td>4:45 p.m. - 5:00 p.m.</td>
<td>MIR192-5p Is a Novel Regulator of GLP-1R and Insulin Secretion That May Contribute to Risk of Statin-Induced Diabetes</td>
<td>Yu-Lin Kuang, Antonio Munoz, Yuanyuan Qin, Andrae Dose, Gilbert Nalula, Elizabeth Theusch, Gabriela Sanchez, Carlos Iribarren, Ronald M. Krauss, Marisa W. Medina</td>
<td>Irvine, CA, Oakland, CA</td>
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<tr>
<td>5:00 p.m. - 5:15 p.m.</td>
<td>In Vivo Genetic Evidence That the Pyruvate Kinase Isoforms PKM1 and PKM2 Differentially Control Beta-Cell Fuel Sensing</td>
<td>Hannah R. Foster, Thuong Ho, Evgeniy Potapenko, Sophie L. Lewandowski, Sophia Sdao, Halaena R. VanDeusen, Rebecca L. Cardone, Richard Kibbe, IV, Matthew J. Merrins</td>
<td>Madison, WI, New Haven, CT</td>
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<tr>
<td>5:15 p.m. - 5:30 p.m.</td>
<td>DOC2b Boosts Insulin Secretion via a Yes Kinase-Dependent Mechanism</td>
<td>Ditii Chatterjee Bhowmick, Arianne Aslamy, Supriyo Bhattacharya, Eunjin Oh, Miwon Ahn, Debbie C. Thurmond</td>
<td>West Hollywood, CA, Duarte, CA</td>
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<tr>
<td>5:30 p.m. - 5:45 p.m.</td>
<td>Glycolytic Enzymes and Creatine Kinase Locally Regulate KATP Channel Activity in Both ß- and α-Cells</td>
<td>Thuong Ho, Evgeniy Potapenko, Matthew J. Merrins</td>
<td>Madison, WI</td>
</tr>
<tr>
<td>5:45 p.m. - 6:00 p.m.</td>
<td>Statin Exposure Increases Star (Steroidogenic Acute Regulatory Protein) Expression in Islets: A Novel Mechanism for ß-Cell Dysfunction and Increased Diabetes Risk?</td>
<td>Meghan F. Hogan, Nathalie Esser, Andrew T. Templin, Joseph J. Castillo, Rehana Akter, Rebecca L. Hull, Steven E. Kahn, Sakeneh Zraika</td>
<td>Indianapolis, IN, Seattle, WA</td>
</tr>
</tbody>
</table>
SUNDAY, JUNE 27, 2021

Scientific Sessions
8:00 a.m.-10:00 a.m.

Symposium
Theme Area: Acute and Chronic Complications
New Tools to Examine Diabetes-Related Kidney Disease
Chair: Robert G. Nelson, MD, PhD
8:00 a.m.-8:30 a.m. Is Kidney Disease the Same in Type 1 and Type 2 Diabetes? Intrarenal Hemodynamics, Kidney Energetics, and Biomarkers
Yuliya Lytvyn, PhD
8:30 a.m.-9:00 a.m. The Expanding Role of MRI, PET, and NMR Imaging in Clinical Diabetic Kidney Disease Research
Petter Bjornstad, MD
9:00 a.m.-9:30 a.m. Research Kidney Biopsies—Now More Important Than Ever!
Laura Barisoni, MD
9:30 a.m.-10:00 a.m. Putting It All Together—Precision Medicine Gets Precise
Jonathan Himmelfarb, MD

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Preserving Mental Health across the Lifespan of Living with Diabetes (and during COVID-19)
Chair: Diana Naranjo, PhD
8:00 a.m.-8:30 a.m. Supporting Families of Young Children with Diabetes—The Preschool and Early Childhood Years
Randi Streisand, PhD
8:30 a.m.-9:00 a.m. Adolescents and Young Adults—Managing the Co-occurring Life Challenges (and Diabetes)
Jessica Pierce, PhD
9:00 a.m.-9:30 a.m. Navigating Pregnancy and the Psychosocial Challenges of Diabetes
Maisa N. Feghali, MD
9:30 a.m.-10:00 a.m. The Unique Challenges of Diabetes, Mental Health, and the Elderly
David G. Marrero, PhD

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Who Should Loop? Pro/Cons (Includes Live Video Question and Answer Period)
Chair: Jordan Sherwood, MD
8:00 a.m.-8:25 a.m. Nuts and Bolts of “Looping” in 2021
Natalie J. Bellini, MSN, FNP-BC
8:25 a.m.-8:50 a.m. Lived Experience
Anna Norton, MS
8:50 a.m.-9:15 a.m. Looping Is for Everyone
Dana Lewis, DO
9:15 a.m.-9:40 a.m. DIY—Provider Concerns, Approaches, and the Future
David M. Maahs, MD, PhD
9:40 a.m.-10:00 a.m. Live Video Question and Answer Period
SUNDAY, JUNE 27, 2021

8:00 a.m.-10:00 a.m.
(continued)

**Symposium**
*Theme Area: Clinical Diabetes/Therapeutics*

**Matchmaker, Matchmaker, Make Me a Match—Selecting Glucose-Lowering Combinations for Type 2 Diabetes Mellitus**
Chair: Richard E. Pratley, MD

8:00 a.m.-8:30 a.m.  
*Incretins and SGLT2 Inhibitors*  
Ralph A. DeFronzo, MD

8:30 a.m.-9:00 a.m.  
*Insulin and SGLT2 Inhibitors*  
Chantal Mathieu, MD, PhD

9:00 a.m.-9:30 a.m.  
*Insulin and GLP-1RAs*  
Tina Vilsbøll, MD, DMSc

9:30 a.m.-10:00 a.m.  
*Dual Agonists*  
David D’Alessio, MD

**Symposium**
*Theme Area: Insulin Action/Molecular Metabolism*

**Emerging Paradigms of Uncoupled Bioenergetics in Metabolic Disease**
Chair: Rana K. Gupta, PhD

8:00 a.m.-8:30 a.m.  
*UCP1-Independent Thermogenesis via Ca2+ Futile Cycling*  
Shingo Kajimura, PhD

8:30 a.m.-9:00 a.m.  
*Noncanonical Thermogenesis via the Creatine Cycle*  
Bruce M. Spiegelman, PhD

9:00 a.m.-9:30 a.m.  
*Skeletal Muscle Thermogenesis and Energy Balance*  
Muthu Periasamy, PhD

9:30 a.m.-10:00 a.m.  
*A New Generation of Mitochondrial Uncouplers for the Treatment of Nonalcoholic Fatty Liver Disease, Nonalcoholic Steatohepatitis, and Type 2 Diabetes*  
Gerald I. Shulman, MD, PhD, MACP, MACE

**Symposium**
*Theme Area: Integrated Physiology/Obesity*

**ADA Diabetes Symposium—New Turf for the Other Incretin—GIP Signaling in the Brain and Effects on Food Intake and Energy Balance**
Co-Chairs: Darleen A. Sandoval, PhD and Jenny Tong, MD, MPH

8:00 a.m.-8:30 a.m.  
*Interactions of GIP and Leptin in the Regulation of Energy Balance*  
Makoto Fukuda, PhD

8:30 a.m.-9:00 a.m.  
*Integration of the GIP Receptor into Circuits Regulating Energy Balance*  
Alice Adriaenssens, PhD

9:00 a.m.-9:30 a.m.  
*Single-Cell Mapping of GLP-1 and GIP Receptor Expression in Hindbrain Circuits*  
Tune H. Pers, PhD

9:30 a.m.-10:00 a.m.  
*GIP in the Regulation of Satiety and Nausea*  
Matthew R. Hayes, PhD
Oral Presentations
Theme Area: Acute and Chronic Complications
Hypoglycemia by Day and by Night—Mechanisms and Management (With ADA Presidents' Select Abstract Presentation)
Chair: Bastiaan E. de Galan, MD, PhD

8:00 a.m.-8:15 a.m.
131-OR ADA Presidents' Select Abstract Presentation: Effect of Insulin Degludec vs. Insulin Glargine U100 on Occurrence of Nocturnal Hypoglycemia Assessed by Nocturnal Plasma Glucose Profiles in People with Type 1 Diabetes Prone to Nocturnal Severe Hypoglycemia
JULIE M. BRØSEN, RIKKE AGENSEN, PETER L. KRISTENSEN, SR., AMRA CIRIC ALIBEGOVIC, HENRIK U. ANDERSEN, PETER GUSTENHOFF, CHRISTOFFER HEDETOFT, TONNY JENSEN, SR., CLAUS B. JUHL, SUSANNE LERCHE, KIRSTEN NØRGAARD, HANS-HENRIK D. PARVING, LISE TARNOW, BIRGER THORSTEINSSON, ULRIK PEDERSEN-BJERGAARD, Hillerød, Denmark, Søborg, Denmark, Gentofte, Denmark, Aalborg, Denmark, Køge, Denmark, Copenhagen, Denmark, Esbjerg, Denmark, Kolding, Denmark, Holbæk, Denmark

8:15 a.m.-8:30 a.m.
132-OR Prolonged Mild Hypoglycemia Elicits Greater Heat Shock Protein Responses than Severe Transient Hypoglycemia
ANU MOIN, ALEXANDER S. ATKIN, HASSAN KAHAL, AHMED AL-QAISI, THOZHUKAT SATHYAPALAN, STEPHEN ATKIN, ALEXANDRA E. BUTLER, Cambridge, United Kingdom, Hull, United Kingdom, Leeds, United Kingdom, Doha, Qatar

8:30 a.m.-8:45 a.m.
133-OR Somatostatin Receptor Type 2 Antagonism (SSTR2a) Augments Glucagon Counterregulation and Delays Hypoglycemia Onset in Type 2 Diabetic (T2D), Sprague-Dawley Rats
EMILY G. HOFFMAN, NINOSCHKA DSOUZA, JULIAN AIKEN, RICHARD LIGGINS, MICHAEL RIDDELL, Toronto, ON, Canada, North York, ON, Canada, Vancouver, BC, Canada

8:45 a.m.-9:00 a.m.
134-OR Comparison of Glucose-Insulin Homeostasis in People with Postprandial Hypoglycemia after Gastric Bypass Surgery and Nadir Plasma Glucose <50 mg/dl vs. >50 mg/dl
DAVID HERZIG, MICHELE SCHIAVON, AFRODITI TRIPYLA, VERA LEHMANN, JASMIN MEIER, SJAAM JAINANDUNSING, CHIARA DALLA MAN, LIA BALLY, Bern, Switzerland, Padova, Italy, Rotterdam, Netherlands

9:00 a.m.-9:15 a.m.
135-OR Impaired Awareness of Hypoglycemia Is Associated with Residual Beta-Cell Function and Glucose Variability Parameters in Patients with Type 1 Diabetes
VADIM KLIMONTOV, JULIA F. SEMENOVA, ANTON I. KORBUT, Novosibirsk, Russian Federation

9:15 a.m.-9:30 a.m.
136-OR Nocturnal Hypoglycemia Prevention Strategies Used by People with Type 1 Diabetes According to Their Insulin Delivery and Blood Glucose Monitoring Technology
MERYEM K. TALBO, VIRGINIE MESSIER, KATHERINE DESJARDINS, RÉMI RABASA-LHORET, ANNE-SOPHIE BRAZEAU, TRICIA PETERS, Montreal, QC, Canada

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SUNDAY, JUNE 27, 2021

9:30 a.m.-9:45 a.m.

137-OR Dasiglucagon Ready-to-Use Autoinjector Is More Reliably and Quickly Administered than Glucagon Emergency Kit (GEK)
N. CELESTE BAILEY, JEANNETT DIMSITS, RAMIN TEHRANCHI, DAVID M. KENDALL, TIMOTHY S. BAILEY, Søborg, Denmark, Copenhagen, Denmark, Westlake Village, CA, Escondido, CA

9:45 a.m.-10:00 a.m.

138-OR Indirect Treatment Comparison of Ready-to-Use Glucagon Rescue Treatments for Severe Hypoglycemia: Nasal Glucagon vs. Liquid Stable Glucagon
YU YAN, CHRISTOPHER J. CHILD, KRISTEN SYRING, QIANQIAN WANG, REBECCA J. THRELKELD, Indianapolis, IN, Windlesham, United Kingdom, Sarasota, FL
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Health Economics and Cost-Effectiveness of Diabetes Prevention and Treatment (With ADA Presidents’ Select Abstract Presentation)
Chair: Elbert Huang, MD, MPH, FACP

8:00 a.m.-8:15 a.m.
139-OR ADA Presidents' Select Abstract Presentation: Potential Gains in Life Expectancy (LE) Associated with Achieving Treatment Goals in People with Type 2 Diabetes (T2D) in the U.S.
HAMED KIANMEHR, PING ZHANG, MEDA E. PAVKOV, KAI M. BULLARD, VIVIAN FONSECA, LIZHENG SHI, HUI SHAO, Gainesville, FL, Atlanta, GA, New Orleans, LA

8:15 a.m.-8:30 a.m.
140-OR Projected Impact of the Medicare Part D Senior Savings Model (SSM) on Diabetes-Related Health and Economic Outcomes among Insulin Users Covered by Medicare
HUI SHAO, HAMED KIANMEHR, LIZHENG SHI, VIVIAN FONSECA, JOSHUA D. BROWN, Gainesville, FL, New Orleans, LA

8:30 a.m.-8:45 a.m.
141-OR Selecting Intervention Population for Lifestyle Program for Type 2 Diabetes Prevention (LPT2DP): A Cost-Effectiveness Perspective
JOOHYUN PARK, PING ZHANG, HUI SHAO, MICHAEL LAXY, GIUSEPPINA IMPERATORE, Atlanta, GA, Gainesville, FL, Munich, Germany

8:45 a.m.-9:00 a.m.
142-OR Health Care Coverage and Access and Associations with Glycemic Control in Young Adults with Youth-Onset Diabetes: The SEARCH for Diabetes in Youth and TODAY Studies
CATHERINE PIHOKER, BARBARA H. BRAFFETT, THOMAS SONGER, WILLIAM H. HERMAN, MELINDA TUNG, SHIHCHEN KUO, ANNA BELLATORRE, ELVIRA M. ISGANAITIS, ELIZABETH T. JENSEN, JASMIN DIVERS, PING ZHANG, DAVID M. NATHAN, KIMBERLY DREWS, DANA DABELEA, PHILIP ZEITLER, Seattle, WA, Rockville, MD, Pittsburgh, PA, Ann Arbor, Mi, Boston, MA, Winston-Salem, NC, Mineola, NY, Atlanta, GA, Aurora, CO

9:00 a.m.-9:15 a.m.
143-OR Financial Incentives to Promote Adolescent Adherence to Type 1 Diabetes Self-Care: A Discrete Choice Experiment
DAVENE WRIGHT, KRISTEN CHALMERS, JESSICA L. LEBLANC, JOYCE YI-FRAZIER, SEEMA K. SHAH, KATHARINE GARVEY, KIRSTEN SENTURIA, CATHERINE PIHOKER, FAISAL MALIK, Seattle, WA, Chicago, IL, Boston, MA, Woodinville, WA

9:15 a.m.-9:30 a.m.
144-OR WITHDRAWN

9:30 a.m.-9:45 a.m.
145-OR Annual Wellness Visits Are Associated with Increased Use of Diabetes Preventive Services in the Diabetes Belt and Surrounding Counties
TIMOTHY L. MCMURRY, SOYOUN KIM, JENNIFER M. LOBO, HYOJUNG KANG, MIN-WOONG SOHN, Charlottesville, VA, Champaign, IL, Lexington, KY

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SUNDAY, JUNE 27, 2021

9:30 a.m.-9:45 a.m.

146-OR  A New Type 2 Diabetes Microsimulation Model to Estimate Long-Term Health Outcomes, Costs, and Cost-Effectiveness

THOMAS J. HOERGER, RAINER HILSCHER, SIMON NEUWAHL, YILING J. CHENG, STEPHEN R. BENOIT, HUI SHAO, MICHAEL LAXY, WENYA YANG, INNA CINTINA, MATTHEW KAUFMANN, HAIYING CHEN, ANDREA M. ANDERSON, LISA R. STAIMEZ, K.M. VENKAT NARAYAN, PING ZHANG, Research Triangle Park, NC, Atlanta, GA, Gainesville, FL, Munich, Germany, Falls Church, VA, Stanford, CA, Winston-Salem, NC
SUNDAY, JUNE 27, 2021

8:00 a.m.-10:00 a.m.
(continued)

Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Glucose Monitoring and Sensing
Chair: Francisco J. Pasquel, MD, MPH

8:00 a.m.-8:15 a.m.
147-OR Use of Closed-Loop Insulin Therapy in Older Adults with Type 1 Diabetes: Real-World Experience
ELENA TOSCHI, CHRISTINE SLYNE, ASTRID ATAKOV-CASTILLO, MEDHA MUNSHI, Boston, MA

8:15 a.m.-8:30 a.m.
148-OR Usefulness of CGM Metrics to Assess Glycemic Control in Non-White Subjects with Diabetes
ELENA TOSCHI, CHRISTINE SLYNE, AMY MICHALS, KAYLA SIFRE, RACHEL DEWAR, ASTRID ATAKOV-CASTILLO, DAI’QUANN J. DAVIS, MEDHA MUNSHI, Boston, MA

8:30 a.m.-8:45 a.m.
149-OR Evaluation of the Next Generation 180-Day Long-Term Implantable Eversense CGM System: PROMISE Study
SATISH K. GARG, DAVID R. LILJENQUIST, BRUCE W. BODE, MARK P. CHRISTIANSEN, TIMOTHY S. BAILEY, RONALD L. BRAZG, DOUGLAS S. DENHAM, ANNA CHANG, HALIS K. AKTURK, ANDREW D. DEHENNIS, KATHERINE TWEDEN, FRANCINE R. KAUFMAN, Idaho Falls, ID, Atlanta, GA, Walnut Creek, CA, Escondido, CA, Renton, WA, San Antonio, TX, Concord, CA, Aurora, CO, Germantown, MD

8:45 a.m.-9:00 a.m.
150-OR Intermittently Scanned Continuous Glucose Monitoring and Automated Bolus Calculation in Type 1 Diabetes Treated with Multiple Daily Insulin Injections: A Randomized Controlled Trial
ANNA L. SECHER, ULRIK PEDERSEN-BJERGAARD, OLE L. SVENDSEN, BIRTHE GADE-RASMUSSEN, THOMAS P. ALMDAL, LINDA H. RAIMOND, DORTE VISTISEN, KIRSTEN NØRGAARD, Gentofte, Denmark, Hillerød, Denmark, Copenhagen, Denmark, Hvidovre, Denmark

9:00 a.m.-9:15 a.m.
151-OR Using a CGM plus Online Peer Support Community Intervention to Address Health Disparities
MICHELLE L. LITCHMAN, ASHLEY NG, BRUNO GONZALES, ANA C. SANCHEZ-BIRKHEAD, NANCY A. ALLEN, ELI IACOB, DEBORAH GREENWOOD, Bundoora, Australia, Salt Lake City, UT, Granite Bay, CA

9:15 a.m.-9:30 a.m.
152-OR Glargine Timing during Fasting Ramadan in Patients with Type 1 Diabetes: A Randomized Controlled Trial
REEM ALAMOUDI, GHOFRAN S. KHOGEER, ALI AL QARNI, YOUSEF M. SALEH, ABDULRHMAN ALJAWHRJI, MARAM R. ALSUBAIEE, HAWAZEN A. ZARIF, SALWA B. ALAIDAROUS, SEHAM A. KHASHWAYN, MOHAMED HASSANEIN, Riyadh, Saudi Arabia, Al Ahsa, Saudi Arabia, Jeddah, Saudi Arabia, Dammam, Saudi Arabia, Dubai, United Arab Emirates

9:30 a.m.-9:45 a.m.
153-OR Measurement of C-Peptide at Diagnosis Informs Glycemic Control but Not Hypoglycemic Risk in Type 1 Diabetes
ALICE CARR, RICHARD A. ORAM, PARTH NARENDRAN, ROBERT C. ANDREWS, Exeter, United Kingdom, Birmingham, United Kingdom

9:45 a.m.-10:00 a.m.
154-OR People Who Get More Hours of Sleep Have Lower Mean Glucose: Analysis of Continuous Glucose Monitoring and Fitbit Data in a Free-Living Population without Diabetes
MARGARET A. CRAWFORD, SARAH K. PICKUS, KAZANNA C. HAMES, MATTHEW JOHNSON, ILENE J. KLEIN, GREGORY J. NORMAN, San Diego, CA, Del Mar, CA
SUNDAY, JUNE 27, 2021

8:00 a.m.-10:00 a.m.
(continued)

Oral Presentations
Theme Area: Epidemiology/Genetics
New Insights for Diabetes in Pregnancy and Youth
Chair: Elizabeth T. Jensen, MPH, PhD

8:00 a.m.-8:15 a.m.
155-OR Diabetes Complications and Cognitive Function in Youth with Type 1 and Type 2 Diabetes: The SEARCH for Diabetes in Youth Study
ALLISON SHAPIRO, ANNA BELLATORRE, DANA DABELEA, JEANETTE M. STAFFORD, RALPH DAGOSTINO, JR., AMY S. SHAH, ELAINE M. URBINA, CATHERINE E. BARRETT, CATHERINE PIHOKER, SANTICA M. MARCOVINA, ANGELA D. LIESE, AMY K. MOTTI, ELIZABETH T. JENSEN, GREGA WILKENING, Aurora, CO, Winston-Salem, NC, Cincinnati, OH, Atlanta, GA, Seattle, WA, Columbia, SC, Chapel Hill, NC

8:15 a.m.-8:30 a.m.
156-OR Projections of Type 1 and Type 2 Diabetes Burden in the U.S. Population Aged <20 Years through 2060
THADDÄUS TÖNNIES, SHARON SAYDAH, SCOTT ISOM, DANA DABELEA, JASMIN DIVERS, ELIZABETH J. MAYER-DAVIS, CATHERINE PIHOKER, LAWRENCE M. DOLAN, RALPH BRINKS, RALPH DAGOSTINO, JR.,ANNIKA HOYER, GIUSEPPINA IMPERATORE, Düsseldorf, Germany, Atlanta, GA, Winston-Salem, NC, Aurora, CO, Mineola, NY, Chapel Hill, NC, Seattle, WA, Cincinnati, OH, Munich, Germany

8:30 a.m.-8:45 a.m.
157-OR Childhood Nutrient Intake Changes and Adolescent Hepatic Fat: The Exploring Perinatal Outcomes among Children (EPOCH) Study
CATHERINE C. COHEN, WEI PERNG, KATHERINE A. SAUDER, BRANDY RINGHAM, ANNA BELLATORRE, ANN SCHERZINGER, MAGGIE STANISLAWSKI, LESLIE LANGE, KARTIK SHANKAR, DANA DABELEA, Aurora, CO, Denver, CO

8:45 a.m.-9:00 a.m.
158-OR Periconceptional and First Trimester Ultraprocessed Food Intake and Gestational Diabetes Risk
SAMRAWIT F. YISAHAK, STEFANIE HINKLE, SUNNI L. MUMFORD, KATHERINE GRANTZ, CUILIN ZHANG, JAGTESHWAR GREWAL, Bethesda, MD, Rockville, MD

9:00 a.m.-9:15 a.m.
159-OR Changes of Plasma Phospholipid Fatty Acids in Pregnancy in Relation to the Diagnosis and Treatment of Gestational Diabetes
LING-JUN LI, YEI ZHU, JING WU, DEIRDRE K. TOBIAS, STEFANIE HINKLE, RONALD C. MA, MICHAEL Y. TSAI, CUILIN ZHANG, Singapore, Singapore, Oakland, CA, Bethesda, MD, Boston, MA, Hong Kong, China, Minneapolis, MN

9:15 a.m.-9:30 a.m.
160-OR Increased Adiposity and Low Height-for-Age in Early Childhood Is Associated with Later Metabolic Risk in American Indian Children and Adolescents
MARIA J. RAMIREZ-LUZURIAGA, SAYUKO KOBES, MADHUMITA SINHA, WILLIAM C. KNOWLER, ROBERT L. HANSON, Phoenix, AZ

(continued on next page)
161-OR  Trends in Glycemic Control between 2002 and 2016 among Youth Recently Diagnosed with Type 1 Diabetes: The SEARCH for Diabetes in Youth Study
DARIA IGUDESMAN, BETH A. REBOUSSIN, KATHERINE J. SOURIS, CATHERINE PIHOKER, LAWRENCE M. DOLAN, SHARON SAYDAH, DANA DABELEA, NOEMIE CLOUET-FORAISON, SANTICA M. MARCOVINA, FAISAL MALIK, ELIZABETH J. MAYER-DAVIS, Chapel Hill, NC, Winston-Salem, NC, Seattle, WA, Cincinnati, OH, Atlanta, GA, Aurora, CO

162-OR  Food Insecurity and Glycemic Control among Youth and Young Adults with Type 2 Diabetes
LAUREN A. REID, JASON A. MENDOZA, ANWAR MERCHANT, MARCO GERACI, BETH A. REBOUSSIN, ALICE M. ELLYSON, FAISAL MALIK, DANA DABELEA, LINA MERJANEH, SANTICA M. MARCOVINA, EVA LUSTIGOVA, ANGELA D. LIESE, Columbia, SC, Rome, Italy, Winston-Salem, NC, Aurora, CO, Seattle, WA, Pasadena, CA
SUNDAY, JUNE 27, 2021

8:00 a.m.-10:00 a.m.
(continued)

Oral Presentations
Theme Area: Immunology/Transplantation
Advances in Islet Transplantation
Chair: Amisha Wallia, MD, MS

8:00 a.m.-8:15 a.m.
163-OR Evidence for Circadian Control of Glucose-Stimulated Insulin Secretion in Transplanted Human Stem-Cell-Derived Pancreatic β-Cells
SATISH K. SEN, SHAIMAA HASSOUN, QUINN P. PETERSON, ALEKSEY MATVEYENKO, Rochester, MN

8:15 a.m.-8:30 a.m.
164-OR Brown Adipose Tissue as a Novel Site for Islet Transplantation
JESSICA KEPPLE, JESSIE BARRA, CHAD S. HUNTER, HUBERT M. TSE, Birmingham, AL

8:30 a.m.-8:45 a.m.
165-OR Antioxidant-Based Encapsulation Strategies to Enhance Islet Allotransplantation
JESSIE BARRA, VERONIKA KOZLOVSKAYA, EUGENIA KHARLAMPIEVA, HUBERT M. TSE, Birmingham, AL

8:45 a.m.-9:00 a.m.
166-OR Coinfusion of Mesenchymal Stem Cells Improves Human Islet Survival in the Hepatic Islet Transplantation Mouse Model
WENYU GOU, CHARLIE STRANGE, HONGJUN WANG, Charleston, SC

9:00 a.m.-9:15 a.m.
167-OR Long-Term Follow-up after Total Pancreatectomy and Islet Cell Autotransplantation in Patients with Chronic Pancreatitis Utilizing Off-Site Islet Isolation
SALONI U. LAD, KHAWLA F. ALI, PHILIP C. JOHNSTON, VICENTE SAN MARTIN, YU KUEI LIN, RITA BOTTINO, MATTHEW WALSH, TYLER STEVENS, BETUL HATIROGLU, Belfast, United Kingdom, Cleveland, OH, Ann Arbor, MI, Pittsburgh, PA

9:15 a.m.-9:30 a.m.
168-OR Five-Year Follow-up after Islet Transplantation in Nonuremic Patients with Type 1 Diabetes Mellitus and Hypoglycemia Unawareness: Favorable Long-Term Outcomes of Multicenter Trial at University of Chicago
PIOTR J. BACHUL, GABRIELA S. GENERETTE, PETER BOREK, JORDAN S. PYDA, ROI ANTEBY, LINDSAY BASTO, LAURENCIA PEREA, KAROLINA GOLAB, MARTIN TIBUDAN, ANGELICA PEREZ-GUTIERREZ, AARON C. LUCANDER, JOHN FUNG, PIOTR WITKOWSKI, Boston, MA, Tel Aviv, Israel, Chicago, IL
Oral Presentations
Theme Area: Integrated Physiology/Obesity

Integrated Physiology—Central Nervous System Regulation of Metabolism
Chair: Jarrad M. Scarlett, MD, PhD

8:00 a.m.-8:15 a.m.

169-OR Magnetogenetic Stimulation of Pancreatic Nerves Regulates Blood Glucose
ROSEMARY LI, MARIA JIMENEZ GONZALEZ, LISA E. POMERANZ, GARY J. SCHWARTZ, SARAH STANLEY, Bronx, NY, New York, NY

8:15 a.m.-8:30 a.m.

170-OR Hypothalamic Gliosis Predicts Decline in Insulin Sensitivity over One Year in People with Obesity
JENNIFER L. ROSENBAUM, STEFAN SCHOEN, SUSAN J. MELHORN, MARY ROSALYNN DE LEON, MARY WEBB, KRISTINA UTZSCHNEIDER, ELLEN SCHUR, Portland, OR, Seattle, WA

8:30 a.m.-8:45 a.m.

171-OR Dopaminergic Signaling in the Ventral Tegmental Area of the Brain Mediates the Impaired Sympathoadrenal Response to Hypoglycemia
RAHUL AGRAWAL, SUNNY SHARMA, SIMON FISHER, Salt Lake City, UT

8:45 a.m.-9:00 a.m.

172-OR Perinatal Exposure to a Western Diet Alters Hypothalamic Gene Expression and Predisposes to Diabetes in Adult Male Mice
MONA ELGAZZAZ, ERIC D. LAZARTIGUES, FRANCK MAUVAIS-JARVIS, New Orleans, LA

9:00 a.m.-9:15 a.m.

173-OR Medial Amygdala Projections Regulate the Metabolic Responses to Internal and External Signals
KAVYA DEVARAKONDA, ALEXANDRA ALVARSSON, MARIA JIMENEZ GONZALEZ, ROSEMARY LI, VANESSA E. LEHMANN, SARAH STANLEY, New York, NY
Oral Presentations
Theme Area: Islet Biology/Insulin Secretion
You Are (or Aren’t) What You Eat—Cellular Identity and Fuel Utilization (With ADA Presidents’ Select Abstract Presentation)
Chair: Adolfo Garcia-Ocana, PhD

8:00 a.m.-8:15 a.m.

174-OR ADA Presidents' Select Abstract Presentation: Epigenetic Regulation of Functional Beta-Cell Mass by Cohesin Smc3
JEAN K. WANG, APARAMITA PANDEY, ALEXANDER P. HAM, NAZIA PARVEEN, SANGEETA DHAWAN, Los Angeles, CA, Duarte, CA

8:15 a.m.-8:30 a.m.

175-OR The Mitochondrial Life Cycle Determines Beta-Cell Maturity through Activation of the Integrated Stress Response
GEMMA PEARSON, NATHAN LAWŁOR, JIE ZHU, EMILY M. WALKER, EMMA C. RECK, MICHAEL L. STITZEL, SCOTT SOLEIMANPOUR, Farmington, CT, Ann Arbor, MI

8:30 a.m.-8:45 a.m.

176-OR STIM1 Deletion Leads to Loss of Beta-Cell Identity in High-Fat Diet-Fed Female Mice
PAUL SOHN, PREETHI KRISHNAN, CHIH-CHUN LEE, TATSUYOSHI KONO, CARMELLA EVANS-MOLINA, Indianapolis, IN

8:45 a.m.-9:00 a.m.

177-OR The Swi/Snf Chromatin Remodeling Complex Controls the Specification, Expansion, and Differentiation of Pancreatic Endocrine Progenitor Cells
JASON SPAETH, REBECCA K. DAVIDSON, NOLAN CASEY, Indianapolis, IN

9:00 a.m.-9:15 a.m.

178-OR Lipotoxicity Stimulates Beta-Cell Extracellular Vesicle Secretion Which Induces Beta-Cell Dysfunction and Perturbs Beta-Cell Transcriptional Identity
TRACY K. HER, MATTHEW BROWN, ALEKSEY MATVEYENKO, NAUREEN JAVEED, Rochester, MN

9:15 a.m.-9:30 a.m.

179-OR Defining Circadian Clock Dependency of Pancreatic Islet Transcriptional and Epigenetic Identity
MATTHEW BROWN, ALEKSEY MATVEYENKO, Rochester, MN

9:30 a.m.-9:45 a.m.

180-OR Single-Cell RNA Sequencing Reveals a Role for ROS Signaling in Nutrient-Induced Beta-Cell Proliferation
ALEXIS VIVOLI, JULIEN GHISLAIN, ANNE-LAURE CASTELL, ALI FILALI, ROBERT M. SLADEK, VINCENT POITOUT, Montreal, QC, Canada

9:45 a.m.-10:00 a.m.

181-OR Amino Acid-Stimulated Alpha Cell Proliferation Requires Glutaminase Activity
WALTER SIV, KATELYN SELLICK, AUSTIN REUTER, MATTHEW SHOU, JADE STANLEY, ERICK SPEARS, WENBIAO CHEN, DANIELLE DEAN, Nashville, TN
SUNDAY, JUNE 27, 2021

10:15 a.m.-11:45 a.m.
President, Medicine & Science Address

Our Past, Present, and Future—The Journey and the Dream Continue
Ruth S. Weinstock, MD, PhD

and

Banting Medal for Scientific Achievement

In the Beginning Was the Gut—And Then Something Happened—
A Story about the Incretins
Jens Juul Holst, MD, DrMedSci

12:00 p.m.-1:00 p.m.

Professional Interest Group Discussion
Theme Area: Acute and Chronic Complications

Professional Interest Group Discussion on Diabetes and Cardiovascular Disease—Are We Going to Learn More from Broader Evaluations of New Glycemic Lowering Medications Beyond Cardiovascular Outcome (CVO) Trials? Is It Time to Let Go of “CVO” Trials?
Chair: Neda Rasouli, MD
12:00 p.m.-12:05 p.m. Introduction
Neda Rasouli, MD
12:05 p.m.-12:20 p.m. Assessing the Safety of Glucose-Lowering Drugs—The FDA Perspective
Lisa Yanoff, MD
12:20 p.m.-12:40 p.m. Beyond the FDA Guidance for Development of Glucose-Lowering Agents—Gaps in Knowledge
Illdiko Lingvay, MD, MPH, MSCS
12:40 p.m.-1:00 p.m. Therapeutic Development in Patients with Diabetes—Target or Outcome? A Cardiologist’s Perspective
Marc P. Bonaca, MD, MPH

Professional Interest Group Discussion
Theme Area: Acute and Chronic Complications

Professional Interest Group Discussion on Eye Health—Ocular Health Care by Telehealth and Artificial Intelligence (AI)
Chair: George L. King, MD
12:00 p.m.-12:10 p.m. Introduction
George L. King, MD
12:10 p.m.-12:35 p.m. The Use of AI in the Diagnosis of Diabetic Retinopathy
Michael D. Abramoff, MD, PhD
12:35 p.m.-1:00 p.m. Telehealth in Ocular Care for Diabetic Retinopathy before and after COVID-19
Bobeck S. Modjtahedi, MD
Professional Interest Group Discussion
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Professional Interest Group Discussion on Behavioral Medicine and Psychology—We Need More Mental Health Providers! Growing the Behavioral Diabetes Workforce
Chair: Korey K. Hood, PhD
12:00 p.m.-12:03 p.m.  Introduction  Korey K. Hood, PhD
12:03 p.m.-12:22 p.m.  Progress from the ADA-APA Mental Health Provider Training Program  Marisa E. Hilliard, PhD
12:22 p.m.-12:41 p.m.  Training Mental Health Providers to Staff Diabetes Clinics  Danielle M. Hessler, PhD
12:41 p.m.-1:00 p.m.  CDCES Perspective on Providing Mental Health Care  Laurel H. Messer, PhD, RN, CDCES

Professional Interest Group Discussion
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Professional Interest Group Discussion on Diabetes Self-Management Education and Support (DSMES)—Post-Pandemic Care for Patients with Diabetes in a Diverse Population (Includes Live Video Question and Answer Period)
Chair: Clipper F. Young, PharmD, MPH, CDCES, BC-ADM, BCGP
12:00 p.m.-12:05 p.m.  Introduction  Clipper F. Young, PharmD, MPH, CDCES, BC-ADM, BCGP
12:05 p.m.-12:30 p.m.  Delivering DSMES Post-Pandemic—Addressing Health Equity in a Diverse Population  Ashby F. Walker, PhD
12:30 p.m.-12:55 p.m.  Lessons Learned from COVID-19—What Have CDCESs Done to Maintain the Delivery of DSMES to a Diverse Population?  Beverly Thomassian, RN, MPH, CDCES, BC-ADM
12:55 p.m.-1:00 p.m.  Live Video Question and Answer Period

Professional Interest Group Discussion
Theme Area: Clinical Diabetes/Therapeutics
Professional Interest Group Discussion on Diabetes in Youth—Identification and Management of Prediabetes in Youth—Pros vs. Cons
Chair: Jean M. Lawrence, ScD, MPH, MSSA
12:00 p.m.-12:05 p.m.  Introduction  Jean M. Lawrence, ScD, MPH, MSSA
12:05 p.m.-12:10 p.m.  Session Overview  Silva A. Arslanian, MD
12:10 p.m.-12:35 p.m.  Pros  Tamara S. Hannon, MD
12:35 p.m.-1:00 p.m.  Cons  Philip Zeitler, MD, PhD
SUNDAY, JUNE 27, 2021

1:00 p.m.-2:15 p.m.

Session Break

Take this opportunity to visit the Virtual Exhibits and Poster Hall

2:15 p.m.-3:00 p.m.

Kelly West Award for Outstanding Achievement in Epidemiology Lecture

Risk Factors and Type 2 Diabetes
Nicholas J. Wareham, FMedSci, FRCP, FFPHM, MBBS, MSc, PhD

2:15 p.m.-3:45 p.m.

Symposium

Theme Area: Clinical Diabetes/Therapeutics

Efficacy and Safety of Dapagliflozin in Patients with and without Type 2 Diabetes Hospitalized with COVID-19—Results from the DARE-19 Global Randomized Controlled Trial (Includes Live Video Question and Answer Period)
Chair: Jennifer B. Green, MD
2:15 p.m.-2:30 p.m.  Rationale, Design, and Baseline Characteristics of Patients in the DARE-19 Trial
Mikhail N. Kosiborod, MD
2:30 p.m.-2:45 p.m.  Efficacy Outcomes in Patients with and without Type 2 Diabetes
Otávio Berwanger, MD, PhD
2:45 p.m.-3:00 p.m.  Safety Outcomes in Patients with and without Type 2 Diabetes
Subodh Verma, MD, PhD, FRCSC
3:00 p.m.-3:15 p.m.  Clinical Implications of the DARE-19 Trial
Mikhail N. Kosiborod, MD
3:15 p.m.-3:30 p.m.  Independent Commentary
Carolyn S.P. Lam, MBBS, PhD
3:30 p.m.-3:45 p.m.  Live Video Question and Answer Period

2:15 p.m.-4:15 p.m.

Symposium

Theme Area: Acute and Chronic Complications

The Importance of Triglycerides Continues to Emerge
Chair: Savitha Subramanian, MD
2:15 p.m.-2:45 p.m.  Insights on the Causative Role of Elevated Triglyceride Levels from Mendelian Randomization Studies
Brian A. Ference, MD, MPhil, MSc, FACC, FESC
2:45 p.m.-3:15 p.m.  Is There a Role for Fibrates and n-3 Fatty Acids Other than Icosapent Ethyl in the Treatment of Hypertriglyceridemia?
Lisa Tannock, MD
3:15 p.m.-3:45 p.m.  New Insights into Plasma Triglyceride Processing by the GPIHBP1–LPL Complex
Stephen G. Young, MD
3:45 p.m.-4:15 p.m.  Newer Drugs in the Management of Hypertriglyceridemia
Jean-Claude Tardif, MD, FRCPC, FACC, FCAHS
Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Timing Is Everything—Meal and Exercise Timing and Your Circadian Clock
Chair: Courtney M. Peterson, PhD, MSc, MA, MS
2:15 p.m.-2:45 p.m. The Circadian Clock—Your Metabolism Is Ticking
Eve Van Cauter, PhD
2:45 p.m.-3:15 p.m. Should We Eat Breakfast Like a King?
Oren Froy, PhD
3:15 p.m.-3:45 p.m. Chrononutrition and Genetics—How Rhythms Shape Our Health
Marta Garaulet Aza, PhD
3:45 p.m.-4:15 p.m. Is There an Ideal Time to Exercise for Establishing an Exercise Habit and Regulating Body Weight?
Dale S. Bond, PhD

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Aiming for Balance—Type 1 Diabetes and Exercise Management Perfected
Chair: Jane E. Yardley, PhD
2:15 p.m.-2:45 p.m. Is There an Optimal Target Blood Glucose during Physical Activity?
Ian W. Gallen, MD, FRCP
2:45 p.m.-3:15 p.m. How Does Type 1 Diabetes Affect Fuel Metabolism?
Lia Bally, MD, PhD
3:15 p.m.-3:45 p.m. Developing a Roadmap to Optimize Performance and Glycemia in Professional Athletes Living with Type 1 Diabetes
Sam N. Scott, PhD
3:45 p.m.-4:15 p.m. Going High Tech for Physical Activity—Using Insulin Pumps, Continuous Glucose Monitors, and Bolus Calculators
Ajenthen G. Ranjan, MD, PhD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Reimagining Diabetes Care in the Virtual World
Chair: Andrea Cherrington, MD, MPH
2:15 p.m.-2:45 p.m. Virtual Diabetes Prevention
Tannaz Moin, MD, MBA, MSHS
2:45 p.m.-3:15 p.m. Virtual Diabetes Group Visits
Arshiya A. Baig, MD, MPH
3:15 p.m.-3:45 p.m. Leveraging Information Technology to Provide Diabetes Care Virtually
Mary Reed, DrPH
3:45 p.m.-4:15 p.m. Equity and Reimbursement of Telemedicine
Sachin D. Shah, MD
Symposium
Theme Area: Clinical Diabetes/Therapeutics
Children with Type 2 Diabetes Are Not Just Little Adults
Chair: Kenneth C. Copeland, MD
2:15 p.m.-2:45 p.m.  
Epidemiology of Type 2 Diabetes—SEARCH Update
Angela D. Liese, PhD, MPH, FACE, FAHA
2:45 p.m.-3:15 p.m.  
Pathophysiology of Pediatric Type 2 Diabetes—RISE and Running to the Future
Tamara S. Hannon, MD
3:15 p.m.-3:45 p.m.  
Beyond Metformin—Novel Treatment Options for Type 2 Diabetes in Children/Youth
Elvira M. Isganaitis, MD, MPH
3:45 p.m.-4:15 p.m.  
The Future of Pediatric Type 2 Diabetes
Sonia Caprio, MD

Symposium
Theme Area: Immunology/Transplantation
Personalized Medicine for Immune Therapies in Type 1 Diabetes
Chair: Aaron W. Michels, MD
2:15 p.m.-2:45 p.m.  
Type 1 Diabetes—Is It More than One Disease?
Laura M. Jacobsen, MD
2:45 p.m.-3:15 p.m.  
Antigen-Specific Therapies for Type 1 Diabetes
Colin Dayan, MD
3:15 p.m.-3:45 p.m.  
Genetically Selected Patients for Targeted Immune Therapy
Peter Gottlieb, MD
3:45 p.m.-4:15 p.m.  
Response to Immune Therapies—Who Benefits?
Peter Linsley, PhD

Symposium
Theme Area: Integrated Physiology/Obesity
Health Disparities among People with Obesity
Chair: Neda Laiteerapong, MD, MS, FACP
2:15 p.m.-2:55 p.m.  
What Are the Potential Physiological Differences in Adiposity and Energy Expenditure?
Barbara Gower, PhD
2:55 p.m.-3:35 p.m.  
What Are the Social/Cultural Determinants?
Leonard E. Egede, MD, MS
3:35 p.m.-4:15 p.m.  
What Are the Support and Treatment Paradigms Needed to Address Disparities?
Fatima Cody Stanford, MD, MPH, MPA, FAAP, FACP, FAHA, FTOS

Symposium
Theme Area: Islet Biology/Insulin Secretion
All Roads Lead to Insulin
Chair: Debbie C. Thurmond, PhD
2:15 p.m.-2:45 p.m.  
Microtubules and Insulin Granules
Irina Kaverina, PhD
2:45 p.m.-3:15 p.m.  
A Fluorescent Timer Reporter Enables Sorting of Insulin Secretory Granules by Age
Melkam A. Kebede, PhD
3:15 p.m.-3:45 p.m.  
The Mitochondria’s Role in Basal Insulin Secretion
Orian Shirihai, MD, PhD
3:45 p.m.-4:15 p.m.  
Store-Operated Calcium Channels, Ca Channels, and Basal Insulin Secretion
Leslie S. Satin, BS, MS, PhD
SUNDAY, JUNE 27, 2021

2:15 p.m.-4:15 p.m.  
(continued)

**Oral Presentations**  
*Theme Area: Acute and Chronic Complications*  
*Highlights in Diabetic Kidney Disease Research—Basic, Clinical, and Translational Science*  
Chair: Petter Bjornstad, MD

2:15 p.m.-2:30 p.m.  
**182-OR** Genetic Susceptibility to Diabetic Kidney Disease Is Linked to C/EBP-XOR Axis  
QIN WANG, HAIYING QI, SHUYU LI, GABRIELLA CASALENA, LIPING YU, ILSE S. DAEHN, Chongqing, China, New York, NY

2:30 p.m.-2:45 p.m.  
**183-OR** Pyruvate Kinase M2 (PKM2) Enzymatic Activity Is Necessary to Improve Podocyte Mitochondrial Function and Glomerular Fuel Metabolism and Diabetic Nephropathy  
JIALIN FU, TAKANORI SHINJO, QIAN LI, RONALD ST-LOUIS, KYOUNGMIN PARK, HISASHI YOKOMIZO, MARC GREGORY YU, HETAL SHAH, I-HSIEN WU, GEORGE L. KING, Boston, MA, Fukuoka, Japan

2:45 p.m.-3:00 p.m.  
**184-OR** Youth-Onset (YO) Type 2 Diabetes (T2D) Is Associated with More Severe Structural Lesions on Kidney Biopsy than Adult-Onset (AO) T2D  
HELEN C. LOOKER, CAMERON SEVERN, TIMOTHY B. VIGERS, LAURA PYLE, PIERRE-JEAN SAULNIER, BEHZAD NAJAFIAN, MICHAEL MAUER, ROBERT G. NELSON, PETTER BJORNSTAD, Aurora, CO, Poitiers, France, Seattle, WA, Minneapolis, MN, Phoenix, AZ

3:00 p.m.-3:15 p.m.  
**185-OR** Longitudinal Changes in KidneyIntelX and Association with Progressive Decline in Kidney Function in the CANVAS Trial  
DAVID W. LAM, GIRISH N. NADKARNI, BRUCE NEAL, KENNETH W. MAHAffEY, NORM ROSENTHAL, MICHAEL K. HANSEN, HIDDO L. HEERSPINK, STEVEN COCA, New York, NY, Sydney, Australia, Stanford, CA, Raritan, NJ, Spring House, PA, Groningen, Netherlands

3:15 p.m.-3:30 p.m.  
**186-OR** Risk Prediction of Early Decline in Renal Function in Diabetic Kidney Disease with Algorithm Including Fractional Excretion of Glycated Amino Acids  
PAUL THORNALLEY, ALBERTO DE LA FUENTE, NAILA RABBANI, Doha, Qatar

3:30 p.m.-3:45 p.m.  
**187-OR** Advanced Glycation End Products Predict Loss of Renal Function and High-Risk Chronic Kidney Disease in Type 2 Diabetes in the ACCORD Trial  
JURAJ KOSKA, HERTZEL C. GERSTEIN, PAUL J. BEISSWENGER, PETER REAVEN, Phoenix, AZ, Hamilton, ON, Canada, Lebanon, NH

3:45 p.m.-4:00 p.m.  
**188-OR** Inflammatory and Insulinemic Dietary Patterns Associate with Nephropathy in Type 1 Diabetes (T1D)  
HETAL SHAH, ATIF ADAM, TAHANI BOUMENNA, MARC GREGORY YU, JUN LI, FRANK HU, FRED K. TABUNG, GEORGE L. KING, Boston, MA, Columbus, OH

(continued on next page)
SUNDAY, JUNE 27, 2021

4:00 p.m.-4:15 p.m.

189-OR  FIDELIO-DKD Study: Analysis of Effects of Finerenone by Baseline A1C

PETER ROSSING, ELLEN BURGESS, RAJIV AGARWAL, STEFAN ANKER, GERASIMOS FILIPPATOS, BERTRAM PITT, LUIS M. RUILOPE, PIETER GILLARD, AMER JOSEPH, MEIKE DANIELA BRINKER, CHARLIE SCOTT, GEORGE BAKRIS, Gentofte, Denmark, Calgary, AB, Canada, Indianapolis, IN, Athens, Greece, Ann Arbor, MI, Madrid, Spain, Leuven, Belgium, Berlin, Germany, Wuppertal, Germany, Reading, United Kingdom, Chicago, IL
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Insulins
Chair: Rajesh Garg, MD

2:15 p.m.-2:30 p.m.

190-OR  Faster Recovery from Hyperglycemia with Ultrarapid Lispro (URLi) vs. Humalog in Patients with Type 1 Diabetes (T1D) on Continuous Subcutaneous Insulin Infusion (CSII)
JENNIFER LEOHR, ELIZABETH S. LABELL, MARY A. DELLVA, ZHENTAO TONG, JORGE ARRUBLA, LEONA PLUM-MOERSCHEL, ERIC ZIJLSTRA, TSUYOSHI FUKUDA, THOMAS HARDY, Indianapolis, IN, Mainz, Germany, Neuss, Germany

2:30 p.m.-2:45 p.m.

191-OR  Similar Hypoglycemia Duration with Once-Weekly Insulin Icodec vs. Insulin Glargine U100 in Insulin Naïve or Experienced Patients with T2D
ROBERT J. SILVER, MARISSE ASONG, KAMILLA BEGTRUP, METTE M. KOEFOED, SIMON R. HELLER, JULIO ROSENSTOCK, Nashua, NH, Søborg, Denmark, Sheffield, United Kingdom, Dallas, TX

2:45 p.m.-3:00 p.m.

192-OR  Glycemic Control with Once-Weekly Basal Insulin Fc (BIF) in Persons with Type 2 Diabetes Mellitus (T2DM) Using Continuous Glucose Monitoring (CGM) in a Phase 2 Study
CHRISTOF M. KAZDA, JENNY CHIEN, QIANYI ZHANG, EMMANUEL CHIGUTSA, WILLIAM LANDSCHULZ, PAULA WULLENWEBER, AXEL HAUPT, JUAN P. FRIAS, Vagnas, France, Indianapolis, IN, Los Angeles, CA

3:00 p.m.-3:15 p.m.

193-OR  Memory Advancement with Intranasal Insulin in Type 2 Diabetes: Randomized Control Trial
VERA NOVAK, CHRISTOS MANTZOROS, PETER NOVAK, REGINA MCGLINCHY, WEIYING DAI, VASILEIOS LIOUTAS, STEPHANIE BUSS, CATHERINE B. FORTIER, FAIZAN KHAN, LAURA APONTE BECERRA, LONG H. NGO, Boston, MA, Binghamton, NY

3:15 p.m.-3:30 p.m.

194-OR  Real-World Effectiveness and Safety of Insulin Glargine 300 U/mL (Gla-300) in Older Adults (≥70 Years) with Type 2 Diabetes (T2DM): A Subgroup Analysis of the ATOS Study
GAGIK R. GALSTYAN, AMIR TIROSH, HERNANDO VARGAS-URICOECHEA, MARIA AILEEN N. MABUNAY, MATHIEU Coudert, VALERIE PIORGET, NIAZ KHAN, Moscow, Russian Federation, Tel-Hashomer, Israel, Popayan-Cauca, Colombia, Singapore, Singapore, Paris, France, Al Ain, United Arab Emirates

3:30 p.m.-3:45 p.m.

195-OR  A Comparison of Inpatient Glycemic Control Using Continuous Subcutaneous Insulin Infusion vs. Multiple Daily Injections in Persons with Type 1 Diabetes
YUTING YE, STEPHANIE IZARD, ALYSON MYERS, Manhasset, NY

3:45 p.m.-4:00 p.m.

196-OR  Digital Insulin Therapy Protocol in the Postoperative Period of Coronary Artery Bypass Graft Surgery: A Prospective Randomized Study
ALEXANDRE B. CAMARA DE SOUZA, SR., MARCOS T. TOYOSHIMA, SR., São Paulo, Brazil

(continued on next page)
197-OR  ADO09, a Coformulation of Insulin A21G and Pramlintide (Pram), Improves Blood Glucose Control and Reduces Body Weight in Subjects with T1D
GRÉGORY MEIFFREN, GRIT ANDERSEN, ROSY ELOY, CLAIRE MÉGRET, SUSANNE FAMULLA, CYRIL SEROUSSI, YOUNG CHAN, MARTIN GAUDIER, OLIVIER SOULA, J. HANS DEVRIES, TIM HEISE, Lyon, France, Neuss, Germany
Oral Presentations
Theme Area: Integrated Physiology/Obesity
Insulin Secretion and Macronutrient Metabolism in Humans
Chair: Allison Xu, PhD

2:15 p.m.-2:30 p.m.  
**198-OR** The Stimulatory Effect of Glucagon on Insulin Secretion Is Glucose Dependent in Healthy Human Subjects  
SARAH M. GRAY, GUO-FANG ZHANG, WILLIAM BENNETT, JENNY TONG, JONATHAN CAMPBELL, DAVID A. D’ALESSIO, Durham, NC, Seattle, WA

2:30 p.m.-2:45 p.m.  
**199-OR** Insulin Infusion Decreases Extracellular Vesicles in Adults with Metabolic Syndrome  
EMILY HEISTON, ANNA BALLANTYNE, NATHAN STEWART, LUCA MUSANTE, UTA ERDBRUEGGER, STEVEN K. MALIN, Richmond, VA, New Brunswick, NJ, Charlotteville, VA

2:45 p.m.-3:00 p.m.  
**200-OR** Optimal Use of Measures of Insulin Secretion and Sensitivity in Predicting Diabetes: Beyond the Disposition Index  
ELSA VAZQUEZ ARREOLA, ROBERT L. HANSON, CLIFTON BOGARDUS, III, WILLIAM C. KNOWLER, Phoenix, AZ

3:00 p.m.-3:15 p.m.  
**201-OR** Remission of Type 2 Diabetes and Decreased Inflammatory Markers with a High-Protein Diet  
FRANKIE B. STENTZ, ANN AMMONS, JOHN V. CHRISTMAN, Memphis, TN

3:15 p.m.-3:30 p.m.  
**202-OR** Cell-Autonomous Impairment of BCAA Catabolism in White Adipocytes Leads to Systemic Metabolic Dysregulation  
JOYCE TZENG, ASHLEY AGUILLARD, DAMARIS LORENZO, Chapel Hill, NC

3:30 p.m.-3:45 p.m.  
**203-OR** Measurement of Intact Insulin by Mass Spectrometry Identifies Nonalcoholic Fatty Liver Disease (NAFLD)  
FERNANDO BRIL, MICHAEL J. MCPHAUL, SRILAXMI KALAVALAPALLI, ROMINA LOMONACO, DIANA BARB, EDDISON GODINEZ, KENNETH CUSI, Birmingham, AL, San Juan Capistrano, CA, Gainesville, FL
SUNDAY, JUNE 27, 2021

4:30 p.m.-6:00 p.m.

**Symposium**

*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

**Optimizing Health Equity—Solutions-Based Approaches**

Chair: Constance Brown-Riggs, MSED, RDN, CDCES, CDN

4:30 p.m.-5:00 p.m.  
*Technology and Health Equity in Diabetes Care and Education*  
Lori M. Laffel, MD, MPH

5:00 p.m.-5:30 p.m.  
*The COVID-19 Pivot—Leveraging Innovative Technologies and Diabetes Self-Management Education and Support Services*  
Gretchen Youssef, MS, RDN, CDE

5:30 p.m.-6:00 p.m.  
*Digital Health and Health Inequity—Target Diabetes Care and Education Services*  
Gary Puckrein, PhD

4:30 p.m.-6:30 p.m.

**Symposium**

*Theme Area: Acute and Chronic Complications*

**Diabetes Retinal Disease—Changing Before Your Eyes**

Chair: Lucia Sobrin, MD, MPH

4:30 p.m.-5:00 p.m.  
*Treatment of Preproliferative Diabetes Retinopathy and New Grading Scales*  
Jennifer Sun, MD, MPH

5:00 p.m.-5:30 p.m.  
*Clinical Aspects of Retinal Neurovascular Degeneration in Diabetes*  
Stela Vujosevic, MD, PhD, FEBO

5:30 p.m.-6:00 p.m.  
*Laboratory Aspects of Retinal Neurovascular Degeneration in Diabetes*  
Patrice E. Fort, MS, PhD

6:00 p.m.-6:30 p.m.  
*Diabetic Retinopathy in Youth with Diabetes*  
Jinan B. Saaddine, MD, MPH

**Symposium**

*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

**When COVID-19 Clashes with Diabetes—Data and Experiences Regarding the Impact on People with Diabetes**

Chair: Shivani Agarwal, MD, MPH

4:30 p.m.-5:00 p.m.  
*Assessing the Intersection of COVID-19, Diabetes, and Mental Health in Adults with Diabetes*  
Sarah C. Westen, PhD

5:00 p.m.-5:30 p.m.  
*COVID-19’s Impact on the Most Medically and Socially Vulnerable Youth with Diabetes*  
Catlin Dennis, MPH

5:30 p.m.-6:00 p.m.  
*Diabetes Management in African American Adults During a Pandemic—Lessons from Detroit, MI—A U.S. COVID-19 Epicenter*  
Gretchen Piatt, PhD, MPH

6:00 p.m.-6:30 p.m.  
*Impact of COVID-19 on Psychosocial and Behavioral Factors—Assessing Parents of Young Children with Diabetes*  
Christine H. Wang, PhD
SUNDAY, JUNE 27, 2021

4:30 p.m.-6:30 p.m.
(continued)

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Disrupting Endocrine Milieu of Pregnancy—Mechanisms of Per- and Polyfluoroalkyl Substances (PFAS) in Maternal–Fetal Health
Chair: Sara E. Pinney, MD, MS
4:30 p.m.-4:54 p.m.   PFAS—Metabolic Mechanisms as Endocrine Disruptors Influencing Maternal–Fetal Health
   Tracey Woodruff, PhD, MPH
4:54 p.m.-5:18 p.m.   PFAS and Risk of Gestational Diabetes and Maternal Adverse Metabolic Outcomes
   Tamarra James-Todd, PhD
5:18 p.m.-5:42 p.m.   PFAS Placental Transfer in Women with Gestational Diabetes
   Youssef Oulhote, PhD
5:42 p.m.-6:06 p.m.   PFAS and Placental Function
   Rebecca Fry, PhD
6:06 p.m.-6:30 p.m.   Neonatal Effects of In Utero Exposure to PFAS
   Justin Conley, PhD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
The Year in Review—Highlights of the Past Year in Basic, Translational, and Clinical Sciences (Includes Live Video Question and Answer Period)
Chair: Julio Rosenstock, MD
4:30 p.m.-5:05 p.m.   The Year in Review—Basic Science
   Maureen Gannon, PhD
5:05 p.m.-5:40 p.m.   The Year in Review—Translational Science
   William T. Cefalu, MD
5:40 p.m.-6:15 p.m.   The Year in Review—Clinical Science
   Jay S. Skyler, MD, MACP
6:15 p.m.-6:30 p.m.   Live Video Question and Answer Period

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Remote Monitoring and Use of Telehealth—Lessons Learned from a Pandemic
Chair: Andjela T. Drincic, MD
4:30 p.m.-4:54 p.m.   Use of Diabetes Technologies for Remote Monitoring in Ambulatory/Rural Settings
   Leslie A. Eiland, MD
4:54 p.m.-5:18 p.m.   Remote Management of Diabetes Emergencies Using Telehealth
   Irl B. Hirsch, MD
5:18 p.m.-5:42 p.m.   Advanced Telehealth for a Diabetes Digital Visit
   Moshe Phillip, MD
5:42 p.m.-6:06 p.m.   Impact of Telehealth on Quality of Life
   Korey K. Hood, PhD
6:06 p.m.-6:30 p.m.   Can Remote Monitoring and Interventions Lessen Health Disparities in Diverse Ethnic/Racial Communities?
   Lindsay S. Mayberry, PhD
Symposium
Theme Area: Epidemiology/Genetics
Drugs and Genetics—Pharmacogenomic Approaches to Precision Diabetes Treatment
Chair Alessandro Doria, MD, PhD, MPH
4:30 p.m.-5:00 p.m.  Pharmacogenetics and the Basis of Drug Responses in Diabetes
                    Ewan Pearson, PhD
5:00 p.m.-5:30 p.m.  Incorporating Genetic Information for Treatment Strategies in Diabetes
                    Ronald C.W. Ma, MB, BChir, FRCP
5:30 p.m.-6:00 p.m.  Leveraging Genetics for Drug Target Identification
                    Jose C. Florez, MD, PhD
6:00 p.m.-6:30 p.m.  Stem Cell-Based Drug Discovery for Precision Medicine of Diabetes
                    Shuibing Chen, PhD

Symposium
Theme Area: Insulin Action/Molecular Metabolism
Joint ADA/EASD Symposium—Novel Insights and Old Controversies around Insulin and Glucagon-Like Signaling
Co-Chairs: Stefano Del Prato, MD and Daniel J. Drucker, MD
4:30 p.m.-4:38 p.m.  Memorializing the Contributions of Roger H. Unger, MD
                    Philipp E. Scherer, PhD
4:38 p.m.-5:06 p.m.  The Journey from Glucagon to Incretins in Physiology and Disease
                    Jens Juul Holst, MD, DrMedSci
5:06 p.m.-5:34 p.m.  Who’s on First? Insulin Resistance or Hyperinsulinemia?
                    Bettina Mittendorfer, PhD
5:34 p.m.-6:02 p.m.  SGLT2 Inhibitors—Where Do Glucagon, Incretins, and Insulin Fit?
                    Jonathan Campbell, PhD
6:02 p.m.-6:30 p.m.  Insulin Signaling and Health Span
                    Michael Ristow, MD

Symposium
Theme Area: Integrated Physiology/Obesity
Diabetes and Metabolism across the Lifespan
Chair: Rozalyn M. Anderson, PhD
4:30 p.m.-4:54 p.m.  Age-Related Regulation of Energy Balance and Glucose Homeostasis
                    Allison Xu, PhD
4:54 p.m.-5:18 p.m.  The Regulation of Health Span and Longevity by Specific Dietary Macronutrients
                    Dudley Lamming, Jr., PhD
5:18 p.m.-5:42 p.m.  Nutritional Control of Immunometabolism across the Lifespan
                    John Newman, MD, PhD
5:42 p.m.-6:06 p.m.  It’s about Time—Modeling Stress-Related Eating in Both Sexes
                    Lori M. Zeltser, PhD
6:06 p.m.-6:30 p.m.  Development of Hypothalamic Circuits Controlling Energy Balance
                    Sebastien G. Bouret, PhD
Symposium
Theme Area: Islet Biology/Insulin Secretion
What’s for Dinner? Dietary Interventions and Beta-Cell Function
Chair: Adrian Vella, MD

4:30 p.m.-5:00 p.m.  Intermitent Fasting and β-Cell Autophagy/Endoplasmic Reticulum Stress
Maria S. Remedi, PhD

5:00 p.m.-5:30 p.m.  Influence of Beta Cells on the Physiological Response to Ketogenic Diets
Richard O’Brien, PhD

5:30 p.m.-6:00 p.m.  Effects of Time-Restricted Feeding on the Epigenetic Control of Beta-Cell Function
Aleksey Matveyenko, PhD

6:00 p.m.-6:30 p.m.  Environmental Pollutants Sensitize to Adverse Metabolic Effects of a High-Fat Diet
Jennifer Bruin, PhD
SUNDAY, JUNE 27, 2021

4:30 p.m.-6:30 p.m.
(continued)

Oral Presentations
Theme Area: Acute and Chronic Complications
The Conundrum of Diabetic Neuropathies—From Mice to Man (With ADA Presidents' Select Abstract Presentation)
Chair: Lynn Ang, MD

4:30 p.m.-4:45 p.m.
204-OR ADA Presidents' Select Abstract Presentation: Cardiovascular Autonomic Neuropathy Is Associated with Rapid Kidney Function Decline in Type 2 Diabetes: Findings from the ACCORD Trial
YALING TANG, CARLOS BUENO JUNIOR, HETAL SHAH, LYNN ANG, RODICA POP-BUSUI, ALESSANDRO DORIA, Boston, MA, Ann Arbor, MI

4:45 p.m.-5:00 p.m.
205-OR Docosahexaenoic Acid Suppresses Oxidative Stress-Induced Autophagy and Cell Death through the AMPK-Dependent Signaling Pathway in Immortalized Adult Rat Schwann (IFRS1) Cells
YASUAKI TATSUMI, AYAKO KATO, NAOKO NIIMI, HIDEJI YAKO, TATSUHIITO HIMENO, MASAKI KONDO, SHIN TSUNEKAWA, YOSHIRO KATO, HIDEKI KAMIYAMA, JIRO NAKAMURA, KAZUNORI SANGO, KOICHI KATO, Nagoya, Japan, Tokyo, Japan, Nagakute, Japan

5:00 p.m.-5:15 p.m.
206-OR RAGE-Dependent Macrophage Activation Aggravates Retrograde Axonal Transport via Attenuated Insulin Signaling of Peripheral Nerves in Experimental Diabetic Polyneuropathy
SHO OSONOI, HIROKI MIZUKAMI, KAZUHIRO KUDO, YASUHIKO YAMAMOTO, Hirosaki, Japan, Kanazawa, Japan

5:15 p.m.-5:30 p.m.
207-OR Cardiac Autonomic Neuropathy (CAN) and HDL Proteomics in Type 1 Diabetes (T1D)
MARCOS T. TOYOSHIMA, AMANDA SILVA, MONIQUE DE FATIMA M. SANTANA, GRAZIELLA E. RONSEIN, MARIA LUCIA CORREA-GIANNELLA, MARISA PASSARELLI, São Paulo, Brazil

5:30 p.m.-5:45 p.m.
208-OR Fat Mass and Insulin Resistance Are Independent Risk Factors for Polyneuropathy in Non-DM Subjects Who Underwent Bariatric/Metabolic Surgery
KYUHO KIM, TAE JUNG OH, SUNGHEE CHO, HAK CHUL JANG, Seongnam, Korea, Republic of

5:45 p.m.-6:00 p.m.
209-OR Physical Activity and Nerve Structure and Function in Patients with Long-Standing Type 1 Diabetes
EVAN J.H. LEWIS, LEIF ERIK LOVBLOM, SEBASTIEN O. LANCTOT, DANIEL SCARR, NANCY CARDINEZ, ALANNA WEISMAN, MICHAEL H. BRENT, VERA BRIL, DAVID CHERNEY, BRUCE A. PERKINS, Toronto, ON, Canada

6:00 p.m.-6:15 p.m.
210-OR Cerebral Morphometric Alterations in Painless and Painful Diabetic Peripheral Neuropathy
GORDON P. SLOAN, DINESH SELVARAJAH, KEVIN TEH, PALLAI RAPPAI SHILLO, IAIN D. WILKINSON, SOLOMON TESFAYE, Sheffield, United Kingdom

6:15 p.m.-6:30 p.m.
211-OR Differential Cerebral Blood Flow in Controlled and Uncontrolled Patients with Type 2 Diabetes Mellitus
SARAH E. CHOI, BHASWATI ROY, MATTHEW FREEBY, RAJESH KUMAR, Los Angeles, CA
SUNDAY, JUNE 27, 2021

4:30 p.m.-6:30 p.m.
(continued)

Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Insulin Delivery Systems
Chair: Elena Toschi, MD

4:30 p.m.-4:45 p.m.

212-OR Closed-Loop Increases Time-in-Range in Older Adults with Type 1 Diabetes Compared with Sensor-Augmented Pump Therapy: A Randomized Crossover Trial
SYBIL A. MCAULEY, SARA VOGRIN, STEVEN TRAWLEY, PETER G. COLMAN, SPIROS FOURLANOS, CHARLOTTE GRILLS, MELISSA H. LEE, ANDISHEH MOHAMMAD ALIPOOR, DAVID N. O’NEAL, NIAMH A. O’REGAN, VIJAYA SUNDARARAJAN, GLENN M. WARD, RICHARD MACISAAC, Waterford, Ireland, Melbourne, Australia

4:45 p.m.-5:00 p.m.

213-OR Fully Automated Closed-Loop with Faster-Insulin Aspart Compared with Standard Insulin Therapy in Adults with Type 2 Diabetes Requiring Dialysis: An Open-Label, Multinational, Two-Centre, Randomised, Crossover Study
CHARLOTTE K. BOUGHTON, LIA BALLY, SARA HARTNELL, AFRODITI TRIPYLA, DAVID HERZIG, AIDEEN B. DALY, MALGORZATA E. WILINSKA, CECILIA CZERLAU, ANDREW FRY, ROMAN HOVORKA, Cambridge, United Kingdom, Bern, Switzerland

5:00 p.m.-5:15 p.m.

214-OR Cambridge Hybrid Closed-Loop in Children and Adolescents with T1D: A Multicentre Six-Month Randomised Trial
JULIA FUCHS, CHARLOTTE K. BOUGHTON, JANET M. ALLEN, MALGORZATA E. WILINSKA, MARTIN TAUSCHMANN, LOUISE DENVIR, AJAY THANKAMONY, FIONA CAMPBELL, R. PAUL WADWA, BRUCE A. BUCKINGHAM, NIKKI DAVIS, LINDA DIMEGLIO, NELLY MAURAS, RACHEL BESSER, ATRAYEE GHATAK, STUART A. WEINZIMER, KOREY K. HOOD, D. STEVEN FOX, LAUREN KANAPKA, CRAIG KOLLMAN, JUDY SIBAYAN, ROY BECK, ROMAN HOVORKA, DAN05 CONSORTIUM, Vienna, Austria, Nottingham, United Kingdom, Cambridge, United Kingdom, Leeds, United Kingdom, Aurora, CO, Palo Alto, CA, Southampton, United Kingdom, Indianapolis, IN, Jacksonville, FL, Oxford, United Kingdom, Liverpool, United Kingdom, New Haven, CT, Stanford, CA, Los Angeles, CA, Tampa, FL

5:15 p.m.-5:30 p.m.

215-OR Performance of a Dual Hormone Closed-Loop System vs. an Insulin-Only Closed-Loop System during Challenging Inpatient Conditions: A Single-Blinded Randomized Controlled Crossover Trial
AJENTHEN G. RANJAN, DIMITRI BOIROUX, CHRISTIAN LAUGESEN, SIGNE SCHMIDT, ASBJØRN T. REENBERG, JOHN B. JØRGENSEN, KIRSTEN NØRGAARD, Gentofte, Denmark, Kongens Lyngby, Denmark, Copenhagen, Denmark

5:30 p.m.-5:45 p.m.

216-OR A Random-Order, Double-Blinded, Placebo-Controlled Study of the Bionic Pancreas in the Bihormonal vs. Insulin-Only Configurations Using Two Different Glucose Targets in Adults with Type 1 Diabetes in the Home-Use Setting
LUZ E. CASTELLANOS, COURTNEY A. BALLIRO, JORDAN SHERWOOD, MARWA TUFFAHA, MALLORY HILLARD, RAJENDRANATH SELAGAMSETTY, FIRAS EL-KHATIB, EDWARD DAMIANO, STEVEN J. RUSSELL, Boston, MA, Concord, MA

5:45 p.m.-6:00 p.m.

217-OR Glycemic Outcomes by Ethnicity in Adults with Type 1 Diabetes Using Control-IQ Technology: Early Results from the CLIO Study
STEPHANIE HABIF, HARSIMRAN SINGH, LARS MUELLER, MICHELLE L. MANNING, KIRSTIN N. WHITE, SCOTT A. LEAS, ELIAH S. ARONOFF SPENCER, BETSY DOKKEN, ELIAH ARONOFF SPENCER, San Diego, CA, La Jolla, CA

(continued on next page)
SUNDAY, JUNE 27, 2021

6:00 p.m.-6:15 p.m.
218-OR  Revisiting the Rule of 500: Data-Driven Insights from Sensor Augmented Pump Therapy
SOUPTIK BARUA, ANGELA ZHANG, ASHUTOSH SABHARWAL, DANIEL DESALVO, Houston, TX

6:15 p.m.-6:30 p.m.
219-OR  Impact Of Inpen Smart Insulin Pen Use on Real-World Glycemic and Insulin Dosing Outcomes in Individuals with Poorly Controlled Diabetes
ROBERT VIGERSKY, MADISON SMITH, SNEHA THANASEKARAN, ANGELA GAETANO, GLEN HEUNGYONG IM, TONI L. CORDERO, JANICE MACLEOD, Northridge, CA
MONDAY, JUNE 28, 2021

Scientific Sessions
8:00 a.m.-10:00 a.m.

Symposium
Theme Area: Acute and Chronic Complications
Surgical Considerations in Diabetes Foot Management
Chair: Adam E. Fleischer, DPM, MPH, FACFAS
8:00 a.m.-8:30 a.m.  
Recalcitrant Diabetes Foot Ulcers—When Should You Do Surgery?
Tammer Elmarsafi, DPM, MB, BCh

8:30 a.m.-9:00 a.m.  
Pearls of Charcot Reconstruction—When to Pull the Trigger
Michael D. VanPelt, DPM

9:00 a.m.-9:30 a.m.  
The Psychological Impact of Diabetes Foot Surgery
Garneisha Torrence, DPM, MHMS

9:30 a.m.-10:00 a.m.  
Racial Disparities in Amputation Outcomes—Making the Difference
Foluso Fakorede, MD

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Diabetes Prevention—Addressing Implementation Challenges
Chair: Colin James Greaves, PhD, CPsychol
8:00 a.m.-8:25 a.m.  
Successful Diabetes Prevention Interventions—Lessons Learned
Mike Sampson, MD

8:25 a.m.-8:50 a.m.  
Can We Prevent Type 2 Diabetes in Women Who Have Gestational Diabetes?
Kerri Lynn Knippen, PhD, MPH, RDN/LD, BC-ADM

8:50 a.m.-9:15 a.m.  
Diabetes Prevention in Low- and Middle-Income Countries
Pilvikki Absetz, PhD

9:15 a.m.-9:40 a.m.  
Using Digital Technologies to Prevent Diabetes—What Works and Why?
Anne M. Wolf, MS, RDN

9:40 a.m.-10:00 a.m.  
Panel Discussion
Mike Sampson, MD
Kerri Lynn Knippen, PhD, MPH, RDN/LD, BC-ADM
Pilvikki Absetz, PhD
Anne M. Wolf, MS, RDN

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Automation and Expanded Use of Technology in the Inpatient Setting—An Update
Chair: Athena Philis-Tsimikas, MD
8:00 a.m.-8:24 a.m.  
Automated Inpatient Insulin Orders
Amisha Wallia, MD, MS

8:24 a.m.-8:48 a.m.  
How to Optimize Hospital Glucose Management Remotely
Robert J. Rushakoff, MD

8:48 a.m.-9:12 a.m.  
Inpatient Use of Continuous Glucose Monitoring to Improve Hyperglycemia
Addie L. Fortmann, PhD

9:12 a.m.-9:36 a.m.  
Inpatient Use of Continuous Glucose Monitoring to Prevent Hypoglycemia
David C. Klonoff, MD

9:36 a.m.-10:00 a.m.  
Inpatient Use of Hybrid Closed-Loop Systems
Joseph A. Aloisi, MD
MONDAY, JUNE 28, 2021

8:00 a.m.-10:00 a.m.
(continued)

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Is Continuous Glucose Monitoring (CGM) an Effective Diabetes Management Tool in Primary Care?
Co-Chairs: Richard M. Bergenstal, MD and Eugene Wright, Jr., MD
8:00 a.m.-8:24 a.m.  CGM Data Automatically Integrated into the Electronic Health Record—What Does It Take?
   Amy B. Criego, MD, MS
8:24 a.m.-8:48 a.m.  Successful Use of CGM in Primary Care Depends on Patient Support and Workflow—Lessons from the Mobile Study
   Thomas W. Martens, MD
8:48 a.m.-9:12 a.m.  Can CGM Guide Effective and Sustainable Dietary Changes in the Primary Care Setting?
   Dana Gershenoff, MS, RD, CDCES
9:12 a.m.-9:36 a.m.  Can CGM Combined with a Smart Pen Improve Insulin Management in Primary Care?
   Dana Isaacs, PharmD, BCPS, BCACP, BC-ADM, CDCES, FADCES, FCCP
9:36 a.m.-10:00 a.m. Could CGM Guided Clinical Decision-Making Be Effective in Primary Care?
   Revital Nimri, MD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Management of Type 1 Diabetes in Adults—2021 Draft ADA/EASD Consensus Report (Includes Live Video Question and Answer Period)
Co-Chairs: Richard I.G. Holt, PhD, FRCP and Anne L. Peters, MD
8:00 a.m.-8:10 a.m.  Introduction and Methods, Goals, and Targets
   Anne L. Peters, MD
8:10 a.m.-8:20 a.m.  Diagnosis of Type 1 Diabetes
   J. Hans De Vries, MD, PhD
8:20 a.m.-8:30 a.m.  Schedule of Care
   Ruth S. Weinstock, MD, PhD
8:30 a.m.-8:40 a.m.  Diabetes Self-Management Education and Additional Behavioral Considerations
   Amy Hess Fischl, MS, RDN, LDN, BC-ADM, CDCES
8:40 a.m.-8:50 a.m.  Monitoring
   Irl B. Hirsch, MD
8:50 a.m.-9:00 a.m.  Insulin Therapy
   M. Sue Kirkman, MD
9:00 a.m.-9:05 a.m.  Hypoglycemia
   Eric Renard, MD, PhD, FRCPEdin
9:05 a.m.-9:15 a.m.  Psychosocial Care
   Frank J. Snoek, PhD
9:15 a.m.-9:20 a.m.  Diabetic Ketoacidosis
   Kirsten Nørgaard, MD, DMSc, MHPE
9:20 a.m.-9:25 a.m.  Pancreas and Islet Cell Transplantation
   Barbara Ludwig, MD, PhD
9:25 a.m.-9:30 a.m.  Adjunctive Therapy
   Jeremy Pettus, MD
9:30 a.m.-9:35 a.m.  Special Populations
   Tomasz Klupa, MD, PhD
9:35 a.m.-9:40 a.m.  Emergent and Future Perspectives
   Jay S. Skyler, MD, MACP
9:40 a.m.-10:00 a.m. Key Knowledge Gaps and Live Video Question and Answer Period
   Richard I.G. Holt, PhD, FRCP
Symposium
Theme Area: Immunology/Transplantation
Clinical and Regulatory Hurdles Facing Islet Transplantation
Chair: A.M. James Shapiro, MD, PhD
8:00 a.m.-8:40 a.m. Islet Transplantation—Benefits and Shortcomings
Piotr Witkowski, MD, PhD
8:40 a.m.-9:20 a.m. Status of Islet Transplantation in the U.S.
Camillo Ricordi, MD, FNAI
9:20 a.m.-10:00 a.m. International Experience—Successful Implementation of Clinical Islet Transplantation across the World—What Can the U.S. Learn?
Thierry Berney, MD

Symposium
Theme Area: Insulin Action/Molecular Metabolism
Fibrosis—At the Metabolism–Signaling Interface
Chair: David Wasserman, PhD
8:00 a.m.-8:30 a.m. Gut Microbiota at the Interface of Fibrosis and Metabolism
Suzanne Devkota, PhD
8:30 a.m.-9:00 a.m. Sphingolipid Metabolism and Liver Fibrosis
Jennifer Chen, MD
9:00 a.m.-9:30 a.m. Liver Inflammation and Fibrosis in Nonalcoholic Steatohepatitis
Ariel Feldstein, MD
9:30 a.m.-10:00 a.m. Stromal Engagement in Adipose—Adipogenesis vs. Fibrosis
Rana K. Gupta, PhD

Symposium
Theme Area: Islet Biology/Insulin Secretion
Nuclear Control of Beta-Cell Function
Chair: Doris A. Stoffers, MD, PhD
8:00 a.m.-8:30 a.m. Context-Specific Genetic Regulation of Chromatin Architecture in Diabetes
Stephen Parker, PhD
8:30 a.m.-9:00 a.m. Tuning Cellular Stress-Response to Protect Postnatal Pancreatic β-Cell Proliferation, Function, and Survival
Guoqiang Gu, PhD
9:00 a.m.-9:30 a.m. Islet-1 Interacts with Ring Finger Ubiquitin Ligases to Impact Beta-Cell Function
Chad S. Hunter, PhD
9:30 a.m.-10:00 a.m. Cooperative Function of Pdx1 and Oc1 in Beta-Cell Proliferation and Compensation
Maureen Gannon, PhD
MONDAY, JUNE 28, 2021

8:00 a.m.-10:00 a.m.
(continued)

Oral Presentations
Theme Area: Acute and Chronic Complications
Diabetes and Heart Failure
Chair: Shelley Zieroth, MD, FRCPC, FHFA, FESC, FACC

8:00 a.m.-8:15 a.m.
220-OR Comparing Cardiovascular Benefits between GLP-1RA and SGLT2i as an Add-On to Metformin among U.S. Adults with Type 2 Diabetes (T2D)
CHRISTINA E. DEREMER, JINGCHUAN GUO, SCOTT M. VOURI, MICHAEL J. HALLER, WILLIAM T. DONAHOO, ALMUT G. WINTERSTEIN, HUI SHAO, Gainesville, FL

8:15 a.m.-8:30 a.m.
221-OR A Machine Learning Approach Identifies Modulators of Congestive Heart Failure Hospitalization Prevention among Patients with Type 2 Diabetes: A Revisit to the ACCORD Trial
HAMED KIANMEHR, JINGCHUAN GUO, LIZHENG SHI, VIVIAN FONSECA, HUI SHAO, Gainesville, FL, Pittsburgh, PA, New Orleans, LA

8:30 a.m.-8:45 a.m.
222-OR High Glucose Level Increases Expression of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Receptors
SESHAGIRI RAO NANDULA, RAJESH NAIDU JANAPALA, SABYASACHI SEN, Washington, DC

8:45 a.m.-9:00 a.m.
223-OR Heart Failure with Reduced, Midrange and Preserved Ejection Fraction in Chinese with Type 2 Diabetes: Risk Factors and Prognosis
ANDREA LUK, XINGE ZHANG, ERIK FUNG, HONGJIANG WU, ERIC S. LAU, AMIN YANG, ELAINE CHOW, ALICE P. KONG, RONALD C. MA, JULIANA C. CHAN, Hong Kong, China

9:00 a.m.-9:15 a.m.
224-OR Cardiac Imaging and Metabolomics Studies Suggest Shared and Distinct Risk Factors for Atherosclerosis and Cardiomyopathy in Renoprotected, Long-Duration Type 1 Diabetes
MARC GREGORY YU, HETAL SHAH, EMILY WOLFSON, ATIF ADAM, JOHN GAUTHIER, VIBHAV JHA, CONNIE TSAO, GEORGE L. KING, Boston, MA

9:15 a.m.-9:30 a.m.
225-OR Cardiovascular Autonomic Neuropathy and Risk of Heart Failure in Participants with Type 2 Diabetes Enrolled in DEVOTE Trial
RODICA POP-BUSUI, LYNN ANG, SALIM HAYEK, KARA R. MIZOKAMI-STOUT, EHSAN PARVARESH RIZI, ILDIKO LINGVAY, ON BEHALF OF THE DEVOTE STUDY GROUP, Ann Arbor, MI, Søborg, Denmark, Dallas, TX
MONDAY, JUNE 28, 2021

8:00 a.m.-10:00 a.m.
(continued)

Oral Presentations

Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise

From Type 1 Diabetes to Obesity, Prediabetes, and Type 2 Diabetes—Physical Activity for All (With ADA Presidents' Select Abstract Presentation)
Chair: Osama Hamdy, MD, PhD

8:00 a.m.-8:15 a.m.

226-OR ADA Presidents' Select Abstract Presentation: Exercise Training Promotes Mitochondrial Remodeling in Skeletal Muscle of Type 2 Diabetes Humans
LUCIA MASTROTOTARO, MARIA APOSTOLOPOULOU, DOMINIK PESTA, KLAUS STRASSBURGER, YANISLAVA KARUSHEVA, SOFIYA GANCHEVA, JULIA SZENDROEDI, MICHAEL RODEN, Düsseldorf, Germany

8:15 a.m.-8:30 a.m.

227-OR Physical Activity and Glucose Control among Youth with T1D
JORDAN GAL, ZHAOMIAN LI, STEVEN M. WILLI, MICHAEL RIDDELL, Clemson, SC, Tampa, FL, Philadelphia, PA, Toronto, ON, Canada

8:30 a.m.-8:45 a.m.

228-OR Inconsistent Antecedent Physical Activity (PA) Impacts Nocturnal Glycemia in Youth with T1D
REBECCA O. LA BANCA, LISA K. VOLKENING, KERRY MILASZEWSKI, EYAL DASSAU, SANJEEV N. MEHTA, LORI M. LAFFEL, Boston, MA, Cambridge, MA

8:45 a.m.-9:00 a.m.

229-OR Physical Fitness and Cardiovascular Risk Factors in Diabetes Subgroups
NINA SAATMANN, OANA P. ZAHARIA, KLAUS STRASSBURGER, DOMINIK PESTA, VOLKER BURKART, JULIA SZENDROEDI, MICHAEL RODEN, Düsseldorf, Germany, Cologne, Germany

9:00 a.m.-9:15 a.m.

230-OR Exercise Training Improved Antilipolytic Sensitivity to Insulin in Obese Adults with Low Sensitivity to Insulin before Training
CHEEHOON AHN, MICHAEL W. SCHLEH, BENJAMIN J. RYAN, ALISON LUDZKI, PALLAVI VARSHNEY, JENNA B. GILLEN, SHIQI CHEN, JEFFREY F. HOROWITZ, Ann Arbor, MI, Toronto, ON, Canada, Storrs, CT

9:15 a.m.-9:30 a.m.

231-OR Neighborhood Walkability Is Associated with Prediabetes in a Behavioral Weight Loss Study
JACOB K. KARIUKI, ZHADYRA BIZHANOVA, BONNY ROCKETTE-WAGNER, BETHANY B. GIBBS, SUSAN M. SEREIK, CHRISTOPHER KLINE, KIRK ERICKSON, DARA MENDEZ, I. WAYAN PULANTARA, JESSICA CHENG, LORA E. BURKE, Pittsburgh, PA

9:30 a.m.-9:45 a.m.

232-OR Replacing Sedentary Time by Different Types of Physical Activity and the Risk of Type 2 Diabetes
XIANG LI, TAO ZHOU, HAO MA, YORIKO HEIANZA, LU QI, New Orleans, LA

9:45 a.m.-10:00 a.m.

233-OR Circulating Inflammatory Biomarkers Are Not Improved with Combined Low-Volume High-Intensity Interval Training and Progressive Resistance Training in Prediabetes
CALLUM J. BAKER, DANQING MIN, JAMES GEROFI, XIAOYU WANG, SAMANTHA L. HOCKING, STEPHEN COLAGIURI, NATHAN A. JOHNSON, STEPHEN M. TWIGG, Camperdown, Australia, Sydney, Australia, Dulwich Hill, Australia
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Novel Therapeutic Agents and Approaches
Chair: Joshua J. Neumiller, PharmD, CDCES, FADCES, FASCP

8:00 a.m.-8:15 a.m.
234-OR Advancing Therapy in Uncontrolled Basal Insulin-Treated Type 2 Diabetes (T2D): Better Clinical Outcomes with IGlarLixi vs. Premix 70/30 in the SoliMix Trial
JULIO ROSENSTOCK, RIFAT EMRAL, LEOBARDO SAUQUE-REYNA, VISWANATHAN MOHAN, CARLOS TRESCOLI, SAUD N. AL SIFRI, NEBOJSALA LASIC, AGUSTINA ALVAREZ, PASCALINE PICARD, NACIMA DEMIL, MIREILLE BONNEMAIRE, RORY J. MCCRIMMON, Dallas, TX, Ankara, Turkey, Cuernavaca, Mexico, Chennai, India, Alzira, Spain, Taif, Saudi Arabia, Belgrade, Serbia, Buenos Aires, Argentina, Levallois-Perret, France, Chilly-Mazarin, France, Paris, France, Dundee, United Kingdom

8:15 a.m.-8:30 a.m.
235-OR Dorzagliatin as a Glucose Sensitizer Achieved Sustained Glycemic Control with Good Safety Profiles in Drug-Naïve T2D Patients in a 52-Week Phase 3 Monotherapy Trial (SEED)
LI CHEN, YI ZHANG, DALONG ZHU, Shanghai, China, Nanjing, China

8:30 a.m.-8:45 a.m.
236-OR Volagidemab, a Human Glucagon Receptor Antagonist, Improves Glycemic Control in Subjects with Type 1 Diabetes (T1D): A 12-Week, Randomized, Double-Blind, Placebo-Controlled Trial
JEREMY PETTUS, SCHAFFER C. BOEDER, MARK P. CHRISTIANSEN, DOUGLAS S. DENHAM, TIMOTHY S. BAILEY, HALIS K. AKTURK, LESLIE J. KLAFF, JULIO ROSENSTOCK, MICKIE H.M. CHENG, BRUCE W. BODE, EDGAR D. BAUTISTA, HAI YAN, DUNG THAI, SATISH K. GARG, SAMUEL KLEIN, San Diego, CA, La Jolla, CA, Walnut Creek, CA, San Antonio, TX, Escondido, CA, Aurora, CO, Renton, WA, Dallas, TX, Greenbrae, CA, Atlanta, GA, Los Angeles, CA, Camarillo, CA, Redwood City, CA, St. Louis, MO

8:45 a.m.-9:00 a.m.
237-OR Low-Dose Dasiglucagon vs. Oral Carbohydrates for Prevention of Insulin-Induced Hypoglycemia in People with Type 1 Diabetes: A Phase 2, Randomized, Three-Arm Crossover Study
CHRISTIAN LAUGESEN, AJENTHEN RANJAN, SIGNE SCHMIDT, KIRSTEN NØRGAARD, Gentofte, Denmark

9:00 a.m.-9:15 a.m.
238-OR Treatment with Testosterone Undecanoate Injections (TU) Up to 12 Years Improves Glycemic Control in Patients with Hypogonadism and Type 2 Diabetes (T2DM): Update of Real-World Data with 3,149 Patient-Years
FARID SAAD, KARIM S. HAIDER, AHMAD HAIDER, Berlin, Germany, Bremerhaven, Germany

9:15 a.m.-9:30 a.m.
239-OR A Phase 1, Randomized, Double-Blind, Placebo-Controlled, Four-Period, Crossover Trial to Assess the Safety, Tolerability, Pharmacokinetics, and Pharmacodynamics of Three Dose Levels of PB201 as Monotherapy in Subjects with Type 2 Diabetes Mellitus
MIN XU, PEGBIO STUDY GROUP, Suzhou, China

9:30 a.m.-9:45 a.m.
240-OR Mortality, MACE, and Diabetic Complications in Men with Hypogonadism and Type 2 Diabetes (T2DM) Receiving Long-Term Treatment with Testosterone Undecanoate Injections (TU): An Update of 12-Year Real-World Data
KARIM S. HAIDER, AHMAD HAIDER, FARID SAAD, Bremerhaven, Germany, Berlin, Germany

(continued on next page)
241-OR  Effects of Antidiabetes Therapies on Irisin Levels in Type 2 Diabetes Patients
ANNALISA NATALICCHIO, NICOLA MARRANO, GIUSEPPINA BIONDI, ANNA MONTEDORO, GIULIA LE GRAZIE,
LUDOVICO DI GIOIA, FRANCESCA GUARINI, ANNA BORRELLI, ANGELO CIGNARELLI, SEBASTIO PERRINI, LUIGI
LAVIOLA, FRANCESCO GIORGINO, Bari, Italy
Oral Presentations
Theme Area: Epidemiology/Genetics
Advances from Gene/Variant to Function in Diabetes
Chair: Andrew D. Paterson, MD

8:00 a.m.-8:15 a.m.
242-OR Single Nuclei Skeletal Muscle Chromatin and Gene Expression Profiling across 287 Individuals Reveals Cell Type-Specific Genetic Regulatory Architectures at T2D GWAS Loci
STEPHEN PARKER, ARUSHI VARSHNEY, FUSION TISSUE STUDY, AMP-T2D SKELETAL MUSCLE WORKING GROUP, Ann Arbor, MI

8:15 a.m.-8:30 a.m.
243-OR Integrating Genetic Risk Score and Islet Autoantibody Characteristics in the Predictive Model for Type 1 Diabetes in the TrialNet Study
LAURIC A. FERRAT, ANDREA STECK, HEMANG M. PARikh, LU YOU, SUNA ONENGUT-GUMUSCU, PETER GOTTLIEB, STEPHEN S. RICH, JEFFREY KRISCHER, RICHARD A. ORAM, MARIA J. REDONDO, Exeter, United Kingdom, Aurora, CO, Charlottesville, VA, Tampa, Fl, Houston, TX

8:30 a.m.-8:45 a.m.
244-OR Toward Improved Identification of Adult-Onset Type 1 Diabetes (T1D): Clinical Characteristics Associated with T1D Polygenic Risk Scores in the Million Veteran Program (MVP)
PETER K. YANG, SANDRA JACKSON, BRIAN R. CHAREST, MICHAEL N. WEEDON, YILING J. CHENG, YAN V. SUN, SRIDHARAN RAGHAVAN, ELIZABETH M. LITKOWSKI, BRIAN T. LEGVOLD, MARY K. RHEE, CARLA MERCADO, RICHARD A. ORAM, MARIJANA VUKOVIC, PETER REAven, KELLY CHO, LAWRENCE S. PHILLIPS, AARON LEONG, Atlanta, GA, Denver, CO, Aurora, CO, Exeter, United Kingdom, Philadelphia, PA, Phoenix, AZ, Decatur, GA, Boston, MA

8:45 a.m.-9:00 a.m.
245-OR Comprehensive Genome-Wide Association Study (GWAS) Meta-analysis Using TOPMed Imputation in Latinos Identifies Rare Variation Associated with Type 2 Diabetes (T2D)
ALICIA HUERTA, JOANNE B. COLE, PETER DORNIBOS, DANIEL A. DICORPO, AARON LEONG, JOSE C. FLOREZ, JOSEP M. MERCADER, SIGMA T2D CONSORTIUM, MX BIOBANK, MGB BIOBANK, Cambridge, MA, Boston, MA

9:00 a.m.-9:15 a.m.
246-OR Probing the Role of Alternative Splicing of IKZF1 in Risk for Type 1 Diabetes
LUCIA PASTOR PALOMO, JEREMY R.B. NEWMAN, MARK A. ATKINSON, PATRICK J. CONCANNON, Gainesville, Fl

9:15 a.m.-9:30 a.m.
247-OR Variant-to-Gene-Mapping Analyses Reveal a Role for Pancreatic Islet Cells in Conferring Genetic Susceptibility to Sleep-Related Traits
CHIARA LASCONI, MATTHEW C. PAHL, JAMES A. PIPPIN, CHUN SU, MATTHEW JOHNSON, ALESSANDRA CHESI, ANDREW D. WELLS, KLAUS H. KAESTNER, STRUAN F.A. GRANT, Philadelphia, PA

(continued on next page)
MONDAY, JUNE 28, 2021

9:30 a.m.-9:45 a.m.

248-OR  Type 1 Diabetes Risk Variants Alter the Transcriptional Profile of Beta Cells
         WIktoria Ratajczak, Sarah Atkinson, Catriona Kelly, Londonderry, United Kingdom

9:45 a.m.-10:00 a.m.

249-OR  Type 2 Diabetes (T2D) Genetic Clusters for Association with Glycemic Responses to Intervention for Diabetes Prevention
         Liana K. Billings, Kathleen A. Jablonski, Paul W. Franks, Ronald B. Goldberg, Marie-France Hivert, Steven E. Kahn, William C. Knowler, Christine Lee, Jordi Merino, Sridharan Raghavan, Shyla Srinivasan, Jianfeng Xu, Jose C. Florez, Miriam Udler, DPP Research Group, Skokie, IL, Rockville, MD, Malmö, Sweden, Miami, FL, Boston, MA, Seattle, WA, Phoenix, AZ, Bethesda, MD, Denver, CO, San Francisco, CA, Evanston, IL
Oral Presentations
Theme Area: Integrated Physiology/Obesity
Obesity—Discoveries, Developments, and New Directions
Chair: Ellen Schur, MD, MS

8:00 a.m.-8:15 a.m.
250-OR Higher Genetic Risk Score Predicts Smaller Waist Circumference Change over One Year across Five Lifestyle Intervention Clinical Trials
JEANNE MCCAFFERY, KATHLEEN A. JABLONSKI, QING PAN, ARNE ASTRUP, MALENE R. CHRISTIANSEN, LAUREN M. CORSO, JOSE C. FLOREZ, PAUL W. FRANKS, CHRISTOPHER D. GARDNER, TORBEN HANSEN, TUOMAS O. KILPELAINEN, DOLORES CORELLA, WIM H.M. SARIS, THORKILD I.A. SØRENSEN, JAAKKO TUOMILEHTO, RENA R. WING, TANYA AGURS-COLLINS, Storrs, CT, Rockville, MD, Washington, DC, Boston, MA, Malmö, Sweden, Stanford, CA, Copenhagen, Denmark, Valencia, Spain, Maastricht, Netherlands, Helsinki, Finland, Providence, RI

8:15 a.m.-8:30 a.m.
251-OR Impact of Vegetarian and the Nordic Diet on Glucose Metabolism: A Human Intervention Study
HANNA HUBER, BIRGIT STOFFEL-WAGNER, MARTIN COENEN, LEONIE WEINHOLD, MATTHIAS SCHMID, PETER STEHLE, MARIE-CHRISTINE SIMON, Bonn, Germany

8:30 a.m.-8:45 a.m.
252-OR Virtual Multidisciplinary Lifestyle Intervention Is as Effective as the Physical Program for Patients with Diabetes and Obesity during COVID-19 Pandemic
MARWA AL-BADRI, CARA L. KILROY, JACQUELINE I. SHAHAR, SHAHEEN TOMAH, HANNAH GARDNER, MALLORY SIN, JENNIE L. VOTTA, ALIZA PHILLIPS-STOLL, AARON M. PRICE, JOAN M. BEATON, CHANDRA L. DAVIS, JENNIFER J. BROWN, OSAMA HAMDY, Boston, MA, Newton Centre, MA

8:45 a.m.-9:00 a.m.
253-OR Plasma Ghrelin Changes and Successful Weight Loss in Patients with Obesity: The POUNDS Lost Trial
YORIKO HEIANZA, QIAOCHU XUE, GEORGE BRAY, FRANK SACKS, LU QI, JENNY TONG, New Orleans, LA, Baton Rouge, LA, Boston, MA, Seattle, WA

9:00 a.m.-9:15 a.m.
254-OR Bariatric Surgery Influences Insulin Sensitivity through Changes in Subcutaneous Adipose Tissue (SAT) Characteristics
ANNIKA LENZ, TRACEY MCLAUGHLIN, ELIZABETH J. ZANLEY, Stanford, CA, Palo Alto, CA

9:15 a.m.-9:30 a.m.
255-OR Blinded, Randomized Trial of Banded Roux-en-y Gastric Bypass vs. Sleeve Gastrectomy for Type 2 Diabetes after Five Years
RINKI MURPHY, RICHARD G. CUTFIELD, MICHAEL W.C. BOOTH, Auckland, New Zealand

9:30 a.m.-9:45 a.m.
256-OR Substantial Cardiovascular Risk Reduction with Icosapent Ethyl Regardless of Diabetes Status or BMI: REDUCE-IT BMI
DEEPAK L. BHATT, ELIOT A. BRINTON, PHILIPPE G. STEG, STEVEN B. KETCHUM, REBECCA A. JULIANO, LIXIA JIAO, RALPH T. DOYLE, CRAIG GRANOWITZ, JEAN-CLAUDE TARDIF, CHRISTIE M. BALLANTYNE, Boston, MA, Salt Lake City, UT, Paris, France, Bridgewater, NJ, Montreal, QC, Canada, Houston, TX
MONDAY, JUNE 28, 2021

8:00 a.m.-10:00 a.m. (continued)

Oral Presentations
Theme Area: Integrated Physiology/Obesity
Glucagon, Incretins, and Other Hormones in Humans
Chair: Patricia L. Brubaker, PhD

8:00 a.m.-8:15 a.m.
257-OR Short-Term Hyperglucagonemia Induces Adipose Tissue Insulin Resistance and Inflammation In Vivo
XI CHEN, MARCEL FOURCAUDOT, LUKE NORTON, RALPH A. DEFRONZO, DEVJIT TRIPATHY, San Antonio, TX

8:15 a.m.-8:30 a.m.
258-OR The Glucagonotropic Effect of GLP-2 during Hypoglycemia, Euglycemia, and Hyperglycemia in Healthy Men: A Randomized, Double-Blind, Placebo-Controlled, Crossover Study
NINA L. HANSEN, TORE MAGNUSSEN, JENS J. HOLST, BOLETTE HARTMANN, MIKKE L. CHRISTENSEN, ASGER LUND, FILIP K. KNOP, Hellerup, Denmark, Copenhagen, Denmark

8:30 a.m.-8:45 a.m.
259-OR The Effect of Impaired Glucagon Suppression on Endogenous Glucose Production Is Independent of Insulin Action
MARCELLO C. LAURENTI, AOIFE M. EGAN, DANIEL SCHEMBRI WISMAYER, CLAUDIO COBELLI, CHIARA DALLA MAN, ADRIAN VELLA, Rochester, MN, Padova, Italy

8:45 a.m.-9:00 a.m.
260-OR The L-Cell Clock Is Required for Circadian GLP-1 Secretion and Maintenance of Intestinal Homeostasis
SARAH E. MARTCHENKO, ALEXANDRE MARTCHENKO, ANDREW BIANCOLIN, PATRICIA L. BRUBAKER, Toronto, ON, Canada

9:00 a.m.-9:15 a.m.
261-OR Transcriptional Profiling of the Intestinal Serotonin System in Individuals with Type 2 Diabetes and Healthy Individuals
CHRISTIAN LEGART, CHRISTOFFER A. HAGEMANN, ANNE MARIE ELLEGAARD, DAMIEN KEATING, TINA JORSAL, FILIP K. KNOP, Hellerup, Denmark, Adelaid, Australia, Copenhagen, Denmark

9:15 a.m.-9:30 a.m.
262-OR Postprandial Glucagon Metabolism in Type 1 Diabetes
FNU RUCHI, YOGESH R. YADAV, MICHELE SCHIAVON, ALEXANDRA WEAVER, CLAUDIO COBELLI, CHIARA DALLA MAN, RITA BASU, ANANDA BASU, Charlottesville, VA, Padova, Italy

9:30 a.m.-9:45 a.m.
263-OR Higher Glycemic Threshold for Glucagon Suppression in Impaired Fasting Glucose and Impaired Glucose Tolerance
JACOB D. KOHLENBERG, MARCELLO C. LAURENTI, AOIFE M. EGAN, CLAUDIO COBELLI, CHIARA DALLA MAN, ADRIAN VELLA, Rochester, MN, Padova, Italy

9:45 a.m.-10:00 a.m.
264-OR Glucagon Kinetics: Model from First-in-Humans with 13C15N Glucagon
MICHELE SCHIAVON, FNU RUCHI, YOGESH R. YADAV, RITA BASU, CLAUDIO COBELLI, CHIARA DALLA MAN, ANANDA BASU, Padova, Italy, Charlottesville, VA
MONDAY, JUNE 28, 2021

10:10 a.m.-11:45 a.m.

National Scientific & Health Care Achievement Awards Presentation

and

Outstanding Scientific Achievement Award Lecture

Unique Cardiometabolic Mechanisms and Consequences of Youth-Onset Type 1 and Type 2 Diabetes
Kristen J. Nadeau, MD, MS

12:00 p.m.-1:00 p.m.

Professional Interest Group Discussion
Theme Area: Clinical Diabetes/Therapeutics

Professional Interest Group Discussion on Diabetes Technology—Understanding the Current State of Apps for Supporting Effective Diabetes Care
Chair: Joseph A. Alo, MD
12:00 p.m.-12:05 p.m. Introduction
Joseph A. Alo, MD
12:05 p.m.-12:15 p.m. Overview of the ADA/EASD Consensus Statement on Diabetes Apps
Anne L. Peters, MD
12:15 p.m.-12:30 p.m. Reviewing the Diabetes App Landscape—Potential Benefits to Patients and Providers
Jane Jeffrie Seley, DNP, MSN, MPH, GNP, BC-ADM, CDE, CDTC, FAADE, FAAN
12:30 p.m.-12:45 p.m. Risks and Challenges of Recommending Mobile Apps for Diabetes—Safety Comes First
Jamie R. Hyatt, RN, BSN, CDCES
12:45 p.m.-1:00 p.m. Choosing the Right App and Supporting Effective Use—A Case-Based Discussion
Halis K. Akturk, MD

Professional Interest Group Discussion
Theme Area: Clinical Diabetes/Therapeutics

Professional Interest Group Discussion on Health Care Delivery and Quality Improvement—Don’t Forget to Ramp Up and Don’t Hesitate to Slow Down—Clinical Inertia in the Treatment of Diabetes (Includes Live Video Question and Answer Period)
Chair: Mary K. Rhee, MD
12:00 p.m.-12:05 p.m. Introduction
Mary K. Rhee, MD
12:05 p.m.-12:20 p.m. Clinical Inertia—Treatment Intensification
Kamlesh Khunti, PhD, MD, FRCGP, FRCP, FMedSci
12:20 p.m.-12:35 p.m. Clinical Inertia—Treatment Deintensification
Rajesh Garg, MD
12:35 p.m.-12:50 p.m. Don’t Forget to Talk to Your Patient—Clinical Inertia Is Not Just about Drugs
Alexander Turchin, MD, MS
12:50 p.m.-1:00 p.m. Live Video Question and Answer Period
Professional Interest Group Discussion
Theme Area: Clinical Diabetes/Therapeutics
Professional Interest Group Discussion on Pregnancy and Reproductive Health—First Trimester Screening for Diabetes—What Is the Best Approach?
Chair: Jennifer Wyckoff, MD
12:00 p.m.-12:15 p.m.  
A1C Is Currently the Best Approach for First Trimester Screening  
Florence M. Brown, MD
12:15 p.m.-12:30 p.m.  
OGTT Is Currently the Best Approach for First Trimester Screening  
David Simmons, MA, MBBS, FRACP, FRCP, MD (Cantab)
12:30 p.m.-12:45 p.m.  
There Is No Evidence to Support First Trimester Screening  
Erika F. Werner, MD, MS
12:45 p.m.-1:00 p.m.  
Panel Discussion  
Florence M. Brown, MD  
David Simmons, MA, MBBS, FRACP, FRCP, MD (Cantab)  
Erika F. Werner, MD, MS

Professional Interest Group Discussion
Theme Area: Epidemiology/Genetics
Professional Interest Group Discussion on Public Health and Epidemiology—Is Diabetes a Risk Factor for Adverse Health Outcomes in Patients with COVID-19?
Chair: Elisabetta Patorno, MD, DrPH
12:00 p.m.-12:04 p.m.  
Introduction  
Elisabetta Patorno, MD, DrPH
12:04 p.m.-12:32 p.m.  
Associations of Type 1 and Type 2 Diabetes with COVID-19-Related Mortality in England—A Whole-Population Study  
Jonathan Valabhji, OBE, MD, FRCP
12:32 p.m.-1:00 p.m.  
Obesity and Mortality among Patients Diagnosed with COVID-19—Results from an Integrated Health Care Organization  
Sameer B. Murali, MD, MSHS

Professional Interest Group Discussion
Theme Area: Immunology/Transplantation
Professional Interest Group Discussion on Immunology, Immunogenetics, and Transplantation—Clinical Response Endotypes in Type 1 Diabetes
Co-Chairs: Allison L. Bayer, PhD and Laura M. Jacobsen, MD
12:00 p.m.-12:02 p.m.  
Introduction  
Laura M. Jacobsen, MD
12:02 p.m.-12:21 p.m.  
Teplizumab in Prevention and Response Profiles  
S. Alice Long, PhD
12:21 p.m.-12:41 p.m.  
Regulatory T-Cell Therapy  
Qizhi Tang, PhD
12:41 p.m.-1:00 p.m.  
Multitrial Clinical Response Profiles  
Kirsten E. Diggins, PhD
MONDAY, JUNE 28, 2021

1:00 p.m.-2:15 p.m.
Session Break
Take this opportunity to visit the Virtual Exhibits and Poster Hall

2:15 p.m.-3:35 p.m.

**Symposium**
*Theme Area: Integrated Physiology/Obesity*

**Environmental Exposures and Susceptibility to Obesity and Metabolic Consequences—What Are the Main Drivers?**
Chair: Vasantha Padmanabhan, MS, PhD

2:15 p.m.-2:55 p.m.  *Per- and Polyfluoroalkyl Substances (PFAS) and Body Composition and Diabetes*
Sung Kyun Park, ScD, MPH

2:55 p.m.-3:35 p.m.  *Ultraprocessed Foods*
Carlos A. Monteiro, MD, PhD

2:15 p.m.-4:15 p.m.

**Symposium**
*Theme Area: Acute and Chronic Complications*

**Neonatal Hypoglycemia—Overdiagnosed or Underestimated?**
Chair: Davida F. Kruger, MSN, APN-BC, BC-ADM

2:15 p.m.-2:45 p.m.  *Long-Term Outcomes of Neonatal Hypoglycemia—Clinical Lessons from the Lab*
Raghavendra Rao, MD

2:45 p.m.-3:15 p.m.  *Fetal Hyperinsulinism—Long-Term Outcomes and Lessons for Diabetologists*
Charles A. Stanley, MD

3:15 p.m.-3:45 p.m.  *Epidemiology and Outcomes of Neonatal Hypoglycemia*
Sarbattama Sen, MD

3:45 p.m.-4:15 p.m.  *Best Practice to Detect and Manage Neonatal Hypoglycemia*
Paul J. Rozance, MD

2:15 p.m.-4:15 p.m.

**Symposium**
*Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise*

**Accelerating Care and Education—Digital Health and Diabetes Support—Patient and Provider Perspectives (Includes Live Video Question and Answer Period)**
Chair: Carine M. Nassar, MS, RD, CDE

2:15 p.m.-2:40 p.m.  *How Technology Changes the Who, What, and Where of Diabetes Care and Education*
Kelly M. Rawlings, MS

2:40 p.m.-3:05 p.m.  *Telehealth and Diabetes Self-Management Education and Support Services—How We Deliver Services*
Marci Butcher, RD, LN, CDCES, FADCES

3:05 p.m.-3:30 p.m.  *Diabetes Care and Education Specialists-Led Technology Enabled Transitions in Care—Connecting the Diabetes Management Care Team*
Patricia Hathway Montesinos, MSN, APRN, FNP-BC, BC-ADM, CDCES

3:30 p.m.-3:55 p.m.  *Use of Continuous Glucose Monitoring in the Inpatient Setting—Nursing Unit Glucose Telemetry for Hypoglycemia Mitigation*
Ilias (Elias) Spanakis, MD, CDCES

3:55 p.m.-4:15 p.m.  *Live Video Question and Answer Period*
Symposium
Theme Area: Clinical Diabetes/Therapeutics
Joint ADA/ISPAD Symposium—General Population Screening vs. Targeted Screening for Type 1 Diabetes Risk
Chair: Michael J. Haller, MD
2:15 p.m.-2:45 p.m. Updates in General Population Screening for Type 1 Diabetes Risk and Presymptomatic Type 1 Diabetes
Anette-Gabriele Ziegler, MD
2:45 p.m.-3:15 p.m. Updates in Targeted Screening—TrialNet
Diane K. Wherrett, MD, FRCP
3:15 p.m.-3:35 p.m. Genetic Risk Scores to Direct Screening in Type 1 Diabetes
Richard A. Oram, MD, PhD
3:35 p.m.-3:55 p.m. Psychology of Type 1 Diabetes Risk Screening
Laura B. Smith, PhD
3:55 p.m.-4:15 p.m. Cost-Effectiveness of Type 1 Diabetes Risk Screening
R. Brett McQueen, PhD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Management of Atypical Diabetes
Chair: David A. Baidal, MD
2:15 p.m.-2:45 p.m. Diabetes Associated with Pancreatic Disease
Janet B. McGill, MD
2:45 p.m.-3:15 p.m. Posttransplantation Diabetes Mellitus—When to Diagnose, Significance, Use of Technology, and Treatment Challenges
Marina Basina, MD
3:15 p.m.-3:45 p.m. Evaluation and Treatment of Severe Insulin Resistance
Armen Yerevanian, MD
3:45 p.m.-4:15 p.m. Diabetes Secondary to Cancer Therapies
Mark S. Anderson, PhD, MD

Symposium
Theme Area: Clinical Diabetes/Therapeutics
First Results of the Effect of Efpeglenatide on Cardiovascular Outcomes (AMPLITUDE-O) Trial
Chair: Renato D. Lopes, MD, PhD
2:15 p.m.-2:25 p.m. Introduction and Background
Stefano Del Prato, MD
2:25 p.m.-2:35 p.m. Research Question, Design, and Outcomes
Carolyn S.P. Lam, MBBS, PhD
2:35 p.m.-2:45 p.m. Participants and Follow-Up
Kelley R. Branch, MD, MS
2:45 p.m.-3:00 p.m. Effect on A1C, Weight, Blood Pressure, Heart Rate, Adverse Events
Julio Rosenstock, MD
3:00 p.m.-3:20 p.m. Cardiovascular Outcomes
Hertzel C. Gerstein, MD, MSc, FRCPC
3:20 p.m.-3:40 p.m. Renal Outcomes
Richard E. Pratley, MD
3:40 p.m.-3:55 p.m. Updated Meta-analysis and Summary
Naveed Sattar, MD, PhD
3:55 p.m.-4:15 p.m. Independent Commentary
Amanda I. Adler, MD, PhD
Symposium
Theme Area: Epidemiology/Genetics
Chair: Christy L. Avery, PhD
2:15 p.m.-2:55 p.m. Communicating Risk—The Infectious Disease Epidemiologist’s Perspective
Christina M. Astley, MD, ScD
2:55 p.m.-3:35 p.m. Dissemination, Social Media, and Building Public Trust in Diabetes Risk Communication
Bertha Hidalgo, PhD, MPH
3:35 p.m.-4:15 p.m. Communicating Risk—A Journalist’s Perspective on Scientific Communication
Gary Schwitzer, BA

Symposium
Theme Area: Immunology/Transplantation
T Cells in Diabetes—Past, Present, and Future
Chair: Maria Bettini, PhD
2:15 p.m.-2:45 p.m. T Cells Reactive to Hybrid Insulin Peptides in Pathogenesis and Regulation of Autoimmune Diabetes
Kathryn M. Haskins, PhD
2:45 p.m.-3:15 p.m. From Mice to Men—Animal Models for the Study of Type 1 Diabetes
Teresa P. DiLorenzo, PhD
3:15 p.m.-3:45 p.m. The Role of Follicular T Cells in Type 1 Diabetes
Lucy Walker, PhD
3:45 p.m.-4:15 p.m. Chimeric Antigen Receptor T Cells for the Treatment of Type 1 Diabetes
Megan Levings, PhD

Symposium
Theme Area: Insulin Action/Molecular Metabolism
Interorgan Cross Talk—Metabolites, Proteins, and Extracellular Vesicles
Chair: Jun Wu, PhD
2:15 p.m.-2:45 p.m. Chemical Control of Energy Metabolism by N-acyl Amino Acids
Jonathan Z. Long, PhD
2:45 p.m.-3:15 p.m. Metabolic Signaling via Brown Fat-Derived Lipokines
Yu-Hua Tseng, PhD
3:15 p.m.-3:45 p.m. Exercise-Induced Lipokines in Systemic Metabolism
Kristin I. Stanford, PhD
3:45 p.m.-4:15 p.m. Extracellular Vesicles in Metabolic and Immune Homeostasis
Anthony W. Ferrante, MD, PhD
MONDAY, JUNE 28, 2021

2:15 p.m.-4:15 p.m.
(continued)

Oral Presentations
Theme Area: Acute and Chronic Complications
New Concepts in Managing Diabetic Foot Complications (With Roger Pecoraro Award Lecture)
Chair: Christine Jarocki, DPM

2:15 p.m.-2:45 p.m.
Roger Pecoraro Award Lecture
Causation Research on Diabetic Foot Complications—What I Learned from Roger Pecoraro
Edward J. Boyko, MD, MPH

2:45 p.m.-3:00 p.m.
265-OR Black Race, Rurality, and Neighborhood Disadvantage in Major Amputations: A Medicare Cohort Study
MEGHAN BRENNAN, JOSEPH KRAMER, W. RYAN POWELL, AMY J.H. KIND, CHRISTIE M. BARTELS, Madison, WI

3:00 p.m.-3:15 p.m.
266-OR Proteomic Analysis of Diabetic Foot Ulcer Fluid to Identify Biomarkers of Wound Healing: A Prospective Study
NASIBEH VATANKHAH, VAHID JALILI, YOUNES JAHANGIRI, Portland, OR

3:15 p.m.-3:30 p.m.
267-OR Assessing Patient Knowledge about Diabetic Foot Ulcer Offloading
REBECCA A. BURMEISTER, CRYSTAL HOLMES, CHRISTINE JAROCKI, TYSON STROM, GARNEISHA M. TORRENCE, BRIAN M. SCHMIDT, Ann Arbor, MI

3:30 p.m.-3:45 p.m.
268-OR Cost-Effectiveness and Cost Utility of At-Home Foot Skin Temperature Monitoring for Ulcer Prevention in People with Diabetes: A Multicenter Randomized Controlled Trial (diatemp)
JAAP VAN NETTEN, WOUTER B. AAN DE STEGGE, MARCEL DIJKGRAAF, SICCO A. BUS, Amsterdam, Netherlands

3:45 p.m.-4:00 p.m.
269-OR Thermal Regulation of the Diabetic Foot and Its Impact on Blood Perfusion
ALI ERSEN, RYAN T. MYERS, KATHERINE M. RASPOVIC, MARIA RAMOS-ROMAN, TRAPPER LALLI, YASSER SALEM, GORDON B. HIRSCHMAN, METIN YAVUZ, Bedford, MA, Dallas, TX, Fort Worth, TX

4:00 p.m.-4:15 p.m.
270-OR Relationship between Chronic Renal Disease and Risk Stratification for Chronic Ulcer on the Diabetic Foot: Results of a Prospective Cohort
JEAN-BAPTISTE BONNET, ILAN SZWARC, ANTOINE AVIGNON, SEBASTIEN JUGANT, ARIANE SULTAN, Montpellier, France
MONDAY, JUNE 28, 2021

2:15 p.m.-4:15 p.m.  
(continued)

Oral Presentations  
Theme Area: Clinical Diabetes/Therapeutics  
Mixing “Ommics” in Pregnancy and Beyond (With ADA Presidents’ Select Abstract Presentation)  
Chair: Mary-Elizabeth Patti, MD

2:15 p.m.-2:30 p.m.  
271-OR  ADA Presidents’ Select Abstract Presentation: MyD88 Signaling in Trophoblasts Is Necessary for Maternal High-Fat Diet-Associated Developmental Programming of Obesity  
MEGHAN L. RUEBEL, KESHARI M. THAKALI, SREE V. CHINTAPALLI, KARTIK SHANKAR, Little Rock, AR, Aurora, CO

2:30 p.m.-2:45 p.m.  
272-OR  Impact of Maternal Diabetes on MicroRNA Expression in Fetal Tissue  
ANKUR RUGHANI, JEANIE B. TRYGGESTAD, Oklahoma City, OK

2:45 p.m.-3:00 p.m.  
273-OR  Association of an Integrated Component of Maternal Glycemic Regulation in Pregnancy with Epigenome-Wide Cord Blood DNA Methylation  
DIANA L. JUVINAO-QUINTERO, ANDRES CARDENAS, PATRICE PERRON, LUIGI BOUCHARD, SHARON LUTZ, MARIE-FRANCE HIVERT, El Cerrito, CA, Sherbrooke, QC, Canada, Boston, MA

3:00 p.m.-3:15 p.m.  
274-OR  Gestational Diabetes, Epigenetic Age Acceleration, and Insulin Sensitivity and Secretion in the Exploring Perinatal Outcomes among Children Study  
CATHERINE KIM, KYLIE K. HARRALL, DEBORAH H. GLUECK, BELINDA NEEDHAM, DANA DABELEA, Ann Arbor, MI, Aurora, CO

3:15 p.m.-3:30 p.m.  
275-OR  Maternal Vitamin D Levels during Pregnancy Is Associated with Childhood Telomere Length: Analysis from a Longitudinal Mother-Child Cohort  
KWUN KIU WONG, FEIFEI CHENG, DI MAO, CADMON K.P. LIM, RONALD WANG, CLAUDIA H. TAM, MUGDHA A. JOGLEKAR, ANANDWARDHAN A. HARDIKAR, ALICIA JENKINS, BOYD E. METZGER, WILLIAM LOWE, JR., WING H. TAM, RONALD C. MA, Campbeltown, Australia, Sydney, Australia, Chicago, IL, Hong Kong, China

3:30 p.m.-3:45 p.m.  
276-OR  Predictive Primary Metabolomics Signatures in Early to Mid-pregnancy for Risk of Gestational Diabetes  
YEYI ZHU, AMANDA NGO, SILI FAN, DINESH BARUPAL, CHARLES QUESENBERRY, OLIVER FIEHN, ASSIAMIRA FERRARA, Oakland, CA, Davis, CA, New York, NY

3:45 p.m.-4:00 p.m.  
277-OR  Use of Noncarbohydrate Fuels Is Associated with Materno-Fetal Complications in Type 1 Diabetes Pregnancy: Metabolomics Analysis of the CONCEPTT Trial  
CLAIRE L. MEEK, ZOE STEWART, SAMUEL FURSE, JENNIFER M. YAMAMOTO, DENICE FEIG, ALBERT KOULMAN, HELEN R. MURPHY, Cambridge, United Kingdom, Leicester, United Kingdom, Calgary, AB, Canada, Toronto, ON, Canada, Norwich, United Kingdom

4:00 p.m.-4:15 p.m.  
278-OR  Ancestry-Specific Genetic Risk Scores of Type 2 Diabetes and Longitudinal Fetal Growth in a Race-Ethnic Diverse Population  
MARION OUIDIR, XUEHOU ZENG, SUVO CHATTERJEE, CUILIN ZHANG, FASIL TEKOLA-AYELE, Bethesda, MD
MONDAY, JUNE 28, 2021

2:15 p.m.-4:15 p.m.
(continued)

Oral Presentations
Theme Area: Integrated Physiology/Obesity
Integrative Physiology—Liver
Chair: Claudio Villanueva, PhD

2:15 p.m.-2:30 p.m.
279-OR Hydroxylation Regulation of Hepatic Gluconeogenesis via Prolyl-Hydroxylase 3 in Mice
YAQIAN XUE, GENXIANG CAI, FENGGUANG MA, ZHENGSHUAI LIU, YUXIAO LIU, WEITONG SU, ZENGPENG ZHENG, DONG DING, YANG JIANG, JING GAO, XIAOZHEN DAI, AIOYUAN CUI, YU LI, Shanghai, China, Tianjin, China, Chengdu, China

2:30 p.m.-2:45 p.m.
280-OR CTCFL Is a Fasting-Induced Epigenetic Regulator That Modulates Lipid and Cholesterol Metabolism in the Liver
VISSARION EFTHYMIOU, JEREMY I. CHIMENE-WIESS, LIYUAN ZHOU, SORAVIS OSATAPHAN, LEI SU, MARY-ELIZABETH PATTI, Beijing, China, Boston, MA

2:45 p.m.-3:00 p.m.
281-OR Endothelial Cell Cd36 Regulates Systemic Glucose and Lipid Metabolism
LEIGH GOEDEKE, NI-HUIPING SON, TRACI E. LAMOIA, ALI NASIRI, MARIO KAHN, XIAN-MAN ZHANG, GARY CLINE, IRA J. GOLDBERG, GERALD I. SHULMAN, New Haven, CT, New York, NY

3:00 p.m.-3:15 p.m.
282-OR The Effect of Glucagon on Rates of Hepatic Mitochondrial Oxidation and Pyruvate Carboxylase Flux in Man Assessed by Positional Isotopomer NMR Tracer Analysis (PINTA)
KITT PETERSEN, GERALD I. SHULMAN, New Haven, CT

3:15 p.m.-3:30 p.m.
283-OR Inadequate Hepatic Mitochondrial Adaptation in Patients with NASH Is Related to the Severity of Steatohepatitis and Fibrosis Stage
SRILAXMI KALAVALAPALLI, DIANA BARB, EDDISON GODINEZ, ROMINA LOMONACO, JEFFREY FRIEDMAN, STEPHANIE WOHLGEMUTH, NADA FANOUS, RACHEL E. DILLARD, TYLER M. COWAN, DANIELLE POULTON, LYDIA MANSOUR, SULAV SHRESTHA, FERNANDO BRIL, SREEVIDYA K. SUBBARAYAN, SUSHMA KADIYALA, KENNETH CUSI, Gainesville, FL, Birmingham, AL

3:30 p.m.-3:45 p.m.
284-OR Hepatocyte-Specific CCN2 Gene Deletion Prevents NASH Fibrosis in a Mouse Model of High-Fat Feeding and Diabetes
SARAH N. PARRY, XIAOYU WANG, DANQING MIN, JACINTHA S. LOURDESAMY, PAUL F. WILLIAMS, ANDREW LEASK, STEPHEN M. TWIGG, Sydney, Australia, Saskatoon, SK, Canada

3:45 p.m.-4:00 p.m.
285-OR Lifestyle Treatment-Induced Improvements in Nonalcoholic Steatohepatitis (NASH)
JUSTINE M. MUCINSKI, NAREN S. NALLAPETA, MARY P. MOORE, JAMAL A. IBDAH, R. SCOTT RECTOR, ELIZABETH J. PARKS, Columbia, MO

4:00 p.m.-4:15 p.m.
286-OR FGF21 Decreases Hepatic Triglycerides in a Weight Loss-Independent but Sex-Dependent Manner
AKI T.B. CHAFFIN, KARLTON R. LARSON, KUEI-PIN HUANG, KAREN K. RYAN, Davis, CA, Philadelphia, PA
Oral Presentations
Theme Area: Islet Biology/Insulin Secretion
Out of the Frying Pan, Into the Fire—Mechanisms of Beta-Cell Stress Responses
Chair: Dawn B. Davis, MD, PhD

2:15 p.m.-2:30 p.m.

287-OR: M6A mRNA Methylation Regulates the Innate Immune Response in Human β-Cells
DARIO F. DE JESUS, ZIJIE ZHANG, NATALIE K. BROWN, JIANG HU, SEVIM KAHRAMAN, CLAYTON E. MATHEWS, ALVIN C. POWERS, MARK A. ATKINSON, DECIO L. EIZIRIK, CHUAN HE, ROHIT KULKARNI, Boston, MA, Yunnan, China, Gainesville, FL, Nashville, TN, Indianapolis, IN, Chicago, IL

2:30 p.m.-2:45 p.m.

288-OR: Role of Endoplasmic Reticulum (ER) Calcium in β-Cell Senescence and Type 1 Diabetes Pathophysiology
STACI A. WEAVER, TATSUYOSHI KONO, FAROOQ SYED, ROBERT N. BONE, CARMELLA EVANS-MOLINA, Indianapolis, IN

2:45 p.m.-3:00 p.m.

289-OR: Cleavage of Protein Kinase C d by Caspase-3 Mediates Cytokine-Induced β-Cell Death
JILLIAN COLLINS, RICHARD K. BENNINGER, NIKKI L. FARNsworth, Golden, CO, Aurora, CO

3:00 p.m.-3:15 p.m.

290-OR: Altered In-Situ Expression of Proinsulin-Insulin in Pancreatic Islets Reflects Metabolic and Molecular Defects in Type 2 Diabetic and Glucose-Intolerant Living Donors
NOEMI BRUSCO, GUIDO SEBASTIANI, GIADA LICATA, GIUSEPPINA E. GRIECO, GIANFRANCO DI GIUSEPPE, LAURA NIGI, DANIELA FIGNANI, SIMONA MOFFA, FRANCESCA CINTI, CHIARA MARIA ASSUNTA CEFALO, UMBERTO CAPECE, FLAVIA IMPRONTA, ANDREA MARI, FRANCESCO DOTTa, ANDREA GIACCARI, TERESA MEZZA, Siena, Italy, Rome, Italy, Padova, Italy

3:15 p.m.-3:30 p.m.

291-OR: IFN-α Evokes a Heterogeneous, Rapid ROS Response from a Subset of Human Islet β-Cells
MATTHEW ARVIN, CHARANYA MURALIDHARAN, ABASS M. CONTEH, MICHELLE M. MARTINEZ IRIZARRY, KARA ORR, KEN W. DUNN, AMELIA K. LINNEMANN, Indianapolis, IN, Chicago, IL

3:30 p.m.-3:45 p.m.

292-OR: GPR31 Appears to Mediate the Downstream Actions of 12-Lipoxygenase in the Setting of Diabetic Inflammation
SARAH A. TERSEY, MELISSA WALSH, MARIMAR HERNANDEZ-PEREZ, JONATHAN DOWGIElewicz, ABHISHEK KULKARNI, RYAN ANDERSON, RAGHAVENDRA G. MIRMIRA, Indianapolis, IN, Chicago, IL

3:45 p.m.-4:00 p.m.

293-OR: RIPK3-Mediated Necroptosis Is an Alternative Form of TNFα-Induced β-Cell Death
CHRISTOPHER J. CONTRERAS, LI LIN, MEGHAN F. HOGAN, ANDREW OBERST, STEVEN E. KAHN, ANDREW T. TEMPlIN, Indianapolis, IN, Seattle, WA
MONDAY, JUNE 28, 2021

4:30 p.m.-6:30 p.m.

Symposium
Theme Area: Acute and Chronic Complications
Joint ADA/ASN Symposium—New Therapies for Kidney Protection in Diabetes
Chair: David Cherney, MD, PhD
4:30 p.m.-5:00 p.m.  Realizing the Benefits of SGLT2 Inhibition for Kidney Protection
  Vlado Perkovic, MBBS, PhD, FRACP, FASN, FAHMS
5:00 p.m.-5:30 p.m.  Do GLP-1RAs Protect the Kidney?
  Ofri Mosenzon, MD, MSc
5:30 p.m.-6:00 p.m.  Kidney Benefits of Mineralocorticoid Receptor Antagonism—Lessons from FIDELIO-DKD
  George Bakris, MD
6:00 p.m.-6:30 p.m.  Combination Therapies for Kidney Protection in Diabetes—Is One Plus One More than Two?
  Hiddo L. Heerspink, PhD

Symposium
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
The Diabetes Digital Landscape through a Psychosocial and Behavioral Lens
Chair: David G. Marrero, PhD
4:30 p.m.-5:00 p.m.  Diabetes in the Context of Tech—Innovations in the Integration of Psychosocial Factors in Diabetes Research and Care
  Shelagh A. Mulvaney, PhD
5:00 p.m.-5:30 p.m.  How Behavior-Change Research Drives Diabetes Technology Use and Success
  Maureen Monaghan, PhD
5:30 p.m.-6:00 p.m.  Innovative Use of Blood Glucose Data to Detect Meal Content and Timing
  Samantha Kleinberg, PhD
6:00 p.m.-6:30 p.m.  Addressing Diabetes Distress in Young Adults via Virtual Diabetes Care
  Jennifer Raymond, MD, MCR

Symposium
Theme Area: Epidemiology/Genetics
Imagining How Genetics Alters Risk of Diabetes
Chair: Suna Onengut-Gumuscu, PhD
4:30 p.m.-5:00 p.m.  Where Do the Cells Go When It Is Time to Be Expressed?
  Marcela Brissova, PhD
5:00 p.m.-5:30 p.m.  What Are the Gene Targets of Variants Associated with Diabetes?
  Struan F.A. Grant, PhD
5:30 p.m.-6:00 p.m.  More than One—The Use of Risk Scores to Improve Prediction in Diabetes
  Maggie Ng, PhD
6:00 p.m.-6:30 p.m.  Pathways and Systems Approaches to Understanding Complexity in Diabetes
  Melina Claussnitzer, PhD
Symposium
Theme Area: Integrated Physiology/Obesity
COVID-19, Diabetes, and Obesity
Chair: Kamlesh Khunti, PhD, MD, FRCGP, FRCP, FMedSci
4:30 p.m.-5:00 p.m. Obesity and Diabetes—Risk Factors for Severe COVID-19
Naveed Sattar, MD, PhD
5:00 p.m.-5:30 p.m. Coronaviruses—Dysregulation of the Immune Response in Diabetes Mellitus
Matthew Frieman, PhD
5:30 p.m.-6:00 p.m. Hyperglycemia and Severe COVID-19
Antonio Ceriello, MD
6:00 p.m.-6:30 p.m. Glycolysis, Interferons, and SARS-CoV-2 Infection
Pedro M. Moraes-Vieira, PhD

Symposium
Theme Area: Islet Biology/Insulin Secretion
The Latest on Incretin/GPCR Signaling in the Islet
Chair: Daniel J. Drucker, MD
4:30 p.m.-5:00 p.m. Visualizing Higher-Order GLP-1R Organization in Beta Cells and Beyond
David Hodson, DVM, PhD
5:00 p.m.-5:30 p.m. cAMP Signaling in Islets
Anders Tengholm, PhD
5:30 p.m.-6:00 p.m. Biased Signaling and Receptor Trafficking
Alejandra Tomas, PhD
6:00 p.m.-6:30 p.m. GIPR Signaling in Alpha Cells Completes the Incretin Axis
Megan Capozzi, PhD
Oral Presentations

Theme Area: Acute and Chronic Complications
Diabetic Dyslipidemia (With State-of-the-Art Lecture)
Chair: Lisa Tannock, MD

4:30 p.m.-5:00 p.m.

State-of-the-Art Lecture

Role of the Gut in Diabetic Dyslipidemia
Gary F. Lewis, MD, FRCPC

5:00 p.m.-5:15 p.m.

295-OR Dyslipidemia and Diabetes in Children and Adolescents with Obesity: A 10-Year Retrospective Study
TOMADER ALI, SARADALEKSHMI RADHA, RADWA HELAL, ESPHIE GRACE FOJAS, SHERIF I. EL-REFER, HANI M. SABBOUR, NADER LESSAN, Abu Dhabi, United Arab Emirates

5:15 p.m.-5:30 p.m.

296-OR Metabolic Syndrome Is Associated with a Longer Complicated ICU Stay and Greater Mortality in Patients Hospitalized with COVID-19
LEANNE PEREIRA, VAHID NAMDARIZANDI, SHALEMAR ANN KASAN, MICHAEL FATUYI, BASSMAN TAPPUNI, BELAL KASEER, DOMINIQUE M. BRANDT, KAMAL SHEMISA, AWFA ZAIN ELABIDIN, VIVEK SHARMA, Cincinnati, OH

5:30 p.m.-5:45 p.m.

297-OR Triglyceride Reduction and Effect on Lipoprotein Metabolism in Patients with Type 2 Diabetes Mellitus Receiving Fixed-Dose Combination of Insulin Degludec and Liraglutide
ELENI PAPPA, CHRISTINA KOSTARA, AIKATERINI DIMOU, ELENI T. BAIRAKTARI, VASILIS TSIHODIMOS, Lübeck, Germany, Ioannina, Greece

5:45 p.m.-6:00 p.m.

298-OR Lipid Pattern in Men with Hypogonadism and Type 2 Diabetes Improves during Long-Term Treatment with Testosterone Undecanoate Injections (TU) in Comparison with an Untreated Control Group: Update of Real-World Registry Data
FARID SAAD, KARIM S. HAIDER, AHMAD HAIDER, Berlin, Germany, Bremerhaven, Germany

6:00 p.m.-6:15 p.m.

299-OR Relative Contribution of Statin Intensity, Low-Density Lipoprotein Cholesterol Level and Duration of Statin Therapy for Cardiovascular Risk Reduction in Patients with Type 2 Diabetes
JI YOON KIM, JIMI CHOI, SIN GON KIM, NAM HOON KIM, Seoul, Korea, Republic of

6:15 p.m.-6:30 p.m.

300-OR Association of Raised Lipoprotein(a) Levels with Micro- and Macrovascular Complications in Patients with Type 1 Diabetes
SOPHIE VAN HAARE HEIJMEIJER, MICHEL P. HERMANS, Brussels, Belgium
Oral Presentations
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Food Is Medicine for People with Diabetes and At-Risk of Diabetes
Chair: Guoxun Chen, PhD

4:30 p.m.-4:45 p.m.
301-OR  Effect of Vitamin D Supplementation on Insulin Sensitivity and Beta-Cell Function in Prediabetes
NEDA RASOULI, IRWIN BRODSKY, RANEE CHATTERJEE, SUN H. KIM, RICHARD E. PRATLEY, MYRENE STATEN, JASON P. NELSON, ANASTASSIOS G. PITTAS, D2D RESEARCH GROUP, Aurora, CO, Scarborough, ME, Durham, NC, Stanford, CA, Orlando, FL, Bethesda, MD, Boston, MA

4:45 p.m.-5:00 p.m.
302-OR  Medical Prescriptions for Vegetables Are Associated with Reduced Consumption of Unhealthy Foods, Improved Food Security, and Lowered Cardiometabolic Risk among Adults with or at Risk of Type 2 Diabetes
NAMINO M. GLANTZ, CASEY CONNEELY, ARIANNA J. LAREZ, WENDY C. BEVIER, DAVID KERR, Santa Barbara, CA

5:00 p.m.-5:15 p.m.
303-OR  Calorie Restriction Equalizes Glycemic Control between Short and Adequate Sleepers
KRISTIN K. HODDY, PRACHI SINGH, JAMES L. DORLING, ROBBIE A. BEYL, JOHN P. KIRWAN, KIM HUFFMAN, SUSAN B. RACETTE, SAIKRUPA DAS, CORBY K. MARTIN, Baton Rouge, LA, Durham, NC, St. Louis, MO, Boston, MA

5:15 p.m.-5:30 p.m.
304-OR  Association of Eating Patterns and Diabetic Kidney Disease in Type 2 Diabetes
CİNTİA C.R. RODRİGUES, BÁRBARA P. RİBOLDI, TICIÅNA C. RODRİGUES, ROBERTA A. SARMENTO, JULIANA P. ANTONIO, RAQUEL A. BORBA, ADRIELE P. VIEIRA, ISADORA S. PASINI, JUSSARA C. DE ALMEIDA, Porto Alegre, Brazil

5:30 p.m.-5:45 p.m.
305-OR  Twenty-Eight Days of Meal Delivery Improves Time-in-Range for People with Type 2 Diabetes
CALLAHAN CLARK, BRIAN HART, Minnetonka, MN

5:45 p.m.-6:00 p.m.
306-OR  Changes in Adipose-Derived Circulating MicroRNA Levels and Improvements in Visceral and Ectopic Fat Depots and Insulin Sensitivity: The CENTRAL Trial
YORIKO HEIANZA, KNUT K. KROHN, MENGYING WANG, ANAT YASKOLKA MEIR, QIAOCHU XUE, STEFANIE ZIESCHE, UTA CEGLAREK, MATTHIAS BLÜHER, MARIA KELLER, PETER KOVACS, IRIS SHAI, LU QI, Beersheba, Israel, New Orleans, LA, Leipzig, Germany

6:00 p.m.-6:15 p.m.
307-OR  Mean Blood Beta-Hydroxybutyrate Predicts Clinically Significant Weight Loss following 90 Days Carbohydrate-Restricted Nutrition Therapy
AMY L. MCKENZIE, SHAMINIE J. ATHINARAYANAN, REBECCA N. ADAMS, BRITTANIE M. VOLK, STEPHEN PHINNEY, ROBERT E. RATNER, San Francisco, CA

6:15 p.m.-6:30 p.m.
308-OR  Effectiveness of Telemedicine Intervention on Improving Glycemia and Reducing Pharmacologic Therapy in Older Adults with Type 2 Diabetes
REBECCA N. ADAMS, SHAMINIE J. ATHINARAYANAN, CAROLINE G.P. ROBERTS, BRITTANIE M. VOLK, BRANDON FELL, AMY L. MCKENZIE, San Francisco, CA
MONDAY, JUNE 28, 2021

4:30 p.m.-6:30 p.m.
(continued)

Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
Improvement in Quality of Care in Vulnerable Populations with Diabetes
Chair: Eva Tseng, MD, MPH

4:30 p.m.-4:45 p.m.
309-OR Mean CGM Values Before and During COVID-19 Pandemic Demonstrate Noninferiority of Telehealth in Pediatric T1D
TARA KAUSHAL, LIANE J. TINSLEY, LISA K. VOLKENING, CHRISTINE TURCOTTE, LORI M. LAFFEL, Boston, MA

4:45 p.m.-5:00 p.m.
310-OR Five-Year Trends in American Diabetes Association Recommended Metabolic Screening for Youth Prescribed Antipsychotic Medications
LORETTA HSUEH, NATALIE SLAMA, SCOTT SPALDING, STACY STERLING, ESTI ITURRALDE, Oakland, CA

5:00 p.m.-5:15 p.m.
311-OR Predicting Inadequate Early Glycemic Control among Adults with Younger-Onset Type 2 Diabetes
PRANITA MISHRA, STACEY ALEXEEFF, RICHARD W. GRANT, ANJALI GOPALAN, Oakland, CA

5:15 p.m.-5:30 p.m.
312-OR Comparison of Processes of Care and Acute Care Utilization for Medicaid Enrollees with Type 2 Diabetes in Federally Qualified Health Centers vs. Other Sites of Primary Care
ALEXANDRA C. KNITTER, MANORADHAN MURUGESAN, LOREN SAULSBERRY, WEN WAN, ROBERT NOCON, ELBERT HUANG, JOSH BOLTON, MARSHALL CHIN, NEDA LAITEERAPONG, Chicago, IL, Pasadena, CA, Rockville, MD

5:30 p.m.-5:45 p.m.
313-OR Disparities in Preventive Care Utilization among Patients with Diabetes in the Diabetes Belt and Surrounding Areas
MIN-WOONG SOHN, HYOJUNG KANG, TIMOTHY L. MCMURRY, SOYOU N KIM, JENNIFER M. LOBO, Lexington, KY, Champaign, IL, Charlottesville, VA

5:45 p.m.-6:00 p.m.
314-OR Racial/Ethnic and Geographic Variation in the Initiation of Antidiabetic Therapies in Medicare Enrollees with Newly Diagnosed Type 2 Diabetes (T2D)
YUJIA LI, JINGCHUAN GUO, NICO GABRIEL, SANDRA L. KANE-GILL, UTIBE ESSIEN, FREDERICO TOLEDO, INMACULADA HERNANDEZ, Pittsburgh, PA, Gainesville, FL

6:00 p.m.-6:15 p.m.
315-OR Trends in Racial and Ethnic Difference in Glucose-Lowering Medication (GLM) Use, Out of Pocket (OOP) Payment, and HbA1c Control in U.S. Adults with Diabetes, 2005-2018
PIAOPIAO LI, DAWEI GUAN, JINGCHUAN GUO, ALMUT G. WINTERSTEIN, PING ZHANG, HUI SHAO, Gainesville, FL, Atlanta, GA

6:15 p.m.-6:30 p.m.
316-OR Diabetes Care among Older Adults Enrolled in Medicare Advantage vs. Traditional Medicare Fee-for-Service Plans: The Diabetes Collaborative Registry
UTIBE ESSIEN, YUANYUAN TANG, TERRENCE LITAM, RAVI PATEL, RISHI K. WADHERA, NIHAR DESAI, SANJEEV N. MEHTA, MIKHAIL N. KOSIBOROD, MUTHIAH VADUGANATHAN, Pittsburgh, PA, Kansas City, MO, Chicago, IL, Boston, MA, New Haven, CT
Oral Presentations
Theme Area: Clinical Diabetes/Therapeutics
SGLT Inhibitors
Chair: Katherine R. Tuttle, MD, FACP, FASN, FNKF

4:30 p.m.-4:45 p.m.
317-OR Efficacy and Safety of Dapagliflozin by Glycemic Status in the DAPA-CKD Trial
FREDERIK PERSSON, PETER ROSSING, PRIYA VART, GLENN M. CHERTOW, FAN FAN HOU, JOHN J. MCMURRAY, RICARDO CORREA-ROTTER, HARPREET S. BAJAJ, BERGUR STEFANSSON, ROBERT D. TOTO, ANNA MARIA LANGKILDE, DAVID C. WHEELER, HIDD L. HEERSPINK, DAPA-CKD STUDY GROUP, Gentofte, Denmark, Palo Alto, CA, Guangzhou, China, Glasgow, United Kingdom, Mexico City, Mexico, Brampton, ON, Canada, Dallas, TX, Gothenburg, Sweden, London, United Kingdom, Groningen, Netherlands

4:45 p.m.-5:00 p.m.
318-OR Dapagliflozin Acutely Improves Renal Cortical Oxygenation in Individuals with Type 1 Diabetes and Albuminuria
JENS CHRISTIAN LAURSEN, NIELS S. HEINRICH, JOANA MELO, BRYAN HADDOCK, IDA B. RASMUSSEN, FARZANEH SAFAVIMANESH, CHRISTIAN S. HANSEN, JOACHIM STØRLING, HENRIK B.W. LARSSON, PER-HENRIK GROOP, MARIE FRIMODT-MOELLER, ULRIK B. ANDERSEN, PETER ROSSING, Gentofte, Denmark, Copenhagen, Denmark, Helsinki, Finland

5:00 p.m.-5:15 p.m.
319-OR Effects of Empagliflozin on Markers of Liver Steatosis and Fibrosis and Their Relation to Cardiorenal Outcomes in the EMPA-REG OUTCOME Trial
SABINE KAHL, ANNE PERNILLE OFSTAD, BERNARD ZINMAN, CHRISTOPH WANNER, ELKE SCHUELER, SILVIO E. INZUCCHI, MICHAEL RODEN, Düsseldorf, Germany, Hasle, Norway, Toronto, ON, Canada, Würzburg, Germany, Sulzbach, Germany, New Haven, CT

5:15 p.m.-5:30 p.m.
320-OR Cardiovascular Effectiveness of Empagliflozin in Patients with and without Cardiovascular Disease
ELISABETTA PATORNO, HELEN TESFAYE, DEBORAH J. WEXLER, ROBERT GLYNN, MEHDI NAJAFZADEH, LILY G. BESSETTE, LUKE ZABOTKA, LISSETTE KOENEMAN, ANOUK DERUAZ-LUYET, SEBASTIAN SCHNEEWEISS, Boston, MA, Birmingham, AL, Ingelheim, Germany

5:30 p.m.-5:45 p.m.
321-OR Effects of Canagliflozin (CANA) on Hospitalization for Heart Failure (HHF) by Baseline EGFR: Pooled Analysis from the CANVAS Program and CREDENCE
MIKHAIL N. KOSIBOROD, JAGADISH GOGATE, JOCHEN SEUFERT, KENNETH W. MAHAFFEY, Sydney, Australia, Titusville, NJ, Freiburg, Germany, Stanford, CA

5:45 p.m.-6:00 p.m.
322-OR SGLT2 Inhibition Has No Effect on the Counterregulatory Response to Hypoglycemia in Subjects with Type 1 Diabetes (T1D)
SCHAFER C. BOEDER, DANIEL G. INES, ERIN R. GIOVANNETTI, VALA HAMIDI, PAIVI M. BURKE, ADRIENNE ARMSTRONG, LESLIE CARTER, JEREMY PETTUS, La Jolla, CA

(continued on next page)
MONDAY, JUNE 28, 2021

6:00 p.m.-6:15 p.m.

323-OR  SGLT2 Inhibition Promotes Myocardial Ketone Utilization in the Normal and Failing Heart
LEIGH GOEDEKE, JI EUN LEE, YINA MA, XIAOYUE HU, JIASHENG ZHANG, JIANYING DONG, KATRINE D. GALSGAARD,
NICOLE GUERRERA, SOFIE HAEDERSDAL, XIAN-MAN ZHANG, RACHEL J. PERRY, GARY CLINE, LAWRENCE H. YOUNG,
GERALD I. SHULMAN, New Haven, CT, Copenhagen, Denmark, Hellerup, Denmark

6:15 p.m.-6:30 p.m.

324-OR  Global Use of SGLT2 Inhibitors and GLP-1 Receptor Agonists in Type 2 Diabetes: Results from DISCOVER
SUZANNE V. ARNOLD, FENGMING TANG, ANDREW COOPER, HUNGTA CHEN, MARILIA B. GOMES, WOLFGANG
RATHMANN, ICHIRO SHIMOMURA, JITEN VORA, HIROTAKA WATADA, KAMLESH KHUNTI, MIKHAIL N. KOSIBOROD,
Kansas City, MO, Cambridge, United Kingdom, Gaithersburg, MD, Rio de Janeiro, Brazil, Düsseldorf, Germany,
Osaka, Japan, Liverpool, United Kingdom, Tokyo, Japan, Leicester, United Kingdom
Oral Presentations
Theme Area: Epidemiology/Genetics
Social and Environmental Determinants in Diabetes
Chair: Shelley R. Ehrlich, MD, ScD, MPH

4:30 p.m.-4:45 p.m.
325-OR  Genetic and Socioeconomic Factors Are Independently Associated with Type 2 Diabetes
        SARA JANE CROMER, CHIRAG M. LAKHANI, JOSEP M. MERCADER, TIM MAJARIAN, JOSE C. FLOREZ, ALISA
        MANNING, JORDI MERINO, MIRIAM UDLER, Boston, MA, Cambridge, MA, Providence, RI

4:45 p.m.-5:00 p.m.
326-OR  Income-Related Inequalities in Diagnosed Diabetes Prevalence among U.S. Adults, 2001-2018
        YU CHEN, XILIN ZHOU, KAI M. BULLARD, PING ZHANG, GIUSEPPINA IMPERATORE, DEBORAH B. ROLKA, Atlanta, GA

5:00 p.m.-5:15 p.m.
327-OR  Multicountry Analysis of Trends in All-Cause Mortality among People with Type 1 Diabetes
        PAZ LOPEZ-DORIGA RUIZ, LEI CHEN, JEDIDIAH I. MORTON, AGUS SALIM, BENDIX CARSTENSEN, EDWARD W.
        GREGG, MEDA E. PAVKOV, MANEL MATA-CASES, DIDAC MAURICIO, GREGORY A. NICHOLS, SANTA PILDAVA,
        STEPHANIE H. READ, SARAH WILD, JONATHAN E. SHAW, DIANNA J. MAGLIANO, Oslo, Norway, Gentofte, Denmark,
        London, United Kingdom, Atlanta, GA, Barcelona, Spain, Portland, OR, Riga, Latvia, Edinburgh, United Kingdom,
        Melbourne, Australia

5:15 p.m.-5:30 p.m.
328-OR  County-Level Diabetes Incidence among U.S. Adults in 2019: Timely Small-Area Estimates from a New Model
        HUI XIE, DEBORAH B. ROLKA, STEPHEN R. BENOIT, KAI M. BULLARD, Atlanta, GA

5:30 p.m.-5:45 p.m.
329-OR  Neural Networks in Examining the Association of Built Environment with Diabetes Prevalence
        KEVIN ZHENG, RALPH LAWTON, DANIEL Z. ZHENG, ERIC HUANG, Durham, NC

5:45 p.m.-6:00 p.m.
330-OR  Geographic Disparities and Community Context: Associations of Abandoned Coal Mine Lands with New-Onset
        Type 2 Diabetes in Pennsylvania
        EVANS BROWN, JONATHAN S. POLLAK, ANNEMARIE G. HIRSCH, BRIAN S. SCHWARTZ, Danville, PA, Baltimore, MD

6:00 p.m.-6:15 p.m.
331-OR  Joint Exposure to Various Ambient Air Pollutants, Obesity, and Incident Type 2 Diabetes: A Prospective Study in UK
        Biobank
        XIANG LI, MENGYING WANG, HAO MA, TAO ZHOU, YORIKO HEIANZA, LU QI, New Orleans, LA
Oral Presentations

Theme Area: Insulin Action/Molecular Metabolism

Insulin Signaling and Insulin Resistance
Chair: Lily Q. Dong, PhD

4:30 p.m.-4:45 p.m.

332-OR Pharmacological Inhibition of CREBZF Improves Insulin Resistance by Altering Activation of Macrophage in Adipose Tissue of Diet-Induced Obese Mice
YUXIAO LIU, ZHIMIN HU, ZHENGSHUAI LIU, WEITONG SU, ZENGPENG ZHENG, DONG DING, FENGGUANG MA, YAQIAN XUE, GENXIANG CAI, SHUANG WEI, ZIXUAN WANG, XIAOYANG SUN, YANG JIANG, XIAOZHEN DAI, YU LI, AOYUAN CUI, San Diego, CA, Shanghai, China, Tianjin, China, Chengdu, China

4:45 p.m.-5:00 p.m.

333-OR Regulation of Adiponectin Receptor 2 Expression and Function in the Liver
JASON HADLEY, DARAH A. SCRUGGS, JIYOON RYU, LILY Q. DONG, San Antonio, TX

5:00 p.m.-5:15 p.m.

334-OR Sex Differences in Protein Phosphorylation in Insulin Resistance in Humans at the Cellular Level
NIDA HAIDER, JASMIN LEBASTCHI, THIAGO M. BATISTA, HUI PAN, JONATHAN DREYFUSS, IVAN CARCAMO-ORIYE, JOSH KNOWLES, Providence, RI, Boston, MA, Stanford, CA

5:15 p.m.-5:30 p.m.

335-OR Lipid-Induced Insulin Resistance in the Renal Cortex Is Associated with Plasma Membrane Sn-1,2-diacylglycerol Accumulation and PKCe Translocation
BRANDON T. HUBBARD, RAFAEL C. GASPAR, DONGYAN ZHANG, MARIO KAHN, ALI NASIRI, XIAN-MAN ZHANG, GARY CLINE, GERALD I. SHULMAN, New Haven, CT, Limeira, Brazil

5:30 p.m.-5:45 p.m.

336-OR Mandarin Fish Ranavirus Viral Insulin/IGF-Like Peptide Inhibits Human IGF-1 Receptor
MARTINA CHRUDINOVA, VASILY GELFANOV, LENKA ZAKOVA, JULIANNE CUTONE, AMAYA POWIS, KAAN SEVGI, JIRI JIRACEK, RICHARD DIMARCHI, EMRAH ALTINDIS, Chestnut Hill, MA, Indianapolis, IN, Prague, Czech Republic, Boston, MA, Bloomington, IN

5:45 p.m.-6:00 p.m.

337-OR Intensive Insulin Treatment in a Patient with Type A Insulin Resistance Syndrome Associated with a Novel Heterozygous Mutation of Trp1120Gly in the Insulin Receptor Gene
YU YANG, ZHIMIN HUANG, GUOHONG WEI, YUELI LI, WANPING DENG, YANBING LI, Guangzhou, China, Nanning, China

6:00 p.m.-6:15 p.m.

338-OR Reversal of Insulin Resistance by Resveratrol and Hesperetin Combination in Overweight and Obese Subjects Correlates with Decrease in Expression of Thioredoxin Interacting Protein
MINGZHAN XUE, MARTIN WEICKERT, NAILA RABBANI, PAUL THORNALLEY, Coventry, United Kingdom, Doha, Qatar
MONDAY, JUNE 28, 2021

4:30 p.m.-6:55 p.m.

Symposium

Theme Area: Clinical Diabetes/Therapeutics

Results of the Glycemia Reduction Approaches in Diabetes—A Comparative Effectiveness (GRADE) Study (Includes Live Video Question and Answer Period)

Co-Chairs: Hertzel C. Gerstein, MD, MSc, FRCPC and Julio Rosenstock, MD

4:30 p.m.-4:50 p.m.  Rationale and Study Design
                      David M. Nathan, MD

4:50 p.m.-5:05 p.m.  Baseline Characteristics
                      Margaret Tiktin, DNP, CNP, MBA

5:05 p.m.-5:20 p.m.  Conduct, Retention, and Adherence
                      Heidi Krause-Steinrauf, MS

5:20 p.m.-5:40 p.m.  Primary Outcome—Metabolic Results
                      John M. Lachin, ScD

5:40 p.m.-5:50 p.m.  Microvascular Outcomes
                      Deborah J. Wexler, MD, MSc

5:50 p.m.-6:00 p.m.  Cardiovascular Outcomes and Mortality
                      John B. Buse, MD, PhD

6:00 p.m.-6:15 p.m.  Side Effects, Adverse Events, and Safety
                      Mary E. Larkin, MS, RN

6:15 p.m.-6:25 p.m.  Summary/Conclusions
                      Steven E. Kahn, MB, ChB

6:25 p.m.-6:40 p.m.  Independent Commentary
                      David R. Matthews, DPhil, FRCP

6:40 p.m.-6:55 p.m.  Live Video Question and Answer Period
TUESDAY, JUNE 29, 2021

Scientific Sessions
8:00 a.m.-9:00 a.m.

Symposium
Theme Area: Acute and Chronic Complications
Translating Diabetes and Heart Failure Clinical Trial Findings into Clinical Practice
Chair: Javed Butler, MD, MPH, MBA
8:00 a.m.-8:30 a.m.  Heart Failure with Reduced Ejection Fraction—How to Prioritize among an Array of Available Therapies?
   Michelle Kittleson, MD, PhD
8:30 a.m.-9:00 a.m.  Heart Failure with Preserved Ejection Fraction—Can We Successfully Navigate the “Black Hole” of Heart Failure?
   Nasrien E. Ibrahim, MD

8:00 a.m.-9:20 a.m.

Current Issues
Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
Debate—Precision Nutrition—Are We There Yet?
Chair: Patti Urbanski, MEd, RD, LD, CDCES
8:00 a.m.-8:30 a.m.  Yes, Precision Nutrition Is Ready for Prime Time
   Paul W. Franks, PhD
8:30 a.m.-9:00 a.m.  No, Not Yet Ready for Prime Time
   Kevin D. Hall, PhD
9:00 a.m.-9:10 a.m.  Rebuttal
   Paul W. Franks, PhD
9:10 a.m.-9:20 a.m.  Rebuttal
   Kevin D. Hall, PhD

Symposium
Theme Area: Epidemiology/Genetics
High Dimensional Data in Epidemiologic Research—Gentle Introduction to Methods and Survey of Strengths and Limitations
Chair: Stephen S. Rich, PhD, FAHA
8:00 a.m.-8:40 a.m.  High Dimensional Data—New Methods for New Discoveries
   Kristi L. Hoffman, PhD, MPH
8:40 a.m.-9:00 a.m.  High Dimensional Data—High Impact Science or Hype?
   James B. Meigs, MD, MPH
TUESDAY, JUNE 29, 2021

8:00 a.m.-9:30 a.m.

Symposium
Theme Area: Clinical Diabetes/Therapeutics
Next Chapter in Incretin-Based Therapies—Tirzepatide, a Novel Dual GIP/GLP-1 Receptor Agonist—Results from the First Phase 3 SURPASS Clinical Trials (Includes Live Video Question and Answer Period)
Chair: Alice Y.Y. Cheng, MD, FRCPC
8:00 a.m.-8:15 a.m.  Introduction
Daniel J. Drucker, MD
8:15 a.m.-8:25 a.m.  SURPASS-1—A Phase 3, Randomized, Double-Blind, Placebo-Controlled Trial Comparing the Efficacy and Safety of Three Tirzepatide Doses vs. Placebo in Patients with Type 2 Diabetes Inadequately Controlled with Diet and Exercise Alone
Carol H. Wysham, MD
8:25 a.m.-8:35 a.m.  SURPASS-2—A Phase 3, Randomized, Open-Label Trial Comparing the Efficacy and Safety of Tirzepatide vs. Semaglutide Once Weekly as Add-On Therapy to Metformin in Patients with Type 2 Diabetes
Juan P. Frias, MD
8:35 a.m.-8:45 a.m.  SURPASS-3—A Randomized, Phase 3, Open-Label Trial Comparing the Efficacy and Safety of Tirzepatide vs. Titrated Insulin Degludec in Patients with Type 2 Diabetes as Add-On to Metformin with or without SGLT2 Inhibitors
Francesco Giorgino, MD, PhD
8:45 a.m.-8:55 a.m.  SURPASS-5—A Randomized, Phase 3, Double-Blind Trial Comparing the Effect of the Addition of Tirzepatide vs. Placebo in Patients with Type 2 Diabetes Inadequately Controlled on Insulin Glargine with or without Metformin
Michelle Welch, MD, FACE
8:55 a.m.-9:25 a.m.  Live Video Question and Answer Period
9:25 a.m.-9:30 a.m.  Closing Remarks
Alice Y.Y. Cheng, MD, FRCPC

8:00 a.m.-10:00 a.m.

Symposium
Theme Area: Insulin Action/Molecular Metabolism
Single-Cell Perspectives on Metabolic Tissue Function
Chair: Carey N. Lumeng, MD, PhD
8:00 a.m.-8:30 a.m.  Metabolic and Functional Heterogeneity of Adipocyte
Qiong (Annabel) Wang, PhD
8:30 a.m.-9:00 a.m.  Niche-Specific Reprogramming of Epigenetic Landscapes Drives Myeloid Cell Diversity in Nonalcoholic Steatohepatitis
Christopher K. Glass, MD, PhD
9:00 a.m.-9:30 a.m.  Deciphering Beta-Cell Development, Heterogeneity, and Regeneration on Single-Cell Level
Heiko Lickert, PhD
9:30 a.m.-10:00 a.m.  Hypothalamic Mechanisms Mediating Diabetes Remission
Michael W. Schwartz, MD
TUESDAY, JUNE 29, 2021

8:00 a.m.-10:00 a.m.   (continued)

**Symposium**  
*Theme Area: Integrated Physiology/Obesity*  
**Insulin as a Driver of Cancer**  
Chair: Lewis C. Cantley, PhD

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<th>Speaker</th>
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<tr>
<td>8:00 a.m.-8:30 a.m.</td>
<td>The Role of Systemic Metabolism in Shaping Tumor Development</td>
<td>M. Celeste Simon, PhD</td>
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<td>8:30 a.m.-9:00 a.m.</td>
<td>Insulin Driving Obesity-Related Cancers</td>
<td>Emily J. Gallagher, MD, PhD</td>
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<td>9:00 a.m.-9:30 a.m.</td>
<td>Metabolic Pathways as Key Determinants of Cancer Cell Fate Decisions</td>
<td>Lydia Finley, PhD</td>
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<td>9:30 a.m.-10:00 a.m.</td>
<td>Diet as Both Cause and Intervention for Cancer</td>
<td>Marcus Goncalves, MD, PhD</td>
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**Symposium**  
*Theme Area: Islet Biology/Insulin Secretion*  
**The Islet and Type 1 Diabetes**  
Chair: Raghavendra G. Mirmira, MD, PhD

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<td>8:00 a.m.-8:30 a.m.</td>
<td>Beta Cells in Type 1 Diabetes</td>
<td>Carmella Evans-Molina, MD, PhD</td>
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<td>8:30 a.m.-9:00 a.m.</td>
<td>Transcriptional Profiling of Human Islets in Type 1 Diabetes</td>
<td>Golnaz Vahedi, PhD</td>
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<td>9:00 a.m.-9:30 a.m.</td>
<td>Omics and Interferon/Cytokine Responses in Type 1 Diabetes</td>
<td>Lorenzo Pasquali, MD, PhD</td>
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<td>9:30 a.m.-10:00 a.m.</td>
<td>Pancreatic Beta-Cell Autophagy Is Impaired in Type 1 Diabetes</td>
<td>Amelia K. Linnemann, PhD</td>
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9:00 a.m.-10:00 a.m.

**Symposium**  
*Theme Area: Acute and Chronic Complications*  
**Translating Diabetes and Kidney Disease Clinical Trial Findings into Clinical Practice**  
Chair: Jennifer B. Green, MD

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<th>Time</th>
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<tr>
<td>9:00 a.m.-9:30 a.m.</td>
<td>Early Kidney Disease—Interventions to Slow Progression of Chronic Kidney Disease</td>
<td>Maryam Afkarian, MD, PhD</td>
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<td>9:30 a.m.-10:00 a.m.</td>
<td>Advanced Kidney Disease—Mitigating Cardiorenal Risk with Renin-Angiotensin-Aldosterone System Blockade (ACEi, ARB, MRA) and SGLT2 Inhibition</td>
<td>Meg J. Jardine, MD, PhD</td>
</tr>
</tbody>
</table>
Symposium
Theme Area: Clinical Diabetes/Therapeutics
Update on SCORED and SOLOIST Cardiovascular and Kidney Outcomes Trials (Includes Live Video Question and Answer Period)
Chair: Deepak L. Bhatt, MD, MPH, FACC, FAHA, FSCAI, FESC

10:15 a.m.-10:18 a.m. Introduction to the Sotagliflozin Journey
Deepak L. Bhatt, MD, MPH, FACC, FAHA, FSCAI, FESC

10:18 a.m.-10:36 a.m. Sotagliflozin Background and Study Designs of SOLOIST and SCORED
Lawrence A. Leiter, MD, FRCPC, FACP, FACE, FAHA, FACC

10:36 a.m.-10:54 a.m. SOLOIST—Main Results
Subodh Verma, MD, PhD, FRCSC

10:54 a.m.-11:12 a.m. SCORED—Main Results
Mikhail N. Kosiborod, MD

11:12 a.m.-11:30 a.m. Meta-analysis of SOLOIST and SCORED
Deepak L. Bhatt, MD, MPH, FACC, FAHA, FSCAI, FESC

11:30 a.m.-11:48 a.m. Renal Effects of Sotagliflozin
Julia B. Lewis, MD

11:48 a.m.-12:03 p.m. Independent Commentary
Javed Butler, MD, MPH, MBA

12:03 p.m.-12:15 p.m. Live Video Question and Answer Period
General Poster Session Category Ranges
All posters will be available throughout the duration of the meeting

- Theme Area: Acute and Chronic Complications
  Complications—Hypoglycemia
  Posters: 339-P to 356-P

- Theme Area: Acute and Chronic Complications
  Complications—Macrovascular—Atherosclerotic Cardiovascular Disease and Human Diabetes
  Posters: 357-P to 382-P

- Theme Area: Acute and Chronic Complications
  Complications—Macrovascular—Cellular Mechanisms of Atherogenesis in Diabetes
  Posters: 383-P to 384-P

- Theme Area: Acute and Chronic Complications
  Complications—Nephropathy—Basic and Experimental Science
  Posters: 385-P to 395-P

- Theme Area: Acute and Chronic Complications
  Complications—Nephropathy—Clinical and Translational Research
  Posters: 396-P to 414-P

- Theme Area: Acute and Chronic Complications
  Complications—Neuropathy
  Posters: 415-P to 426-P

- Theme Area: Acute and Chronic Complications
  Complications—Retinopathy
  Posters: 427-P to 437-P

- Theme Area: Acute and Chronic Complications
  Diabetic Dyslipidemia
  Posters: 438-P to 441-P

- Theme Area: Acute and Chronic Complications
  Foot Care—Lower Extremities
  Posters: 442-P to 450-P

- Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
  Diabetes Education
  Posters: 451-P to 490-P

- Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
  Exercise
  Posters: 491-P to 501-P

- Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
  Nutrition—Clinical
  Posters: 502-P to 507-P

- Theme Area: Behavioral Medicine, Clinical Nutrition, Education, and Exercise
  Psychosocial, Behavioral Medicine
  Posters: 508-P to 587-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—Diabetes Prevention
  Posters: 588-P to 591-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—Glucose Monitoring and Sensing
  Posters: 592-P to 636-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—Incretin-Based Therapies
  Posters: 637-P to 690-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—Insulin Delivery Systems
  Posters: 691-P to 717-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—Insulins
  Posters: 718-P to 745-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—Other Therapeutic Agents
  Posters: 746-P to 772-P

- Theme Area: Clinical Diabetes/Therapeutics
  Clinical Therapeutics/New Technology—SGLT Inhibitors
  Posters: 773-P to 806-P

- Theme Area: Clinical Diabetes/Therapeutics
  Health Care Delivery—Economics
  Posters: 807-P to 817-P

- Theme Area: Clinical Diabetes/Therapeutics
  Health Care Delivery—Quality Improvement
  Posters: 818-P to 886-P
General Poster Session Category Ranges

All posters will be available throughout the duration of the meeting

Theme Area: Clinical Diabetes/Therapeutics
Pediatrics—Obesity and Type 2 Diabetes
Posters: 887-P to 901-P

Theme Area: Clinical Diabetes/Therapeutics
Pediatrics—Type 1 Diabetes
Posters: 902-P to 939-P

Theme Area: Clinical Diabetes/Therapeutics
Pregnancy—Basic Science/Translational
Posters: 940-P to 943-P

Theme Area: Clinical Diabetes/Therapeutics
Pregnancy—Clinical/Epidemiology
Posters: 944-P to 965-P

Theme Area: Epidemiology/Genetics
Epidemiology—Aging
Posters: 966-P to 969-P

Theme Area: Epidemiology/Genetics
Epidemiology—Cardiovascular Disease
Posters: 970-P to 993-P

Theme Area: Epidemiology/Genetics
Epidemiology—Clinical—Diagnosis and Screening
Posters: 994-P to 1008-P

Theme Area: Epidemiology/Genetics
Epidemiology—Diabetes Complications
Posters: 1009-P to 1056-P

Theme Area: Epidemiology/Genetics
Epidemiology—Nutrition
Posters: 1057-P to 1061-P

Theme Area: Epidemiology/Genetics
Epidemiology—Other
Posters: 1062-P to 1099-P

Theme Area: Epidemiology/Genetics
Epidemiology—Type 1 Diabetes
Posters: 1110-P to 1123-P

Theme Area: Epidemiology/Genetics
Genetics—Type 1 Diabetes
Posters: 1124-P to 1127-P

Theme Area: Epidemiology/Genetics
Genetics—Type 2 Diabetes
Posters: 1128-P to 1137-P

Theme Area: Immunology/Transplantation
Immunology
Posters: 1138-P to 1143-P

Theme Area: Immunology/Transplantation
Transplantation
Posters: 1144-P to 1146-P

Theme Area: Insulin Action/Molecular Metabolism
Insulin Action—Adipocyte Biology
Poster: 1147-P

Theme Area: Insulin Action/Molecular Metabolism
Insulin Action—Signaling and Insulin Resistance
Posters: 1148-P to 1152-P

Theme Area: Integrated Physiology/Obesity
Integrated Physiology—Central Nervous System
Regulation of Metabolism
Posters: 1153-P to 1158-P

Theme Area: Integrated Physiology/Obesity
Integrated Physiology—Insulin Secretion In Vivo
Posters: 1159-P to 1163-P

Theme Area: Integrated Physiology/Obesity
Integrated Physiology—Liver
Posters: 1164-P to 1178-P

Theme Area: Integrated Physiology/Obesity
Integrated Physiology—Macronutrient Metabolism and Food Intake
Posters: 1179-P to 1186-P

Theme Area: Integrated Physiology/Obesity
Integrated Physiology—Muscle
Posters: 1187-P to 1189-P

Theme Area: Integrated Physiology/Obesity
Integrated Physiology—Other Hormones
Posters: 1190-P to 1198-P

Theme Area: Integrated Physiology/Obesity
Obesity—Animal
Posters: 1199-P to 1211-P

Theme Area: Integrated Physiology/Obesity
Obesity—Human
Posters: 1212-P to 1236-P
General Poster Session Category Ranges
All posters will be available throughout the duration of the meeting

Theme Area: Islet Biology/Insulin Secretion
Islet Biology—Apoptosis
Posters: 1237-P to 1241-P

Theme Area: Islet Biology/Insulin Secretion
Islet Biology—Beta Cell—Development and Postnatal Growth
Posters: 1242-P to 1247-P

Theme Area: Islet Biology/Insulin Secretion
Islet Biology—Beta Cell—Stimulus-Secretion Coupling and Metabolism
Posters: 1248-P to 1257-P

Theme Area: Islet Biology/Insulin Secretion
Islet Biology—Signal Transduction
Poster: 1258-P

Theme Area: All Categories
Late Breaking Posters
Posters: 1-LB to 230-LB
COMPLICATIONS—HYPOGLYCEMIA

339-P Glycemic Variability Assessed by CGM Relates to Hypoglycemia across the Lifespan in Type 1 Diabetes (T1D)
BLAKE A. COOPER, KELLEE MILLER, LORI M. LAFFEL, Shawnee Mission, KS, Tampa, FL, Boston, MA

340-P Nocturnal Hypoglycemia Prediction in Hospitalized Patients with Type 1 Diabetes Using Combined Supervised and Unsupervised Ensemble Learning
VLADIMIR BERIKOV, JULIA F. SEMENOVA, VADIM KLIMONTOV, Novosibirsk, Russian Federation

341-P Effect of Pitolisant on Glucagon in Human Islets and People with Type 1 Diabetes
CLAYTON A. DEHN, MELANIE FEIN, JACK HU, BURCAK YESILDAG, ROBERT MAXWELL, JOYCE B. HARP, San Antonio, TX, High Point, NC, Durham, NC, Schlieren, Switzerland, Jersey City, NJ

342-P Effects of Sitagliptin on Hypoglycemic Episodes and Counterregulation in Type 2 Diabetic Patients Tightly Titrated with Insulin Glargine
MICHAEL A. NAUCK, ANDRE FELDMANN, JURIS J. MEIER, MATTHIAS NAUCK, CHRISTOPH KAPITZA, Bochum, Germany, Greifswald, Germany, Neuss, Germany

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344-P Integrated Safety Analysis of Dasiglucagon for Treatment of Severe Hypoglycemia
SIMON R. HELER, TADEJ BATTELINO, TIMOTHY S. BAILEY, RAMIN TEHRANCHI, LESLIE J. KLAFF, THOMAS PIEBER, ULRIKE HÖVELMANN, LEONA PLUM-MOERSCHEL, ANITA E. MELGAARD, RONNIE ARONSON, LINDA DIMEGLIO, THOMAS DANNE, Sheffield, United Kingdom, Ljubljana, Slovenia, Escondido, CA, Copenhagen, Denmark, Renton, WA, Graz, Austria, Neuss, Germany, Mainz, Germany, Søborg, Denmark, Toronto, ON, Canada, Indianapolis, IN, Hannover, Germany

345-P The Next Generation Glucagon Analog Dasiglucagon Consistently Achieves Rapid Recovery from Hypoglycemia across Subgroups
TADEJ BATTELINO, TIMOTHY S. BAILEY, RAMIN TEHRANCHI, LESLIE J. KLAFF, THOMAS PIEBER, ULRIKE HÖVELMANN, LEONA PLUM-MOERSCHEL, ANITA E. MELGAARD, RONNIE ARONSON, LINDA DIMEGLIO, THOMAS DANNE, Ljubljana, Slovenia, Escondido, CA, Copenhagen, Denmark, Renton, WA, Graz, Austria, Neuss, Germany, Mainz, Germany, Søborg, Denmark, Toronto, ON, Canada, Indianapolis, IN, Hannover, Germany

346-P Predicting True Time to Recovery from Insulin-Induced Hypoglycemia with Dasiglucagon
TADEJ BATTELINO, TIMOTHY S. BAILEY, RAMIN TEHRANCHI, LESLIE J. KLAFF, THOMAS PIEBER, ULRIKE HÖVELMANN, LEONA PLUM-MOERSCHEL, ANITA E. MELGAARD, RONNIE ARONSON, LINDA DIMEGLIO, THOMAS DANNE, ANNE L. PETERS, Ljubljana, Slovenia, Escondido, CA, Copenhagen, Denmark, Renton, WA, Graz, Austria, Neuss, Germany, Mainz, Germany, Søborg, Denmark, Toronto, ON, Canada, Indianapolis, IN, Hannover, Germany, Los Angeles, CA

347-P Why Some Americans Use Health Care following Severe Hypoglycemia, and Why Some Do Not: Baseline Results of the iNPHORM Study
ALEXANDRIA RATZKI-LEEWIN, JASON E. BLACK, BRIDGET L. RYAN, GUANGYONG ZOU, STEWART B. HARRIS, London, ON, Canada

348-P Nasal Glucagon Was Efficacious in Reversing Insulin-Induced Hypoglycemia across a Range of Nadir Blood Glucose Levels
JEAN-FRANÇOIS YALE, REBECCA J. THRELKELD, QIANQIAN WANG, PARAG GARHYAN, DOUGLAS JAMES, CHRISTOPHER J. CHILD, YU YAN, Montreal, QC, Canada, Sarasota, FL, Indianapolis, IN, Windlesham, United Kingdom
Hospital Utilization for Hypoglycemia among Patients with Type 2 Diabetes Using Pooled Data from Six Health Systems
SCOTT J. PILLA, JENNIFER L. KRASCHNEWSKI, ERIK LEHMAN, LAN KONG, ERICA FRANCIS, JENNIFER M. POGER, CINDY L. BRYCE, NISA M. MARUTHUR, HSIN-CHIEH YEH, Hershey, PA, Pittsburgh, PA, Baltimore, MD

The Importance of Professional CGM Use in Clinical Care of Older Adults with Type 2 Diabetes on Insulin
CHRISTINE SLYNE, ELENA TOSCHI, AMY MICHALS, ASTRID ATAKOV-CASTILLO, KAYLA SIFRE, RACHEL DEWAR, DAI’QUANN J. DAVIS, MEDHA MUNSHI, Boston, MA

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Assessment of a Deep Learning Model Based on Three-Year Longitudinal Electronic Health Record Data for Predicting Severe Hypoglycemia in Patients with Type 2 Diabetes
GARAM LEE, SEUNG-HYUN KO, YU-BAE AHN, EUN YOUNG LEE, SEON-AH CHA, DOKYOON KIM, JAE-SEUNG YUN, Seoul, Korea, Republic of, Suwon, Korea, Republic of, Philadelphia, PA

Safety and Tolerability of Sodium-Glucose Cotransporter 2 Inhibitors during Ramadan Fasting
ELSAVED M.A. EID, ABDELAZIZ HUSSEIN, HOSSAM A. GHAZI, Mansoura, Egypt

Interstitial Fluid Glucose as a Measure of Hypoglycemia Burden in Elderly Subjects with Type 2 Diabetes Mellitus
KRISTY TIAN, LI C. ANG, YONG MONG BEE, SU-YEN GOH, MING M. TEH, Singapore, Singapore

Decreased BCAAs and Elevated Fatty Acids during Repeated Episodes of Hypoglycemia in Individuals with Type 1 Diabetes
RUI SHE, NABA AL-SARI, ANNE-SOPHIE SEJLING, ISMO MATTILA, PETER HENRIKSEN, JENS PEDERSEN, CRISTINA LEGIDO-QUIGLEY, ULRIK PEDERSEN-BJERGAARD, Hillerød, Denmark, Gentofte, Denmark

Population Pharmacokinetic Modeling of Dasiglucagon in Subjects with Type 1 Diabetes Mellitus
CARSTEN B. KNUDSEN, ANDERS H. VALEUR, STINE JUST MAARBJERG, RAMIN TEHRANCHI, PAUL MATTHIAS DIDERICHSEN, HAN WITJES, Søborg, Denmark, Copenhagen, Denmark, Princeton, NJ, Oss, Netherlands

Advanced Glycation End Products Associate with Vascular Stiffness in Diabetic, Prediabetic, and Normoglycemic Individuals
ANNA BIRUKOV, RAFAEL CUADRAT, ELLI POLEMITI, FABIAN EICHELmann, MATTHIAS B. SCHULZE, Nuthetal, Germany

Effects of Obesity, Exercise, and Type 2 Diabetes on Cardiovascular Phenotype
DANIEL ENGE, MICHAL SCHAFFER, REBECCA L. SCALZO, DEIRDRE RAFFERTY, IRENE E. SCHAFFER, LAYLA ABUSHAMAT, MARY O. WHIPPLE, ETHAN JOHNSON, MICHAEL B. SCOTT, KELLY JARVIS, TAKASHI FUJWARA, MICHAEL MARKL, KENDALL S. HUNTER, ALEX J. BARKER, KRISTEN J. NADEAU, JUDITH G. REGENSTEINER, JANE E. REUSCH, Chicago, IL, Akron, OH, Denver, CO

Congestive Heart Failure and the Metabolic Syndrome Are Mutually Independent Predictors of Nonalcoholic Fatty Liver Disease
MAXIMILIAN MAECHLER, ALEXANDER VON BANK, BARBARA LARCHER, ARTHUR MADEL, LUKAS SPRENGER, BEATRIX MUTESCHELNER, ANDREAS LEIHERER, AXEL MUENDLEIN, HEINZ DREXEL, CHRISTOPH H. SAELY, Feldkirch, Austria, Triesen, Liechtenstein, Philadelphia, PA

A Risk Score to Predict Incident Heart Failure among Patients with Type 2 Diabetes Mellitus
YILU LIN, HUI SHAO, VIVIAN FONSECA, LIZHENG SHI, New Orleans, LA, Gainesville, FL

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361-P Elevated BNP Is Associated with Higher Risk of Cardiac Arrest in Diabetic Patients Hospitalized with COVID-19
AWFA ZAIN ELABIDIN, LEANNE PEREIRA, VAHID NAMDARIZANDI, MICHAEL FATUYI, SHALEMAR ANN KASAN, VIVEK SHARMA, BASSMAN TAPPUNI, BELAL KASEER, DOMINIQUE M. BRANDT, KAMAL SHEMISA, Cincinnati, OH

362-P Punicalagin Promotes Mitochondrial Fusion and Alleviates Diabetic Cardiomyopathy via Regulating PTP1B-Stat3-Opal Pathway
MINGGE DING, MAN LI, FENG FU, CHAOYANG LIU, Xi’an, China

363-P The Ceramide- and Phosphatidylcholine-Based Coronary Event Risk Test 2 (CERT2) and Cardiovascular Mortality in Men and Women with Type 2 Diabetes
ANDREAS LEIHERER, AXEL MUENDLEIN, CHRISTOPH H. SAELY, BARBARA LARCHER, ARTHUR MADER, MAXIMILIAN MAECHLER, LUKAS SPRENGER, BEATRIX MUTSCHLECHNER, REIJO LAAKSONEN, MITJA LAAPERI, ANTTI JYLHA, PETER FRAUNBERGER, HEINZ DREXEL, Triesen, Liechtenstein, Espoo, Finland, Feldkirch, Austria, Philadelphia, PA

364-P Efficacy of IGLarLixi on Five-Year Risk of Diabetes-Related Complications: A Simulation Experiment
HUI SHAO, HAMED KIANMEHR, PIAOPIAO LI, VIVIAN FONSECA, LIZHENG SHI, Gainesville, FL, New Orleans, LA

365-P Remnant Cholesterol in Patients with Established Cardiovascular Disease Predicts Cardiovascular Events Both among Patients with Type 2 Diabetes and among Nondiabetic Subjects
ARTHUR MADER, LUKAS SPRENGER, ALEXANDER VONBANK, BARBARA LARCHER, MAXIMILIAN MAECHLER, BEATRIX MUTSCHLECHNER, ANDREAS LEIHERER, AXEL MUENDLEIN, HEINZ DREXEL, CHRISTOPH H. SAELY, Feldkirch, Austria, Triesen, Liechtenstein, Philadelphia, PA

366-P Cystatin C Predicts Incident Diabetes in Angiographied Coronary Patients
ARTHUR MADER, LUKAS SPRENGER, ALEXANDER VONBANK, BARBARA LARCHER, MAXIMILIAN MAECHLER, BEATRIX MUTSCHLECHNER, ANDREAS LEIHERER, AXEL MUENDLEIN, HEINZ DREXEL, CHRISTOPH H. SAELY, Feldkirch, Austria, Triesen, Liechtenstein, Philadelphia, PA

367-P Cardiovascular Risk Categories in Patients with Diabetes According to 2019 ESC/EASD Guidelines in Clinical Practice: Use of a Dedicated App (AWARE)
CESARE C. BERRA, ROBERTO MANFRINI, RENATA GHELARDI, PAOLA M. BOLLATI, LOREDANA BUCCIARELLI, MARCO MIRANI, MILENA MURATORI, FRANCO FOLLI, AWARE STUDY GROUP, Sesto San Giovanni, Italy, Milan, Italy, Albairate, Italy, Rozzano, Italy

368-P Type 2 Diabetes Mellitus Increases Epicardial Adipose Tissue Senescence in Subjects with Coronary Artery Disease during Elective Cardiac Surgery
MILOS MRAZ, JAROSLAVA TRNOVSKA, BARBORA JUDITA KASPEROVA, IVETA DVORAKOVA, ZDENKA LACINOVA, DANIEL HLAVACEK, JAKUB MAHRIK, PETER IVAK, IVAN NETUKA, MARTIN HALUZIK, Prague, Czech Republic

369-P Wound Repair by P53 Silenced Human Endothelial Cell-Derived Conditioned Media, In Vitro
DAYNA K. RIVERA, SESHAGIRI RAO NANDULA, SABYASACHI SEN, Washington, DC

370-P WITHDRAWN

371-P Impact of Sodium Intake on the Risk of Cardiovascular Disease in Patients with Type 2 Diabetes: Analysis of Data from the Japan Diabetes Complications Study and the Japanese Elderly Diabetes Intervention Trial
CHIKA HORIKAWA, REI AIDA, SHIRO TANAKA, CHIEMI KAMADA, YUKIO YOSHIMURA, REMI KODERA, KAZUYA FUJIHARA, TATSUMI MORIYA, ATSUSHI ARAKI, HIROHITO SONE, Kyoto, Japan, Tokushima, Japan, Niigata, Japan, Sagamihara, Japan, Tokyo, Japan

372-P Type 2 Diabetes and Risk of Major Cardiovascular Events in Peripheral Artery Disease vs. Coronary Artery Disease Patients
CHRISTOPH H. SAELY, ALEXANDER VONBANK, BARBARA LARCHER, ARTHUR MADER, MAXIMILIAN MAECHLER, LUKAS SPRENGER, BEATRIX MUTSCHLECHNER, ANDREAS LEIHERER, AXEL MUENDLEIN, HEINZ DREXEL, Feldkirch, Austria, Triesen, Liechtenstein, Philadelphia, PA
373-P  Type 2 Diabetes, Chronic Kidney Disease, and Major Cardiovascular Events in Patients with Established Coronary Artery Disease  
LUKAS SPRENGER, ALEXANDER VONBANK, BARBARA LARCHER, ARTHUR MADER, MAXIMILIAN MAECHLER, BEATRIX MUTSCHLECHNER, ANDREAS LEIHERER, AXEL MUENDELEIN, HEINZ DREXEL, CHRISTOPH H. SAELY, Feldkirch, Austria, Triesen, Liechtenstein, Philadelphia, PA

374-P  Oleate Prevents Palmitate-Induced Abnormalities in Insulin Signaling in Human Cardiac Progenitor Cells  
ROSSELLA DORIA, CRISTINA CACCIOPPOLI, ROSSELLA SCHIPANI, VALENTINA ANNAMARIA GENCHI, ANNA LEONARDINI, ANNALISA NATALICCHIO, SEBASTIO PERRINI, ANGELO CIGNARELLI, LUIGI LAVIOLA, FRANCESCO GIORGINO, Bari, Italy

375-P  Association of Low Fasting C-Peptide Levels and Visit-to-Visit Glucose Variability with Cardiovascular Risk in Type 2 Diabetes  
JURAJ KOSKA, DANIEL S. NUYUJKIAN, GIDEON D. BAHN, JIN ZHOU, PETER REAVEN, Phoenix, AZ, Hines, IL, Tucson, AZ

376-P  REWIND Data on Obesity and Cardiovascular (CV) Health: Waist-to-Hip Ratio (WHR) Independently Predicted CV Outcomes  
EDWARD FRANEK, PREM PAIS, JAN N. BASILE, SOHINI RAHA, NADIA AHMAD, HONG KAN, MANIGE KONIG, Warsaw, Poland, Bangalore, India, Charleston, SC, Indianapolis, IN

377-P  Effect of Severe Hypoglycemia on Myocardial Cardiac Function in Type 1 Diabetes  
ELKE R. FAHRMANN, LAURA J. ADKINS, RAJAN LAMICCHANE, HENRY DRISCOLL, Huntington, WV

378-P  Upregulation of Regenerating Gene IV and Hepatocyte Growth Factor in Cardiomyocytes by Intermittent Hypoxia and Its MicroRNA-Mediated Mechanism  
SHIN TAKASAWA, ASAKO ITAYA-HIRONAKA, AKIYO YAMAUCHI, MAI MAKINO, SUMIYO SAKURAMOTO-TSUCHIDA, TOMOKO UCHIYAMA, YOSHINORI TAKEDA, YOJI KYOTANI, HIROYO OTA, Kashihara, Japan

379-P  Aldose Reductase Inhibition by AT-001 Prevents Diabetic Cardiomyopathy via Reducing Myocardial Fatty Acid Oxidation Rates  
KESHAV GOPAL, QUTUBA G. KARWI, SEYED AMIRHOSSEIN TABATABAEI DAKHILI, CORY S. WAGG, RICCARDO PERFETTI, RAVICHANDRAN RAMASAMY, JOHN R. USSHER, GARY LOPASCHUK, Edmonton, AB, Canada, Devon, AB, Canada, New York, NY

380-P  Endothelial Glycocalyx Dimensions and Cardiovascular Risk Factors in Type 1 Diabetes  
ELISABETH BUUR STOUGAARD, SIGNE WINThER, HANAN AMADID, MARIE FRIMODT-MoELLER, FREDERIK PERSSON, TINE W. HANSEN, PETER ROSSING, Gentofte, Denmark

381-P  Type 2 Diabetes Significantly Modulates the Power of Lipoprotein(a) to Predict Cardiovascular Events and Mortality in Young Coronary Artery Disease Patients  
ARTHUR MADER, MAXIMILIAN MAECHLER, BARBARA LARCHER, LUKAS SPRENGER, BEATRIX MUTSCHLECHNER, ANDREAS LEIHERER, AXEL MUENDELEIN, ALEXANDER VONBANK, HEINZ DREXEL, CHRISTOPH H. SAELY, Feldkirch, Austria, Triesen, Liechtenstein, Philadelphia, PA

382-P  Thyroid Hormone Is Associated with Arterial Stiffness in Chinese Patients with Type 2 Diabetes Mellitus  
YAO CHEN, ZHAI HONG, BINGWEI MA, XINGCHUN WANG, SHEN QU, Chengdu, China, Shanghai, China

COMPLICATIONS—MACROVASCULAR—CELLULAR MECHANISMS OF AtherosGENESIS IN DIABETES

383-P  Comparative Study of Serum Testosterone Levels in Male T2DM and Nondiabetic Subjects as a Risk Marker for Atherosclerotic Coronary Artery Disease  
AMIT K. DAS, ABHINAV BHAGAT, NEERAJ SINHA, Muzaffarpur, India, Patna, India
384-P  Text Mining and Bioinformatic Identification of Genes Linking Glycemic Variability and Impaired Angiogenesis in Diabetes
OLGA V. SAIK, VADIM KLIMONTOV, Novosibirsk, Russian Federation

COMPLICATIONS—NEPHROPATHY—BASIC AND EXPERIMENTAL SCIENCE

385-P  Exosomal MiR-146a-5p from Macrophages Inhibits Diabetic Nephropathy Fibrosis by Targeting Smad4
WENNING ZHANG, HONGWEI JIANG, YUJIN MA, HUIFANG PENG, JING LIU, JINGYA YUAN, KEYAN HU, BING ZHAO, HONGLI WU, Luoyang, China

386-P  Chronic Treatment with the Direct AMPK Activator PXL770 Improves Cardiac, Vascular, and Renal Function in Rodents with Diabetes-Related Cardiorenal Disease
YOHAN STEPHAN, MATTHIEU SOULIÉ, LIONEL NICOL, PASCALE GLUAIS-DAGORN, SOPHIE HALLAKOU-BOZEC, PAUL MULDER, Rouen, France, Lyon, France

387-P  Protective Impact and Potential Mechanisms of Elabela on DKD via β-Arestitns
MIN SHI, YANNA CHEN, HONG ZHANG, Huai’an, China

388-P  GLP-1 Receptor Agonists Attenuates Secretion of Extracellular Matrix via Inhibiting HMGB1 Signaling in Rat Mesangial Cells
WENSHA GU, MIN SHI, HONG ZHANG, Huai’an, China

389-P  Pathological Significance of Renal Tubular ROCK2 in Chronic Kidney Disease
KEN SUKE SEKIGUCHI, KEIICHIRO MATOBA, RIKAKO UKICHI, YOSUKE NAGAI, YUSUKE TAKEDA, TOMOYO AKAMINE, YASUSHI KANAZAWA, KAZUNORI UTSUNOMIYA, RIMEI NISHIMURA, Tokyo, Japan

390-P  WITHDRAWN

391-P  The Nrf2 Activator Increases TFAM and Suppresses STING in Human Renal Proximal Tubular Cells
RYOICHI BESSHO, TAKAO TAKIYAMA, SURATSAWADEE PROMSUWAN, HIROYA KITSUNAI, KAZUKI SAWAMOTO, YASUTAKA TAKEDA, YUMI TAKIYAMA, Asahikawa, Japan

392-P  ROCK2-Mediated Podocyte Dysfunction in Diabetic Nephropathy
KEIICHIRO MATOBA, YOSUKE TAKEDA, TOMOYO AKAMINE, YOSUKE NAGAI, RIKAKO UKICHI, YASUSHI KANAZAWA, KAZUNORI UTSUNOMIYA, RIMEI NISHIMURA, Tokyo, Japan

393-P  Combination Treatment with Lisinorpril and Empagliflozin Improves Urine and Histological Markers of Diabetic Kidney Disease in Female Renin-AAV UNx db/db Mice
METTE V. ØSTERGAARD, MICHAEL CHRISTENSEN, THOMAS SECHER, JACOB L. SKYTTE, URMAS ROOSTALU, CASPER G. SALINAS, FREDERIKKE E. SEMBACH, LISBETH N. FINK, NIELS VRANG, Hørsholm, Denmark

394-P  ROCK1/AMPK Axis Regulates the Development of Diabetic Kidney Disease via Modulation of Fatty Acid Metabolism
YOSUKE NAGAI, KEIICHIRO MATOBA, KEN SUKE SEKIGUCHI, RIKAKO UKICHI, YUSUKE TAKEDA, TOMOYO AKAMINE, YASUSHI KANAZAWA, KAZUNORI UTSUNOMIYA, RIMEI NISHIMURA, Tokyo, Japan, Minato, Japan

395-P  Identification of Key Genes and Transcriptional Factors Associated with Podocyte Functions in Human Diabetic Nephropathy
AMMIRA S. AKIL, SUJITHA SUBASH PADMAJEYA, KHALID FAKHRO, TANWIR HABIB, Doha, Qatar

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396-P  Delayed Chronic Kidney Disease (CKD) Diagnosis in Type 2 Diabetes (T2D)
TASMA HARINDHANAVUDHI, REBECCA L. FREERE, LUIZA CARAMORI, Minneapolis, MN
Insulin Dosing Adjustments in Patients with Diabetes on Peritoneal Dialysis or Hemodialysis: A Systematic Review of the Literature
ROBIN TUMLINSON, EMILY BLAINE, MARION COLVIN, TYLER G. HAYNES, HEATHER P. WHITLEY, Auburn, AL, Montgomery, AL

Higher Hemoglobin Level Associated with Increased Prevalence of Albuminuria in Male Patients with Type 2 Diabetes from Tibet
CHENHUI ZHANG, Chengdu, China

Age at Menopause Was Not Associated with Microvascular Complication in Patients with Type 2 Diabetes
CHENHUI ZHANG, DU RONG, Chengdu, China

Skin Autofluorescence Is Associated with Progression of Kidney Disease in Individuals with Type 2 Diabetes: Results from the Hong Kong Diabetes Biobank
QIAO JIN, ERIC S. LAU, ANDREA LUK, RISA OZAKI, ELAINE CHOW, TAMMY SO, HOI MING THERESA YEUNG, KIT MAN LOO, CADMON K. LIM, ALICE P. KONG, ALICIA JENKINS, JULIANA C. CHAN, RONALD C. MA, Hong Kong, China, Sydney, Australia

Decline of Hemoglobin A1c in One Year Is Associated with Rapid GFR Decline in Patients with Type 2 Diabetes at Stage G1
LINGWANG AN, LINONG JI, Beijing, China

Liraglutide Might Have Synergistic Renal Protection Effect with SGLT2 Inhibitors in Rapidly Progressive Diabetic Kidney Disease
KOJI KASHIMA, HIROYUKI SHIMIZU, MASANOBU YAMADA, Kiryu, Japan, Maebashi, Japan

Plasma Renin Level and Aldosterone-to-Renin Ratio Are Associated with Diabetic Kidney Disease
MARIKO HIGA, TAKAYUKI SUZUKI, TAKASHI KIDO, MARIKO ZENRI, KEIKO NAO, MAI HIIKATA, KAORU YAMASHITA, KAYOKO IKEHARA, TAKAMASA ICHIJO, Yokohama, Japan

Advanced Liver Fibrosis Is Associated with an Increased Risk of Chronic Kidney Disease in Patients with Type 2 Diabetes and NAFLD
DA HEA SEO, YONGIN CHO, SEONG HEE AHN, SEONG HA SEO, SEONGBIN HONG, YONG-HO LEE, SO HUN KIM, Seoul, Korea, Republic of, Incheon, Korea, Republic of

Efficacy and Safety of Finerenone in Patients with CKD and T2D by Baseline Insulin Treatment
PETER ROSSING, RAJIV AGARWAL, STEFAN ANKER, GERAISIMOS FILIPPATOS, BERTRAM PITT, LUIS M. RUILOPE, RICHARD MACISAAC, JULIO WAINSTEIN, AMER JOSEPH, LOTHAR ROESSIG, CHARLIE SCOTT, GEORGE BAKRIS, Gentofte, Denmark, Indianapolis, IN, Athens, Greece, Ann Arbor, MI, Madrid, Spain, Fitzroy, Australia, Holon, Israel, Berlin, Germany, Wuppertal, Germany, Reading, United Kingdom, Chicago, IL

Efficacy and Safety of Finerenone in Patients with CKD and T2D by GLP-1RA Treatment
PETER ROSSING, RAJIV AGARWAL, STEFAN ANKER, GERAISIMOS FILIPPATOS, BERTRAM PITT, LUIS M. RUILOPE, ASLAM AMOD, MICHEL MARRE, AMER JOSEPH, ANDREA Z. LAGE, CHARLIE SCOTT, GEORGE BAKRIS, Gentofte, Denmark, Indianapolis, IN, Athens, Greece, Ann Arbor, MI, Madrid, Spain, Durban, South Africa, Paris, France, Berlin, Germany, São Paulo, Brazil, Reading, United Kingdom, Chicago, IL

Long-Term Effect of Intensive Lifestyle Intervention on Incidence of Nephropathy in Adult Patients with Diabetes: A Post-hoc Analysis of a 10-Year Longitudinal Study
SHAHEEN TOMAH, HONGXIA ZHANG, HANNAH GARDNER, MARWA AL-BADRI, OSAHA HAMDY, Boston, MA, Taiyuan, China

Improving Knowledge and Confidence of Diabetologists and Endocrinologists Related to MRAs for CKD in T2D with Curriculum-Based Online Education
AMY LARKIN, KELLY L. HANLEY, ANNE LE, New York, NY
Arteriolar Hyalinosis Is Associated with the Rate of eGFR Decline and Predicts the Onset of Macroalbuminuria and eGFR<60 Ml/min/1.73 M2 in Patients with Type 2 Diabetes and Normo-microalbuminuria Regardless of Microalbuminuria Grade
TATSUMI MORIYA, AKINORI HAYASHI, AKIHIKO SUZUKI, MADOKA MATSUBARA, MOTOSHI OUCHI, Sagamihara, Japan, Kanagawa, Japan, Tochigi, Japan

Therapeutic Profile from the Canadian REgistry of Chronic Kidney Disease in Diabetes Outcomes (CREDO) Study
LISA CHU, MARK FULLER, KATHRYN JERVIS, SANJIT K. BHOGAL, ALEXANDER ABITBOL, Toronto, ON, Canada, Mississauga, ON, Canada

Fibroblast Growth Factor 23 and Diabetic Kidney Disease Phenotypes in Type 2 Diabetes
MONIA GAROFOLO, CATERINA PELOSINI, DANIELA LUCCHESI, PIERPAOLO FALCETTA, MARIA RITA SESSA, STEFANO DEL PRATO, GIUSEPPE PENNO, Pisa, Italy

Increased Peripheral Neutrophil Count Is Closely Associated with the Incidence and Progression of Chronic Kidney Disease in Older Type 2 Diabetic Patients
RUI ZHANG, Shanghai, China

Renal Tubular Damage Marker, Urinary N-acetyl-b-d-glucosaminidase, as a Predictive Marker of Hepatic Fibrosis in Type 2 Diabetes
HAE KYUNG KIM, YOUNG-EUN KIM, MINYOUNG LEE, YONG-HO LEE, EUN SEOK KANG, BONG-SOO CHA, BYUNG-WAN LEE, Seoul, Korea, Republic of

Apparent Diffusion Coefficient on Diffusion-Weighted Magnetic Resonance Imaging Predicts the Progression of Renal Damage in Diabetic Nephropathy
HIROYA KITSUNAI, YUMI TAKIYAMA, NAOKI NAKAGAWA, NAOYUKI HASEBE, ATSUTAKA OKIZAKI, MASAKAZU HANEDA, Asahikawa, Japan, Amagasaki Hyo, Japan

Prevalence of Gastroparesis Symptoms in Diabetic Patients in the Western Region of Saudi Arabia, 2019
ABDULRAHMAN A. BUKHARI, MAYADA M. ALSAYARI, Taif, Saudi Arabia, Jeddah, Saudi Arabia

Palmitic Acid-Induced Schwann Cells Apoptosis and Oxidative Stress in Diabetes Peripheral Neuropathy
JINGWEN FAN, LIXIN GUO, Beijing, China

AGE Precursor Methylglyoxal Leads to Behavioral Pattern Changes Characteristics of Alzheimer’s Disease in Mice
WAI YIN LI, SZE LOK WU, FIONA CHEUK YAN LEE, KEVIN YUE, Hong Kong, China

Adults with T1D, Neuropathy, and Depressive Symptoms Are in Need of Clinical Intervention
SARA E. WETTER, KIMBERLY A. DRISCOLL, JANET K. SNELL-BERGEON, Gainesville, FL, Aurora, CO

Correlation between 24-Hour Urinary Electrolyte and Urinary Albumin in Patients with Type 2 Diabetes
YANRU WANG, MENGYU ZHANG, HONG LI, SHEN QU, Shanghai, China

Effects of Liraglutide on Sudomotor Function in Subjects with Type 2 Diabetes
CAROLINA M. CASELLINI, MICHAEL D. BAILEY, HENRI PARSON, ELIAS S. SIRAJ, Norfolk, VA

Genetically Reduced Chondroitin Sulfate Prevents the Progression of Diabetic Neuropathy via Pericyte Functions
HAJIME ISHIUGRO, TAKASHI USHIKI, ATSUKO HONDA, TADAHISA MIKAMI, HIROSHI KITAGAWA, KAZUNORI SANGO, MASAYOSHI MASUKO, MICHIIHIRO IGARASHI, HIROHITO SONE, Kobe, Japan, Tokyo, Japan, Niigata, Japan

Intrinsic Brain Connectivity in Chronic Painful Diabetic Neuropathy: A Resting-State fMRI Study
KEVIN TEH, IAIN D. WILKINSON, PALLAI RAPPAI SHILLO, GORDON P. SLOAN, SOLOMON TESFAYE, DINESH SELVARAJAH, Sheffield, United Kingdom
423-P  Altered Microvascular Perfusion of the Pain-Processing Areas of the Brain during the Experience of Spontaneous Neuropathic Pain
MARNI GREIG, GORDON P. SLOAN, PALLAI RAPPAI SHILLO, DINESH SELVARAJAH, IAIN D. WILKINSON, SOLOMON TESFAYE, Sheffield, United Kingdom

424-P  Autoantibodies to Glutamic Acid Decarboxylase in Type 1 Diabetes Are Not a Marker of Asymptomatic Cardiac Autonomic Neuropathy
LÍA NATTERO-CHÁVEZ, JHONATAN QUIÑONES SILVA, LAURA MONTANÉZ, ELENA FERNÁNDEZ DURÁN, BEATRIZ DORADO AVENDAÑO, CRISTINA SÁNCHEZ RODRÍGUEZ, MAR LORENZO, MARIÁ FERNÁNDEZ ARGÜESO, NURIA BENGOA ROJANO, EDURNE LECUMBERRÍ, HÉCTOR F. ESCOBAR-MORREALE, MANUEL LUQUE-RAMÍREZ, Madrid, Spain

425-P  Association between Neuropathy and Periodontitis among Type 2 Diabetes Patients
RAMACHANDRAN VINITHA, MANOJ MUTHUKURU, KRISHNAMOORTHY SATHEESH, RAGHURAMAN YOGALAKSHMI, ANANDHAN RAJESWARI, LAKSHMI SUNDAR, ARUN NANDITHA, ARUN RAGHAVAN, CHAMUKUTTAN SNEHALATHA, AMBADY RAMACHANDRAN, Chennai, India

426-P  Sudomotor Dysfunction Is Associated with Decreased Cardiac Diastolic Function in Patients with Type 2 Diabetes
XUEYAN CHEN, XUBIN YANG, WEN XU, HONGRONG DENG, JINPING WU, JINHUA YAN, BIN YAO, Guangzhou, China

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427-P  Prevalence and Treatment of Diabetic Macular Edema and Vision-Threatening Diabetic Retinopathy among Commercially Insured Adults Aged <65 Years
ELIZABETH A. LUNDEEN, MINCHUL KIM, DAVID B. REIN, JOHN WITTENBORN, CINDY CAI, JINAN B. SAADDINE, Peoria, IL, Chicago, IL, Baltimore, MD, Atlanta, GA

428-P  The Association between Monocyte to High-Density Lipoprotein Cholesterol Ratio and Diabetic Retinopathy
YING TAN, XIXIANG TANG, YANMING CHEN, Guangzhou, China

429-P  Higher Hemoglobin Level Associated with Decreased Prevalence of Diabetic Retinopathy in Male Patients with Type 2 Diabetes from Tibet
CHENGHUI ZHANG, Chengdu, China

430-P  Urinary Proteome and Diabetic Retinopathy in the Direct-Proect 1 and 2 Trials
VIKTOR ROTBAIN CUROVIC, PEDRO MAGALHÃES, TIANLIN HE, TINE W. HANSEN, HARALD MISCHAK, PETER ROSSING, Gentofte, Denmark, Hannover, Germany

431-P  Gaps in Retinal Screening among Medicaid Patients with Diabetes: A Natural Experiment for Translation in Diabetes (NEXT-D) 2 Study
TANNAZ MOIN, JESSICA HARWOOD, LAUREN DASKIVICH, JACOB QUINTON, ARSENIY VASILYEV, NORMAN TURK, O. KENRIK DURU, CAROL MANGIONE, Los Angeles, CA

432-P  Sodium Intake and Incidence of Diabetes Retinopathy in Elderly Patients with Type 2 Diabetes: Analysis of Data from the Japanese Elderly Diabetes Intervention Study (J-EDIT)
CHIKA HORIZAKA, REI AIDA, SHIRO TANAKA, CHIEMI KAMADA, SACHIKO TANAKA, YUKIO YOSHIMURA, REMI KODERA, KAZUYA FUJIIHARA, RYO KAWASAKI, TATSUHIKI MORIYA, HIROHITO SONE, ATSUSHI ARAKI, Kyoto, Japan, Shiga, Japan, Tokushima, Japan, Niigata, Japan, Suita, Japan, Sagamihara, Japan, Tokyo, Japan

433-P  Hyperglycemia-Induced Oxidative Stress Prevents REDD1 Degradation by Chaperone-Mediated Autophagy
WILLIAM P. MILLER, ALLYSON TORO, SIDDHARTH SUNILKUMAR, JOSEPH GIORDANO, MICHAEL D. DENNIS, Hershey, PA
Large Quantity of Alcohol Intake per Occasion was Positively Associated with Vision-Threatening Eye Diseases in Japanese Men with Type 2 Diabetes
MASAHIKO YAMAMOTO, KAZUYA FUJIHARA, YUTA YAGUCHI, TAEKO OSAWA, MASANORI KANEKO, MASARU KITAZAWA, TAKAAKI SATO, MAYUKO H. YAMADA, YASUHIRO MATSUBAYASHI, TAKAHO YAMADA, SATORU KODAMA, HIROHIITO SONE, Niigata, Japan

Port Delivery System with Ranibizumab (PDS) in Diabetic Retinopathy (DR) with or without Diabetic Macular Edema (DME)
MARGARET CHANG, ASHWINI BOBBALA, VARUN MALHOTRA, PAUL LATKANY, Sacramento, CA, South San Francisco, CA

Low Prevalence of Diabetic Retinopathy in Type 1 Diabetes Patients with a Long-Term Modernly Treated Disease and Very Good Glycaemic Control: A Retrospective Single-Center Analysis
PAULINA SUROWIEC, BARTOMIEJ MATEJKO, MARIANNA KOPKA, AGNIESZKA FILEMONOWICZ-SKOCZEK, TOMASZ KLUPA, BOZENA A. ROMANOWSKA-DIXON, KATARZYNA CYGANEK, MACIEJ MALECKI, Kraków, Poland

MicroRNA-223 Expression Is Upregulated in Type 2 Diabetes and Associated with Diabetic Retinopathy in Cohort of Qatar Biobank: Functional Validation in Zebrafish Model
AMMIRA S. AKIL, SAHAR DA’AS, LAILA A. JERMAN, DOUA ABDELRAHMAN, WASEEM HASAN, KHALID FAKHRO, Doha, Qatar

Contribution of Hypertriglyceridemia to Cardiovascular Disease in Korean Women: A Nationwide Population-Based Study
HUN JEE CHOE, MIN KYONG MOON, BO KYUNG KOO, Seoul, Korea, Republic of

A Promising Regulatory Role for MicroRNA-133b in Controlling Lipid Metabolism and Dyslipidemia Gene Expression in Diabetic Retinopathy: The 1000 Qataromics Cohort
AMMIRA S. AKIL, SUJITHA SUBASH PADMAJEYA, LAILA A. JERMAN, TANWIR HABIB, ALYA AL-KURBI, ELBAY E. ALIYEV, MOHAMMED EL ANBARI, KHALID FAKHRO, Doha, Qatar

Dual Long-Term Effects of Free Fatty Acid on Human Endothelial Barrier In Vitro Are Mediated by NO, Mitochondrial ROS, and Dicarbonyl Stress
MIKHAIL SAMSONOV, NIKITA PODKUYCHENKO, ASKER Y. KHAPCHAEV, TATIANA VLASIK, VADIM LANKIN, MAXIM SKULACHEV, IURI STAFEEV, ALEXANDER V. VOROTNIKOV, MARINA V. SHESTAKOVA, VLADIMIR P. SHIRINSKY, Moscow, Russian Federation

The Association between Time-in-Range %, Measured by Continuous Glucose Monitoring (CGM) and Physical and Functional Indices amongst Older People with Type 2 Diabetes: A Cross-Sectional Study
YAMIT BASSON-SHLEYMOVICH, TALI CUKIERMAN-YAFFE, TAL YAHALOM-PERI, MICHAL AZMON, NAAMA PELTZ-SINVANI, Ramat Gan, Israel, Tel Aviv, Israel, Nirit, Israel

An Immunologic Evaluation of Infection in the Patient with Diabetes
CHRISTIAN B. BERGMANN, ALLISON R. HAMAD, CHARLES C. CALDWELL, PETER CRISOLOGO, Cincinnati, OH

Outcomes of Bedside Diabetic Foot Amputation by a Diabetologist
FLORINE FERON, JEAN-PIERRE RIVELINE, JEAN-FRANÇOIS GAUTIER, JEAN-PHILIPPE KEVORKIAN, Paris, France

Rates and Reasons for 30-Day Readmissions in Hospitalizations among Patients with Diabetes Mellitus Who Underwent Below-Knee Amputation: Analysis of the Nationwide Readmissions Database
CARLOS GABRIEL D. CORPUZ, HAFEEZ SHAKA, MARCELO RAMIREZ, MARIA C. AGUILERA, SARA ELIZABETH T. YAP, ASIM KICHLOO, MUKUNTHAN MURTHI, RAMTEJ ATLURI, SRIRAM GONAKOTI, Chicago, IL, Watertown, NY
445-P  Clinical Outcomes following Hospitalization for Patients with Soft Tissue Infection, Osteomyelitis Clean Margin, and Residual Osteomyelitis
AMANDA L. KILLEEN, KATHRYN DAVIS, JAVIER LA FONTAINE, ORHAN K. OZ, PETER CRISOLOGO, LAWRENCE A. LAVERY, Dallas, TX, Cincinnati, OH

446-P  Mortality in 98 Type 1 Diabetes Mellitus and Type 2 Diabetes Mellitus (DM): Foot Ulcer Location Is an Independent Risk Determinant
ADRIAN H. HEALD, MICHAEL E. EDMONDS, SIMON G. ANDERSON, ADAM ROBINSON, Salford, United Kingdom, London, United Kingdom, Bridgetown, Barbados

447-P  The Efficacy and Safety Trial of ENERGI-F703 in Diabetic Wound Healing: A Randomized, Double-Blind, Placebo-Controlled, Phase 2 Clinical Trial
GUANG-HUAR YOUNG, JIUN-TSAI LIN, YI-FANG CHENG, HAN-MIN CHEN, CHUN-FANG HUANG, Taipei, Taiwan

448-P  Serum Inflammatory Markers Are Not Correlated with Detection of Osteomyelitis by 99mTC-WBC SPECT/CT Imaging in Subjects with Diabetes and Foot Infection
AMBER SHERWOOD, KATIE L. RUBITSCHUNG, AMANDA L. KILLEEN, PETER CRISOLOGO, KATERINA GRIGOROPoulos, AMANDA PAJOuH, JENNIFER KEP, DANE WUKICH, III, JAVIER LA FONTAINE, LAWRENCE A. LAVERY, ORHAN K. OZ, Cincinnati, OH, Dallas, TX

449-P  Incidence of Acute Kidney Infection in Patients with Diabetes Hospitalized for Foot Infections
LAWRENCE A. LAVERY, KATHRYN DAVIS, JAVIER LA FONTAINE, EASTON C. RYAN, PETER CRISOLOGO, AMANDA L. KILLEEN, Cincinnati, OH, Dallas, TX

450-P  Increasing Trends in Major Amputations among Patients with Diabetes in Kentucky, 2008-2018
MIN-WOONG SOHN, WOOK-JOONG KIM, MARY ELIZABETH LACY, Lexington, KY

451-P  Participants’ Satisfaction with the Support Online Self-Guided Educational Platform for Type 1 Diabetes Management: A Proof-of-Concept Study, Preliminary Results
LI FENG XIE, CATHERINE LEROUX, AMÉLIE ROY-FLEMING, RÉMI RABASA-LHORET, ANNE-SOPHIE BRAZEAU, Sainte-Anne-de-Bellevue, QC, Canada, Montreal, QC, Canada

452-P  Effect of Virtual Education on Glycemic Control in Patients with Type 1 Diabetes during Fasting Ramadan
GHOFRAN S. KHOGEER, REEM ALAMOUDI, MARYAM N. ALOTIBI, Jeddah, Saudi Arabia

453-P  Diabetes Knowledge Test Score Predicts HbA1c Levels after Discharge in Inpatients with Type 2 Diabetes
KAZUYA OKUBO, TAICHI MINAMI, AKIKO KAMEDA, TAKU YAMADA, HIROKO HIIRAGI, FUMINA YOSHIDA, MAYUKO TAKAHASHI, YOICHI SUZUKI, YASUO TERASHI, Yokohama, Japan, Odawara, Japan

454-P  Pharmacist-Led Diabetes Self-Management Education and Reduction of Readmission Rates at a County Hospital
LISELI MULALA, TAMARA LENHOFF, San Francisco, CA

455-P  Global Comparisons of Awareness of Chronic Kidney Disease and Renoprotective Therapies among Type 1 Diabetes Patients
EMILY YE, JULIA STEVENSON, JACQUELINE TAIT, REBECCA GOWEN, SARA SUHL, CATERINA FLORISSI, CHRISTIANNE PANG, RICHARD WOOD, San Francisco, CA

456-P  Ongoing Knowledge Gaps in Antiplatelet Therapy for High-Risk Diabetes Patients with CAD
SHPETIM KARANDREA, NEHA AGARWAL, AMANDA JAMROGIEWICZ, Tampa, FL, Boca Raton, FL

457-P  Effectiveness of an Empowerment-Based Self-Management Intervention on Glycemic Control, Self-Management Behaviors, and Psychological Distress in Middle-Aged Patients with Poorly Controlled Type 2 Diabetes
LI CHENG, JANET WH SIT, QINQIN XIE, Guangzhou, China, Hong Kong, China
The Current Status and Influencing Factors of In-Home Handling of Disposable Needles among Diabetic Patients in Beijing
YUMO YANG, LIXIN ZHOU, Beijing, China

An Examination of Introductory Sessions Offered by CDC-Recognized National Diabetes Prevention Program Lifestyle Change Programs
PAMELA WILLIAMS, WENDI ELKINS, KRISTA PROIA, ZOHRA TAYEBALI, KATHLEEN AXELROD, NIKIE S. ESQUIVEL, AKIMI SMITH, DEBORAH PORTERFIELD, Research Triangle Park, NC, Atlanta, GA

Eating Behavior among Inpatients with Type 2 Diabetes (T2D) Is Affected by Childhood Food Education
MAYUKO TAKAHASHI, TAICHI MINAMI, AKIKO KAMEDA, TAKU YAMADA, HIROKO HIIRAGI, FUMINA YOSHIDA, KAZUYA OKUBO, YASUO TERAUCHI, Yokohama, Japan

A Day in the Life of a Person with Diabetes Mellitus: An Experiential Learning Initiative
JOSEPH D. GOLTZ, AMR MORSI, INGRID LIBMAN, HEBA M. ISMAIL, Pittsburgh, PA, Indianapolis, IN

Factors Associated with Health Literacy among Patients with Type 2 Diabetes in China
XIAOYAN ZHAO, Shenzhen, China

Fuel Expenditure and Deposition in Tissues after Exercise or Low-Fat Diet in Obese Female and Male Mice
JULIA AN, LIN ZHU, SOPHIA YU, EMERY EDINGTON, BRIDGET LITTS, JOHN M. STAFFORD, Nashville, TN

Does the Referral Source Influence Retention in Community Diabetes Prevention Programs
HALLIE KOEPPEN, SONJA TYSK, MELISSA HOUSE, JESSIE FERNANDES, TODD S. HARWELL, STEVEN D. HELGERSON, DOROTHY M. GOHDES, Helena, MT, Seattle, WA, Albuquerque, NM

Applying the Ancestral Knowledge System Framework to Interviews with Key Stakeholders Regarding a Gestational Diabetes Mellitus Risk Reduction and Reproductive Health Planning Program for American Indian Adolescent Females
DENISE CHARRON-PROCHOWNIK, RENI SOON, SARAH A. STOTZ, ANDREA F. FISCHL, KELLY L. GONZALES, MARIORIE MAU, KELLY R. MOORE, Pittsburgh, PA, Denver, CO, Portland, OR, Honolulu, HI, Albuquerque, NM

Cultural Adaptation of a Diabetes Self-Management Education and Support Telehealth Intervention for Rural Colorado
TAMARA OSER, MICHELLE L. LITCHMAN, BETHANY KWAN, JULIE NEUBERGER, KRISTEN CURCIA, SHAWNECCA BURKE, LINDA K. ZITTEL, JULIANA S. SIMONETTI, Salt Lake City, UT, Aurora, CO, Denver, CO

Immediate and Sustained Trends in Glycemic Control during Remote Patient Monitoring in People with Type 2 Diabetes
TONG SHENG, SARINA BABIKIAN, VIKRAM SINGH, MARK A. CLEMENTS, Palo Alto, CA

Impact of Webinars and Telemedicine during COVID-19 Lockdown in Transforming Outcomes in 848 T2D Patients in India
JOTHYDEV KESAVADEV, BANSHI D. SABOO, ARUN SHANKAR, GOPIKA KRISHNAN, ANJANA BASANTH, SANTHI JOYOGESH, SANAL T.S., GOPIKA B. CHANDRAN, KRISHNADEV JOTHYDEV, SUNITHA JOTHYDEV, Trivandrum, India, Ahmedabad, India

Health Care Providers’ Experiences with a Virtual Reality Program Focused on Diabetes, Social Determinants of Health, and Appalachian Culture
ELIZABETH A. BEVERLY, CARRIE LOVE, MATTHEW LOVE, Nelsonville, OH, Athens, OH

Usability and Satisfaction of a Mobile Application to Support Individuals with Insulin Therapy Management
LINDA M. SIMINERIO, LORI L. BEDNARZ, CARLA DEJESUS, JASON NG, SHARI L. REYNOLDS, JODI S. KRALL, Pittsburgh, PA, Bethel Park, PA, McKeesport, PA
471-P Using Peer Power to Reduce Health Disparities: Implementation of a Diabetes Support Coach Program in Federally Qualified Health Centers
ASHBY F. WALKER, MICHAEL J. HALLER, ELENI SHEEHAN, SARAH C. WESTEN, CLAUDIA ANEZ-ZABALA, XANADU ROQUE, ANGELINA BERNIER, LEON BAIN, MATTHEW J. GURKA, STEPHANIE L. FILIPP, NICOLAS CUTTRISS, LINDA G. BAER, LAUREN Figg, KOREY K. HOOD, RAYHAN LAL, MARINA BASINA, JESSIE J. WONG, KATARINA YABUT, DAVID M. MAAHS, Gainesville, FL, Miami, FL, Stanford, CA, Palo Alto, CA

472-P Online Patient Education on GLP-1 Receptor Agonists in Patients with T2D and CVD Prompts Real-Life Changes
AMY LARKIN, ANNE LE, New York, NY

473-P Feasibility and Acceptability of a Direct-to-Home Diabetes Self-Management Education and Support Telemedicine Program (DSMES) with High-Risk Patients in a Rural, Underserved Area
JODI S. KRALL, JASON NG, PATRICIA A. JOHNSON, SHARI L. REYNOLDS, LINDA M. SIMINERIO, Pittsburgh, PA

474-P Durable Reductions in A1C and Diabetes Distress with a One-Day Hybrid DSMES Intervention
MICHELLE L. LITCHMAN, XUECHEN WANG, REBECCA K. DELANEY, JULIE NEUBERGER, AMY REEDER, STEVEN R. JONES, JULIANA S. SIMONETTI, MATTHEW WAHL, ANGELA FAGERLIN, SIMON FISHER, Salt Lake City, UT

475-P School Nurses Report Low Confidence in Many Skills with Diabetes Devices
CHRISTINE MARCH, AMBER L. HILL, TRACI M. KAZMERSKI, GALEN E. SWITZER, EILEEN WALLACE, LINDA M. SIMINERIO, ELIZABETH MILLER, INGRID LIBMAN, Pittsburgh, PA, Bethel Park, PA

476-P Multidisciplinary Predialysis Team Education for Patients with Diabetic Nephropathy, Postponed Hemodialysis Induction, and Prolonged Survival after Hemodialysis Induction
MAMIKO HITOMI, TERUKO SATO, TATSUMI MORIYA, Sagamihara, Japan

477-P The National Diabetes Prevention Program (National DPP): What the New Variables Are Telling Us about Outcomes
ELIZABETH ELY, MIRIAM BELL, Atlanta, GA

478-P Effect of Nonpharmacological Management of Chronic Constipation in Diabetic Patients
EITA NISHIMORI, MOTOJI NAKA, Nagano, Japan

479-P WITHDRAWN

480-P Impact of Medication Adherence and Glycemic Control on the Risk of Micro/Macrovascular Diseases in Patients with Diabetes
YUTA YAGUCHI, KAZUYA FUJIHARA, MAYUKO H. YAMADA, YASUHIRO MATSUBAYASHI, TAKAHO YAMADA, MIDORI IWANAGA, MASARU KITAZAWA, MASAKI YAMAMOTO, SATORU KODAMA, HIROHITO SONE, Niigata, Japan

481-P Risk Assessment among Organizations Participating in the National Diabetes Prevention Program (National DPP) Lifestyle Change Program
RAJAI JABRAH, ELIZABETH ELY, Atlanta, GA

482-P Comprehension of Medicare Program and Participation of Diabetes Self-Management Training among Medicare Beneficiaries with Diabetes
BOON PENG NG, SAMUEL D. TOWNE, JR., JACQUELINE B. LAMANNA, KIYOUNG KIM, Orlando, FL, Boston, MA

483-P Remote Diabetes Care, Education, and Support Encounters in Adults with Type 1 Diabetes
MARGARET GREENFIELD, DIANA L. STUBER, DANIELLE STEGMAN-BARBER, KAREN KEMMIS, BETH A. WELLS, TERESA S. MCARTHUR, BELINDA MATTHEWS, CHRISTOPHER P. MORLEY, RUTH S. WEINSTOCK, Syracuse, NY, New York, NY

484-P Satisfaction with Remote Diabetes Education and Support Varies by Age
CARLY FEUERSTEIN-SIMON, MARGARET GREENFIELD, PRASENJIT SAHA, RUTH S. WEINSTOCK, Syracuse, NY
485-P  Insights from Type 2 Diabetes Patients Reveal Education- and Income-Based Disparities in Awareness Surrounding Kidney Disease Risk and Renoprotective Therapies  
JULIA STEVENSON, EMILY YE, SARA SUHL, REBECCA GOWEN, JACQUELINE TAIT, CATERINA FLORISSI, RICHARD WOOD, San Francisco, CA

486-P  Does Racial Homogeneity within an Organization Affect Non-Hispanic Black Participant Performance Outcomes in the National Diabetes Prevention Program (National DPP)  
ERIN O. LANDAU, ELIZABETH ELY, Herndon, VA, Atlanta, GA

487-P  Exploring the Research Experiences of American Indian Mother/Daughter Dyads and Site Coordinators after a GDM Risk Reduction and Preconception Counseling Randomized Controlled Trial  
SARAH A. STOTZ, ANDREA F. FISCHL, MARTHA A. TERRY, HEATHER GARROW, NANCY O’BANION, LAURA CHALMERS, KELLY R. MOORE, DENISE CHARRON-PROCHOWNIK, Denver, CO, Pittsburgh, PA, Akwesasne, NY, Tulsa, OK, Albuquerque, NM

488-P  Patient Perceptions toward the Role of the Diabetes Educator  
REEM ALAMOUDI, MEHAD A. ALAWAD, FAIZA J. ALHAIDER, SEHAM A. KHASHWAYN, Jeddah, Saudi Arabia, Dammam, Saudi Arabia

489-P  Facilitating Collaboration through TeleECHO Education in Diabetes  
RUSSIE ALLEN, LAUREN K. WELCH, New York, NY

490-P  Success of a Multidisciplinary Approach Strategy to Reach Target Glycemic Control in Patients with Uncontrolled Diabetes in a Rural Hospital in Thailand  
VARISA LIMPIJANKIT, SASINUN CHOTTHUNYAPAT, PETCH KRUACHAI, SUNANTA KHAMPETDEE, PANANDA OP-UN, DUANGGRAT WANTHONG, NUTTAYA AUNLAMAI, DONLAYA PETCHAI, JUTARAT NOORAPAN, SUNISA MATIDTO, PATTAPORN TECHATHAWERIT, THOSAPHOL LIMPIJANKIT, Medford, MA, Kalasin, Thailand, Bangkok, Thailand

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491-P  Severe Muscle Insulin Resistance in Inuit Homozygous Carriers of the Common Greenlandic P.Arg684Ter TBC1D4 Variant Is Improved by a Single Bout of Exercise  
JONAS M. KRISTENSEN, TRINE L.J. LARSEN, CHRISTIAN S. CARL, ANETTE THORUP, JANNE HINGST, JOHAN ONSLEV, JESPER S. OLESEN, MICHAEL L. PEDESEN, II, ERIK A. RICHTER, TORBEN HANSEN, MARIT E. JØRGENSEN, JØRGEN F.P. WOTJASZEWSKI, Ilulissat, Greenland, Copenhagen, Denmark, Nuuk, Greenland, Gentofte, Denmark

492-P  Glucose Level Recommendations for VO2 Max Exercise Testing in Adolescents with Type 1 Diabetes  
KRISTI KING, BRAD J. THRASHER, TIM E. MCKAY, KUPPER A. WINTERGERST, Louisville, KY

493-P  Do Spanish Language Pictograms Reflect Objective Physical Activity Data in Hispanics/Latinos with or at Risk of Type 2 Diabetes?  
DELOUR HAJ, WENDY C. BEVIER, ARIANNA J. LAREZ, CASEY CONNEELY, NAMINO M. GLANTZ, KRISTIN N. CASTORINO, DAVID KERR, Santa Barbara, CA

494-P  Canagliflozin Prevents Hyperglycemia-Associated Muscle Extracellular Matrix Accumulation and Restores the Adaptive Response to Aerobic Exercise  
TARA MACDONALD, PATTARAWAN PATTAMAPRAPANONT, SARAH J. LESSARD, Boston, MA

495-P  The Level of Muscle and Intestinal Damage Biomarkers after an Exercise with a Predominance of Eccentric Contractions in Male Patients with Type 1 Diabetes Mellitus  
ŁUKASZ TOTA, BARTIOMIEJ MATEJKO, MAIGORZATA MORAWSKA, SANDRA MROZINSKA, TOMASZ KLUPA, MACIEJ MALECKI, Kraków, Poland

496-P  Large-Scale Association of Basal Metabolic Rate and Blood Glucose Outcomes in People with Type 2 Diabetes  
YDO WEXLER, DAN GOLDNER, New York, NY
497-P  Weekdays or Weekends? Does Timing of Physical Activity Assessment Matter in Hispanic/Latino Adults with or at Risk for Type 2 Diabetes?
WENDY C. BEVIER, ARIANNA J. LAREZ, CASEY CONNEELY, NAMINO M. GLANTZ, KRISTIN N. CASTORINO, DAVID KERR, Santa Barbara, CA

498-P  Resistance Exercise Rapidly Alters Citric Acid Cycle and Amino Acid Metabolism in Skeletal Muscle
MARK W. PATAKY, ARATHI PRABHA KUMAR, KATHERINE KLAUS, K. SREEKUMARAN NAIR, Rochester, MN

499-P  The Effect of Exercise Capacity on Metabolic and Cardiac Aging in Normal and Obese Rats
CHANISA THONUSIN, PATCHARAPONG PANTIYA, NATTICHA SUMNEANG, SIRAWIT SRIWICHAIN, NIPON CHATTIPAKORN, SIRIPORN C. CHATTIPAKORN, Mueang Chiang Mai, Thailand

500-P  Determinants of Exercise-Induced Increase in Insulin Sensitivity
ARATHI PRABHA KUMAR, SURENDRA DASARI, MARK W. PATAKY, JULIA CROOK, COLLEEN T. BALL, KATHERINE KLAUS, IAN R. LANZA, MATTHEW M. ROBINSON, K. SREEKUMARAN NAIR, Rochester, MN, Jacksonville, FL, Corvallis, OR

501-P  Lower Plasma Membrane Sn-1,2-Diacylglycerol Content and PKCepsilon/theta Activity Explain the Athlete’s Paradox
RAFAEL C. GASPAR, KUN LYU, BRANDON T. HUBBARD, BROOKS LEITNER, PANU LUUKKONEN, SANDRO HIRABARA, IKKI SAKUMA, ALI NASIRI, DONGYAN ZHANG, MARIO KAHN, GARY CLINE, JOSÉ R. PAULI, RACHEL J. PERRY, KITT PETERSEN, GERALD I. SHULMAN, New Haven, CT, São Paulo, Brazil, Limeira, Brazil

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502-P  Introduction of a Gluten-Free Diet in Children with Type 1 Diabetes and Coeliac Disease Did Not Impact Glycemic Control, Nutrient Intake, or Quality of Life at Three Months
ALEXANDRA L. MARLOW, BRUCE R. KING, SHUAH E. JOHNSON, SABRINA K. BINKOWSKI, JAN FAIRCHILD, ELIZABETH A. DAVIS, CARMEL E. SMART, New Lambton, Australia, Newcastle, Australia, North Adelaide, Australia, Perth, Australia

503-P  Intensive Lifestyle Interventions for Treatment towards Remission of Type 2 Diabetes: A Case Series
MICAELEA KARLSEN, GUNADHAR PANIGRAHI, JOHN KELLY, Chesterfield, MO, Virginia Beach, VA, Boones Mill, VA

504-P  Association between Serum Fatty Acid Metabolism Profile and Type 2 Diabetes with Worse Glycemic Control: A Study in Northeastern China
YINGYING LI, MI ZHOU, XINGHAI XIA, HUI SHEN, YIKE LI, YANBING XU, CHENG HAN, YAZHUO LIU, Dalian, China, Hershey, PA

505-P  Implementation of Nutrition Assessments to Evaluate and Improve Nutrition Knowledge at Initial Follow-up of New-Onset Type 1 Diabetes
MEREDITH R. THIVIERGE, SHANI SNOW, MAUREEN SEE, ELIZABETH A. BROWN, YASMIN AKHTAR, RISA WOLF, Baltimore, MD

506-P  Weight Loss Is Associated with Changes in Gut Microbiome: A Randomized, Crossover Trial Comparing a Mediterranean and a Low-Fat Vegan Diet in Overweight Adults
HANA KAHLEOVA, RICHARD HOLUBKOV, NEAL BARNARD, Washington, DC, Salt Lake City, UT

507-P  Effectiveness of a Ketogenic Diet and Virtual Coaching Intervention for Patients with Diabetes: A Difference-in-Differences Analysis
KIERSTEN STROMBOTNE, JESSICA LUM, NAMBI NDUGGA, ANNE UTECH, STEVEN PIZER, AUSTIN FRAKT, PAUL CONLIN, Boston, MA, Brighton, MA, Washington, DC
Correlations between Burden and Quality of Life for Caregivers of Children Living with Type 1 Diabetes
VANESSA D. JEWELL, GILLIANE LEE, KASEY HARMON, ERICA GALLEGOS, Omaha, NE

Type 1 Diabetes Management and the Impact on Caregiver Quality of Life
VANESSA D. JEWELL, Omaha, NE

Prevalence of Mental, Behavioral, and Developmental Disorders among Youth with Diabetes, United States (2016-2019)
CATHERINE E. BARRETT, KAI M. BULLARD, JOOHYUN PARK, ALAIN KOYAMA, CARLA MERCADO, ANGELIKA H. CLAUSSEN, KIM NEWSOME, MEDA E. PAVKOV, Atlanta, GA

Treatment Burden, Glycemic Control, and Social Determinants of Health in Patients with Type 2 Diabetes
ELIZABETH A. ROGERS, SARAH T. MANSER, STEVEN ARRIAZA, MARK LINZER, Minneapolis, MN

Desire for and Experience of Shared Decision-Making and Associations with Patient-Reported Outcomes in Those with Diabetes
EMILY SYVERUD, SARAH T. MANSER, STEVEN ARRIAZA, ELIZABETH A. ROGERS, Minneapolis, MN

Associations of Common Mental Health Disorders with Impaired Awareness of Hypoglycaemia in Type 1 Diabetes
BEATRICE PIERI, GABRIELLA BERGIN-CARTWRIGHT, MATTHEW HOTOPF, SUFYAN HUSSAIN, York, United Kingdom, London, United Kingdom

In Search of “Glycemic Happiness”: Interim Analysis of an Observational Survey of Persons Living with Type 2 Diabetes Mellitus
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MARY E. ZINN, CHRISTINE H. WANG, BREANA BRYANT, MAUREEN MONAGHAN, Washington, DC

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570-P  Impact of Psychosocial Factors, Self-Efficacy, Knowledge, and Nutrition Using 12-Week Courses on Diabetes Management for Veterans
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JULIA E. BLANCHETTE, VALERIE B. TOLY, JAMIE R. WOOD, MICHELLE L. LITCHMAN, Salt Lake City, UT, Cleveland, OH

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JULIA E. BLANCHETTE, M.J. TRAN, ELI IACOB, TAMARA OSER, ERNEST GRIGORIAN, LINDA S. EDELMAN, MICHELLE L. LITCHMAN, Salt Lake City, UT, Denver, CO, Cottonwood Heights, UT

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Maintenance of Time-Restricted Eating in Daily Life to Lose Weight and Lower Risk of Type 2
NATASJA BJERRE, LOTTE HOLM, JONAS S. QUIST, KRISTINE FÆRCH, NANA F. HEMPLER, Gentofte, Denmark

Complexity of Antidiabetic Medication Regimen Is Associated with Increased Diabetes-Related Distress in Patients with Type 2 Diabetes
MARIA GRACIA LUZURIAGA, RAFAEL LEITE, HAMMAD AHMED, PATRICE G. SAAB, RAJESH GARG, Miami, FL, Coral Gables, FL

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Samantha A. Carreon, Iman Al-Gadi, Kellyann Rooney, Christine H. Wang, Carrie Tully, Jasmine N. Jones, Katherine A. Gallagher, Maureen Monaghan, Randi Streisand, Marisa E. Hilliard, Houston, TX, Washington, DC

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JACLYNN M. HAWKINS, NIKOLAS J. KOSCIELNIK, ROBIN NWANKWO, MARTHA M. FUNNELL, KATHERINE A. KLOSS, DIANA HALL, GRETHEN PIATT, Ann Arbor, MI, Richmond, VA
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CHRISTINE H. WANG, CARRIE TULLY, MAUREEN MONAGHAN, MARISA E. HILLIARD, RANDI STREISAND, Washington, DC, Houston, TX

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JARED S. ENG, KELLYANN ROONEY, CELIA HENDERSON, BRYNN E. MARKS, CARRIE TULLY, MAUREEN MONAGHAN, MARISA E. HILLIARD, RANDI STREISAND, CHRISTINE H. WANG, Washington, DC, Houston, TX

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LAURA M. JACOBSEN, DAVID D. CUTHBERTSON, EMILY K. SIMS, HEBRA M. ISMAIL, LINDA DIMEGLIO, TAYLOR M. TRIOLO, MARIA J. REDONDO, MARKUS LUNDGREN, PETER GOTTLIB, MARK A. ATKINSON, JEFFREY KRISCHER, DESMOND SCHATZ, JAY SOSENKO, Gainesville, FL, Indianapolis, IN, Aurora, CO, Houston, TX, Lund, Sweden, Tampa, FL, Miami, FL

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AHMED A. METWALLY, DALIA PERELMAN, HEYJUN PARK, ALESSANDRA CELLI, TRACEY MCLAUGHLIN, MICHAEL SNYDER, Stanford, CA

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MICHAEL W. PORTER, LEOR NEEDLEMAN, SEBA RAMHMDANI, NICOLE M. EHRHARDT, Washington, DC, Seattle, WA

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RISHI R. ADHIKARY, SIDDDESH KOLWANKAR, RITIKA VERMA, JITESH BHATT, KETAN L. PAKHALE, RAKESH SAHAY, Mumbai, India, Hyderabad, India

**594-P** Use of Connected Glucometer with Real-Time Feedback and Counseling for Glycemic Control in Patients with Diabetes in India: BeatO’s Connected Diabetes Care Program
MUDIT SABHARWAL, MINAL MOHIT, VAMS K. KOLUKULA, RUPALI JANGID, GAUTAM CHOPRA, New Delhi, India, Jaipur, India, Haryana, India

**595-P** CGM Use in Ambulatory Insulin-Treated Patients following Hospital Discharge
ALI A. RIZVI, CELESTE EBERLEIN, Atlanta, GA, Johns Creek, GA
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618-P Association between Time-in-Range and A1C in Basal Insulin-Treated People with Type 2 Diabetes
RONALD GOLDENBERG, VANITA R. ARODA, LIANA K. BILLING, ANDERS MELLER DONATSKY, MARIE FREDRIKSEN, DAVID C. KLONOFF, EHSAN PARVARESH RIZI, RICHARD M. BERGENSTAL, Concord, ON, Canada, Boston, MA, Evanston, IL, Søborg, Denmark, San Mateo, CA, Minneapolis, MN

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JUNXIAN LI, FANG LIU, *Shanghai, China*
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A Novel, Automated AI Method for Detecting and Classifying CGM Patterns
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SHIPING LIU, MANSUR SHOMALI, ABHIMANYU KUMBARA, ANAND K. IYER, MALINDA PEEPLES, MICHELLE A. DUGAS, KENONY CROWLEY, GUODONG GAO, Baltimore, MD, Columbia, MD, College Park, MD

Diabetes Providers Value CGM Data Despite Challenges in Data Review Process
TEJASWI KOMPALA, JENISE C. WONG, AARON B. NEINSTEIN, San Francisco, CA

Effectiveness of Fixed Ratio Combination of IGlarLixi in People with Type 2 Diabetes Mellitus: Experience from Routine Clinical Practice
JANOS T. KIS, GABOR NAGY, PETER STELLA, Budapest, Hungary

A Novel, Long-Acting Dual Agonist for GIPR/GLP-1R, HISHS-2001, Demonstrates Effects on HbA1c and Weight Loss in the db/db Mouse Model of Type 2 Diabetes
VINOD S. BURADE, ADOLFO GARCIA-OCANA, RICHARD E. PRATLEY, GUY A. RUTTER, TINA VILSBØLL, BERNARD THORENS, RAJAMANNAR THENNATI, Vadodara, India, New York, NY, Orlando, FL, London, United Kingdom, Copenhagen, Denmark, Lausanne, Switzerland

GIP Receptor Agonism Enhances Weight Loss from Either a Biased or an Unbiased GLP-1 Receptor Agonist in DIO Mice
MATTHEW P. COGHLAN, LIBBEY O’FARRELL, AARON D. SHOWALTER, DAVID B. WAINSCOTT, CYNTHIA STUTSMAN, GUEMALLI CARDONA, OVER CABRERA, JORGE ALSINA-FERNANDEZ, FRANCIS S. WILLARD, KYLE SLOOP, TAMER COSKUN, Indianapolis, IN

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COLLEEN GAVIGAN, THOMAS W. DONNER, Baltimore, MD

Novel Microsphere Formulation Developments of Long-Acting GLP-1 RA Including Exenatide, Liraglutide, and Semaglutide
JIN G. JUNG, Daejeon, Korea, Republic of

A Model-Based Evaluation of Nausea and Vomiting Events for Additional Doses of Dulaglutide in Existing and Dulaglutide-Naive Patients with Type 2 Diabetes
LAI-SAN THAM, JEAN S.K. LIM, CHENG CAI TANG, HEIKE JUNG, MANIGE KONIG, LI SHEN LOO, Singapore, Singapore, Bad Homburg, Germany, Indianapolis, IN

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649-P  Impact of Early Initiation of Dulaglutide on A1C in Patients with Type 2 Diabetes  
MEREDITH HOOG, JOSEPH L. SMITH, MARIA YU, JENNIFER PELESHOK, REEMA MODY, MICHAEL GRABNER, Indianapolis, IN, Wilmington, DE, Toronto, ON, Canada

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651-P  Higher Doses of Dulaglutide Induce Weight Loss in Patients with Type 2 Diabetes (T2D) Regardless of Baseline BMI: Post-hoc Analysis of AWARD-11  
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VINCENT WILLEY, NITIN SHIVAPPA, JOSHUA NOONE, CAROLINE SWIFT, SIMO DU, YUREK M. PAPROCKI, HIANGKIAT (JASON) TAN, Wilmington, DE, Plainsboro, NJ, Watertown, MA

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VINCENT WILLEY, NITIN SHIVAPPA, CAROLINE SWIFT, JOSHUA NOONE, SIMO DU, YUREK M. PAPROCKI, HIANGKIAT (JASON) TAN, Wilmington, DE, Plainsboro, NJ, Watertown, MA

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655-P  Multitarget Engagement Effect of a Novel Long-Acting Glucagon/GIP/GLP-1 Triple Agonist (HM15211) in Animal Model of NASH  
JUNG KUK KIM, JONG SUK LEE, HYUNJOO KWON, EUNJIN PARK, JONGSOO LEE, SUNGMIN BAE, SANG HYUN LEE, IN YOUNG CHOI, Seoul, Korea, Republic of

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Potential Effect of a Novel Combination of GLP-1RA (efpeglenatide) and Long-Acting Glucagon Analog (HM15136) in Animal Models of Metabolic Disorders

JONG SUK LEE, JUNG KUK KIM, SEON MYEONG LEE, JAEHYUK CHOI, EUNJIN PARK, DAEJIN KIM, SUNGMIN BAE, SANG HYUN LEE, IN YOUNG CHOI, Seoul, Korea, Republic of

Sustained Glucagon Effect on Cardiovascular Renal and Metabolic Disorders Mediated by a Long-Acting Glucagon Analog, HM15136, in Animal Disease Models

JONG SUK LEE, SEON MYEONG LEE, JUNG KUK KIM, EUNJIN PARK, JONGSOO LEE, DAEJIN KIM, YOUNG HOON KIM, IN YOUNG CHOI, Seoul, Korea, Republic of

Cotadutide (MEDI0382) Is Well Tolerated at Doses Up to 600 µG with Blood Glucose-Lowering Activity in Japanese Patients with T2DM

MIICHIKO ASANO, AKIKO SEKIKAWA, MASATOSHI SUGENO, HITOSHI SHIMADA, DARREN ROBERTSON, LARS HANSEN, Tokyo, Japan, Osaka, Japan, Cambridge, United Kingdom, Gaithersburg, MD

Greater Proportions of Subjects Achieved Composite Endpoints with Once-Weekly Semaglutide vs. Comparators in SUSTAIN Trials

PETER GÆDE, ANDREI-MIRCEA CATARIG, KATHLEEN M. DUNGAN, CHARLOTTE HINDSBERGER, JENS ØLLGAARD, STEPHEN C. BAIN, Slagelse, Denmark, Columbus, OH, Søborg, Denmark, Orestad, Denmark, Swansea, United Kingdom

Reduced Glycemic Variability with Once-Weekly Semaglutide vs. Active Comparators in Post-hoc Analysis of the SUSTAIN Program

RICHARD E. PRATLEY, VANITA R. ARODA, CHARLOTTE HINDSBERGER, YASEMIN KOSE, MARGIT KALTOFT, ESTEBAN JODAR, Orlando, FL, Boston, MA, Søborg, Denmark, Madrid, Spain

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Achievement of Near-Normal HbA1c with Early Initiation of Oral Semaglutide: An Exploratory Subgroup Analysis of PIONEER 1

VANITA R. ARODA, LARS BARDTRUM, KLAUS KALLENBACH, ANNE MOELLER NIELSEN, JULIO ROSENSTOCK, ENRIQUE C. MORALES-VILLEGAS, MELANIE J. DAVIES, Boston, MA, Søborg, Denmark, Dallas, TX, Aguascalientes, Mexico, Leicester, United Kingdom

Incorporating Treatment Pauses, Dosing Flexibility, and Education to Support GLP-1RA Therapy Persistence

VANITA R. ARODA, ROBERT BAUER, ALUN L. DAVIES, ESKIL B. KREINER, PETER J. LIN, RICHARD E. PRATLEY, STEPHEN C. BAIN, Boston, MA, Søborg, Denmark, North York, ON, Canada, Orlando, FL, Swansea, United Kingdom

Efficacy and Safety of Once-Weekly Semaglutide 2.0 mg vs. 1.0 mg by Baseline HbA1c and BMI: SUSTAIN FORTE Subgroup Analyses

JOHN B. BUSE, PERNILLE AUERBACH, HARPREET S. BAJAJ, YASUSHI FUKUSHIMA, ILDIKO LINGVAY, STANISLAVA MACURA, ANETTE L. SØNDERGAARD, TSVELTALINA TANKOVA, NIKOLAOS TENTOLOURIS, JUAN P. FRIAS, Chapel Hill, NC, Brampton, ON, Canada, Tokyo, Japan, Dallas, TX, Søborg, Denmark, Sofia, Bulgaria, Athens, Greece, Los Angeles, CA

Greater Proportions of Subjects Achieved HbA1c <7% without Weight Gain, Hypoglycemia, or Moderate/Severe Gastrointestinal Adverse Events with Semaglutide vs. Comparators in the SUSTAIN 7-10 Trials

KAMLESH KHUNTI, CHARLOTTE HINDSBERGER, JACK LAWSON, BLAZ VRHNIJAK, CAREL LE ROUX, Leicester, United Kingdom, Søborg, Denmark, Dublin, Ireland

IBI362 (LY3305677), a Weekly-Dose Glucagon-Like Peptide-1/Glucagon Receptor Dual Agonist, in Subjects with Overweight or Obesity

HONGWEI JIANG, PEI AN, HELENA DENG, LI LI, LIQI FENG, QINGYANG MA, LEI QIAN, LINONG JI, Luoyang, China, Shanghai, China, Beijing, China
668-P  Body Weight Loss with Oral Semaglutide Is Predominantly Mediated by Effects Other than Gastrointestinal Adverse Events
JURIS J. MEIER, RIKKE AGESEN, LARS BARDTRUM, ALICE Y. CHENG, SRIKANTH DEENADAYALAN, EDUARD MONTANYA, RICHARD E. PRATLEY, Bochum, Germany, Søborg, Denmark, Mississauga, ON, Canada, Barcelona, Spain, Orlando, FL

669-P  Prandial Insulin Secretion in the VERIFY Study
PAIVI M. PALDANIUS, DAVID R. MATTHEWS, STEFANO DEL PRATO, Helsinki, Finland, Oxford, United Kingdom, Pisa, Italy

670-P  Time Spent in Glycemic Control after Initiating Treatment with Oral Semaglutide vs. Empagliflozin: An Exploratory Analysis of the PIONEER 2 Trial
JULIO ROSENSTOCK, BERTRAND CARIOU, ERIK CHRISTIANSEN, CHRISTIN L. HERTZ, EDUARD MONTANYA, MORTEN ABILDULD NIELSEN, FILIP K. KNOP, Dallas, TX, Nantes, France, Søborg, Denmark, Barcelona, Spain, Hellerup, Denmark

671-P  Liraglutide Possibly Prevents Progression of Dementia in Patients with Type 2 Diabetes
MAMI YOSHIDA, AI YOSHIDA, ERIKO OH, NAOMUNE YAMAMOTO, EUN SASAKI, SHIGERU YOSHIDA, NAKAAKI OHSAWA, MASAKAZU SUGINO, IKUO KOYAMA, Ibaraki, Japan, Otsu, Japan

672-P  The Real-World Observational Prospective Study of Health Outcomes with Dulaglutide and Liraglutide in Type 2 Diabetes Patients (TROPHIES): Twelve-Month Data Analysis
BRUNO GUERCI, FRANCESCO GIORGINO, LUIS-EMILIO GARCIA, KRISTINA BOYE, KIRSI NORRBACKA, HELENE SAPIN, ELKE HEITMANN, JEREMIE LEBREC, ANNE DIB, MARCO O. ORSINI FEDERICI, Vandoeuvre lès Nancy, France, Bari, Italy, Alcobendas, Spain, Greenwood, IN, Indianapolis, IN, Bad Homburg, Germany, Schriesheim, Germany, Neuilly-sur-Seine, France, Sesto Fiorentino, Italy

673-P  Effect of Once-Weekly Dulaglutide 3.0 and 4.5 mg in Patients with Different Baseline Renal Function: Post-hoc Analysis from the Award-11 Trial
LUIS-EMILIO GARCIA-PEREZ, JUAN M. MALDONADO, KARI T. RANTA, SOHINI RAHA, Alcobendas, Spain, San Juan, PR, Helsinki, Finland, Indianapolis, IN

674-P  Efficacy and Safety of Cotadutide, a Dual GLP-1 and Glucagon Receptor Agonist in Patients with T2DM and DKD
VICTORIA E. PARKER, THUONG HOANG, HEIKE SCHLICHTHAAR, FRASER W. GIBB, BARBARA WENZEL, MAXIMILIAN G. POSCH, YI-TING CHANG, MARCELLA PETRONE, LARS HANSEN, PHILIP AMBERY, HIDDLO J. HEERSPINK, RORY J. MCCCRIMMON, LUTZ JERMUTUS, Magdeburg, Germany, Edinburgh, United Kingdom, Munich, Germany, Berlin, Germany, Gaithersburg, MD, Cambridge, United Kingdom, Gothenburg, Sweden, Groningen, Netherlands, Dundee, United Kingdom

675-P  Effects of Liraglutide in T1D by Baseline Anthropometrics in ADJUNCT One and Two
THOMAS F. DEJGAARD, LARS BARDTRUM, ERIK CHRISTIANSEN, FREDERIK KREINER, STEN MADSBAD, SR., MATTHIAS G. VON HERRATH, BERNT JOHAN VON SCHOLTEN, CHANTAL MATHIEU, Gentofte, Denmark, Søborg, Copenhagen, Denmark, Leuven, Belgium

676-P  Semaglutide Achieves Better Metabolic and Weight Control than Other GLP-1 RA in Real Life after 12 Months of Follow-up
MARIA DOLORES GARCIA DE LUCAS, LUIS MIGUEL PÉREZ-BELMONT, BEATRIZ AVILES, ANA ISABEL JIMENEZ, JOSE MARIA FERNANDEZ, FRANCISCO RIVAS RUIZ, Malaga, Spain, Puerto Real, Spain, Cangas del Narcea, Spain, Marbella, Spain
677-P Remission of Type 2 Diabetes following Intensive Treatment with Insulin Glargine, Lixisenatide, Metformin, and Lifestyle Approaches: Results of a Multicenter Randomized Controlled Trial
NATALIA MCINNES, STEPHANIE HALL, HEATHER A. LOCHNAN, STEWART B. HARRIS, ZUBIN PUNTHAKEE, RONALD J. SIGAL, IRENE HRAMIAK, MOHAMMED AZHARUDDIN, JOANNE F. LIUTKUS, JEAN-FRANÇOIS YALE, FARAH SULTAN, ADA C. SMITH, ROSE E. OTTO, DIANA SHERIFALI, YAN YUN LIU, HERTZEL C. GERSTEIN, REMIT-IGLARLIXI COLLABORATIVE GROUP, Ottawa, ON, Canada, Calgary, AB, Canada, London, ON, Canada, Oakville, ON, Canada, Cambridge, ON, Canada, Montreal, QC, Canada, Mississauga, ON, Canada, Hamilton, ON, Canada

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679-P The Novel GIP, GLP-1, and Glucagon Triple Receptor Agonist LY3437943 Exhibits Robust Efficacy in Preclinical Models of Obesity and Diabetes
TAMER COSKUN, JULIE S. MOYERS, WILLIAM C. ROELL, LIBBEY O’FARRELL, AJIT REGMI, XIAOPING RUAN, AARON D. SHOWALTER, KYLE SLOOP, DAVID B. WAINScott, FRANCIS S. WILLARD, JAMES V. FICORILLI, OBER CABRERA, SHWETA URVA, FARIBA NOROUZIYAN COOPER, LILI GUO, JORGE ALSINA-FERNANDEZ, HONGCHANG QU, Indianapolis, IN

680-P Once-Weekly Dulaglutide 3 mg and 4.5 mg Gastrointestinal Tolerability: Post-hoc Analysis of Incidence and Prevalence in Award-11
JOANNA VAN, JUAN P. FRIAS, ENZO BONORA, SOHINI RAHA, HEIKE JUNG, DAVID COX, MANIGE KONIG, JENNIFER PELESHOK, Tustin, CA, Los Angeles, CA, Verona, Italy, Indianapolis, IN, Bad Homburg, Germany

681-P Effect of 3-Month Therapy with SGLT2 Inhibitors and GLP-1 Agonists on Ambulatory Blood Pressure in Patients with Type 2 Diabetes Mellitus
ATHANASIA PAPAZAFIROPOULOU, STYLIANI S. PAPANTONIOU, MARIA RALLATOU, ANDREAS J. MELIDONIS, STAVROS ANTONOPOULOS, Piraeus, Greece

682-P Novel Dual Glucagon and Glucagon-Like Peptide-1 Receptor Agonist LY3305677 Improves Glucose Control, Reduces Body Weight, and Increases Energy Expenditure in Mice
YANYUN CHEN, ADAM MEZO, TAMER COSKUN, MIN SONG, WILLIAM C. ROELL, KRISTER B. BOKVIST, JULIE S. MOYERS, MELISSA K. THOMAS, FRANCISCO VALENZUELA, HONGCHANG QU, Indianapolis, IN

683-P Real-World Evaluation of Once-Weekly Semaglutide (Sema OW) in Patients Newly Initiating GLP-1 Agonist Therapy
NITIN SHIVAPPA, CAROLINE SWIFT, JOSHUA NOONE, SIMO DU, YUREK M. PAPROCKI, HIANGKIAT (JASON) TAN, VINCENT WILLEY, Plainsboro, NJ, Watertown, MA, Wilmington, DE

684-P Trends in Type 2 Diabetes Pharmacotherapy and Evolving Use of the Newer Agents
JAY P. BAE, DONGJU LIU, CHANADDA CHINHTHAMMIT, ZBIGNIEW A. KADZIOLA, KRISTINA BOYE, KIEREN J. MATHER, Indianapolis, IN, Wien, Austria, Greenwood, IN

685-P Medication Use Pattern in Type 2 Diabetes Patients: Commercial and Medicare Data
JAY P. BAE, DONGJU LIU, CHANADDA CHINHTHAMMIT, ZBIGNIEW A. KADZIOLA, KRISTINA BOYE, KIEREN J. MATHER, Indianapolis, IN, Wien, Austria, Greenwood, IN

686-P The Association of British Clinical Diabetologists (ABCD) United Kingdom Nationwide Semaglutide Audit
THOMAS S.J. CRABTREE, ALEX BICKERTON, DEVESH K. SENNik, ANURITA ROHILLA, SIVA SIVAPPRIYAN, DENNIS BARNES, MELISSA L. CULL, Ian W. GALLEN, KAREN ADAMSON, ROBERT E. RYDER, Yeovil, United Kingdom, Harlow, United Kingdom, Essex, United Kingdom, Maidstone, United Kingdom, Birmingham, United Kingdom, Reading, United Kingdom, Livingston, United Kingdom

687-P β-Cell Function and Glycemic Response to Dulaglutide in Patients with Type 2 Diabetes
MASASHI HASEBE, SATOSHI YOSHIJI, YORIHIRO IWASAKI, SADAHITO KIMURA, YOHEI SENO, YAMATO KEIDAI, TAKUYA HARAGUCHI, KANAKO IWASAKI, YOSHIHARU WADA, SACHIKO HONJO, JUN FUJIKAWA, AKIHIRO HAMASAKI, Osaka, Japan
**688-P Effect of Probenecid and Cyclosporin on the Pharmacokinetics of SNAC in Healthy Subjects**

TANJA K. THORNING, ASTRID BREITSCHAFT, THOMAS BO JENSEN, KLAUS KALLENBACH, TINE A. BÆKDAL, Berlin, Germany, Søborg, Denmark

**689-P Association of Preoperative Glycemic Response to GLP-1 Receptor Agonists (GLP-1RA) and Outcomes of Bariatric Surgery**

DANIEL AMUSIN, KRISTINE KUCHTA, TATUM EWING, LYNN TUCKER, MICHELLE CAMPBELL, MICHAEL UJIKI, LIANA K. BILLINGS, Evanston, IL, Ann Arbor, MI, Skokie, IL

**690-P Semaglutide in Patients with Type 2 Diabetes: Real-World Data from Spain**

JERZY J. CÁRDENAS-SALAS, ROBERTO SIERRA, BOGDANA LUIZA LUCA, BEGONA SANCHEZ, NAIARA MODROÑO, CARLOS CASADO, NANCY M. SANCHEZ, EVA CRUCES, CLOTILDE VAZQUEZ, Madrid, Spain, Valdemoro, Spain

**CLINICAL THERAPEUTICS/NEW TECHNOLOGY—INSULIN DELIVERY SYSTEMS**

**691-P Closed-Loop Glycemic Control with the Insulin-Only Bionic Pancreas for the Management of Type 2 Diabetes**

JORDAN SHEROD, COURTNEY A. BALLIRO, MALLORY HILLARD, RAJENDRANATH SELAGAMSETTY, FIRAS EL-KHATIB, EDWARD DAMIANO, STEVEN J. RUSSELL, Boston, MA

**692-P Preclinical Study of a Combined Insulin Infusion and Glucose Sensing Device (Duo)**

GINA ZHANG, EVAN ANSELMO, LYNETTE TO, SARNATH CHATTARAJ, Northridge, CA

**693-P Daily Meal Size Variation Does Not Affect Glucose Control in Adult T1D Patients Under Closed-Loop Equipped with DBLG1 System**

PAUL GIMENEZ, SYLVAIN LACHAL, YOUSRA TOURKI, SYLVIA FRANC, CORALIE AMADOU, ALFRED PENFORNIS, GUILLAUME CHARPENTIER, PIERRE Y. BENHAMOU, Corbeil Essonnes, France, Grenoble, France

**694-P Swimming with Hybrid Closed-Loop: Encouraging Data from Three Swimmers in the Omnipod 5 Trial**

MICHAEL S. HUGHES, RYAN S. KINGMAN, RAYHAN LAL, BRUCE A. BUCKINGHAM, DESSI P. ZAHARIEVA, Stanford, CA, Mountain View, CA, Palo Alto, CA

**695-P Comparison of Inpatient Glycemic Control in Hybrid Closed-Loop vs. Sensor-Augmented Insulin Delivery Systems**

YUMIKO TSUSHIMA, ANIRA IQBAL, JAMES F. BENA, M. CECILIA LANSANG, Cleveland, OH

**696-P Insulin Pump Infusion Set Failure (IPISF) Management: T1D Exchange Survey**

JOHN H. WILCOX, JOHN C. GRAY, NICHOLAS R. COOPER, LUIS E. BLANCO, RYAN KELLEHER, LISANNE M. VANENGELEN, RAYHAN LAL, Memphis, TN, Stanford, CA

**697-P Insulin Pump Interoperability of the Diabeloop DBLG1 System**

ALICE ADENIS, LIM-SYLVIE POU, HECTOR M. ROMERO-UGALDE, YOUSRA TOURKI, SYLVIA FRANC, GUILLAUME CHARPENTIER, PIERRE Y. BENHAMOU, MAEVA DORON, ERIK HUNEKER, Corbeil Essonnes, France, Grenoble, France, Puteaux, France

**698-P Glycemic Improvement in 11,273 Adults with Type 1 Diabetes (T1D) Using the Omnipod Insulin Management System over First 90 Days of Use**

GRAZIA ALEPPO, DANIEL DESALVO, FELIPE LAUAND, SR., LAUREN M. HUYETT, JAY JANTZ, ALBERT CHANG, TODD VENNEAU, TRANG T. LY, Chicago, IL, Houston, TX, Paris, France, San Diego, CA, Acton, MA, Canada, Oakville, ON, Canada
Prerandomization Factors Associated with Time-in-Target Glucose Range with Hybrid Closed-Loop Use in a Six-Month Randomized Controlled Trial in Adults with Type 1 Diabetes
ALICIA JENKINS, ANDRZEJ S. JANUSZEWSKI, ADRIENNE KIRBY, SYBIL A. MCAULEY, MELISSA H. LEE, BARBORA PALDUS, SARA VOGRIN, MARTIN DE BOCK, MORTON BURT, NEALE COHEN, PETER G. COLMAN, ELIZABETH A. DAVIS, JANE HOLMES-WALKER, ANTHONY C. KEECH, RICHARD MACISAAC, CATRIONA M. SIMS, VIJAYA SUNDARARAJAN, STEVEN TRAWLEY, GLENN M. WARD, TIM JONES, DAVID N. O’NEAL, JDRF AUSTRALIA ADULT HYBRID CLOSED LOOP TRIAL, Sydney, Australia, Camperdown, Australia, Christchurch, New Zealand, Adelaide, Australia, Melbourne, Australia, Parkville, Australia, Perth, Australia, Westmead, Australia, Fitzroy, Australia

Glucotab-Based Basal-Bolus Insulin Therapy for Inpatient Glycemic Control Using Insulin Degludec
JULIA K. MADER, PETRA M. BAUMANN, FELIX ABERER, DANIEL A. HOCHFELLNER, AMRA SIMIC, LIRIE BYTYQI, TINA POETTLER, BERNHARD HOELL, ASTRID FAHRLEITNER-PAMMER, THOMAS PIEBER, PETER BECK, Graz, Austria

Feasibility of an Investigational Extended Wear Infusion Set for Insulin Pump Therapy (IPT) in People with Type 1 Diabetes Mellitus
DAVID N. O’NEAL, NISHA VENKATESH, KATRIN BROWN, ELIF I. EKINCI, SPIROS FOURLANOS, JASMIN R. KASTNER, RICHARD MACISAAC, DOUGLAS B. MUCHMORE, Fitzroy, Australia, Melbourne, Australia, Australia, Irvine, CA, La Jolla, CA

Glycemic Improvement in 5,094 Pediatric Patients with Type 1 Diabetes (T1D) Using the Omnipod Insulin Management System over First 90 Days of Use
DANIEL DESALVO, GRAZIA ALEPPO, FELIPE LAUAND, SR., LAUREN M. HUYETT, JAY JANTZ, ALBERT CHANG, TODD VIENNEAU, TRANG T. LY, Houston, TX, Chicago, IL, Paris, France, San Diego, CA, Acton, MA, Canada, Oakville, ON, Canada

Randomized Crossover Comparison of Automated Insulin Delivery vs. Conventional Therapy with Scheduled Stress Challenges
RAVINDER JEET KAUR, SUNIL DESHPANDE, JORDAN E. PINSKER, SHELBY K. MCCRARY-SPITZER, DONNA DESJARDINS, MEI MEI CHURCH, WALTER K. KREMERS, FRANCIS J. DOYLE, III, EYAL DASSAU, YOGISH C. KUDVA, Rochester, MN, Cambridge, MA, Santa Barbara, CA

Adults with Type 1 Diabetes Report Improved Quality of Life with the Omnipod 5 Automated Insulin Delivery System
CAROL J. LEVY, WILLIAM H. POLONSKY, KOREY K. HOOD, SARAH A. MACLEISH, LAUREN M. HUYETT, TODD VIENNEAU, TRANG T. LY, New York, NY, San Diego, CA, Stanford, CA, Cleveland, OH, Oakville, ON, Canada, Acton, MA

Increasing the Longevity of an Insulin Pump by Removal of Phenolic Excipients within the Cannula through Electrooxidation
SUMITA PENNATHUR, LINGYUN ZHO, FARNAZ LORESTANI, ALEXANDER EDEN, DAVID HUBER, Santa Barbara, CA

Robust Glycemic Outcomes after MiniMed Advanced Hybrid Closed-Loop (AHCL) System Use in the Pivotal Trial Regardless of Previous Therapy
JOHN SHIN, XIAOXIAO CHEN, MARGARET LIU, SUIYING HUANG, TONI L. CORDERO, ANDREW S. RHINEHART, ROBERT VIGERSKY, Northridge, CA

Use of Advanced Insulin Delivery Systems Is Not Associated with Fear of Hypoglycemia or Diabetes Treatment Satisfaction in Children and Their Caregivers with Type 1 Diabetes
FATEMA ABDULHUSSEIN, JENISE C. WONG, San Francisco, CA

Complexity of Mealtime Insulin Dosing in Free-Living People with T1D: Novel Study with Varied Meal Macronutrient Content
STEPHANIE S. EDWARDS, WENJIE WANG, ELENA TOSCHI, ASTRID ATAKOV-CASTILLO, RACHEL DEWAR, GARRY M. STEIL, HOWARD WOLPERT, Cambridge, MA, Indianapolis, IN, Boston, MA
709-P Improved Satisfaction and Perceived Usability with the Omnipod 5 Automated Insulin Delivery System Compared with Prior Therapy
SARAH A. MACLEISH, WILLIAM H. POLONSKY, KOREY K. HOOD, CAROL J. LEVY, LAUREN M. HUYETT, TODD VIENNEAU, TRANG T. LY, Cleveland, OH, San Diego, CA, Stanford, CA, New York, NY, Oakville, ON, Canada, Acton, MA

710-P Real-World Evaluation of Glycemic Outcomes by Prior Therapy for People with Type 1 and Type 2 Diabetes Onboarding to Control-IQ Technology
JOHN W. MORBERG, HARSIMRAN SINGH, MOLLY MCELWEE-MALLOY, STEPHANIE HABIF, ALEXANDRA CONSTANTIN, San Diego, CA

711-P Glycemic Outcomes for Adult Type 1 Diabetes (T1D) with and without DKA Treated with an Electronic Glycemic Management System
JORDAN MESSLER, PRIYATHAMA VELLANKI, BRUCE W. BODE, ROBERT BOOTH, JOHN CLARKE, Largo, FL, Atlanta, GA, Greenville, SC

712-P International Consensus on the Ethics of Open-Source Automated Insulin Delivery
KATARINA BRAUNE, SYED SUFYAN HUSSAIN, MUIREANN QUIGLEY, LENKA PETRUZELKOVA, GARY SCHEINER, PER WINTERDIJK, SIGNE SCHMIDT, LINDA H. RAIMOND, KOREY K. HOOD, MICHAEL RIDDLE, TIMOTHY C. SKINNER, KLEMENS RAILE, CAROLYN JOHNSTON, RAYHAN LAL, Berlin, Germany, London, United Kingdom, Birmingham, United Kingdom, Prague, Czech Republic, Wynnewood, PA, Rotterdam, Netherlands, Gentofte, Denmark, Stanford, CA, Toronto, ON, Canada, Bendigo, Australia, Melbourne, Australia

713-P Glycemic Outcomes of New Inpen Smart Insulin Pen Users Who Received Virtual Onboarding Support
MADISON SMITH, GLEN HEUNG YONG IM, ANGELA GAETANO, SNEHA THANASEKARAN, JANICE MACLEOD, Northridge, CA

714-P Assessment of the Patient Transition Experience to Hybrid Closed-Loop Insulin Pump Therapy
ASHINI DISSANAYAKE, ERIC CHOW, ADAM WHITE, JORDANNA E. KAPELUTO, JESSICA MACKENZIE-FEDER, BENJAMIN SCHROEDER, MONIKA PAWLOWSKA, Vancouver, BC, Canada

715-P A Randomized, Controlled Trial of Transition from Insulin Pump to Multiple Daily Injections Using Insulin Degludec
VIRAL SHAH, HALIS K. AKTURK, HAL JOSEPH, NICOLE SCHNEIDER, JANET K. SNELL-BERGEON, Aurora, CO

716-P Transition from Multiple Daily Injections (MDI) to Omnipod 5 Automated Insulin Delivery System Improves A1C in Type 1 Diabetes (T1D)
VIRAL SHAH, AMY B. CRIEGO, ANDERS L. CARLSON, ANUJ BHARGAVA, BRUCE W. BODE, SUE A. BROWN, GREGORY P. FORLENZA, CAROL J. LEVY, SANJEEV N. MEHTA, LORI M. LAFFEL, GRAZIA ALEPPO, BRUCE A. BUCKINGHAM, DANIEL DESALVO, IRL B. HIRSCH, SARAH A. MACLEISH, JORDAN E. PINSKER, TRANG T. LY, Aurora, CO, Minneapolis, MN, West Des Moines, IA, Atlanta, GA, Charlottesville, VA, New York, NY, Boston, MA, Chicago, IL, Palo Alto, CA, Houston, TX, Seattle, WA, Cleveland, OH, Santa Barbara, CA, Acton, MA

717-P Real-World, Patient-Reported Data on Training and Use of 670G Hybrid Closed-Loop (HCL) among Children and Adults with Type 1 Diabetes (T1D)
COLLEEN BAUZA, STEPHANIE DUBOSE, ALANDRA VERDEJO, ROY BECK, RICHARD M. BERGENSTAL, JENNIFER SHERR, Tampa, FL, Minneapolis, MN, New Haven, CT

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718-P Long-Term Safety of Intranasal Insulin (INI) in Insulin-Dependent Type 2 Diabetes (T2DM-IDDM): A Safety Substudy of Memory Advancement by Intranasal Insulin in Type 2 Diabetes (MemAID) Trial
LAURA APONTE BECERRA, BRAHYAN GALINDO MENDEZ, FAIZAN KHAN, CHRISTOS MANTZOROS, PETER NOVAK, VASILEIOS LIOUTAS, LONG H. NGO, MEMAID INVESTIGATORS (J. TREVINO), VERA NOVAK, Bronx, NY, Jamaica Plain, MA, Brookline, MA, Boston, MA
719-P Caloric Intake, Appetite, and Body Composition Outcomes of Long-Term Intranasal Insulin (INI) Administration: A Substudy of the Memory Advancement by INI in Type 2 Diabetes (MemAID) Study
LAURA APONTE BECERRA, FAIZAN KHAN, LONG H. NGO, VERA NOVAK, MEMAID COLLABORATORS (A. GAVRIELI, J. UPADHYAY), CHRISTOS MANTZOROS, Brookline, MA, Boston, MA

720-P Using IV Insulin (IVI) Data to Accurately Calculate Prandial Insulin (PI) Requirement
JING H. CHAO, IRL B. HIRSCH, Seattle, WA

721-P Efficacy and Safety of Basal-First Titration Order in Patients with Type 2 Diabetes (T2D) Receiving Short-Term Intensive Insulin Therapy (SIT)
LIXIN GUO, YIMING MU, HAILONG WAN, JUNFEN WANG, BINHUA XU, GUOPING WANG, CHENGXIA JIANG, LI LIANG, WEI FENG, JINGCHENG LIU, XIA ZHANG, NAN CUI, HUIQIU YIN, Beijing, China, Panjin, China, Shijiazhuang, China, Harbin, China, Baotou, China, Yibin, China, Shenyang, China, Shanghai, China

722-P Inhaled Insulin Improves Daytime Time-in-Range in People with Type 2 Diabetes
LANE DESBOROUGH, PHILIP LEVIN, LEE A. BROMBERGER, Thousand Oaks, CA, Baltimore, MD

723-P Efficacy and Safety of Once-Daily Fixed-Ratio Coformulation of Degludec-Aspart plus Empa-Lina 25/5 FDC in Post-Discharge COVID-19 Pneumonitis T2DM Patients Treated with Dexamethasone during Inpatient Stay
SUPRATIK BHATTACHARYYA, Kolkata, India

724-P Factors Associated with Glycemic Control in People with Type 1 Diabetes (PWT1D) Switched to Once Daily (QD) Insulin Glargine (Gla) 300 U/ml (Gla-300): The European REALI Pooled Database
DIRK MÜLLER-WIELAND, PIERRE GOURDY, RICCARDO C. BONADONNA, NICK FREEMANTLE, GREGORY BIGOT, CORINNE JAMOUL, ALICE CIOCCA, MIREILLE BONNEMAIRE, DIDAC MAURICIO, Aachen, Germany, Toulouse, France, Parma, Italy, London, United Kingdom, Levallois-Perret, France, Louvain-la-Neuve, Belgium, Paris, France, Barcelona, Spain

725-P Low Fasting Glucose and Insulin Deficiency Were Related with Superiority of Insulin Degludec/Aspart Compared with Basal Insulin in Patients with Type 2 Diabetes
HAN NA JANG, YE SEUL YANG, TAE JUNG OH, BO KYUNG KOO, SEONGOK LEE, HYE SEUNG JUNG, Seongnam, Korea, Republic of, Seoul, Korea, Republic of

726-P Glucose Control Using Fast-Acting Insulin Aspart in a Real-World Setting: A One-Year Multicenter Study in People with Type 1 Diabetes Using Continuous Glucose Monitoring
LISA BILLION, SARA CHARLEER, LAURENS VERBRAEKEN, MIRA STERCKX, KATO VANGELABBEEK, NATHALIE DE BLOCK, CHARLIEN JANSSEN, NANCY BOLSENS, EVELINE L. DIRINCK, FRIDA W. PEIFFER, KRISTOF P. VAN DESSEL, CHANTAL MATHIEU, PIETER GILLARD, CHRISTOPHE DE BLOCK, Leuven, Belgium, Wilrijk, Belgium, Edegem, Belgium

727-P The Association between Missed Basal Insulin Injections and Glycemic Control in Adults with Type 1 Diabetes Mellitus
NEDA RAJAMAND EKBERG, NIELS V. HARTVIG, ANNE KAAS, JONAS MOLLER, ANN-CHARLOTTE M. MÅRDBY, PETER ADOLFSSON, Stockholm, Sweden, Söborg, Denmark, Bagsværd, Denmark, Malmö, Sweden, Gothenburg, Sweden

728-P Mylan Insulin Aspart (MYL-1601D) is Bioequivalent to Novolog (U.S.-Licensed Insulin Aspart) and NovoRapid (EU-Approved Insulin Aspart)
YARON RAITER, ULRIKE HÖVELMANN, ANOOP CHULLIKANA, MARK LIU, CHARLES M. DONNELLY, TRACEY LAWRENCE, NILANJAN SENGUPTA, GOPINATH RANGANNA, ABHIJIT BARVE, Gothenburg, Sweden, Neuss, Germany, Morgantown, WV, Bangalore, India, Bengaluru, India, Canonsburg, PA

729-P Efficacy and Safety of Mylan Insulin Glargine Products (MYL-1501D) from Two Manufacturing Processes (Process V and Process VI) in Combination with Insulin Lispro in Subjects with Type 1 Diabetes Mellitus
YARON RAITER, THOMAS BLEVINS, BIN SUN, ANOOP CHULLIKANA, GOPINATH RANGANNA, ABHIJIT BARVE, Amstelveen, Netherlands, Austin, TX, Morgantown, WV, Bangalore, India, Bengaluru, India, Canonsburg, PA
730-P Basal Insulin Regimen vs. Twice-Daily Premix Insulin Regimen after Short-Term Intensive Insulin Therapy (SIT) in Patients with Type 2 Diabetes (T2D): A Multicenter, Open-Label Randomized Controlled Trial
YIMING MU, LIXIN GUO, HAILONG WAN, JUNFEN WANG, BINGHAO WANG, GUOPING WANG, CHENGXIA JIANG, LI LIANG, WEI FENG, JINCHENG LIU, XIA ZHANG, NAN CUI, HUIQIU YIN, BEIJING, China, Panjin, China, Shijiazhuang, China, Harbin, China, Baotou, China, Yibin, China, Shenyang, China, Shanghai, China

731-P CGM-Based Measurements for Once-Weekly Insulin Icodec vs. Once-Daily Insulin Glargine U100 in Insulin-Treated Patients with T2D: A Post-hoc Analysis
HARPREET S. BAJAJ, RIKKE BECK BANG, AMOOLYA GOWDA, METTE M. KOEFOED, PETER A. SENIOR, RICHARD M. BERGENSTAL, Brampton, ON, Canada, Søborg, Denmark, Edmonton, AB, Canada, Minneapolis, MN

732-P CGM-Derived Parameters for Once-Weekly Insulin Icodec vs. Once-Daily Insulin Glargine U100 in Insulin-Naïve Patients with T2D
ILDIKO LINGVAY, RIKKE BECK BANG, METTE M. KOEFOED, JULIA K. MADER, JEREMY PETTUS, LILY WAGNER, CHANTAL MATHIEU, Dallas, TX, Søborg, Denmark, Graz, Austria, San Diego, CA, Leuven, Belgium

733-P A Randomized Controlled Trial Comparing Insulin Degludec U100 and Glargine U100 for the Inpatient Management of Medicine and Surgery Patients with Type 2 Diabetes: Degludec Hospital Trial
RODOLFO J. GALINDO, FRANCISCO J. PASQUEL, PRIYATHAMA VELLANKI, RADICA Z. ALICIC, DAVID W. LAM, MAYA FAYFMAN, ALEXANDRA MIGDAL, MARIA A. URRUTIA, GEORGIA DAVIS, SAUMETH CARDONA, KARLA W. ZAMUDIO, BONNIE S. ALBURY, MIREYA C. PEREZ-GUZMAN, LIMIN PENG, GUILLERMO E. UMPIERREZ, Spokane, WA, New York, NY, Atlanta, GA

734-P Cellular Internalization and Localization of Once-Weekly Basal Insulin Fc (BIF)
CATHERINE VOLK, CHEN ZHANG, JULIE S. MOYERS, Indianapolis, IN

735-P Effects of Insulin Degludec in Patients with Diabetes Using Continuous Glucose Monitoring: A Scoping Review
CHAOFAN WANG, WEN XU, XUBIN YANG, JINHUA YAN, DAIZHI YANG, BIN YAO, JIANPING WENG, Guangzhou, China, Hefei, China

736-P Proposed Biosimilar Gan & Lee Insulin Lispro (GL-LIS) Shows Pharmacokinetic (PK) and Pharmacodynamic (PD) Bioequivalence (BE) vs. U.S.- and EU-Licensed Insulin Lispro (LIS)
ERIC ZIJLSTRA, TIM HEISE, MARCEL ERMER, JIA LU, MICHAEL G. WILSON, LEONA PLUM-MOERSCHEL, Neuss, Germany, Mainz, Germany, Bridgewater, NJ, Indianapolis, IN

737-P Efficacy and Safety of Insulin Glargine 300 U/mL (Glia-300) in People with Type 2 Diabetes Mellitus (T2DM) Uncontrolled on Basal Insulins (BI): ARTEMIS-DM Study
BIPIN SETHI, KHALID ALRUBEAAN, MUSTAFA UNUBOL, MARIA AILEEN N. MABUNAY, MUBARAK NAQVI, BAPTISTE BERTHOU, VALERIE PILORGET, GUSTAVO FRECHTEL, Hyderabad, India, Riyadh, Saudi Arabia, Aydin, Turkey, Singapore, Singapore, Mumbai, India, Chilly-Mazarin, France, Paris, France, Buenos Aires, Argentina

738-P Proposed Biosimilar Gan & Lee Insulin Aspart (GL-ASP) Shows Pharmacokinetic (PK) and Pharmacodynamic (PD) Bioequivalence (BE) to U.S.- and EU-Licensed Insulin Aspart (ASP)
LEONA PLUM-MOERSCHEL, ERNESTOS H. UHRMACHER, ERIC ZIJLSTRA, JIA LU, MICHAEL G. WILSON, MATTHEW E. BARTON, TIM HEISE, Mainz, Germany, Neuss, Germany, Bridgewater, NJ, Indianapolis, IN, Raleigh, NC

739-P WITHDRAWN

740-P Proposed Biosimilar Gan & Lee Insulin Glargine (GL-GLA) Shows Pharmacokinetic (PK) and Pharmacodynamic (PD) Bioequivalence (BE) to U.S.- and EU-Licensed Insulin Glargine (IG)
TIM HEISE, LEONA PLUM-MOERSCHEL, GRIT ANDERSEN, JIA LU, MICHAEL G. WILSON, ERIC ZIJLSTRA, Neuss, Germany, Mainz, Germany, Bridgewater, NJ, Indianapolis, IN
741-P  Efficacy and Safety of MYL-1601D (Mylan’s Insulin Aspart) Compared with Novolog (Novo Nordisk’s Insulin Aspart) in Patients with Type 1 Diabetes (T1DM) after 24 Weeks
YARON RAITER, THOMAS BLEVINS, BIN SUN, CHARLES M. DONNELLY, ANITA U. RAO, ROXANN SHAPIRO, LAXMIKANT VASHISHTA, GOPINATH RANGANNA, ANoop CHULLIKANA, ABHIJIT BARVE, Amstelveen, Netherlands, Austin, TX, Morgantown, WV, Bengaluru, India, Bangalore, India, Canonsburg, PA

742-P  Phase 1 Study of Safety, Tolerability, PK, and PD of Once-Weekly Basal Insulin Fc (BIF) in Japanese Patients with T2DM
KENJI OHWAKI, KENICHI FURIHATA, RISA NASU, TOMONORI OURA, MAKOTO IMORI, Kobe, Japan, Hachioji, Japan

743-P  Real-World Effectiveness and Safety of Insulin Glargine 300 U/mL (Gla-300) in Insulin-Naïve People with Type 2 Diabetes (T2DM) and Renal Impairment (RI): A Subgroup Analysis of the ATOS Study
AMIR TIROSH, NIAZ KHAN, HERNANDO VARGAS-URICOECHEA, MARIA AILEEN N. MABUNAY, MATHIEU COUDERT, VALERIE PILORET, GAGIK R. GALSTYAN, Tel-Hashomer, Israel, Al Ain, United Arab Emirates, Popayán-Cauca, Colombia, Singapore, Singapore, Paris, France, Moscow, Russian Federation

744-P  LIVE India: A Post-hoc Subanalysis of FINE-ASIA and GOAL Registries to Measure Effectiveness and Safety of Glargine 100 U/mL (Gla-100) in Insulin-Naïve Indian Adults with T2DM
VAISHALI C. DESHMUKH, TIRTHANKAR CHAUDHURY, MANOJ CHADHA, MANOJ S. CHAWLA, SAGARIKA MUKHERJEE, SHAILESH U. PITALE, DEBASHIS BASU, ROMIKA GHOSH, ARUN NAIR, Senthilnathan MOHANASUNDARAM, CHIRAG TRIVEDI, VAIBHAV SALVI, PRITESH R. NARVEKAR, SHAILAJA KALE, SANTOSH RAMAKRISHNAN, GHANSHYAM GOYAL, Pune, India, Mumbai, India, Nagpur, India, Kolkata, India, Hyderabad, India

745-P  Effectiveness and Safety of Insulin Glargine 300 U/mL (Gla-300) in Insulin-Naïve People with Type 2 Diabetes (T2DM): ATOS Study Subgroup Analysis by Baseline (BL) HbA1c
NIAZ KHAN, AMIR TIROSH, HERNANDO VARGAS-URICOECHEA, MARIA AILEEN N. MABUNAY, MATHIEU COUDERT, VALERIE PILORET, GAGIK R. GALSTYAN, Tel-Hashomer, Israel, Al Ain, United Arab Emirates, Popayán-Cauca, Colombia, Singapore, Singapore, Paris, France, Moscow, Russian Federation

CLINICAL THERAPEUTICS/NEW TECHNOLOGY—OTHER THERAPEUTIC AGENTS

746-P  Advancing Therapy in Uncontrolled Basal Insulin-Treated Type 2 Diabetes (T2D): Nocturnal Hypoglycemia in the SoliMix Trial
RORY J. MCCRIMMON, ALICE Y. CHENG, VIVIAN FONSECA, RICARDO CHOZA, THAMER ALESSA, AGUSTINA ALVAREZ, ELISABETH SOUHAMI, ANDERS H. BOSS, PASCALINE PICARD, JULIO ROSENSTOCK, Dundee, United Kingdom, Toronto, ON, Canada, New Orleans, LA, Mexico City, Mexico, Safat, Kuwait, Buenos Aires, Argentina, Paris, France, Bridgewater, NJ, Levallois-Perret, France, Dallas, TX

747-P  Improved Treatment Perceptions with iGlarLixi vs. Premix Insulin in Type 2 Diabetes (T2D) Uncontrolled on Basal Insulin (BI) + Oral Antihyperglycemic Drugs (OADs): Patient-Reported Outcomes (PROs) of the SoliMix Trial
WILLIAM H. POLONSKY, RORY J. MCCRIMMON, KATHERINE H. WHITMIRE, FRANCESCO GIORGINO, JUNG-FU CHEN, CHARLIE NICHOLS, LISHEVA LEW, AGUSTINA ALVAREZ, MATHIEU COUDERT, JULIO ROSENSTOCK, San Diego, CA, Dundee, United Kingdom, Las Vegas, NV, Bari, Italy, Kaohsiung, Taiwan, Reading, United Kingdom, Buenos Aires, Argentina, Chilly-Mazarin, France, Dallas, TX

748-P  Advancing Therapy in Uncontrolled Basal Insulin (BI)-Treated Type 2 Diabetes (T2D): Subanalysis of the SoliMix Trial in Participants in Europe
ALICE Y. CHENG, RORY J. MCCRIMMON, VIVIAN FONSECA, CARLOS TRESCOLI, MARTIN HALUZIK, JOCHEN SEUFERT, AGUSTINA ALVAREZ, ELISABETH SOUHAMI, PASCALINE PICARD, MIREILLE BONNEMAIRE, JULIO ROSENSTOCK, Toronto, ON, Canada, Dundee, United Kingdom, New Orleans, LA, Alzira, Spain, Prague, Czech Republic, Freiburg, Germany, Buenos Aires, Argentina, Paris, France, Levallois-Perret, France, Dallas, TX
749-P Advancing Therapy in Uncontrolled Basal Insulin (BI)-Treated Type 2 Diabetes (T2D): Subanalysis of the SoliMix Trial Outside Europe
VIVIAN FONSECA, JULIO ROSENSTOCK, ALICE Y. CHENG, RIFAT EMRAL, LEOBARDO SAUQUE-REYNA, VISWANATHAN MOHAN, SAUD N. AL SIFRI, AGUSTINA ALVAREZ, KHIER DJABALLAH, PASCALINE PICARD, ELISABETH SOUHAMI, RORY J. MCCRIMMON, New Orleans, LA, Dallas, TX, Toronto, ON, Canada, Ankara, Turkey, Cuernavaca, Mexico, Chennai, India, Taif, Saudi Arabia, Buenos Aires, Argentina, Levallois-Perret, France, Paris, France, Dundee, United Kingdom

750-P Afinin HbA1c Dx Point-of-Care Test Is Accurate to Diagnose Diabetes in CLIA-Waived Settings
MARTA CLENDENIN, KENNETH KUPFER, KYLE S. FORTNER, RANDIE R. LITTLE, TIMOTHY S. BAILEY, KRISTIN N. CASTORINO, DOUGLAS S. DENHAM, EDWARD KERWIN, MARC MICKIEWICZ, AMY J. NATION, RICHARD C. SAN GEORGE, San Diego, CA, Columbia, MO, Escondido, CA, Santa Barbara, CA, San Antonio, TX, Medford, OR, Nashville, TN, Oviedo, FL, Carlsbad, CA

751-P First-in-Human, Single and Repeated Dose Study of SCO-267, a GPR40 Full Agonist, in Healthy Adults and Subjects with Glucose Intolerance
HARUNOBU NISHIZAKI, OSAMU MATSUOKA, MEGURU ACHIRA, TOMOYA KAGAWA, MASANORI WATANABE, YUSUKE MORITOH, Fujisawa, Japan, Tokyo, Japan, Osaka, Japan

752-P LIVRXNac (AXA112S) Enhances Insulin Sensitivity in Primary Human Hepatocytes and in Subjects with NAFLD and T2D
SETH BAUM, STEPHEN A. HARRISON, NADEGE T. GUNN, ZIAD YOUNES, ANITA KOHLI, RASHMEE PATIL, JUAN P. FRIAS, MICHAEL HAMILL, NADINE DAOU, JEFF ZHAO, MANU CHAKRAVARTHY, MARGARET KOZIEL, Boca Raton, FL, Live Oak, TX, Austin, TX, Germantown, TN, Chandler, AZ, Edinburg, TX, Los Angeles, CA, Cambridge, MA

753-P Senolytics Improve Diabetes Measures in Type 2 Diabetic Nonhuman Primates: A Pilot Study
ALISTAIRE D. RUGGIERO, MASHA BLOCK, MATTHEW DAVIS, RAVICHANDRA VEMURI, MIRANDA E. ORR, KYLIE KAVANAGH, Winston-Salem, NC

754-P SerpinB1 Delays T1D Progression and Improves Glucose Homeostasis in NOD Mice
GIORGIO BASILE, HYUNKI KIM, LING XIAO, JIANG HU, HUAFANG WANG, PHILIP PEMBERTON, ROHIT KULKARNI, Boston, MA, Belmont, CA

755-P A 26-Week Carcinogenicity Study with the Novel Glucagon Analog Dasiglucagon in CByB6F1-Tg(HRAS)2Jic Mice
MIKAEL ELANDER, ADAM FROUD, Glostrup, Denmark, Eye, United Kingdom

756-P Bromocriptine-QR (BQR) Ameliorates Immunoocyte Pro-Oxidative Stress/Proinflammatory (POS/PI) and ER Stress Phenotype in T2DM Subjects
MICHAEL EZROKHI, ANTHONY H. CINCOTTA, EUGENIO CERSOSIMO, JOHN M. ADAMS, II, MARIAM ALATRACH, CHRISTINA AGYIN, IV, CURTIS L. TRIPLITT, NICHOLAS COMINOS, RALPH A. DEFRONZO, Tiverton, RI, San Antonio, TX

757-P Cardiometabolic Disease Risk Assessment of HIV Medication Regimens
ADRIAN ELZARKI, SESHAGIRI RAO NANDULA, HASSAN AWAL, SABYASACHI SEN, Washington, DC

758-P Treatment with Testosterone Undecanoate Injections (TU) Improves Estimated Glomerular Filtration Rate (eGFR) in Men with Hypogonadism and Type 2 Diabetes Mellitus: Update of Real-World Data
KARIM S. HAIDER, AHMAD HAIDER, FARID SAAD, Bremerhaven, Germany, Berlin, Germany

759-P Effect of Elexacaftor/Tezacaftor/Ivacaftor on Glycemic Control in Cystic Fibrosis-Related Diabetes Mellitus: A Chart Review
MARIA KRAVCHENKO, WHITTNEY WARREN, Fort Sam Houston, TX

760-P Allogeneic "Neo-Islets," Organoids Composed of Cultured Pancreatic Islet and Mesenchymal Stromal Cells from Diverse Donors, Afford a Marked Increase in the Global Availability of a Curative, Novel, Anti-Rejection-Drug-Independent Biotherapy of T1DM
CHRISTOF WESTENFELDER, SABIHA S. CHOWDHURY, ANNA GOOCH, Salt Lake City, UT
761-P  Safety and Pharmacokinetic Study of GPR40 Agonist (CPL207280) after a Single Dose in Healthy Subjects
KATARZYNA BAZYDLO-GUZENDA, AGNIESZKA GIERCZAK-PACHULSKA, KATARZYNA JARUS-DZIEDZIC, PIOTR RUDZKI, MACIEJ WIECZOREK, Kazun Nowy, Poland, Nadarzyn, Poland

762-P  Use of Oral Hypoglycemic Agents in Type 1 DM
KARINA G. ROMO, WILLIAM A. WEST, GABRIEL I. UWAIFO, New Orleans, LA, Slidell, LA

763-P  Dorzagliatin Add-On to Metformin Achieved Sustained Efficacy and Good Safety Profiles in T2D Patients in a 52-Week Phase 3 Trial (DAWN)
LI CHEN, YI ZHANG, WENYING YANG, Shanghai, China, Beijing, China

764-P  Preventive Effect of Cranberry Extract for SGLT2i-Associated Urinary Tract Infection: A Case Control Study
ASHISH GAUTAM, PRABHAT K. AGRAWAL, NIKHIL PURSNANI, PRADEEP K. MAHESHWARI, RUCHI RANI, Agra, India

765-P  DA-1241, a Novel GPR119 Agonist: Data on Safety, Tolerability, Pharmacokinetics (PK), and Pharmacodynamics (PD) from Part 2 of a Phase 1b Multiple Ascending Dose (MAD) Study in Patients with Type 2 Diabetes Mellitus (T2DM)
MI-KYUNG KIM, DAE YOUNG LEE, JIYOON JEONG, MICHAEL GRIMM, BRIDGETTE B. FRANEY, MARCUS HOMPESCH, Yongin, Korea, Republic of, Seoul, Korea, Republic of, Chula Vista, CA

766-P  DA-1241, a Novel GPR119 Agonist: Data on Safety, Tolerability, and Pharmacokinetics (PK) from Part 1 of a Phase 1b Multiple Ascending Dose (MAD) Study in Healthy Volunteers (HV)
MI-KYUNG KIM, DAE YOUNG LEE, JIYOON JEONG, MICHAEL GRIMM, BRIDGETTE B. FRANEY, MARCUS HOMPESCH, Yongin, Korea, Republic of, Seoul, Korea, Republic of, Chula Vista, CA

767-P  Effect of Digital Twin Technology for Remission of Diabetes on the Glycemic and Extra-Glycemic Parameters: Interim Results of the Prospective Randomised Controlled Clinical Trial
PARAMESH SHAMANNA, SHASHANK R. JOSHI, LISA SHAH, MALA DHARMALINGAM, ARUN VADAVI, JAHINGIR MOHAMMED, MALUK MOHAMED, TERRENCE POON, ASHOK KESHAVAMURTHY, MOHAMED THAJDEEN, SUCHITRA BHONSLEY, Mumbai, India, Mountain View, CA, Bangalore, India

768-P  MSDC-0602 Is a Direct Mitochondrial Pyruvate Carrier Inhibitor That Modulates Central Carbon Metabolism in Mice and Humans
ADAM J. RAUCKHORST, DANIEL J. PAPE, JERRY R. COLCA, ERIC B. TAYLOR, Iowa City, IA, Kalamazoo, MI

769-P  Effect on Insulin Secretion Six Months after the Use of CFTR Modulators in Cystic Fibrosis Patients with or without Glucose Metabolism Abnormalities
EDURNE LECUMBERRI, SAIOA VICENTE, MARIA MARTIN-FRIAS, LÍA NATTERO-CHÁVEZ, VICTORIA MARTÍNEZ-VAELLO, LUIS MAIZ, CRISTINA SÁNCHÉZ RODRÍGUEZ, MAR LORENZO, BEATRIZ DORADO AVENDAÑO, ROSA Y. YELMO, MARÍA GARRIGA, ADELAIDA F. LAMAS, Madrid, Spain

770-P  The Glucose-Lowering Effect of the Bile Acid Sequestrant Sevelamer Is Not Mediated by Glucagon-Like Peptide-1
HENRIETTE H. NERILD, ANDREAS BRØNDEN, DAVID P. SONNE, JENS J. HOLST, TINA VILSBØLL, FILIP K. KNOP, Copenhagen, Denmark, Hellerup, Denmark

771-P  The Effect of Adding Acarbose to Insulin Therapy in Type 1 Diabetes Mellitus: A Systematic Review and Meta-analysis
ZHIGU LIU, DAIZHI YANG, WEN XU, JING LV, HUIMIN LIN, ZIYU LIU, HONGRONG DENG, JINHUA YAN, BIN YAO, Guangzhou, China

772-P  Portability of Nasal Glucagon for the Rescue of Severe Hypoglycemia: Stability and Performance Evaluation across a Broad Range of Temperatures
BRIAN W. PACK, JASON MELNICK, CHRISTOPHER BREEN, ROSS ALLEN, Indianapolis, IN
CLINICAL THERAPEUTICS/NEW TECHNOLOGY—SGLT INHIBITORS

773-P The Association between the Estimated GFR Trajectory and Cardiovascular/Renal Outcomes in SGLT2i Users
CHU LIN, XIAOLING CAI, LINONG JI, Beijing, China

774-P Hereditary Renal Glycosuria, Diabetes, and Responses to SGLT2 Inhibitor
QIAN REN, SIQIAN GONG, XUEYAO HAN, LINONG JI, Beijing, China

775-P Effects of Canagliflozin (CANA) on Major Adverse Cardiovascular Events (MACE) by Baseline EGFR: Pooled Hispanic Subgroup Analysis from the CANVAS Program and CREDENCE
MATTHEW R. WEIR, JAGADISH GOGATE, CV DAMARAJU, RICARDO CORREA-ROTTER, KENNETH W. MAHAFFEY, Baltimore, MD, Titusville, NJ, Mexico City, Mexico, Stanford, CA

776-P SGLT2i Increased the Fasting Glucagon Level in Patients with Diabetes: A Meta-analysis
XINGYUN ZHU, CHU LIN, LI LI, SUIYUAN HU, XIAOLING CAI, LINONG JI, Beijing, China

777-P Efficacy of SGLT2 Inhibitors and GLP1-Receptor Agonists in Asians with Type 2 Diabetes: A Systemic Review and Meta-analysis
RYAN JOHNSON, MELISSA FRANCO, ERIN M. STAAB, ALEXANDRA C. KNITTER, WEN WAN, JASON ALEXANDER, NEDA LAITEERAPONG, Chicago, IL

779-P Prescribing of SGLT2 Inhibitors in Primary Care: A Qualitative Study of Primary Care Physicians and Endocrinologists
TAMARA MILDER, SOPHIE STOCKER, MELISSA BAYSARI, RICHARD O. DAY, JERRY GREENFIELD, Sydney, Australia

780-P Improved Mitochondrial Function by Luseogliflozin Prevents Pancreatic Beta-Cell Damage
YUKI YAMAUCHI, AKINOBU NAKAMURA, TAKASHI YOKOTA, KIYOHICO TAKAHASHI, SHINICHIRO KAWATA, KAZUHISA TSUCHIDA, KAZUNO OMORI, HIROSHI NAMOTO, HIROKU KAMEDA, YOSHIHIRO ANZAI, SHINYA TANADA, YASUO TERAUCHI, HIDEAKI MIYOSHI, TATSUYA ATSUMI, Sapporo, Japan, Yokohama, Japan

781-P Beyond Glucosuria: Urine Metabolome Signature Associated with Dapagliflozin in Wild-Type Mice
AMRO ILAIWY, ADAM MINCEY, JAMES R. BAIN, MICHAEL MUEHLBAUER, JONATHAN CAMPBELL, DAVID A. D’ALESSIO, Durham, NC

782-P Machine Learning to Identify Diabetes Patients Initiating SGLT2i at High-Risk of Acute Kidney Injury
LANTING YANG, NICO GABRIEL, INMACULADA HERNANDEZ, ALMUT G. WINTERSTEIN, STEPHEN KIMMEL, JINGCHUAN GUO, Pittsburgh, PA, Gainesville, FL

783-P Cardiorenal Outcomes with Ertugliflozin by Baseline (BL) Glucose-Lowering Agent (GLA): An Analysis from VERTIS CV
BERNAND CHARBONNEL, SAMUEL DAGOGO-JACK, CHRISTOPHER P. CANNON, DAVID CHELOYEE, FRANCESCO COSENTINO, DARREN K. McGUIRE, WEICHUNG J. SHIH, JIE LIU, ANNPEY PONG, IRA GANTZ, ROBERT FREDERICH, JAMES P. MANCUSO, RICHARD E. PRATLEY, Nantes, France, Memphis, TN, Boston, MA, Toronto, ON, Canada, Stockholm, Sweden, Dallas, TX, Piscataway, NJ, Kenilworth, NJ, Collegeville, PA, Groton, CT, Orlando, FL

784-P Does Sacubitril/Valsartan Combination Therapy Provide Additional Renal Benefits in Type 2 Diabetes Mellitus Receiving Canagliflozin?
VISHAL GUPTA, VAISHALI TELI, Mumbai, India
785-P  Ertugliflozin (ERTU) Delays Insulin Initiation and Reduces Insulin Dose Requirements in Patients with Type 2 Diabetes (T2D): An Analysis From VERTIS CV
SAMUEL DAGOGO-JACK, ROBERT FREDERICH, BERNARD CHARBONNEL, JIE LIU, CHRISTOPHER P. CANNON, HARRY SHI, DARREN K. MCGUIRE, DAVID CHERNEY, FRANCESCO COSENTINO, WEICHUNG J. SHIH, URSZULA MASIUKEWICZ, IRA GANTZ, RICHARD E. PRATLEY, Memphis, TN, Collegeville, PA, Nantes, France, Kenilworth, NJ, Boston, MA, New York, NY, Dallas, TX, Toronto, ON, Canada, Stockholm, Sweden, Piscataway, NJ, Groton, CT, Orlando, FL

786-P  Glycemic Efficacy and Safety of Ertugliflozin (ERTU) in Patients with Type 2 Diabetes (T2D) and Chronic Kidney Disease Stage 3 (CKD 3): An Analysis from VERTIS CV
SAMUEL DAGOGO-JACK, RICHARD E. PRATLEY, DAVID CHERNEY, BERNARD CHARBONNEL, DARREN K. MCGUIRE, FRANCESCO COSENTINO, WEICHUNG J. SHIH, JIE LIU, ROBERT FREDERICH, JAMES P. MANCUSO, ANNASWAMY RAJI, IRA GANTZ, Memphis, TN, Orlando, FL, Toronto, ON, Canada, Nantes, France, Dallas, TX, Stockholm, Sweden, Piscataway, NJ, Kenilworth, NJ, Collegeville, PA, Groton, CT

787-P  Individualized Estimated GFR Slope Analysis Is Needed to Preserve Renal Function by SGLT2 Inhibitors in Patients with DKD
KOJI KASHIMA, HIROYUKI SHIMIZU, MASANOBU YAMADA, Kiryu, Japan, Maebashi, Japan

788-P  The Cardiovascular and Renal Benefits of Dapagliflozin Are Independent of Baseline HbA1c: Analyses from DECLARE-TIMI 58
AVIVIT CAHN, STEPHEN D. WIVIOTT, OFRI MOSENZON, SABINA MURPHY, ERICA L. GOODRICH, DEEPAK L. BHATT, LAWRENCE A. LEITER, DARREN K. MCGUIRE, JOHN WILDING, INGRID A. GAUSE-NILSSON, ANNA MARIA LANGKILDE, MARC S. SABATINE, ITAMAR RAZ, Jerusalem, Israel, Boston, MA, Toronto, ON, Canada, Dallas, TX, Liverpool, United Kingdom, Mölndal, Sweden, Gothenburg, Sweden

789-P  Efficacy of SGLT2 Inhibitor on Circulating Advanced Glycation End Products in Japanese Patients with Type 2 Diabetes
MASATAKA KUSUNOKI, NAOMI WAKAZONO, FUMIYA HISANO, TETSURO MIYATA, Nagoya, Japan, Tokyo, Japan

790-P  Empagliflozin Reduced the Total Burden of Events Leading to or Prolonging Hospitalization in EMPA-REG OUTCOME
SILVIO E. INZUCCHI, CHRISTOPH WANNER, DAVID H. FITCHETT, BERNARD ZINMAN, STEFAN ANKER, MICHAELA MATTHEUS, OLA VEDIN, STEFAN HANTEL, SÖREN S. LUND, New Haven, CT, Würzburg, Germany, Toronto, ON, Canada, Berlin, Germany, Stockholm, Sweden, Biberach, Germany, Ingelheim, Germany

791-P  Ertugliflozin in Older Patients with Type 2 Diabetes (T2D): An Analysis from VERTIS CV
RICHARD E. PRATLEY, SAMUEL DAGOGO-JACK, BERNARD CHARBONNEL, DAVID CHERNEY, FRANCESCO COSENTINO, DARREN K. MCGUIRE, MARGARET N. ESSEX, PHILIP L.S. JONES, JIE LIU, INGRID A. ADAMSONS, DAVID LAWRENCE, WEICHUNG J. SHIH, CHRISTOPHER P. CANNON, Orlando, FL, Memphis, TN, Nantes, France, Toronto, ON, Canada, Stockholm, Sweden, Dallas, TX, Sandwich, United Kingdom, Kenilworth, NJ, New York, NY, Piscataway, NJ, Boston, MA

792-P  Comparative Safety of Empagliflozin in Routine Care Patients: Interim Results from the Empagliflozin Comparative Effectiveness and Safety (EMPRISE) Study
ELISABETTA PATORNO, HELEN TESFAYE, DEBORAH J. WEXLER, ROBERT GLYNN, MEHDI NAJAFZADEH, LILY G. BESSETTE, HEIDI ZAKOUL, LISETTE KOENEMAN, ANOUK DERUJAZ-LUYET, SEBASTIAN SCHNEEWEISS, Boston, MA, Birmingham, AL, Ingelheim, Germany

793-P  Dapagliflozin Improves Renal Function in Obese Indian Diabetics with Microalbuminuria
HARIBALLAV MAHAPATRA, LAXMINARAYAN MAHAPATRA, MONALISA KHUNTIA, ABHAY K. SAHOO, Puri, India, Bhubaneswar, India
794-P Predictors of Hemoglobin (Hb) and Its Changes Focusing on Anemia and Polycythemia after Administration of the SGLT2 Inhibitor Tofogliflozin
YASUHIRO MATSUBAYASHI, AKIHIRO YOSHIDA, HIDEKI SUGANAMI, KOHEI KAKU, HIROHITO SONE, Tokyo, Japan, Kurashiki, Japan, Niigata, Japan

795-P Difference in Glycemic Control between Ipragliflozin (Ipr) and Sitagliptin (Sit) According to Changes in Energy Intake (EI) and Physical Activity (PA): Post-hoc Analysis of the NISM Study
MASARU KITAZAWA, MAYUKO H. YAMADA, MIDORI IWANAGA, MASAHIKO YAMAMOTO, MARIKO HATTA, TAKAHO YAMADA, KAZUYA FUJIHARA, HIROHITO SONE, Niigata, Japan

796-P Cardiorenal Outcomes with Ertugliflozin by Baseline Cardiorenal Medications: An Analysis from VERTIS CV
DAVID CHERNEY, FRANCESCO COSENTINO, DARREN K. MCGUIRE, BERNARD CHARBONNEL, SAMUEL DAGOGO-JACK, RICHARD E. PRATLEY, WEICHIUNG J. SHIH, MARIO MALDONADO, ANNPEY PONG, IRA GANTZ, ROBERT FREDERICH, JAMES P. MANCUSO, URSZULA MASIUKIEWICZ, CHRISTOPHER P. CANNON, Toronto, ON, Canada, Stockholm, Sweden, Dallas, TX, Nantes, France, Memphis, TN, Orlando, FL, Piscataway, NJ, London, United Kingdom, Kenilworth, NJ, Collegeville, PA, Groton, CT, Boston, MA

797-P Predictive Factors of Renal Function Decline in Patients with Type 2 Diabetes Treated with Canagliflozin in the Real-WECAN Study
JUAN J. GORGOJO-MARTINEZ, JAIME E.M. WONG-CRUZ, MIGUEL BRITO, TERESA ANTÓN-BRAVO, ALBA GALDON-SANZPASTOR, MANUEL A. GARGALLO-FERNANDEZ, Alcorcon, Spain, Móstoles, Spain, Madrid, Spain

798-P Luseogliflozin Suppresses Fine Glycemic Fluctuation Late at Night: New Aspect of SGLT2 Inhibitor
KEISHI YAMAUCHI, Shioya, Japan

799-P Comparison of the Effects of Sodium-Glucose Cotransporter 2 Inhibitor and Thiazolidinedione Treatment on Risk of Atrial Fibrillation among Patients with Type 2 Diabetes
SEUNG EUN LEE, YOO RI KIM, HYEWON NAM, HOSEOB KIM, JAEHWAN KIM, KYOUNG-AH KIM, Goyang, Korea, Republic of, Seoul, Korea, Republic of

800-P Phase 3 Results of Fixed-Dose Combination of Remogliflozin Etabonate and Vildagliptin in Indian T2DM Patients
BRU MOHAN, MANOJ S. CHAWLA, RAHUL R. KODGULE, MONIKA TANDON, SAGAR KATARE, SACHIN SURYAWANSHI, HANMANT V. BARKATE, Kanpur, India, Mumbai, India

801-P SGLT2 Inhibitor, Luseogliflozin, Prevent Sarcopenia by Improving Extracellular Lipidome
RYO BAMBA, TAKURO OKAMURA, YOSHITAKA HASHIMOTO, TAKAFUMI SENMARU, MASAHIDE HAMAGUCHI, MICHIAKI FUKUI, Kyoto, Japan

802-P Dapagliflozin Improves Glycolytic Reserve in Peripheral Blood Mononuclear Cells in Patients with Type 1 Diabetes
JOANA MELO, JENS CHRISTIAN LAURSEN, NIELS S. HEINRICH, IDA B. RASMUSSEN, CHRISTIAN S. HANSEN, MARIE FRIMODT-MOELLER, PETER ROSSING, JOACHIM STØRLING, Gentofte, Denmark

803-P The Association between Empagliflozin and Changes in Alanine Aminotransferase Levels: Data from the Association of British Clinical Diabetologists (ABCD) Audit Programme
THOMAS S.J. CRABTREE, JACKIE ELLIOTT, ALEX BICKERTON, IAN W. GALLEN, KETAN DHATARIYA, MELISSA L. CULL, ALISON EVANS, SUZANNE M. PHILLIPS, ROBERT E. RYDER, Sheffield, United Kingdom, Yeovil, United Kingdom, Reading, United Kingdom, Norwich, United Kingdom, Birmingham, United Kingdom, Cheltenham, United Kingdom, Gloucester, United Kingdom

804-P Empagliflozin Reduces Inflammation and Bioenergetics in Proinflammatory Human Macrophages: Clues to Mechanisms of Blood Vessel Protection?
VALENTINA SPIGONI, GLORIA CINQUEGRANI, FEDERICA FANTUZZI, SIMONA LORUSSO, ALESSANDRA DEI CAS, RICCARDO C. BONADONNA, Parma, Italy
805-P  Risk of Severe Complications of Urinary Tract Infection in Real-World Use of Dapagliflozin
CATHERINE JOHANNES, J. BRADLEY LAYTON, DANIEL C. BEACHLER, RYAN M. ZIEMIECKI, LING LI, HEATHER E.
DANYSH, JADE DINH, PHILLIP R. HUNT, CECILIA KARLSSON, HUNGTA CHEN, ALICIA GILSENAN, Research Triangle
Park, NC, Wilmington, DE, Waltham, MA, Arlington, VA, Gaithersburg, MD, Mölndal, Sweden

806-P  Risk of Acute Liver Injury in Real-World Use of Dapagliflozin
CATHERINE JOHANNES, J. BRADLEY LAYTON, DANIEL C. BEACHLER, RYAN M. ZIEMIECKI, LING LI, HEATHER E.
DANYSH, JADE DINH, PHILLIP R. HUNT, CECILIA KARLSSON, HUNGTA CHEN, ALICIA GILSENAN, Research Triangle
Park, NC, Wilmington, DE, Waltham, MA, Arlington, VA, Gaithersburg, MD, Mölndal, Sweden

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807-P  Adding CGM to Diabetes Care of Young Children with T1D Increases Caregiver Time
ALEXANDRA GLYNN, LAUREN KANAPKA, KELLEE MILLER, LORI M. LAFFEL, LINDA DIMEGLIO, THOMAS SONGER,
Tampa, FL, Boston, MA, Indianapolis, IN, Pittsburgh, PA

808-P  Economic Benefits of Initiating Empagliflozin vs. GLP-1 Receptor Agonists among Patients with Type 2 Diabetes
PRATIK PIMPLE, ADITYA RAJU, EILEEN FARRELLY, SHARASH SHETTY, Ridgefield, CT, Palm Harbor, FL, Sandy Hook, CT

809-P  The Impact of High-Deductible Health Plans (HDHPS) and Out-of-Pocket (OOP) Costs on Access to Care in
Diabetes
SHELAGH M. SZABO, EFFIE KUTI, MICHAEL FRIESEN, DEBORAH REARDON, ELIZABETH JAYKUS, REKESH COREPAL,
BONNIE M.K. DONATO, Vancouver, BC, Canada, Ridgefield, CT

810-P  The Diminishing Cost-Effectiveness of the Newer Glucose-Lowering Drugs in the United States, 2010-2018
PIAOPIAO LI, RAHUL S. PATEL, SCOTT M. VOURI, LIZHENG SHI, VIVIAN FONSECA, HUI SHAO, Gainesville, FL, New
Orleans, LA

811-P  Durable Insulin Pumps vs. Multiple Daily Injections for Type 1 Diabetes: Health Care Utilization and A1C
MONA SHAH, CYRUS ZHU, KAEL WHERRY, Bartlett, IL, Northridge, CA

812-P  The Role of Industry and NIH/Academia in the Clinical Development of GLP-1 Agonists and SGLT2 Inhibitors
BRIAN R. KOCAK, ZACHARY KASSIR, JING LUO, Pittsburgh, PA

813-P  Demonstrating the Economic Health Benefit of Using the PromarkerD In Vitro Diagnostic Test in the Prediction
of Diabetic Kidney Disease
WILL BURCHENAL, MANASI DATAR, KIRSTEN E. PETERS, GARETH C. FERNANDEZ, JOHN C. MORRISON, RICHARD J.
LIPSCOMBE, Boston, MA, Perth, Australia, Hanover, MA

814-P  Clinical Factors Impacting Glycemic Control in Young Adults with Type 1 Diabetes at Transition to Adult Clinical
Care
KRISTEN FLINT, MADELINE BENNETTI, ASTRID ATAKOV-CASTILLO, ELENA TOSCHI, Boston, MA

815-P  Cost-Effectiveness of Subcutaneous Semaglutide vs. Empagliflozin as Add-On Therapy for Type 2 Diabetes
MARGARET ZUPA, RONALD CODARIO, KENNETH J. SMITH, Pittsburgh, PA

816-P  Diabetes Education and Cost Savings with Telemedicine Delivery in Rural Communities
EMILY GAMMOH, PATRICIA A. JOHNSON, JODI S. KRALL, JASON NG, LINDA M. SIMINERIO, ARCHANA BANDI,
Pittsburgh, PA
817-P Inside CKD: Modeling the Direct Economic Burden of Concomitant Chronic Kidney Disease and Type 2 Diabetes
JUAN JOSE GARCIA SANCHEZ, ALYSHAH ABDUL SULTAN, JOHAN ÄRNLÖV, MARCELO C. BATISTA, CLAUDIA CABRERA, JOSHUA CARD-GOWERS, STEVE CHADBAN, GLENN M. CHERTOW, LUCA DENICOLA, JEAN MICHEL HALIMI, EIICHIRO KANDA, GUISEN LI, FRANCESCO SAVERIO MENNINI, JUAN NAVARRO-GONZALEZ, STEPHEN T. NOLAN, ALBERT POWER, LISE RETAT, NAVDEEP TANGRI, LAURA WEBBER, JAY WISH, MICHAEL XU, Cambridge, United Kingdom, Solna, Sweden, São Paulo, Brazil, Gothenburg, Sweden, London, United Kingdom, Camperdown, Australia, Palo Alto, CA, Naples, Italy, Tours, France, Kurashiki, Japan, Chengdu, China, Rome, Italy, Santa Cruz de Tenerife, Spain, Luton, United Kingdom, Bristol, United Kingdom, Winnipeg, MB, Canada, Indianapolis, IN

HEALTH CARE DELIVERY—QUALITY IMPROVEMENT

818-P Barriers to Metformin Initiation and Adherence following a New Diagnosis of Type 2 Diabetes
CHELSEA GONG, KRISTINE GU, MARUTA A. BLATCHINS, PRANITA MISHRA, RICHARD W. GRANT, ANJALI GOPALAN, Oakland, CA

819-P Comparison of Two Nurse-Driven Adult Diabetic Ketoacidosis (DKA) Treatment Protocols Using a Single Bag vs. Simultaneous Two-Bag Maintenance Intravenous Fluids
REBECA HALFON, DIANE DREUCEAN, MICHAEL SIRIMATUROS, ARCHANA R. SADHU, Houston, TX

820-P WITHDRAWN

821-P A Retrospective Chart Review and Comparison of HbA1c Goals to Proposed Calculator Models
ALEONA C. ZUZEK, CLARE KELLY, LAURE SAYYED KASSEM, AMAN RAJPAL, Shaker Heights, OH, Cleveland, OH

822-P Insulin Pump Use in Patients with Type 1 Diabetes: Real-World Data from a Large U.S. Based Multicenter Observational Study
NUDRAT NOOR, SAKETH ROMPICHERLA, NUDRAT NOOR, SARAH LYONS, JOYCE M. LEE, MARY PAT GALLAGHER, JUSTIN A. INDYK, OSAGIE EBEKOZIEN, MARGARET GREENFIELD, MARK A. CLEMENTS, GUY T. ALONSO, Boston, MA, Houston, TX, Ann Arbor, MI, New York, NY, Columbus, OH, Syracuse, NY, Kansas City, MO, Denver, CO

823-P Insulin Pump Use and Glycemic Control among Patients with Type 1 Diabetes: Trends from the T1DX-QI Cohort
NUDRAT NOOR, RYAN MCDONOUGH, EMILY CARLSON, ALLISON B. MEKHOUBAD, SUSAN HSIEH, CARLA DEMETERCO-BERGGREN, SHIDEH MAJIDI, MARISA DESIMONE, KATHRYN OBRYNBA, OSAGIE EBEKOZIEN, SARAH CORATHERS, Boston, MA, Kansas City, MO, Lake Success, NY, Fort Worth, TX, San Diego, CA, Aurora, CO, Syracuse, NY, Columbus, OH, Cincinnati, OH

824-P Does Utilization of a Three-Month Multidisciplinary Endocrinology Treatment Team Improve Glycemic Control and Reduce Therapeutic Inertia in High-Risk Patients with Diabetes
ANIRA IQBAL, DAVID T. BROOME, DIANA ISAACS, PRATIBHA RAO, Cleveland, OH

825-P Glycemic Control in Hospitalized Patients Receiving Enteral Nutrition
R. MATTHEW HAWKINS, STACEY A. SEGSELKE, JOANNA GIBBS, MARK C. LINDSAY, CECILIA C. LOW WANG, Aurora, CO

826-P Application of Health Services Outcome Research Approaches to Refine Pragmatic Trial Design during COVID-19
PAMELA WAX, REBECA KHORZAD, CHEONG M. YU, EMILIE K. TOUMA, AMADOR ROSALES, GRACE PRINCE, KASEY COYNE, STACY BAILEY, TERESA POLLACK, CYNTHIA BARNARD, RONALD T. ACKERMANN, JANE L. HOLL, AMISHA WALLIA, Lake Forest, IL, Chicago, IL

827-P Pioneering a Novel Inpatient Diabetes Consult Service in the COVID Era
ALI A. RIZVI, ANITA O. RICH, RITA ELDRIDGE, Atlanta, GA, Johns Creek, GA
828-P Inpatient Provider Experience with Diabetes Technology Use on General Medicine Wards: Continuous Subcutaneous Insulin Infusion (CSII) and Continuous Glucose Monitors (CGM)
NABIL Z. MADHUN, RODOLFO J. GALINDO, JESSICA DONATO, PATRICIA HWANG, HASAN F. SHABBIR, MICHAEL FOWLER, ETHAN MOLTITCH-HOU, GUILLERMO E. UMPIERREZ, M. CECILIA LANSANG, Atlanta, GA, Johns Creek, GA, Nashville, TN, Chicago, IL, Cleveland, OH

829-P Improving Diabetes Self-Management with a Peer-to-Peer Mentoring Program: Final Results of a Pilot Program at a Safety Net Health Care System
ROOPA KALYANARAMAN MARCELLO, JOHANNA DOLLE, SHARANJIT KAUR, SAWKIA R. PATTERSON, NICHOLA DAVIS, New York, NY

830-P The Development of a New Computer Adaptive Test of Illness Burden for Use in People with Type 2 Diabetes Mellitus (T2DM)
SUZANNE MITCHELL, MICHAEL A. KALLEN, ALEXA BRAGG, IOANA MOLDOVAN, JESSICA M. HOWARD, BRIAN W. JACK, JENNIFER A. MINER, CHRISTOPHER M. GRAVES, NOELLE CARLOZZI, Missouri City, TX, Boston, MA, Ann Arbor, MI

831-P The Development of a New Computer Adaptive Test of Medication Adherence for People with Type 2 Diabetes Mellitus: Medication Adherence Item Bank
SUZANNE MITCHELL, MICHAEL A. KALLEN, ALEXA BRAGG, IOANA MOLDOVAN, JESSICA M. HOWARD, BRIAN W. JACK, JENNIFER A. MINER, CHRISTOPHER M. GRAVES, NOELLE CARLOZZI, Missouri City, TX, Boston, MA, Ann Arbor, MI

832-P Implementation of Depression Screening in a Pediatric Diabetes Clinic with Limited Mental Health Services
SHILPA GURNURKAR, NEHA V. VYAS, UNNATI PATEL, JESSICA PIERCE, Orlando, FL

833-P HbA1c Trends in the T1D Exchange Quality Improvement Collaborative (T1DX-QI), 2017-2020
OSAGIE EBEKOZIEN, NUDRAT NOOR, NANA-HAWA JONES, GUY T. ALONSO, MARISA DESIMONE, ROBERTO IZQUIERDO, SARAH CORATHERS, DANIEL DESALVO, NICOLE RIOLES, PRIYA PRAHALAD, ORI ODUGBESAN, MANMOHAN K. KAMBOJ, DAVID M. MAAHS, MARK A. CLEMANTS, T1DX-QI COLLABORATIVE, Boston, MA, Cincinnati, OH, Denver, CO, Syracuse, NY, Houston, TX, Stanford, CA, Columbus, OH, Kansas City, MO

834-P Factors Associated with Optimal Glycemic Control in Children and Adolescents with Type 1 Diabetes: Real-World U.S. Multicenter Study
OSAGIE EBEKOZIEN, NUDRAT NOOR, BERHANE SEYOMU, SHIDEH MAJIDI, NANA-HAWA JONES, RYAN MCDONOUGH, JANINE SANCHEZ, AHLEE KIM, ROBERTO IZQUIERDO, EMMA L. OSPELT, MANMOHAN K. KAMBOJ, T1DX-QI COLLABORATIVE, Boston, MA, Troy, MI, Aurora, CO, Cincinnati, OH, Kansas City, MO, Miami, FL, Memphis, TN, Syracuse, NY, Columbus, OH

835-P Characteristics, Comorbidities, and Tobacco Cessation Outcomes in an Underserved Community with and without Diabetes and Health Disparities
FEI WANG, PRINCE A. ALLOTEGY, MAI VESTERGAARD, CUNEGUNDO M.D. VERGARA, JOEL L. WILKEN, OFER HAREL, Storrs, CT, Willimantic, CT, Glastonbury, CT, Hartford, CT

836-P Models to Predict Initial Insulin Requirements in Hospitalized Patients with Diabetes
HOU-HSIEN CHIANG, PRASANTH SURAMPUDI, AJAY SOOD, Sacramento, CA, Mather, CA

837-P Expertise in Patient-Centered Communication (PCC): Insights from the CoYoY1 to California (CTC) Study
ANUVA MITTAL, JENNIFER RAYMOND, CLEMENT CHEUNG, ALAINA VIDMAR, JESUS DIAZ, JENNIFER L. FOGEL, MARK W. REID, ELIZABETH SALCEDO-RODRIGUEZ, ALEJANDRA TORRES SANCHEZ, DEBRA MILLER, ELIZABETH PYATAK, Los Angeles, CA

838-P Current Provision and HCP Experiences of Remote Care Delivery and Diabetes Technology Training for People with Type 1 Diabetes in the UK during the COVID-19 Pandemic
HANNAH E. FORDE, PRATIK CHOUDHARY, SUFYAN HUSSAIN, Leicester, United Kingdom, London, United Kingdom
Impact of Culturally Specific Care Teams on Mitigation of Racial Disparities in Diabetes Care: A Five-Year EHR-Based Study
ATIF ADAM, KA HEI KAREN LAU, HETAL SHAH, MARC GREGORY YU, GEORGE L. KING, Boston, MA

Evaluation of the Use of Telehealth vs. In-Person Visits on Clinical Process in Aging Patients with Type 1 Diabetes over the Pandemic
ATIF ADAM, ELENA TOSCHI, MEDHA MUNSHI, LORI M. LAFFEL, Boston, MA

Racial and Ethnic Disparities in Pregnant Women with Diabetes: A Review of Literature
RATCHANOK PHO NYIAM, DIANE C. BERRY, Chapel Hill, NC

Disruption Caused by the COVID-19 Pandemic on HbA1c Testing and Its Implications for Diabetes (DM) Management/Diagnosis
DAVID HOLLAND, ADRIAN H. HEALD, MICHAEL STEDMAN, LEWIS A. GREEN, JONATHAN SCARGILL, CHRISTOPHER DUFF, FAHMY HANNA, PENSEE WU, ANTHONY A. FRYER, Salford, United Kingdom, Andover, United Kingdom, Whiston, United Kingdom, Manchester, United Kingdom, Newcastle Under Lyme, United Kingdom, Stoke-on-Trent, United Kingdom

The Variability in Glycosylated Haemoglobin (HbA1c) Testing Interval in People with Diabetes Is Closely Linked to Long-Term Diabetes Control
ANTHONY A. FRYER, DAVID HOLLAND, MICHAEL STEDMAN, CHRISTOPHER DUFF, LEWIS A. GREEN, JONATHAN SCARGILL, FAHMY HANNA, PENSEE WU, ADRIAN H. HEALD, Stoke-on-Trent, United Kingdom, Andover, United Kingdom, Whiston, United Kingdom, Manchester, United Kingdom, Newcastle Under Lyme, United Kingdom, Salford, United Kingdom

Impact of Hypoglycemic Awareness on Diabetes Care during the SARS CoV Pandemic
CHARLES WATT, MARI-LYNET KNIGHT, ELIZABETH SANCHEZ RANGEL, FELONA GUNAWAN, JANICE J. HWANG, New Haven, CT, Dallas, TX

Unmanaged Diabetes as a Poor Prognostic Factor in the Severity of Infection and Recovery Time of Hospitalized COVID-19 Patients
ALI MOSSAYEBI, HELEN KREIT, SUNDAR V. CHERUKURI, ROSHNI A. MANDANIA, JEANNIE B. CONCHA, HYEJIN JUNG, AMY E. WAGLER, AKSHAY A. GUPTA, ABHIZITH DEOKER, SUDIP BAJPEYI, El Paso, TX

Basal Insulin Management in Inpatients Who Are Not Eating: Is There a Difference between Medical and Surgical Patients?
JOHN PAUL SACDAL, HELEN A. HABIB, EUNAH CHEON, ERIN OH, Brooklyn, NY

Goal-Setting Behavior for Physical Activity in Diabetics: A Quality Improvement Project
HANH T. NGUYEN-VAELSELAAR, Omaha, NE

Assessing Impact of Proactive Interventions in Patients with Near-Hypoglycemia
MAUDRENE L.S. TAN, SHIH LING KAO, KAI XIN NG, SI EW WAI FAN, XI MIN TAN, QUEK PENG YAN MEGAN, SHAUNA SOH XIN NI, SHAO FENG MOK, Singapore, Singapore

Outreach Method Predicts Patient Engagement during Sustained Care Disruption
GRACE CROMWELL, MARGO HUDSON, CHARLES K. MCKITRICK, MARINA DONAHUE, COLLEEN M. SMITH, KRISTEN M. FOWLER, KAYLA L. DEL VALLE, DONALD C. SIMONSON, MARIE E. MCDONNELL, Boston, MA

"Six Habits": Quality Metrics to Support Glycemic Outcomes in Type 1 Diabetes
JOYCE M. LEE, ASHLEY GARRITY, EMILY HIRSCHFELD, INAS H. THOMAS, NICOLE RIOLES, OSAGIE EBEKOZIEN, SARAH CORATHERS, Ann Arbor, MI, Boston, MA, Cincinnati, OH
Are We There Yet? Increasing Use of Cardioprotective Antihyperglycemic Agents in Patients with T2D and CVD or CV Risk in the U.S.
REEMA MODY, JULIANA MEYERS, MARIA YU, JOSHUA A. LEVINE, KEITH DAVIS, Indianapolis, IN, Research Triangle Park, NC, Toronto, ON, Canada, Durham, NC

Improving the Quality of Health Care Transitions for Young Adults at an Adult Endocrinology Clinic
MATTHEW P. GILBERT, STEPHEN G. DEVOE, AMANDA G. KENNEDY, MONICA OGELOBY, ALYSSA CONSIGLI, PAUL JAMES ZIMAKAS, ALLEN B. REPP, KEITH J. ROBINSON, Burlington, VT

Comparing Telemedicine with Conventional Diabetes Care in Assessing Long-Term Outcomes in 451 Patients over 15 Years
JOTHYDEV KESAVADEV, ARUN SHANKAR, GOPIKA KRISHNAN, ASHWIN DAVID, GEETHU SANAL, KRISHNADEV JOTHYDEV, GOPIKA B. CHANDRAN, ANJANA BASANTH, SANAL T.S., JAYASREE AJITH, SUNITHA JOTHYDEV, Trivandrum, India, Attingal, India

A Statewide Needs Assessment to Inform Best Practices for the Ohio Cardiovascular and Diabetes Health Collaborative (Cardi-OH)
ELIZABETH A. BEVERLY, KATHLEEN M. DUNGAN, JACKSON T. WRIGHT, JR., ALEECE CARON, MARILEE CLEMONS, SARAH ALDRICH RENNER, KATE GAWLIK, MARTHA SAJATOVIC, GOUTHAM RAO, GLEN D. SOLOMON, MICHAEL B. HOLLIDAY, JESSIE LEWIS, ANN NEVAR, SHANNON M. SWIATKOWSKI, MICHAEL W. KONSTAN, SHARI D. BOLEN, Athens, OH, Columbus, OH, Cleveland, OH, Toledo, OH, Dayton, OH, Cincinnati, OH, Chesterland, OH, Shaker Heights, OH

Health Care Delivery for Young Adults (YAs) with Type 1 Diabetes (T1D) during the Pandemic
AMIT SHAPIRA, LIANE J. TINSLEY, EMILY FREINER, LORI M. LAFFEL, ELENA TOSCHI, Boston, MA

Long-Term Benefits of Multicomponent Integrated Care Program Participation on Diabetes Care Goals: The DIABEMPIC Program
RUBÉN SILVA-TINOCCO, VIRIDIANA DELATORRE-SALDAÑA, TERESA CUATECONTZI-XOCHITIOTZI, ARNULFO GONZALEZ-CANÚ, CARMEN CASTILLO-GALINDO, BLANCA PIMENTEL-HERNÁNDEZ, MARIA ELENA ROMERO-IBARGUENGOTTITIA, ADRIÁN NÚÑEZ-RODRÍGUEZ, FRANCISCO OROZCO-GUTIÉRREZ, ALBERTO GALLARDO-HERNÁNDEZ, JORGE OCHOA-MORENO, Mexico City, Mexico, Iztapalapa, Mexico, Monterrey, Mexico

A Risk Stratification Approach to Diabetes Care Delivery Services
MARGARET ZUPA, JODI S. KRALL, KEVIN COLLINS, JASON NG, LINDA M. SIMINERIO, Pittsburgh, PA

Online Clinician and Aligned Patient Education Improves Both Clinicians’ and Patients’ Ability to Manage T2D with GLP-1 RAs
AMY LARKIN, ANNE LE, New York, NY

Impact of a Prediabetes Clinical Decision Support System on CV Risk Factor Control in Primary Care: Randomized Trial
JAY R. DESAI, A. LAUREN CRAIN, DANIEL SAMAN, JOANN M. SPERL-HILLEN, CLAYTON ALLEN, STEPHEN WARING, KRIS OHNSOR, DEEPIKA APPANA, STEVEN P. DEHMER, HEIDI EKSTROM, PATRICK J. O’CONNOR, Bloomington, MN, Doral, FL, Duluth, MN, Minneapolis, MN

Glycemic Control Trajectories and Associated Risk Factors among Women with Gestational Diabetes (GDM)
YEYI ZHU, MARA GREENBERG, AMANDA NGO, JUANRAN FENG, ASSIAMIRA FERRARA, Oakland, CA

Factors Associated with Optimal Glycemic Management in Adults with Type 1 Diabetes: Results from T1D QI Collaborative (T1DX-QI)
NICOLE RIOLES, SARIT POLSKY, OSAGIE EBEKOZIEN, NUDRAT NOOR, FRANCESCO VENDRAME, MARINA BASINA, RUTH S. WEINSTOCK, Boston, MA, Aurora, CO, Miami, FL, Stanford, CA, Syracuse, NY

Impact of COVID-19 on Pediatric Endocrinology Practice and Diabetes Care in Children: A Survey
MELISSA CHAMBERS, MADHUMITA SINHA, Phoenix, AZ
863-P  Diagnostic and Care Gaps for Nonalcoholic Fatty Liver Disease in Poorly Controlled Type 2 Diabetes: A Role for Endocrinology?
ANASTASIA-STEFANIA ALEXOPOULOS, RYAN DUFFY, ELIZABETH A. KOBE, CYNTHIA A. MOYLAN, AMY S. JEFFREYS, CYNTHIA COFFMAN, DIANA SOLIMAN, JASHALYNN GERMAN, MATTHEW CROWLEY, Durham, NC

864-P  Treatment Burden and Quality of Life Conversations during Clinical Encounters: A Videographic Analysis
SHANZAY HAIDER, OMAR M. EL KAWKG, JENNIFER CLARK, MAGGIE BRESLIN, KASEY BOEHMER, VICTOR M. MONTORI, KASIA J. LIPSKA, New Haven, CT, Rochester, MN, Brooklyn, NY

865-P  Care Management Processes That Improve Diabetes Outcomes
KEVIN A. PETERSON, CAROLINE CARLIN, LEIF SOLBERG, MILTON EDER, Minneapolis, MN

866-P  Determinants of Uptake and Access to Insulin Pump Therapy by Adults with Type 1 Diabetes
KATARZYNA A. GAJEWSKA, REGIEN BIESMA, KATHLEEN BENNETT, SEAMUS SREENAN, Groningen, Netherlands, Dublin, Ireland

867-P  Variation in the Setting of Type 2 Diabetes Diagnosis Disclosure
KRISTINE GU, CHELSEA GONG, MARUTA A. BLATCHINS, PRANITA MISHRA, RICHARD W. GRANT, ANJALI GOPALAN, Oakland, CA

868-P  The Efficacy of Personalized Diabetes Management Using an Electronic Medical Record-Integrated Mobile Application
JAE-SEUNG YUN, SUN-YOUNG LIM, SEON-AH CHA, KUN-HO YOON, YU-BAE AHN, EUN YOUNG LEE, SEUNG-HYUN KO, Suwon, Korea, Republic of, Seoul, Korea, Republic of

869-P  Patient-Provider Video Visit Use and HbA1c Control among Patients with Diabetes
MARY REED, ANJALI GOPALAN, ILANA GRAETZ, LORETTA HSUEH, JIE HUANG, EMILIE MUELLY, Oakland, CA, Atlanta, GA, Santa Clara, CA

870-P  Patient Factors and Engagement of Care in Type 2 Diabetes in Phnom Penh, Cambodia
JASMINE M. VICENCIO, SOVANN PENG, PHANAVARINE MENH, PETER G. CURRAN, MARGO HUDDSON, Washington, DC, Phnom Penh, Cambodia, Ketchum, ID, Boston, MA

871-P  Integrating the PHQ-A Depression Screening Tool within the Electronic Health Record Increases Detection of Depression Symptoms
JULIE GETTINGS, OONA PATIL, MARY ELLEN VAJRAVELU, COLIN P. HAWKES, ALAN TUTTLE, MARIANNE BUZBY, STEPHANIE CREAN, MAUREEN B. WILLI, Philadelphia, PA, Pittsburgh, PA

872-P  Impact of Telemedicine Consultations during the COVID-19 Pandemic on Glycemic Control of Diabetes Patients
ASHINI DISSANAYAKE, MONIKA PAWLOWSKA, BENJAMIN SCHROEDER, JESSICA MACKENZIE-FEDER, ADAM WHITE, Vancouver, BC, Canada

873-P  Modified Insulin Infusion Protocol for COVID-19 Patients Is Safe and Effective for Controlling Hyperglycemia
DIANA ATHONVARANGKUL, LEIGH B. BAK, CINDY ZHENG, JULIE D’AMBROSIO, JONATHAN SINER, SHYOKO HONIDEN, SILVIO E. INZUCCHI, New Haven, CT

874-P  Use of Weight-Based Insulin to Reduce Hyperglycemia when Transitioning to Subcutaneous Insulin in MICU
KEREN ZHOU, LAUREN A. BUEHLER, TIN Z. ZAW, JAMES F. BENA, M. CECILIA LANSANG, Cleveland, OH

875-P  Breathe Diabetes Management Program: A Personalized App to Assist Type 2 Diabetics in India to Achieve Healthy Outcomes
PAWAN K. GOYAL, ROHAN VERMA, ADITYA KAICKER, SAURAV DEKA, SRIVANI PALUKURI, BETINA CHANDOLIA, Delhi, India, Gurgaon, India

876-P  Is Telemedicine the Preferred Visit Modality in Patients with Type 1 Diabetes?
ALENA KIRZHNER, TAIBA ZORNITZKI, VIVIANA OSTROVSKY, HILLA KNOBLER, TAL SCHILLER, Rehovot, Israel
877-P Video Visit: A New Tool for Diabetes Post-hospitalization Follow-up
ESRA KARSIOLGlu-FRENCH, DIVYA SISTLA, ANNA C. MEYER, Pittsburgh, PA

878-P The Association between Demographics, Insulin Rationing, and Glycemic Control Assessed by Hemoglobin A1c
TRISHA MENON, MENG ZHANG, ALYSON MYERS, Manhasset, NY

879-P Dropout Risk and Effectiveness of Retention Strategies: A Substudy of the Memory Advancement by Intranasal Insulin (INI) in Type 2 Diabetes (MemAID)
FAIZAN KHAN, DANIEL F. ISAZA-PIEROTTI, PETER NOVAK, CHRISTOS MANTZOROS, LONG H. NGO, VERA NOVAK, Jamaica Plain, MA, Brookline, MA, Boston, MA

880-P Insulin Regimen and Glycemic Control in People with Type 2 Diabetes Mellitus
AMAR ARUNACHALAM, RAJESH GARG, Miami, FL

881-P Improving Diabetes Inpatient Safety by Implementing a Concise Diabetes Training Programme for All Staff
RUTH L. MILLER, London, United Kingdom

882-P QBSAFE: Pilot Study of an Intervention to Shift the Paradigm of Diabetes Care
JENNIFER CLARK, KASEY BOEHMER, MAGGIE BRESLIN, SHANZAY HAIDER, WERONIKA PASCIAK, DEREK GRAVHOLT, BRIANNA B.M. SANCHEZ, SANDRA A. HARTASANCHEZ, OMAR M. EL KAWKGI, VICTOR M. MONTORI, KASIA J. LIPSKA, Rochester, MN, Brooklyn, NY, Waterbury, CT, North Haven, CT, New Haven, CT

883-P Evaluating Impact of the Physician-Pharmacist Collaborative Management (PPCM) Team Providing Diabetes Preventative Care Services
ANGELINA VASCIMINI, TARA SULLIVAN, SUTHIDA S. SAKDIPANICHKUL, CHRISTINA E. DEREMER, Gainesville, FL

884-P Health Care Experiences among People with Type 2 Diabetes: Identifying Social Determinants and Areas to Improve
SARA SUHL, REBECCA GOWEN, EMILY YE, CATERINA FLORISSI, JULIA STEVENSON, JACQUELINE TAIT, RICHARD WOOD, San Francisco, CA

885-P C-Reactive Protein Predicts COVID-19 Infection Severity and Length of Hospitalization
HELEN KREIT, SUNDAR V. CHERUKURI, ROSHNI A. MANDANIA, ABHIZITH DEOKER, AKSHAY A. GUPTA, ALI MOSSAYEBI, JEANNE B. CONCHA, HYEJIN JUNG, AMY E. WAGLER, SUDIP BAJPEYI, El Paso, TX

886-P Impact of Endocrine E-Consultation on SGLT2i and GLP-1 RA Prescription
AMNA RASHEED, TEJASWI KOMPALA, AARON B. NEINSTEIN, Vallejo, CA, San Francisco, CA

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887-P Moderator Role of Family Protective Factors on the Association between Family Structure Type and Obesity in Children
MINKYOUNG SONG, LAURA L. HAYMAN, NATHAN DIECKMANN, CAROL MUSIL, Boston, MA, Portland, OR, Cleveland, OH

888-P Food Insecurity and Type 2 Diabetes in Children: A Systematic Literature Review
JYE BLACKBURN, HANNAH BRES, GEMMA DEVENISH, AMELIA HARRY, Bentley, Australia, Nedlands, Australia

889-P Prescriber Perceptions of the Implementation of Liraglutide into Pediatric Type 2 Diabetes Care
TALIA A. HITT, SANDRA VAZQUEZ DIAZ, YESENIA SANCHEZ-KLEINBERG, JUDY A. SHEA, LORRAINE E. KATZ, MARY ELLEN VAJRAVEL, Philadelphia, PA

890-P CDK5 Regulatory Subunit-Associated Protein 1-Like 1 Promotes Adipocyte Proliferation through Transcriptional Activation of NEK8 in T2DM and Obesity
YAN CHEN, Chang Chun, China
Association between Type 2 Diabetes Risk Factors and Sex in Argentinean Schoolchildren
VALERIA HIRSCHLER, CLAUDIO D. GONZALEZ, CLAUDIA MOLINARI, SILIVA LAPERTOSA, DIOSES GROUP, Buenos Aires, Argentina

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MATTHEW W. SEGAR, KERSHAW PATEL, NITIN KONDAMUDI, AMBARISH PANDEY, Dallas, TX, Houston, TX

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JINGCHUAN GUO, TINA COSTACOU, RACHEL G. MILLER, TREvor J. ORCHARD, Gainesville, FL, Pittsburgh, PA

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REEMA MODY, STUART COWBURN, MARIA YU, RADHIKA NAIR, MANIGÉ KONIG, TODD G. PREWITT, Indianapolis, IN, Portland, OR, Toronto, ON, Canada, Louisville, KY

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MONIA GAROFOLI, ELISA GUALDANI, DANIELA LUCCHESI, PIERPAOLO FALCETTA, PAOLO FRANCESCONI, STEFANO DEL PRATO, GIUSEPPE PENNO, Pisa, Italy, Florence, Italy

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DANIEL S. NUYUJUKIAN, JIN ZHOU, JURAJ KOSKA, PETER REAVEN, Phoenix, AZ, Tucson, AZ

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CAROLINE FOCH, ARTHUR ALLIGNOL, EMMANUELLE BOUTMY, KERSTIN BRAND, Darmstadt, Germany

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DAVID P. CISTOLA, RINKAL PATEL, ERIN CAMPBELL, VIPULKUMAR PATEL, ALOK K. DWIVEDEI, El Paso, TX, Bethesda, MD

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1004-P The Influence of Body Mass Index in Mixed-Ancestry South Africans on the Ability of A1C and Glycated Albumin to Detect Dysglycemia
ANDRE PASCAL KENGNE, TANDI E. MATSHA, DAVID B. SACKS, ANNALISE E. ZEMLIN, RAJIV T. ERASMUS, ANNE E. SUMNER, Cape Town, South Africa, Bethesda, MD, Parow, South Africa

1005-P Patients with Overweight and Obesity at High-Risk for Type 2 Diabetes: A Predictive Model
ALEXANDER TURCHIN, FRITHA J. MORRISON, MARIA SHUBINA, SHRADDHA SHINDE, NADIA AHMAD, HONG KAN, Boston, MA, Indianapolis, IN

1006-P Progression to Type 2 Diabetes Despite a Baseline Fasting Plasma Glucose ≤ 80 mg/dl in a Population-Based Cohort
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1007-P Risk Factor for COVID-19 Infection-Related Hospitalization in Patients with Type 2 Diabetes
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1008-P Utility of a Comprehensive Physical Fitness Score by the Tests of Physical Fitness in Screening of Metabolic Diseases
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995-P Glucagon-Like Peptide-1 (GLP-1) Levels following OGTT Mirror Insulin Resistant States (IRS) in Prediabetes Subjects: A Multi-Ethnic Comparative Study
SHIAU C. CHONG, NORLELA SUKOR, SARAH ROBERT, KIM F. NG, NOR A. KAMARUDDIN, Kuala Lumpur, Malaysia, Johor Bahru, Malaysia

996-P Prevalence of Functional Hyperandrogenism in Young Women with Type 1 Diabetes: A Preliminary Analysis from a Cross-Sectional Study of a Spanish Cohort
ANE BAYONA, LÍA NATTERO-CHÁVEZ, ELENA FERNÁNDEZ DURÁN, BEATRIZ DORADO AVENDAÑO, HÉCTOR F. ESCOBAR-MORREALE, MANUEL LUQUE-RAMÍREZ, Madrid, Spain

997-P Thyroid Safety in T2DM Patients Treated with Long-Term Administration of Liraglutide
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998-P REVEAL-CKD: Prevalence of and Patient Characteristics Associated with Undiagnosed Stage 3 Chronic Kidney Disease
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999-P  A Study to Assess Occurrence of NAFLD and Liver Fibrosis in Patients with T2DM and Associated Factors  C.L. NAWAL, ABHISHEK YADAV, PANKAJ MANGAL, ARADHANA SINGH, Jaipur, India

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1010-P  Prevalence of Acute Diabetes Complications following Cancer Diagnosis and Treatment  RICHARD VISKOCIL, SVENJA PAULECK, MACI WINN, KATSU FUNAI, MICHELLE L. LITCHMAN, WALLACE AKERLEY, HOWARD COLMAN, CORNELIA M. ULRICH, MARY C. PLAYDON, SHEETAL HARDIKAR, Salt Lake City, UT

1011-P  Major Depressive Disorder Is Associated with Higher Risk of Readmission following DKA  MARCELO RAMIREZ, MUKUNTHAN MURTHI, BHAROSA SHARMA, RAMTEJ ATLURI, HAFeEZ SHAKA, GENARO VELAZQUEZ, Chicago, IL

1012-P  Diabetes Is Not Associated with Worse Outcomes in Acute Exacerbation of Chronic Obstructive Pulmonary Disease  RAMTEJ ATLURI, MARCELO RAMIREZ, HAFeEZ SHAKA, MUKUNTHAN MURTHI, CARLOS GABRIEL D. CORPUZ, SUJITHA VELAGAPUDI, GENARO VELAZQUEZ, Chicago, IL

1013-P  Long-Term Metformin Use and Risk of Death and CV-Renal Outcomes in Type 2 Diabetes with Chronic Kidney Disease (Stage 1-4)  Aimin YANG, Eric S.H. LAU, HongJiang Wu, Ronald C. MA, Alice P. KONG, Andrea LUK, Amy W. Fu, Juliana C. CHAN, Elaine Chow, Hong Kong, China

1014-P  The Impact of Baseline A1C and Admission Glucose on Mortality among Patients with Diabetes Hospitalized with COVID-19  JOSEPH BRANCALE, DIANA ATHONVARANGKUL, MICHAEL SIMONOV, JAMEEL ALUSA, LABEEBAH K. SUBAIR, ALEXANDRA M. HAJDUK, YU MI KANG, TANIMA ARORA, FRANCIS P. WILSON, ANIA M. JASTREBOFF, KASIA J. LIPSKA, New Haven, CT, Bridgeport, CT

1015-P  Cost of Diabetes Complications in U.S. Adults Aged 65 Years or Older  YU WANG, PING ZHANG, HUI SHAO, LINDA J. ANDES, GIUSEPPINA IMPERATORE, Gainesville, FL, Atlanta, GA

1016-P  Effectiveness of Early vs. Delayed Pharmacotherapy in Chinese Adults with Type 2 Diabetes: A Retrospective Cohort Study  YAN HO JEFFREY LAU, YUET HIN YUEN, CARMEN NG, JIANCHAO QUAN, Hong Kong, China, Pok Fu Lam, China

1017-P  Association between Death at Day 28 and Components of Microvascular Disease of with Diabetes Hospitalized for Coronavirus Disease-2019 (COVID-19): The CORONADO Study  PIERRE-JEAN SAULNIER, SAMY HADIADJ, LAURENCE KESSLER, MICHEL MARRE, JEAN MICHEL HALIMI, MATTHIEU WARGNY, PIERRE GOURDY, BERTRAND CARIOU, FOR THE CORONADO STUDY GROUP, Poitiers, France, Nantes, France, Strasbourg, France, Paris, France, Tours, France, Toulouse, France

1018-P  Chronic Limb-Threatening Ischemia in Individuals with Type 1 Diabetes: The Impact of Diabetic Nephropathy and Severe Diabetic Retinopathy  VALMA HARJUTSALO, MILLA KALLIO, CAROL FORSBLOM, PER-HENRIK GROOP, THE FINNDIANE STUDY GROUP, Helsinki, Finland

1019-P  Outcomes of Hospitalized DKA Patients with Hypocalcemia: An Analysis of National Inpatient Sample  MUKUNTHAN MURTHI, CARLOS GABRIEL D. CORPUZ, SUJITHA VELAGAPUDI, MARCELO RAMIREZ, RAMTEJ ATLURI, HAFeEZ SHAKA, Chicago, IL
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SHIVANI A. PATEL, DAESUNG CHOI, Atlanta, GA

1021-P Mortality and Length of Hospitalisation amongst Diabetic and Nondiabetic COVID-19 Critical Patients: A Retrospective Cohort Study  
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1022-P Changes in Excess Mortality among Adults with Diabetes-Related End-Stage Renal Disease: A Comparison between the United States and Australia  
JESSICA L. HARDING, JEDIDIAH I. MORTON, JONATHAN E. SHAW, DIANNA J. MAGLIANO, Atlanta, GA, Melbourne, Australia

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JUSTIN MATHEW, CLYDE SCHECHTER, WILLIAM SOUTHERN, JILL P. CRANDALL, YARON TOMER, SHIVANI AGARWAL, Bronx, NY

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NAWEEN KUMAR, ABHISHEK K. CHANDRA, SAJJAD AHSAN, ABHISHEK KUMAR, Darbhanga, India, Patna, India, Purnia, India

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1026-P Rates and Disparities of Hypoglycemic and Hyperglycemic Emergencies and Mortality among U.S. Adults with Diabetes, 2009-2018  
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1027-P Sociodemographic, Clinical, and Treatment Factors Associated with Hyperglycemic Emergencies in Type 1 and Type 2 Diabetes  
ROZALINA G. MCCOY, KAVYA SINDHU SWARNA, RODOLFO J. GALINDO, HOLLY VAN HOUTEN, PATRICK J. O’CONNOR, NILAY SHAH, Rochester, MN, Atlanta, GA, Bloomington, MN

1028-P Inside CKD: Modeling the Clinical and Economic Impact of Routine Screening for Albuminuria in People with Type 2 Diabetes  
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RACHEL G. MILLER, TREVOR J. ORCHARD, TINA COSTACOU, Pittsburgh, PA

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1031-P Wnt Regulation and Collagen Gene Expression in the Bone of Type 2 Diabetes Patients
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1033-P Complications at One Year in a Longitudinal Nationwide Study on Real-World Outcomes of Type 2 Diabetes in India (LANDMARC)
NADEEM RAIS, ASHOK K. DAS, SHASHANK JOSHI, AMBRISH MITHAL, SANJAY KALRA, AMBIKA GOPALAKRISHNAN UNNIKRISHNAN, HEMANT THACKER, BIPIN SETHI, SUBHANKAR CHOWDHURY, ROMIK GHOSH, SUKANYA KRISHNAN, ARJUN NAIR, SENTHILNATHAN MOHANASUNDARAM, SHALINI K. MENON, VAIBHAV SALVI, DEEPA CHODANKAR, CHIRAG TRIVEDI, SUBHASH KUMAR WANGNOO, ABDUL H. ZARGAR, K.M. PRASANNA KUMAR, Puducherry, India, Gurgaon, India, Karnal, India, Pune, India, Mumbai, India, Hyderabad, India, Kolkata, India, New Delhi, India, Srinagar, India, Bengaluru, India

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TAeko OSAWA, KAZUYA FUJIHARA, MAYUKO H. YAMADA, YUTA YAGUCHI, TAKAAKI SATO, MASARU KITAZAWA, YASUHIRO MATSUBAYASHI, TAKAHO YAMADA, HIROHITO SONE, Niigata, Japan

1035-P HbA1c Does Not Identify Nursing Home Residents at High Risk of Hypoglycemia and Hyperglycemia
ALEXANDRA K. LEE, SEI J. LEE, BOCHENG JING, MEDHA MUNSHI, ANDREW J. KARTER, San Francisco, CA, Boston, MA, Oakland, CA

1036-P Ethnic Discordance between HbA1c and BP Management in Primary Care among New Zealanders with Type 2 Diabetes
DAVID SIMMONS, DAHAI YU, RICHARD G. CUTFIELD, BRANDON J. ORR-WALKER, ZHANZHENG ZHAO, YAMEI CAI, CHERI HOTU, JOHN BAKER, UCHECHUKWU L. OSUAGWU, Campbeltown, Australia, Newcastle Under Lyme, United Kingdom, Zhengzhou, China, Auckland, New Zealand, Papatoetoe, New Zealand

1037-P Poor Adherence to Medication and High HbA1c Predict Risk of Amputation in Diabetes Mellitus: Historical Cohort Study Using a Nationwide Claims Database
MASANORI KANEKO, KAZUYA FUJIHARA, MAYUKO H. YAMADA, YUTA YAGUCHI, MASAHIKO YAMAMOTO, MASARU KITAZAWA, SATORU KODAMA, HIROHITO SONE, Niigata, Japan

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JULIE SETTLES, CHRISTOPHER J. CHILD, MAGDALIZ GORRITZ, JASJIT K. MULTANI, CATHERINE MCGUINESS, ROLIN WADE, HONG KAN, Indianapolis, IN, Windlesham, United Kingdom, Falls Church, VA, Plymouth Meeting, PA, Crozet, VA

1040-P Survival Models of Diabetes Complications Applied to Different Cohorts
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1041-P Diabetes Complications among Patients from Metropolitan vs. Non-metropolitan Cities in India: One-Year Results of LANDMARC  
SANJAY KALRA, ASHOK K. DAS, SHASHANK JOSHI, AMBRISH MITHAL, K.M. PRASANNA KUMAR, AMBIKA GOPALAKRISHNAN UNNIKRISHNAN, HEMANT THACKER, BIPIN SETHI, SUBHANKAR CHOWDHURY, ROMIK GHOSH, SUKANYA KRISHNAN, ARJUN NAIR, SENTHILNATHAN MOHANASUNDARAM, SHALINI K. MENON, VAIBHAV SALVI, DEEPA CHODANKAR, CHIRAG TRIVEDI, SUBHASH KUMAR WANGNOO, ABDUL H. ZARGAR, NADEEM RAIS, Karnal, India, Puducherry, India, Gurgaon, India, Bengaluru, India, Pune, India, Mumbai, India, Hyderabad, India, Kolkata, India, New Delhi, India, Srinagar, India

1042-P Major Amputation Rates in the Diabetes Belt and Surrounding Counties among Medicare Beneficiaries in 2006-2015  
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RICCARDO PERFETTI, SHOSHANA SHENDELMAN, New York, NY

1044-P COVID-19 and Trends in Emergency Room (ER) Admissions for Diabetic Ketoacidosis (DKA) and Hypoglycemia  
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1045-P Impact of Type 2 Diabetes Mellitus with Hyperosmolar Hyperglycemic State on Patients Admitted for Heart Failure: Insights from the National Inpatient Sample  
IRIAGBONSE R. ASEMOTA, HAFEEZ SHAKA, EHIZOGIE EDIGIN, MUHAMMAD USMAN ALMANI, EMMANUEL AKUNA, Chicago, IL

1046-P Automated Early Flagging of Undiagnosed CKD Using Real-World Data  
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1047-P Genetic Risk of Insulin Resistance Is Associated with Kidney Disease in Type 2 Diabetics and Nondiabetics  
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1048-P Factors Contributing to Early Mortality in Persons with Type 2 Diabetes with Lower Extremity Amputation  
JEFFREY CHAN, KUN YAN, Martinez, CA

1049-P Finding Equity: Utilizing Artificial Intelligence to Identify Social and Infrastructural Predictors of Diabetes Mortality in Florida  
ANDREW CISTOLA, Gainesville, FL

1050-P Rates, Characteristics, and Comparison of Readmissions for Diabetic Ketoacidosis in Patients with Psoriasis in the United States: A National Population-Based Study  
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1051-P Inside CKD: Modeling the Future Global Burden of Chronic Kidney Disease in Patients with Type 2 Diabetes  
JUAN JOSE GARCIA SANCHEZ, ALYSHAH ABDUL SULTAN, JOHAN ÄRNLÖV, MARCELO C. BATISTA, CLAUDIA CABRERA, JOSHUA CARD-GOWERS, STEVE CHADBAN, GLENN M. CHERTOW, LUCA DENICOLA, JEAN-MICHEL HALIMI, EIICHIRO KANDA, GUUSEN LI, FRANCESCO SAVERO MENNINI, JUAN NAVARRO-GONZALEZ, STEPHEN T. NOLAN, ALBERT POWER, LISE RETAT, NAVDEEP TANGRI, LAURA WEBBER, JAY WISH, MICHAEL XU, Cambridge, United Kingdom, Solna, Sweden, São Paulo, Brazil, Gothenburg, Sweden, London, United Kingdom, Camperdown, Australia, Palo Alto, CA, Naples, Italy, Tours, France, Kurashiki, Japan, Chengdu, China, Rome, Italy, Santa Cruz de Tenerife, Spain, Luton, United Kingdom, Bristol, United Kingdom, Winnipeg, MB, Canada, Indianapolis, IN
1052-P Clinical Characteristics of Osteoporosis in Postmenopausal Women with Type 2 Diabetes Mellitus
YAN WANG, ZHANG LINA, LIXIN GUO, Beijing, China

1053-P Predictors of Nontraumatic Lower Extremity Amputations in Patients with Diabetes Mellitus and Peripheral Artery Disease
GEETHANJALI RAJAGOPAL, JEREMY B. PROVANCE, BETTY DREES, MAHA ABU KISHK, Kansas City, MO

1054-P Incidence of Micro- and Macrovascular Complications among Persons with Type 2 Diabetes with and without Severe Mental Illness: A Nationwide Study
STINE H. SCHEUER, VANJA KOSJERINA, NANNA LINDEKILDE, FRANS POUWER, BENDIX CARSTENSEN, MARIT E. JØRGENSEN, MICHAEL E. BENROS, GREGERS S. ANDERSEN, Odense, Denmark, Gentofte, Denmark

1055-P The Machine Learning Prediction Model NASHmap Identifies Higher Insulin Resistance in Type 2 Diabetes Mellitus (T2DM) Patients at Risk for Nonalcoholic Steatohepatitis (NASH)
ANDREAS TIETZ, GIOVANNI BADER, MATT DOCHERTY, BRENDA REINHART, MARIA-MAGDALENA BALP, MARCOS PEDROSA, SANDIP K. ACHARYA, JUERGEN LOEFFLER, JÖRN M. SCHATTENBERG, Philadelphia, PA, Zurich, Switzerland, Hyderabad, India, Basel, Switzerland, Mainz, Germany

1056-P High Prevalence of Fatty Liver Disease in Individuals with Diabetes and Subclinical Manifestations of Liver Disease
KAJAL CLAYPOOL, CHIRAG PATEL, Lexington, MA, Boston, MA

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1057-P Predictors of Food Insecurity among Ambulatory Patients with Diabetes
AMALIE ALVER, ARPITA BASU, ANTONINA CAPURRO, CIVO L. GEWELBER, KRISTIN BACA, SHELLEY J. WILLIAMS, JEFFREY L. EBERSOLE, KAVITA BATRA, AMRITA M. PATEL, KENNETH IZUORA, Las Vegas, NV

1058-P The 2018 World Cancer Research Fund (WCRF) and American Institute for Cancer Research (AICR) Score and Diabetes Risk in the Diabetes Prevention Program Outcomes Study (DPPOS)
MARISSA M. SHAMS-WHITE, ASHLEY H. TJADEN, SHARON EDELSTEIN, SARAH BASSIOUNI, CATHERINE KIM, XAVIER PI-SUNYER, KARLA A. TEMPLE, ELIZABETH M. VENDITTI, JILL REEDY, BRANDY M. HECKMAN-STODDARD, DPP RESEARCH GROUP, Bethesda, MD, Rockville, MD, La Jolla, CA, Ann Arbor, MI, New York, NY, Chicago, IL, Pittsburgh, PA

1059-P Unmet Social Needs and Diabetes-Related Emergency Department Visits and Hospitalization: A Nationally Representative Study of U.S. Safety-Net Health Center Patients
ALICE YAN, ZUMIN SHI, MUKOSO N. OZIEH, JONI S. WILLIAMS, Milwaukee, WI, Doha, Qatar

1060-P Associations of Dietary Patterns and Nutrients with Biomarkers of Inflammation in Adults with and without Type 1 Diabetes
ARPITA BASU, LUNG-CHANG CHIEN, AMY C. ALMAN, JANET K. SNELL-BERGEON, Las Vegas, NV, Tampa, FL, Aurora, CO

1061-P Use of Nutrition and Behavioral Therapy for Obesity among Medicare Beneficiaries with Incident Diabetes, 2002-2016
LINDA J. ANDES, KAREN R. SIEGEL, ALEXIS WILLIAMS, GIUSEPPINA IMPERATORE, DEBORAH B. ROLKA, Atlanta, GA

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1062-P Attainment of Glycemic Targets among Adults with Diabetes in Canada: A Cross-Sectional National Diabetes Repository Study
ALANNA WEISMAN, BRUCE A. PERKINS, Toronto, ON, Canada
1063-P  Regional Variation in Hypertension Prevalence among Older Adults with and without Diabetes, 2005-2017
JALAL UDDIN, SHA ZHU, GARGYA MALLA, EMILY B. LEVITAN, DEBORAH B. ROLKA, D. LEANN LONG, APRIL P. CARSON, Birmingham, AL, Atlanta, GA

1064-P  Trends in Heavy Metal Mixtures among U.S. Adults by Diabetes and Cardiovascular-Renal Diseases in NHANES, 1999-2016
JINGLI YANG, KENNETH LO, AIMAIN YANG, Gansu, China, Hong Kong, China

1065-P  Glycemc Trend at One Year in a Longitudinal Nationwide Study on Real-World Outcomes of Type 2 Diabetes in India (LANDMARC)
SHASHANK JOSHI, ASHOK K. DAS, K.M. PRASANNA KUMAR, AMBRISH MITHAL, SANJAY KALRA, AMBIKA GOPALAKRISHNAN UNNIRKRISHNAN, HEMANT THACKER, BIPIN SETHI, SUBHANKAR CHOWDHURY, ROMIK GHOSH, SUKANYA KRISHNAN, ARJUN NAIIR, SENTHILNATHAN MOHANASUNDARAM, SHALINI K. MENON, VAIBHAV SALVI, DEEPA CHODANKAR, CHIRAG TRIVEDI, SUBHASH KUMAR WANGNOO, ABDUL H. ZARGAR, NADEEM RAIS, Puducherry, India, Bengaluru, India, Gurgaon, India, Karnal, India, Pune, India, Mumbai, India, Hyderabad, India, Kolkata, India, New Delhi, India, Srinagar, India

1066-P  Association of Food Security with Cardiometabolic Health during Young Adulthood: Comparison by Race and Ethnicity
CASSANDRA J. NIKOLAUS, LUCIANA E. HEBERT, ANNA ZAMORA-KAPOOR, KAIMI SINCLAIR, Seattle, WA, Seatac, WA

1067-P  Short-Term Risk of Type 2 Diabetes Mellitus in Adults Treated with Corticosteroids: An Observational Study
ELLEN BERNI, SARA JENKINS-JONES, CAROL ASTBURY, MARY N. BROWN, PHILLIP R. HUNT, CRAIG J. CURRIE, SAMUEL ADAMSSON ERYD, PHILIP AMBERY, Cambridge, United Kingdom, Waltham, MA, Cardiff, United Kingdom, Mölnad, Sweden, Gothenburg, Sweden

1068-P  Diabetes and Comorbidities Risk Assessment in Hospitalization and Fatalities from the Mexican COVID-19 Surveillance System
HECTOR GALLARDO-RINCÓN, ALEJANDRA MONTOYA, LUIS ALBERTO MARTINEZ-JUAREZ, JULIETA LOMELIN-GASCON, EDUARDO R. SAUCEDO-MARTINEZ, RICARDO MUJICA-ROSALES, ROBERTO TAPIA-CONYER, Mexico City, Mexico

1069-P  How Does Exposure to Overnutrition In Utero Lead to Childhood Adiposity? A Longitudinal Study in the Exploring Perinatal Outcomes among Children (EPOCH) Cohort
WEI PERNG, MEGAN M. KELSEY, KATHERINE A. SAUDER, DANA DABELEA, Aurora, CO

1070-P  Relationships between β-Cell Function and Insulin Sensitivity in East Asians and Caucasians during Progression from NGT to Diabetes: A Meta-analysis
LI LI, XIANTONG ZOU, LINONG JI, Beijing, China

1071-P  Long-Term Renin-Angiotensin System Inhibitor Use and Risk of Pneumonia and Pneumonia-Related Death in Type 2 Diabetes
MAI SHI, AIMAIN YANG, ERIC S.H. LAU, HONGJIANG WU, BAOQI FAN, ALICE P. KONG, ANDREA LUK, RONALD C. MA, JULIANA C. CHAN, ELAINE CHOW, Hong Kong, China

1072-P  Changes in the Prevalence of Metabolically Healthy Obese in the United States, 1988-2018
SHIVANI A. PATEL, DAESUNG CHOI, Atlanta, GA

1073-P  Incidence of Type 2 Diabetes Mellitus in a Cohort of Transgender Persons
NOREEN ISLAM, MICHAEL GOODMAN, Atlanta, GA

1074-P  Variation in Ambulatory Care Sensitive Condition-Related Emergency Department Use among Adults with Diabetes over 2008-2014
TEG S. UPPAL, GAIL FERNANDES, JEEHAI SONYA HAW, MEGHA K. SHAH, SARA TURBOW, PUNEET K. CHEHAL, SWAPNIL RAJPATTHAK, K.M. VENKAT NARAYAN, MOHAMMED K. ALI, North Wales, PA, Atlanta, GA, Dunwoody, GA
1075-P Acute and Chronic Glucose Control in Critically Ill Patients with Diabetes: Impact of Prior Insulin Treatment
JAMES S. KRINSLEY, PETER R. RULE, JEAN-CHARLES PREISER, GREG ROBERTS, SHEHROSE CHAUDRY, CAMILA HELUEY-RODRIGUES, KRISTA DIONNE, GUILLERMO E. UMPIERREZ, IRL B. HIRSCH, Stamford, CT, Los Altos Hills, CA, Brussels, Belgium, Bedford Park, Australia, Atlanta, GA, Seattle, WA

1076-P First-Fill Failure with Antihyperglycemic Medications: A Systematic Literature Review
NEHAL M. AHMED, SADIE PETERS, CATHERINE E. COOKE, Baltimore, MD

1077-P Alcohol Consumption, Smoking Habits, and the Risk of Incident Glomerular Hyperfiltration in Subjects with Impaired Fasting Glucose
MIKIKO SHIBATA, KYOKO K. SATO, SHINICHIRO UEHARA, NORIMITSU NISHIDA, KAORI OKAMURA, HIDEO KOH, KEIKO OUE, NORIKO IHANA-SUGIYAMA, MITSURU OHSUGI, OSACA, Japan

1078-P Disparities in HbA1c Testing and Diabetes Outcomes: SEARCH for Diabetes in Youth
KATHERINE A. SAUDER, JEANETTE M. STAFFORD, SHELLEY R. EHRlich, ANGELA M. LIESE, SANTICA M. MARCOVINA, AMY M. MOTTI, CATHERINE PIHOKER, SHARON SAYDAH, RALPH DAGOSTINO, JR., DANA DABLEA, Aurora, CO, Winston-Salem, NC, Cincinatti, OH, Columbia, SC, Chapel Hill, NC, Seattle, WA, Atlanta, GA

1079-P Maternal Gestational Diabetes and Childhood Hyperlipidemia
GANG HU, Baton Rouge, LA

1080-P Trends in Clinical Inertia in Diabetes Treatment Intensification in the U.S. Veterans Affairs Health Care System (VA)
SRIDHARAN RAGHAVAN, LAWRENCE S. PHILLIPS, LIRON CAPLAN, JANE E. REUSCH, Aurora, CO, Decatur, GA, Denver, CO

1081-P Serum Total Adiponectin Level Is Associated with Onset of Diabetes in Male Japanese: Tokushima Cohort Study
AKIKO HATA, MASASHI MIYOSHI, TAKAYUKI NAKAO, TAKAKO MINAGAWA, YUMI KUWAMURA, MAKOTO FUNAKI, Kagawa, Japan, Tokushima, Japan

1082-P Prevalence of Depression in U.S. Adults with and without Diabetes, 2011-2019
PYONE CHO, ISRAEL H. HORA, KAI M. BULLARD, STEPHEN R. BENoit, Atlanta, GA

1083-P Diabetes and Social Determinants of Health: A Web-Based Interactive Module
STEPHEN R. BENoit, KAI M. BULLARD, PYONE CHO, ISRAEL A. HORA, DOUGLAS KING, JOHN W. REYNOLDS, HUI XIE, YAN ZHANG, MAIS ABONEAAJ, DAVID C. SHELTON, YUN HAN HANNAH WANG, KIRANKUMAR BATCHU, Atlanta, GA, Chamblee, GA, Chantilly, VA

1084-P Cesarean Delivery and Insulin Sensitivity in the Older Adult: The Microbiome and Insulin Longitudinal Evaluation Study
ELIZABETH T. JENSEN, ALAIN BERTONI, OSA L. CRAGO, YII-DER IDA CHEN, JEROME I. ROTTER, ALEXIS WOOD, STEPHEN S. RICH, MARK O. GOODARZI, Winston-Salem, NC, Torrance, CA, Houston, TX, Charlottesville, VA, Los Angeles, CA

1085-P Defining the Role of Insulin Clearance in Dysglycemia: The Microbiome and Insulin Longitudinal Evaluation Study (MILES)
ALEXIS WOOD, ELIZABETH T. JENSEN, GAUTAM RAMESH, ZORAYR ARZUMANYAN, KELVIN LAM, ALAIN BERTONI, JEROME I. ROTTER, YII-DER IDA CHEN, MARK O. GOODARZI, Houston, TX, Winston-Salem, NC, La Jolla, CA, Torrance, CA, Los Angeles, CA

1086-P A Retrospective Nationwide Surveillance on the First-Line Antidiabetic Medication for the Patients with Type 2 Diabetes in Japan
RYOTARO BOUCHI, TAKEHIRO SUGIYAMA, ATSUSHI GOTO, KENJIRO IMAI, NORIKO IHANA-SUGIYAMA, MITSURU OHSUGI, TOSHIASA YAMAUCHI, TAKASHI KADOWAKI, KOHJIRO UEKI, Tokyo, Japan, Yokohama, Japan
1087-P Therapy Trends at One Year in the Longitudinal LANDMARC Study on Real-World Outcomes in Type 2 Diabetes Patients in India
HEMANT THACKER, ASHOK K. DAS, SHASHANK JOSHI, AMBRISH MITHAL, SANJAY KALRA, AMBIKA GOPALAKRISHNAN UNNIKRISHNAN, K.M. PRASANNA KUMAR, BIPIN SETHI, SUBHANKAR CHOWDHURY, ROMIK GHOSH, SUKANYA KRISHNAN, ARUN NAIR, SENTHILNATHAN MOHANASUNDARAM, SHALINI K. MENON, VAIBHAV SALVI, DEEPA CHODANKAR, CHIRAG TRIVEDI, SUBHASH KUMAR WANGNOO, ABDUL H. ZARGAR, NADEEM RAIS, Mumbai, India, Puducherry, India, Gurgaon, India, Karnal, India, Pune, India, Bengaluru, India, Hyderabad, India, Kolkata, India, New Delhi, India, Srinagar, India

1088-P Can Machine Learning Support Decision for Insulin Initiation in Patients with Type 2 Diabetes?
KAZUYA FUJIHARA, HIROHITO SONE, Niigata, Japan

1089-P Abnormal Glucose Tolerance Consequences Depend on Etiology: Insulin Resistance vs. β-Cell Failure
MARIE CONSOLATRICE SAGE ISHIMWE, THOMAS HORMENU, ELYSSA M. SHOUP, NANA H. OSEI-TUTU, ARIELLE PATTERSON, ANNEMARIE WENTZEL, MOHAMMAD-HADI BAGHERI, CHRISTOPHER DUBOSE, LILIAN MABUNDO, JOON HA, ARTHUR SHERMAN, ANNE E. SUMNER, Kigali, Rwanda, Bethesda, MD

1090-P Diabetes in Japanese COVID-19 Patients as the Primary Factor of Accelerated Progression to Severe State
SHIZUKA KANEKO, HIDEO KITA, KAZUYA MOTOHASHI, SHINSUKE TOKUMOTO, UEBA YOKO, HIDEKI EGUCHI, ICHIRO TSUNEMATSU, Takatsuki, Japan, Osaka, Japan, Kyoto, Japan

1091-P Barrier to Clinic Attendance among Rural Appalachian Adults with Diabetes
BRITTANY L. SMALLS, MARY ELIZABETH LACY, LAURA HIERONYMUS, PHILIP WESTGATE, MD TOFIAL AZAM, SUSAN C. WESTNEAT, NANCY SCHOENBERG, Lexington, KY

1092-P Trends in Metformin Prescribing in Patients with Chronic Kidney Disease after FDA Label Change
CARLOS A. ALVAREZ, AARON PERKINS, LUCILE PARKER GREGG, ERIC MORTENSEN, Dallas, TX, Houston, TX, Farmington, CT

1093-P Incidence of Primary Nonadherence to Sodium-Glucose Cotransporter 2 Inhibitors (SGLT2i) and Glucagon-Like Peptide-1 Agonists (GLP-1A) in an Integrated Health Care System
JING LUO, ROBERT FELDMAN, SCOTT D. ROTHENBERGER, MICHAEL FISCHER, MARY T. KORYTKOWSKI, WALID F. GELLAD, Pittsburgh, PA, Boston, MA

1094-P Attrition Rates among Participants in the National Diabetes Prevention Program: Variation by Organization Type, State, and Region
XUANPING ZHANG, MICHAEL CANNON, BOON PENG NG, ELIZABETH ELY, Atlanta, GA, Chamblee, GA

1095-P Glycemic Trend in Metropolitan versus Non-metropolitan Cities of India: One-Year Results of LANDMARC
AMBIKA GOPALAKRISHNAN UNNIKRISHNAN, ASHOK K. DAS, SHASHANK JOSHI, AMBRISH MITHAL, SANJAY KALRA, K.M. PRASANNA KUMAR, HEMANT THACKER, BIPIN SETHI, SUBHANKAR CHOWDHURY, ROMIK GHOSH, SUKANYA KRISHNAN, ARUN NAIR, SENTHILNATHAN MOHANASUNDARAM, SHALINI K. MENON, VAIBHAV SALVI, DEEPA CHODANKAR, CHIRAG TRIVEDI, SUBHASH KUMAR WANGNOO, ABDUL H. ZARGAR, NADEEM RAIS, Pune, India, Puducherry, India, Gurgaon, India, Karnal, India, Bengaluru, India, Mumbai, India, Hyderabad, India, Kolkata, India, New Delhi, India, Srinagar, India

1096-P Analysis of Medication Use in Type 2 Diabetes Mellitus in Korea Using a Common Data Model Based on the Claim Data of the Health Insurance Review and Assessment Service
KYUNG AE LEE, HEUNG YONG JIN, YU JI KIM, TAE SUN PARK, Jeonju, Korea, Republic of

1097-P Comparative Effectiveness of Diabetes Prevention Program Implementation Strategies
KIRSTEN S. DORANS, KATHERINE T. MILLS, YUAN FENG, ASHNA A. SETHI, XINGYAN LI, JIANG HE, New Orleans, LA
Admission Blood Glucose but Not HbA1c Predicts Mortality in People with Diabetes Hospitalized with COVID-19 Infection
SOUMYABRATA ROY CHAUDHURI, ANIRBAN MAJUMDER, DEBMALYA SANYAL, AJoy BISWAS, KINGSHUK BHATTACHARJEE, Kolkata, India

Association between Variability in Body Mass Index and Development of Type 2 Diabetes: Panasonic Cohort Study
HIROSHI OKADA, MASAHAIDE HAMAGUCHI, MICHIAKI FUKUI, Moriguchi, Japan, Kyoto, Japan

A Four-Humanitarian Agency Survey of Diabetes Care in 83 Humanitarian Settings
SYLVIA KEHLENBRINK, OMAR MAHBOOB, SARA A. AL-ZUBI, PHILIPPA BOULLE, SIGIRIYA AEBISCHER PERONE, LILIAN KIAPI, AHMAD H. ALANI, HEIKO HERING, MICHAEL WOODMAN, STEPHANIE KAYDEN, KAREN DONELAN, BIANCA PORNEALA, JAMES B. MEIGS, Boston, MA, London, ON, Canada, Geneva, Switzerland, London, United Kingdom, Waltham, MA

Association between Insulin Utilization and Average Out-of-Pocket Cost in Commercially Insured Patients with Diabetes
NATALIA RUIZ-NEGRON, JANE SULLIVAN, JAMIE TUCKER, CARRIE MCADAM-MARX, Salt Lake City, UT, Eden Prairie, MN, Omaha, NE

Association between Insulin Utilization and Average Out-of-Pocket Cost in Medicare Advantage Patients with Diabetes
NATALIA RUIZ-NEGRON, JANE SULLIVAN, JAMIE TUCKER, CARRIE MCADAM-MARX, Salt Lake City, UT, Eden Prairie, MN, Omaha, NE

Risk Factors for Visit Cancellations in a Tertiary Care Referral Clinic Specializing in Diabetic Eye Disease
CATHERINE GILBERT, WARD FICKWEILER, ATIF ADAM, JENNIFER SUN, Boston, MA

Normative Fasting C-Peptide Values in Adolescents in the National Health and Nutrition Examination Surveys (NHANES)
PRIYA Y. SONI, YUMIN WANG, GEORGE J. ECKERT, HEBA M. ISMAIL, Indianapolis, IN

Effects of Exercise on Glycemic Control and Insulin Resistance (IR) in Individuals with Type 1 (T1D) and Type 2 Diabetes (T2D) in the NHANES Dataset
PRIYA Y. SONI, QING TANG, HEBA M. ISMAIL, Indianapolis, IN

Glycemic Burden and Obesity Independently Increased Risk of Liver Cancer in Type 2 Diabetes: Hong Kong Diabetes Register (1995-2019)
DANDAN MAO, ERIC S.H. LAU, AIMIN YANG, HONGJIANG WU, MAI SHI, ALICE P. KONG, RONALD C. MA, ELAINE CHOW, ANDREA LUK, JULIANA C. CHAN, Hong Kong, China

Trends of First-Line Antidiabetic Treatment among 2007-2017 Medicare Beneficiaries Newly Diagnosed with Type 2 Diabetes (T2D) and Their Determinants
YUJIA LI, INMACULADA HERNANDEZ, NICO GABRIEL, SANDRA L. KANE-GILL, UTIBE ESSIEN, FREDERICO TOLEDO, JINGCHUAN GUO, Pittsburgh, PA, Gainesville, FL

Care Cascade Engagement and Characteristics of Diabetes Awareness in Adult Samoans in 2010 and 2018
ANNA C. RIVARA, EMILY M. RUSSELL, SATUPAITEA VIALI, MUAGUTUTIA SEFUIVA REUPENA, TAKE K. NASERI, ALYSA POMER, RYAN L. MINSTER, DANIEL E. WEEKS, STEPHEN T. MCGARVEY, NICOLA HAWLEY, New Haven, CT, Apia, Samoa, Pittsburgh, PA, Providence, RI

The Effect of Neighborhood Food Environment on Diabetes Risk: A Multilevel Analysis of the Veterans Administration Diabetes Risk Cohort
RANIA KANCHI, PRISCILLA M. LOPEZ, PASQUALE E. RUMMO, DAVID C. LEE, SAMRACHANA ADHIKARI, MARK D. SCHWARTZ, SANJA AVRAMOVIC, KAREN R. SIEGEL, DEBORAH B. ROLKA, GIUSEPPINA IMPERATORE, BRIAN ELBEL, LORNA THORPE, New York, NY, Fairfax, VA, Atlanta, GA
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1110-P  COVID-19 Pandemic-Related Anxiety and Depression Symptoms among Adults with Type 1 Diabetes
EMILY MALECHA, KIMBERLY A. DRISCOLL, VIRAL SHAH, JANET K. SNELL-BERGEON, CRISTY GENO RASMUSSEN,
Aurora, CO, Gainesville, FL

1111-P  Integrating Longitudinal Clinical and Baseline Multiomics Data for Predicting C-Peptide Progression in Newly
Diagnosed Type 1 Diabetes
CAROLINE BRORSSON, JOSE JUAN ALMAGRO ARMENTEROS, GIANLUCA MAZZONI, SIMRANJEET KAUR, ANKE M.
SCHULTZE, CHANTAL MATHIEU, SØREN BRUNAK, ON BEHALF OF THE INNODIA CONSORTIUM, Copenhagen,
Denmark, Gentofte, Denmark, Frankfurt, Germany, Leuven, Belgium

1112-P  Mortality Risk Associated with Recurrent Ketoacidosis in a Cohort of Brazilian Type 1 Diabetes Patients
SARAH S. DOS SANTOS, LUANA A. RAMALDES, MONICA GABBAY, PATRICIA DUALIB, JOAO ROBERTO DE SA, SERGIO
A. DIB, São Paulo, Brazil

1113-P  COVID-19 Avoidance Behaviors in Adults with Type 1 Diabetes
CATHERINE J. CHARTIER-LOGAN, EMMA EIKERMANN, HALEY K. WISE, EMILY MALECHA, JANET K. SNELL-BERGEON,
Aurora, CO

1114-P  Cannabis Use, Diabetes Self-Management, and Diabetic Ketoacidosis (DKA) in Adults with Type 1 Diabetes (T1D)
DRAKE GIESE, GREGORY L. KINNEY, CRISTY GENO RASMUSSEN, JANET K. SNELL-BERGEON, VIRAL SHAH, Aurora, CO

1115-P  Household Food Insecurity and Cognitive Function in Youth and Young Adults with Type 1 Diabetes
ANGELA D. LIESE, ANDREA D. BROWN, ALLISON SHAPIRO, EDWARD A. FRONGILLO, GRETA WILKENING, JULIUS
FRIDRIKSSON, ANWAR MERCHANT, LEORA HENKIN, ELIZABETH T. JENSEN, BETH A. REBOUSSIN, AMY S. SHAH,
SANTICA M. MARCOVINA, LAWRENCE M. DOLAN, DANA DABELEA, CATHERINE PIHOKER, JASON A. MENDOZA,
Columbia, SC, Winston-Salem, NC, Cincinnati, OH, Seattle, WA, Aurora, CO

1116-P  Macronutrient Intake and Risk of Progression to Type 1 Diabetes in TrialNet
ERIKA L. LUNDGRIN, ANURADHA VISWANATHAN, SUZANNE B. JOHNSON, JILL M. NORRIS, HEBA M. ISMAIL, JAMIE
R. WOOD, ALICIA J. THOMAS, DOROTHY J. BECKER, Cleveland, OH, Tallahassee, FL, Aurora, CO, Indianapolis, IN,
Pittsburgh, PA

1117-P  Characterizing Glucose/C-Peptide Response Curve (GCRC) Phenotypes to Enhance Selection Specificity for Type 1
Diabetes (T1D) Prevention Trials
HEBA M. ISMAIL, DAVID D. CUTHBERTSON, MARIA J. REDONDO, CARMELLA EVANS-MOLINA, ANDREA STECK,
HENRY RODRIGUEZ, STEPHEN E. GITELMAN, KEVAN C. HEROLD, JAY S. SKYLER, BRANDON M. NATHAN, MARK A.
ATKINSON, LINDA DIMEGLIO, JAY SOSENKO, Indianapolis, IN, Tampa, FL, Houston, TX, Aurora, CO, San Francisco,
CA, New Haven, CT, Miami, FL, Minneapolis, MN, Gainesville, FL

1118-P  The Association of Ankle-Brachial Index and BMI with Pulmonary Disease in Type 1 Diabetes
JINGHUI JU, GREGORY L. KINNEY, RACHEL G. MILLER, TREvor J. ORCHARD, TINA COSTACOU, Pittsburgh, PA,
Aurora, CO

1119-P  Improving Clinical Utility of GAD65 Autoantibodies by Electrochemiluminescence Assay When Identifying
Autoimmune Adult-Onset Diabetes
XIAOFAN JIA, YONG GU, TANWI VARTAK, DONGMEI MIAO, FRAN DONG, SAMUEL T. JERRAM, MARIAN REWERS,
ASSIAMIRA FERRARA, JEAN M. LAWRENCE, LIampion YU, RICHARD D. LESLIE, THE ACTION LADA CONSORTIUM, THE
DIABETES IN YOUNG ADULTS (DIYA) STUDY GROUP, Dublin, Ireland, Aurora, CO, Oakland, CA, Pasadena, CA,
London, United Kingdom
1120-P  Sex Differences in the Burden of Diabetes-Related Complications among Older Adults with Type 1 Diabetes
MARY ELIZABETH L. LEIGH, PAOLA GILSANZ, CHRIS MORAN, ANDREW J. KARTER, RACHEL A. WHITMER, Lexington, KY, Clayton, Australia, Oakland, CA, Davis, CA

1121-P  Unmet Social Needs and Depressive Symptomatology among Youth and Young Adults with Type 1 Diabetes
ANDREA D. BROWN, JASON A. MENDOZA, EDWARD A. FRONGILLO, KATE FLORY, BETH A. REBOUSSIN, ELIZABETH T. JENSEN, LAWRENCE M. DOLAN, ANNA BELLATORRE, FAISAL MALIK, SANTICA M. MARCOVINA, ANGELA D. LIESE, Columbia, SC, Seattle, WA, Winston-Salem, NC, Cincinnati, OH, Aurora, CO

1122-P  Comparing the Relative Frequency of Pediatric New-Onset Type 1 Diabetes since the Onset of COVID in the United States
DUSTIN ROWLAND, NICOLE D.O. LEE, BERRIN ERGUN-LONGMIRE, Kalamazoo, MI

1123-P  Analysis of Readmissions for Diabetic Ketoacidosis in Patients with Hidradenitis Suppurativa: A Nationwide Analysis
EHIZOGIE EDIGIN, HAFeEZ SHAKA, PRECIOUS O. ESEATON, MUHAMMAD USMAN ALMANI, ASIM KICHLOO, PIUS E. OJEMOLON, DEEPAK JAKHAR, Chicago, IL, Benin, Nigeria, Watertown, NY, St. George’s, Grenada, Delhi, India

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1124-P  Clinical and Genetic Models Assess the Probability of Type 1 Diabetes (T1D) among Patients with Nonclassic Diabetes Features
LIANA K. BILLINGS, ZHUQING SHI, W. KYLE RESURRECCION, ARMAN QAMAR, CHI-HSIUNG WANG, JUN WEI, TONI I. POLLIN, MIRIAM UDLER, JIANFENG XU, Evanston, IL, Baltimore, MD, Boston, MA

1125-P  o Non-HLA Genes Contribute to Age of Type 1 Diabetes Onset in Monozygotic Twins?
TAYLOR M. TRIOLO, FRAN DONG, HALI C. BRONCUCIA, SUNA ONENGUT-GUMUSCU, ANDREA STECK, STEPHEN S. RICH, Charlotteville, VA, Aurora, CO

1126-P  Activating SKAP2 Mutation Linked to Diabetes with Multiple Autoimmune and Inflammatory Conditions
CHESTER CHAMBERLAIN, NIKLAS RUTSCH, WESLEY DIXON, LISA R. LETOURNEAU-FREIBERG, LOUIS H. PHILIPSON, MICHAEL GERMAN, MARK S. ANDERSON, CLIFFORD A. LOWELL, Muenster, Germany, San Francisco, CA, Chicago, IL

1127-P  Expression-Based Genome-Wide Association Study Links Osteopontin and Interleukin-1 Receptor Antagonist with Type 1 Diabetes
XIAOFAN JIA, KYOKO TODA, LING HE, DONGMEI MIAO, SATORU YAMADA, LI Ping YU, KIICHI KODAMA, Tokyo, Japan, Englewood, CO, Aurora, CO

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1128-P  Genetic Risk Score for Type 2 Diabetes (T2D) and Glycemic Traits: The Exploring Perinatal Outcomes among Children (EPOCH) Study
MAGGIE STANISLAWSKI, ELIZABETH M. LITKOWSKI, SRIDHARAN RAGHAVAN, KRISTEN K. HARRALL, DEBORAH H. GLUECK, ETHAN M. LANGE, DANA DABELEA, LESLIE LANGE, Aurora, CO, Denver, CO

1129-P  The Genetic Architecture of Cardiovascular Disease in Individuals with Type 2 Diabetes
ERIN L. RICHARD, STEVEN CAO, ALADDIN SHADYAB, RANY SALEM, La Jolla, CA

1130-P  A GWAS of Gene by Smoking Interaction on Type 2 Diabetes
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1131-P  Clinical Prediction Models for MODY Genetic Testing in the United States Monogenic Diabetes Registry
ROBERT P. MULLIGAN, LISA R. LETOURNEAU-FREIBERG, TIANA L. BOWDEN, PERSEPHONE TIAN, BALAMURUGAN KANDASAMY, LOUIS H. PHILIPSON, SIRI ATMA W. GREELEY, ROCHELLE N. NAYLOR, Chicago, IL
1132-P Genetic Relationships between Birth Weight and Type 2 Diabetes
LAUREN E. WEDEKIND, WEN-CHI HSUEH, MUIDEEN OLAIYA, SAYUKO KOBES, LESLIE BAIER, WILLIAM C. KNOWLER, ANUBHA MAHAJAN, MARK MCCARTHY, ROBERT L. HANSON, Phoenix, AZ, Clayton, Australia, Oxford, United Kingdom

1133-P Monogenic Diabetes in Chinese with Young-Onset Diabetes
SANDRA TSOI, CADMON K.P. LIM, RONALD C. MA, ERIC S.H. LAU, BAOQI FAN, ELAINE CHOW, ALICE P. KONG, JULIANA C. CHAN, ANDREA LUK, Hong Kong, China

1134-P Polygenic Risk Score of Type 2 Diabetes as a Predictive Factor for Macrovascular Complications: A Prospective Population-Based UK Biobank Study
SANGHYUK JUNG, DOKYOON KIM, MANU SHIVAKUMAR, HONG-HEE WON, JAE-SEUNG YUN, Philadelphia, PA, Seoul, Korea, Republic of, Suwon, Korea, Republic of

1135-P Type 2 Diabetes Modulates DNA Methylation in Human Sperm
LEI SU, DANIELLE WOLFS, MARIE-FRANCE HIVERT, JAY PATEL, LAUREN RICHARDSON, CHARNICE O. CHARMANT, ELVIRA M. ISGANAITIS, MARY-ELIZABETH PATTI, Boston, MA

1136-P Utility of Mining a Genetic Diagnostic Laboratory for Atypical Diabetes Cases
MARY E. FANG, JILL A. ROSENFELD, MARIA J. REDONDO, MUSTAFA TOSUR, PENGFEI LIU, ASHOK BALASUBRAMANYAM, JENNIFER POSEY, RADIANT STUDY GROUP, Houston, TX

1137-P Liver Regulatory Variants and Genes at Metabolic Trait Loci
GAUTAM PANDEY, KEVIN CURRIN, SWAROOPARANI VADLAMUDI, K. ALAINE BROADAWAY, KAREN L. MOHLKE, Chapel Hill, NC

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DUCHDA VY, Phnom Penh, Cambodia

1139-P CD36/FABP4/PPAR-d Axis-Induced Inflammation Is Dependent on ACSL1 under the Influence of Acute High-Fat Feeding
FATEMA ALRASHED, ASHRAF AL MADHOUN, SARDAR T. SINDHU, AMNAH AL-SAYYAR, FAHD ALMULLA, RASHEED AHMAD, Kuwait City, Kuwait, Dasman, Kuwait

1140-P Immune Dysregulation as a Consequence of Aberrant Glycemic Control in Diabetes Mellitus
VIKRAM SABAPATHY, MURAT DOGAN, RAJKUMAR VENKATADRI, RAJIA ARBAB, JENNIE Z. MA, ANANDA BASU, RITA BASU, RAHUL SHARMA, Charlottesville, VA

1141-P Short-Chain Fatty Acid Acetate Increases TNF-a-Induced MCP-1 Production in Monocytes via the ACSL-1/MAPK/NF-κB Axis: Significance for Inflammation and Insulin Resistance
RASHEED AHMAD, AREEJ ABU ALROUB, FATEMA ALRASHED, AMNAH AL-SAYYAR, NADEEM AKHTER, SHIHAB P. KOCHUMON, FAHD ALMULLA, SARDAR T. SINDHU, Kuwait City, Kuwait, Dasman, Kuwait

1142-P Update on BCG Clinical Trial Programs in Patients with Advanced Type 1 Diabetes
WILLEM KUHTREIBER, HIROYUKI TAKAHASHI, RYAN KEEFE, KACIE NELSON, NATHAN NG, JOAN BRALEY, HUI ZHENG, DENISE L. FAUSTMAN, Charlestown, MA, Boston, MA

1143-P ZnT8 Autoantibody Positivity Does Not Predict Pediatric Diabetes Presentation or Subsequent Clinical Course
AMANDA R. DAHL, SARAH JENKINS, JADE ZBACNIK, JESICA FOSTER, SIOBHAN PITTOCK, Rochester, MN

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STANISLAV RUBAKHIN, ELENA V. ROMANOVA, JONATHAN V. SWEEDLER, Urbana, IL
1145-P Association of Muscle Mass Loss and Diabetes Development in Liver Allograft Recipients
SEJEONG LEE, HAE KYUNG KIM, YOUNG-EUN KIM, MINYOUNG LEE, DONG JIN JOO, MYOUNG SOO KIM, EUN SEOK KANG, Seoul, Korea, Republic of

1146-P Persistent Graft Function after Islet Allotransplantation Into Prevascularized Sernova Cell Pouch Device: Preliminary Results from the University of Chicago
PIOTR J. BACHUL, GABRIELA S. GENERETTE, JORDAN S. PYDA, PETER BOREK, ANGELICA PEREZ-GUTIERREZ, KAROLINA GOLAB, LINDSAY BASTO, LAURENCIA PEREA, MARTIN TIBUDAN, BRADEN JUENGEL, JAYANT KUMAR, CELESTE C. THOMAS, LOUIS H. PHILLIPSON, JOHN FUNG, PIOTR WITKOWSKI, Boston, MA, Chicago, IL

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1148-P Liver Androgen Receptor Knockout Delays the Onset of Diet-Induced Metabolic Dysfunction in Female Mice Compared with Male Mice
TRINITEE R. OLIVER, ADJOA OSEI-NTANSAH, STANLEY ANDRISSE, TAYLOR LOFTON, CLAIRE FALZARANO, Washington, DC, Baltimore, MD

1149-P A Comparison between One Month vs. Two Months on a High-Fat Diet on the Impact on Glucose Metabolism in Male and Female Liver Androgen Receptor Knockout Mice
ADJOA OSEI-NTANSAH, TRINITEE R. OLIVER, CLAIRE FALZARANO, TAYLOR LOFTON, STANLEY ANDRISSE, Washington, DC, Baltimore, MD

1150-P A Hyperhomocysteinemia-Inducing Diet Alters Gut Microbiome and Glucose Homeostasis
CHAK KWONG CHENG, CHENGUANG WANG, YU HUANG, Hong Kong, China

1151-P Differential Associations between Plasma Lipids and Insulin Resistance in Women with and without Type 1 Diabetes
LAURA PYLE, TIMOTHY B. VIGERS, IRENE E. SCHAUER, BRYAN C. BERGMAN, JANET K. SNELL-BERGEON, Aurora, CO

1152-P Elucidating Protective Mechanisms of Targeting of hOGG1 to Mitochondria on the HFD-Induced Insulin Resistance in Mice Lacking OGG1
LARYSA YUZEFOVYCH, VIKTOR M. PASTUKH, LYUDMILA RACHEK, Mobile, AL

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1153-P Sodium-Glucose Cotransporter-2 Inhibitors Increase Food Intake via a Mechanism That Acts on the Central Nervous System Involving Phosphorylation of Adenosine Monophosphate-Activated Protein Kinase in the Lateral Hypothalamus
KENJI TAKEDA, HIRAKU ONO, TOMOHIRO OHNO, KOUTARO YOKOTE, Chiba, Japan

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DAVID Q. JOHNSON, RASHMITA BASU, JONATHAN FLAK, Indianapolis, IN

1155-P Neurocircuits Controlling Adaptive Thermogenesis Rely on Skin Detection of External Temperatures through Calcitonin Gene-Related Peptide Expressing Spinal Neurons
CELINE RIERA, Los Angeles, CA

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VARUN M. BHAVE, MICHAEL J. HILL-OLIVA, NACHIKET KAMATKAR, SRIKANTA CHOWDHURY, ALEXANDER R. NECTOW, New York, NY

1158-P Genetic Dissection of a Vagal Neurocircuit for Blood Glucose Regulation
NICHOLAS J. CONLEY, CHELSEA LI, JOHN CAMPBELL, Charlottesville, VA

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1159-P One-Hour Glucose during Oral Glucose Tolerance Test Predicts Hyperglycemia Relapse in Black Obese Patients with Hyperglyceremic Crises
RAM JAGANNATHAN, DAWN SMILEY-BYRD, DARKO STEFANOVSKI, GUILLERMO E. UMPIERREZ, PRIYATHAMA VELLANKI, Atlanta, GA, Philadelphia, PA

1160-P Does Yoga Reduce the Risk of Conversion from Prediabetes to Diabetes by Improving Acute Phase Insulin Release? An Observation from an RCT
R. NAGARATHNA, SR., JINTU KURIAN, JR., VENUGOPAL VIJAYAKUMAR, JR., HONGASANDRA R. NAGENDRA, SR., RAMESH N. MAVATHUR, SR., Bengaluru, India, Chennai, India

1161-P NOD1-JNK1 Axis Plays a Causal Role in Palmitate-Induced ß-Cell Dysfunction
JUSTIN HOU MING YUNG, ALEKSANDAR IVOVIC, ISABEL CLARK, FIONA LI, BRIAN LIN, YAO TAN, ADRIA GIACCA, Toronto, ON, Canada

1162-P Proinsulin as a Biomarker for Beta-Cell Function in a Diverse Cohort
CATHARINE COUCH, BARBARA GOWER, FRANCESCA PICCININI, Birmingham, AL, Los Angeles, CA

1163-P Exercise as a Strategy to Decrease Pancreatic ß-Cell Senescence
PRISCILA CARAPETO, CRISTINA AGUAYO-MAZZUCATO, Boston, MA

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1164-P A Zebrafish Nonalcoholic Fatty Liver Disease Model Links Liver Inflammation with Pancreatic Inflammation and Hyperglyceremia
SARA IBRAHIM, ISRA HAIDER, ABHISHEK KULKARNI, ILIANA DOYCHEVA, RAGHAVENDRA G. MIRMIRA, EMILY K. SIMS, RYAN ANDERSON, Indianapolis, IN, Chicago, IL

1165-P Alterations of Hepatic Mitochondrial Respiration in Murine Models of Diabetes and Nonalcoholic Fatty Liver Disease (NAFLD)
BEDAIR DEWIDAR, MICHELLE REINADOFUNDO, CORNELIA ENGLISCH, LUCIA MASTROTOTARO, DOMINIK PESTA, CLAUDIA RESS, IRENE ESPOSITO, MICHAEL RODEN, Düsseldorf, Germany, Innsbruck, Austria

1166-P Immunoproteasome Function in the Liver: A Proteomics Analysis
AARON EDMUND, CHANGHO YUN, DO-HYUNG KIM, Minneapolis, MN, Rochester, MN

1167-P Nonalcoholic Fatty Liver Disease, Metabolic Dysfunction Associated Fatty Liver Disease, and Associations with All-Cause and Cause-Specific Mortality
QI HUANG, XIANTONG ZOU, XIANGHAI ZHOU, LINONG JI, Beijing, China

1168-P Serum MicroRNA-122 and -192 Are Increased in Adolescents with NAFLD: Potential Role as Biomarkers
KEVIN R. SHORT, SIRISH KUMAR PALLE, DIANA S. AMAYA HELLMAN, SHAONING JIANG, JEANIE B. TRYGGSTAD, ESTEFANIA FEMATT GARCIA, Oklahoma City, OK

1169-P PNPLA3 148M Is More Susceptible to PA-Induced Endoplasmic Reticulum Stress-Associated Apoptosis in HepG2 Cells
HUA LIANG, Guangzhou, China
1170-P  Dapagliflozin, a Sodium Glucose Cotransporter 2 Inhibitor, Attenuates the Development of Nonalcoholic Steatohepatitis-Associated Hepatocellular Carcinoma
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1171-P  HORMAD1, a Novel Hypoxia-Inducible Factor-1 Target, Is Upregulated in Maternal Overnutrition-Induced Nonalcoholic Steatohepatitis (NASH)/Hepatocellular Carcinoma
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1172-P  Estimation of Glucose Turnover Using Naturally Enriched Complex Carbohydrate Meal in Type 2 Diabetes: Comparison with Triple-Tracer Meal
YOGESH R. YADAV, AMIR ASFA, FNU RUCHI, ALEXANDRA WEAVER, CHANAKA M. AMARASEKARAGE, CHAD LANE, ANANDA BASU, RITA BASU, Charlottesville, VA, Wilmington, NC

1173-P  Sex Differences in NASH Pathways Informed by Multiomics
MONTGOMERY BLENCOWE, FRODE NORHEIM, ZARA SALEEM, NEIL S. HSU, SIMON HUI, CALVIN PAN, KARTHIKEYAN CHELLA KRISHNAN, CHANTLE EDILLOR, XIA YANG, ALDONS LUSIS, Los Angeles, CA, Oslo, Norway, Cincinnati, OH

1174-P  Application of NIS4 Technology for Stand-Alone and Sequential Identification of At-Risk NASH or Advanced Fibrosis in Nondiabetic, Prediabetic, and Type 2 Diabetic Patients
CHRISTIAN ROSENQUIST, YACINE HAJJJI, JÉRÉMY MAGNANENSI, NICOLAS STANKOVIC-VALENTIN, SUNEIL HOSMANE, ARUN J. SANYAL, Loos, France, Cambridge, MA, Richmond, VA

1175-P  Inhibition of FBXO48 Improves Metabolic Changes Associated with NAFLD by Inhibiting Proteasomal Degradation of Phosphorylated AMPKa
ANJANA MURALI, LIA R. EDMUNDS, BINGXIAN XIE, BILL CHEN, YUAN LIU, MICHAEL J. JURCZAK, Pittsburgh, PA

1176-P  Effects of GLP-1 Therapy on GDF15 Expression in Hepatocytes of MAFLD
LU GAN, BEISI LIN, WEN XU, JINHUA YAN, YANNA SU, YALAN CHEN, DAIZHI YANG, HUA LIANG, FEN XU, Guangzhou, China

1177-P  The Reduction in Hepatic Steatosis after Cushing’s Syndrome Treatment Is a Marker of Improving Glycemia
ANNE PIERCE, ZAHRAA A. SATER, AARON M. CYPESS, Bethesda, MD

1178-P  Portal Vein Metabolites as Intermediate Regulators of the Gut Microbiome in Insulin Resistance
FRANCOIS MOREAU, BRUNA B. BRANDAO, JULIAN AVILA, HUI PAN, JONATHAN DREYFUSS, ALEKSANDAR KOSTIC, CLARY B. CLISH, C. RONALD KAHN, Boston, MA, Cambridge, MA

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1179-P  Acute Physiological Effects of Gastric Aspiration for the Treatment of Obesity
IDA MARIE GETHER, MARIE M. JENSEN, TINA JORSAL, CHRISTINA NEXØE-LARSEN, LÆRKE S. GASBERG, LARS P.S. NAVER, JENS J. HOLST, TINA VILSBØLL, FILIP K. KNOP, Gentofte, Denmark, Copenhagen, Denmark, Ballerup, Denmark, Hellerup, Denmark

1180-P  Short-Term Low-Protein Diet Ameliorates Metabolic Dysfunction in Diabetic Lipodystrophic Mice
MARCOS D. MUNOZ, MAXIMILIAN A. MCCANN, PHILIP KIM, CHONG WEE LIEW, Chicago, IL

1181-P  Consumption of Naturally Enriched Complex Carbohydrate Meal Improves Insulin Sensitivity and Disposition Index in Type 2 Diabetes
DAVIDE ROMERES, ANANDA BASU, YOGESH R. YADAV, CLAUDIO COBELLI, CHIARA DALLA MAN, RITA BASU, Padova, Italy, Charlottesville, VA
Trans Fatty Acid Intake Induces Impaired Glucose Tolerance via Dysbiosis
TAKURO OKAMURA, RYO BAMBA, YOSHITAKA HASHIMOTO, TAKAFUMI SENMARU, MASAHIDE HAMAGUCHI, MICHIAKI FUKUI, Kyoto, Japan

Effect of Dairy Consumption and Its Fat Content on Gut Microbiota in Patients with Type 2 Diabetes: A Secondary Analysis of a Randomized Controlled Trial
SHAHEEN TOMAH, ALEKSANDAR KOSTIC, JOANNA MITRI, JEREMY E. WILKINSON, CHENGCHEN LI, MHD WAEL TASABEHJI, AHMED H. ELDIB, MARWA AL-BADRI, HANNAH GARDNER, OSAMA HAMDY, Boston, MA

Return to Normal Glucose Control by Weight Loss in Nonobese People with Type 2 Diabetes: The ReTUNE Study
AHMAD AL-MRABEH, ALISON C. BARNES, KEATON M. IRVICE, TARA L. KELLY, KIEREN G. HOLLINGSWORTH, DAVIDE ROMERES, CLAUDIO COBELL, ROY TAYLOR, Newcastle upon Tyne, United Kingdom, Newcastle, United Kingdom, Padova, Italy

Erythrocyte Eicosapentaenoic and Docosahexaenoic Acid Are Reliable Biomarkers of Dietary Intake in Women of African Ancestry: The Federal Women’s Study
AMBER B. COURVILLE, SHANNA YANG, LILJAN MABUNDO, CELESTE K. CRAVALHO, SAMANTHA MATTA, ALFREDO VILLALOBOS-PEREZ, JOSHUA M. DAWSON, ALICE H. LICHTENSTEIN, ANNE E. SUMNER, STEPHANIE T. CHUNG, Boston, MA, Bethesda, MD

Mechanisms of Glucose Intolerance Induced by Excess Triglycerides and Free Fatty Acids
DOMENICO TRICO, BRENNO D. ASTIARRAGA, MARTA SEGHIERI, ALESSANDRO MENGGOZZI, SIMONA BALDI, ANDREA MARI, ANDREA NATALI, Pisa, Italy, Tarragona, Spain, Florence, Italy, Padova, Italy

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Time to Take Your Steroids: Circadian Regulation of Glucocorticoid Effects on Muscle Metabolism
MATTIA QUATTROCELLI, MICHELLE WINTZINGER, RICHARD M. RATHBUN, Cincinnati, OH

The New Myokine Myonectin Is Significantly Associated with Type 2 Diabetes in Elderly Patients
ANDREAS LEIHERER, AXEL MUENDELEIN, KATHRIN GEIGER, CHRISTOPH H. SAELY, BARBARA LARCHER, ARTHUR MADER, MAXIMILIAN MAECHLER, BEATRIX MUTSCHLECHNER, PETER FRAUNBERGER, HEINZ DREXEL, Triesen, Liechtenstein, Feldkirch, Austria, Philadelphia, PA

Ankyrin-B Modulates the Integrity and Bioenergetic Capacity of Skeletal Muscle Fibers
KAYLEIGH VOOS, JOYCE TZENG, DAMARIS LORENZO, Chapel Hill, NC

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Diabetes Activates Pancreatic Stellate Cells through RAGE Signaling in Pancreatic Ductal Adenocarcinoma
CHIPI KUCHIDA, HIROKI MIZUKAMI, KAZUHIRO KUDO, YASUHIKO YAMAMOTO, Hirosaki, Japan, Kanazawa, Japan

Increased Glucagon Sensitivity in Totally Pancreatectomized Patients
IBEN RIX, ASGER LUND, LARS F. GARVEY, KLARA OWEN, CARSTEN HANSEN, GERRIT VAN HALL, JENS J. HOLST, TINA VILSBOŁL, FILIP K. KNOP, Hellerup, Denmark, Copenhagen, Denmark

Robust Arginine-Stimulated Glucagon Secretion in Patients with Type 1 Diabetes Independent of Diabetes Duration, Age, HbA1c, and Beta-Cell Secretory Capacity
JULIE WARNØE, NICKLAS J. JOHANSEN, ASGER LUND, JONATAN I. BAGGER, SR., NICOI J. WEWER ALBRECHTSEN, BOLETTE HARTMANN, JENS J. HOLST, TINA VILSBOŁL, HENRIK U. ANDERSEN, THOMAS F. DEJGAARD, FILIP K. KNOP, Gentofte, Denmark, Hellerup, Denmark, Copenhagen, Denmark

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ANDREW BIANCOLIN, PATRICIA L. BRUBAKER, Toronto, ON, Canada
1194-P Promotive Effects of Recombinant Human Adiponectin on Bone Regeneration by Paracrine
YANPING GONG, Beijing, China

1195-P Metformin and Growth Differentiation Factor 15 (GDF-15) in Youth with Type 2 Diabetes
SAMANTHA MATTA, CELESTE K. CRAVALHO, ALFREDO VILLALOBOS-PEREZ, LILIAN MABUNDO, VANDHNA R. SHARMA, MARY WALTER, JOSHUA M. DAWSON, ANNA ZENNO, AMBER B. COURVILLE, MOREY W. HAYMOND, STEPHANIE T. CHUNG, Rockville, MD, Eden, UT, Bethesda, MD

1196-P Perineuronal Nets in MeA and Arc Are Influenced by Gonadectomy
NAN ZHANG, YONG XU, Houston, TX

1197-P Effect of Somatostatin Receptor 2 Antagonist (SSTR2a) on Glycemia and Glucagon Levels in a Rat Model of Type 2 Diabetes (T2D)
NINOSCHKA C. D’SOUZA, EMILY G. HOFFMAN, SARA C. ATERLEY, SABRINA CHAMPSI, MARIYA POPKOV, RICHARD LIGGINS, MICHAEL RIDDELL, Toronto, ON, Canada, Brampton, ON, Canada, Vancouver, BC, Canada

1198-P Sex Hormone Binding Globulin (SHBG) as an Indicator of Reduced Insulin Sensitivity in Type 1 Diabetes (T1D) Adults and a Potential Tool to Guide Adjunct Therapy
ANDRZEJ S. JANUSZEWSKI, WAYNE RANKIN, DAVID N. O’NEAL, GARY A. WITTERN, ALICIA JENKINS, Sydney, Australia, Adelaide, Australia, Fitzroy, Australia

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1199-P The Oncogene MDM2 Induces M1 Macrophage Polarization and Adipose Tissue Inflammation in Obesity
KENNETH KING YIP CHENG, Hong Kong, China

1200-P WITHDRAWN

1201-P Monocyte Reprogramming in Nonhuman Primate Mother-Child Dyads Based on Maternal Health and Obesity Status
ALISTAIRE D. RUGGIERO, MASHA BLOCK, RAVICHANDRA VEMURI, MATTHEW DAVIS, DARLA DESTEPHANIS, KYLIE KAVANAGH, Winston-Salem, NC

1202-P Hepatic NgBR Is a Potential Resilience Factor for Preventing Obesity-Caused Insulin Resistance
WENQUAN HU, XIANG WANG, QING MIAO, Mineola, NY

1203-P High-Dose Erythropoietin and Cardiac Function in Mice
JEEYOUNG LEE, CONSTANCE T. NOGUCHI, Bethesda, MD

1204-P Antidiabetic Effects of GLP-1 Analogs Are Mediated by IL-6-Induced Adipocyte Beiging
ABSALON D. GUTIERREZ, JR., ZHANGUO GAO, VALA HAMIDI, MIKHAIL KOLONIN, Houston, TX, San Diego, CA

1205-P Baricitinib Inhibition of Jak/STAT Pathway Changed Immune Composition in Adipose Tissue and Improved Metabolism in Diet-Induced Obese Mice
ZEQIN LIAN, XIAOYUAN PERRARD, CHRISTIE M. BALLANTYNE, HUAIZHU WU, Houston, TX

1206-P Effects of Short-Term Administration of Delta-9-tetrahydrocannabinol on Metabolic Parameters of C57bl/6 Mice
EMILY KURJAN, LAWRENCE K. OLSON, OMAYMA ALSHAARawy, East Lansing, MI

1207-P Tracing Telomerase Reverse Transcriptase (Tert) Expression to a Dormant Preadipogenic Origin
MATTHEW LYNES, DIANA L. CARLONE, KRISTY L. TOWNSEND, DAVID BREAULT, YU-HUA TSENG, Boston, MA

1208-P Caloric Restriction Modified Factors Regulating Lipid Storage and Apoptosis in Inguinal but Not Epididymal Adipose Tissue of 24-Month-Old Male Rats
PALLAVI VARSHNEY, MICHAEL W. SCHLEH, CHEEOHON AHN, AMY ZHENG, EDWARD B. ARIAS, GREGORY D. CARTEE, JEFFREY F. HOROWITZ, Ann Arbor, MI
1209-P  Profound Metabolic Benefits Observed in an Eight-Week GK Rat Study of a Novel Orally Administered Polymeric Duodenal Exclusion Therapy: Implications for Type 2 Diabetes (T2D) Therapy
ASHISH NIMGAONKAR, STEVEN POLOMOSCANIK, PANKAJ J. PASRICHIA, KEVIN COLBERT, THOMAS H. JOZEFIAK, JITEN VORA, MARCELA VIEIRA, TAYLOR CARLSON, LIANSHENG LIU, SUBHASH KULKARNI, JOHN S. PETERSEN, Liverpool, United Kingdom, Baltimore, MD, Lowell, MA

1210-P  Subcutaneous-Depot Specific Adiposity Change Is Associated with the Ectopic Fat Depot and Tissue Damage in High-Fat High-Sucrose (HFHS) Fed Fabp4 Cre-ERK2 Knockout Mice
YUKI ISHINODA, YASUO IDO, MIDORI NOGUCHI, YUSUKE YUMITA, KAZUKI KAGAMI, AYUMU OSAKI, YASUSHI SATOH, SHOGO ENDO, AKIRA KASUGA, TAKESHI ADACHI, HIROO KUMAGAI, Tokorozawa, Japan

1211-P  The Mechanistic Role of Thymidine Phosphorylase in the Development of Obesity
HONG YUE, ADAM M. BELCHER, ADAM BICAK, WEI LI, Huntington, WV

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1212-P  Adipose Tissue Mitochondrial Function in Humans with Varying Liver Histology
KALLIOPI PAFILI, SABINE KAHL, DOMINIK PESTA, KLAUS STRASSBURGER, LUCIA MASTROTOTARO, JENNIFER PUETZER-FURMANCZAK, BEDAIR DEWidar, THERESIA SARABHAI, IRENE ESPOSITO, MATTHIAS SCHLENSAK, MICHAEL RODEN, Cologne, Germany, Düsseldorf, Germany

1213-P  A Novel Relationship between Thromboxane A2 Receptor and Obesity-Related Inflammation
DIEGO ALCARAZ ALVAREZ, SARASWATHI VISWANATHAN, THIYAGARAJAN GOPAL, NARENDRA KUMAR, KATELYN KELLEY, CYRUS DESOUZA, Omaha, NE

1214-P  Urocortin3 Is Overexpressed in GLP-1 Positive Enteroendocrine Cells in Human Obesity
MARIA LAURA RICARDO SILGADO, CHANGHO YUN, ALISON MCRAE, GERARDO CALDERON, GONZALEZ DANIEL, CAMPOS ALEJANDRO, LIZETH CIFUENTES, ANAS HASHEM, MARIA D. HURTADO, ANDRES ACOSTA, Rochester, MN

1215-P  Effects of Exogenous Secretin on Postprandial Plasma Glucose and Lipids and Gallbladder Motility and Hemodynamics in Man
MARIA J. BENTZEN, SEBASTIAN M. NGUYEN HEIMBÜRGER, BOLETTE HARTMANN, JENS J. HOLST, MIKKEL B. CHRISTENSEN, FILIP K. KNOP, Hellerup, Denmark, Copenhagen, Denmark

1216-P  Plasma Amino Acid Profile as a Predictive Biomarker for Visceral Adiposity in Japanese Americans
ANH TRAN, PANDORA WANDER, MELISSA K. THOMAS, STEVEN E. KAHN, WILFRED Y. FUJIMOTO, EDWARD J. BOYKO, Seattle, WA, Indianapolis, IN

1217-P  The Effects of Bariatric Surgery on the Proteome in People Achieving Remission of Type 2 Diabetes (T2DM) after Bariatric Surgery
ZOHAIB IQBAL, HELENE FACHIM, DASHNE HAMARASHID, AKHEEL A. SYED, JOHN M. GIBSON, RACHELLE DONN, HANDREAN SORAN, ADRIAN H. HEALD, Manchester, United Kingdom, Salford, United Kingdom

1218-P  Inflammatory Biomarkers Associate with Incident Metabolically Unhealthy Obesity: The CARDIA Study
LAUREN M.L. CORSO, CORA E. LEWIS, MERCEDES R. CARNETHON, SARAH M. CAMHI, TANIA HUEDO MEDINA, JEANNE MCCAFFERY, Storrs, CT, Birmingham, AL, Chicago, IL, San Francisco, CA

1219-P  WITHDRAWN

1220-P  Treatment with Testosterone Undecanoate Injections (TU) Results in Sustained Weight Loss in Men with Hypogonadism and Type 2 Diabetes: Update of Real-World Data from a Urological Practice
AHMAD HAIDER, KARIM S. HAIDER, FARID SAAD, Bremerhaven, Germany, Berlin, Germany
1221-P  UK First National Health Service (NHS) EndobARRIER (EB) Service for Uncontrolled Diabesity: Three-Year Outcomes for All 62 Treated Patients
ROBERT E.J. RYDER, PIYA SEN GUPTA, MAHENDER YADAGIRI, WYN BURBRIDGE, SUSAN P. IRWIN, TAHIRA BASHIR, MELANIE C. WYRES, JOHN BLEASDALE, MARK ANDERSON, EDWARD FOGDEN, Birmingham, United Kingdom

1222-P  Adipose Tissue Antilipolytic Insulin Sensitivity Protects against Whole-Body Insulin Resistance and Lowers Acylcarnitine Accumulation in Adults with Obesity
MICHAEL W. SCHLEH, BENJAMIN J. RYAN, CHEEOHOON AHN, ALISON LUDZKI, PALLAVI VARSHNEY, JENNA B. GILLEN, JEFFREY F. HOROWITZ, Ann Arbor, MI, Toronto, ON, Canada

1223-P  Effects of Bariatric Surgery on Quality of Life, Body Image, and Sex Life in Obese Women
LUDOVICO DI GIOIA, SEBASTIO PERRINI, ANTONIO BRAUN, ERICA ROSSI, FIORELLA GIORDANO, FRANCESCA GUARINI, EDOARDO SICILIANO, ANGELO CIGNARELLI, ANNA LEONARDINI, ANNALISA NATALICCHIO, LUIGI LAVIOLA, ALESSANDRO BERTOLINO, FRANCESCO GIORGINO, Bari, Italy

1224-P  Exogenous Secretin Decreases Energy Intake and Exerts a Bimodular Effect on Postprandial Brown Adipose Tissue Activation in Man
SEBASTIAN M. NGUYEN HEIMBÜRGER, MARIA J. BENTZEN, BOLETTE HARTMANN, JENS J. HOLST, MIKKEL B. CHRISTENSEN, FILIP K. KNOP, Hellerup, Denmark, Copenhagen, Denmark

1225-P  Prevalence of Obesity and Bariatric Surgery Use in T1DM
WILLIAM A. WEST, KARINA G. ROMO, GABRIEL I. UWAIFO, Jefferson, LA, New Orleans, LA, Slidell, LA

1226-P  Three Year Outcomes after Metabolic Surgery or Medical/Lifestyle Intervention: The ARMMS-T2D Trial
JOHN P. KIRWAN, ANITA COURCOULAS, DAVID E. CUMMINGS, ALLISON GOLDFINE, SANGEETA KASHYAP, DONALD C. SIMONSON, DAVID ARTERBURN, WILLIAM F. GOURASH, ASHLEY H. VERNON, JOHN M. JAKICIC, MARY-ELIZABETH PATTI, KATHERINE WOLSKI, PHILIP SCHAUER, Baton Rouge, LA, Cambridge, MA, Cleveland, OH, Seattle, WA, Boston, MA, Pittsburgh, PA

1227-P  Association between Fat-to-Muscle Ratio and Insulin Resistance in Adults with Impaired Fasting Glucose
YUN-JU LAI, SR., Nantou, Taiwan

1228-P  Cardiovascular Risk of Patients with Overweight and Obesity: A Predictive Model
ALEXANDER TURCHIN, FRITHA J. MORRISON, MARIA SHUBINA, SHRADDHA SHINDE, NADIA AHMAD, HONG KAN, Boston, MA, Indianapolis, IN

1229-P  Decreased Circulating Zonulin in Obese Adults as a Marker of Leaky Gut: Preliminary Results
GRZEGORZ WYSTRZYSOWSKI, AGNIESZKA WITKOWSKA, EWA WOJTYNA, AGNIESZKA GOLDA, MARTA WRÓBEL, KLAUDIA BOCHENEK, WANDA TRAUTSOLT, SYLVIA GORZYNSKA-KOSIORZ, NIKOLA SZWEDA-GANDOR, WLADYSLAW GRZESZCZAK, Zabrze, Poland, Katowice, Poland, Siemianowice Słaskie, Poland

1230-P  Isolation of Functional Endothelial Progenitor Cells from Human Adipose Tissue
CRISTINA CACCIOPPOLI, SEBASTIO PERRINI, VALENTINA ANNAMARIA GENCHI, ROSSELLA DORIA, GIUSEPPE PALMA, ANGELO CIGNARELLI, ANNALISA NATALICCHIO, LUIGI LAVIOLA, FRANCESCO GIORGINO, Bari, Italy

1231-P  Impact of Obesity on Patients Admitted for Diastolic Heart Failure: Insights from the National Inpatient Sample
IRIAGBONSE R. ASEMOTA, HAFEEZ SHAKA, MUHAMMAD USMAN ALMANI, EMMANUEL AKUNA, EHIZIOGIE EDIGIN, Chicago, IL

1232-P  A Total Weight Loss of 25% Shows Better Predictivity in Evaluating the Efficiency of Bariatric Surgery
YINFANG TU, YUNHUI PAN, JUNFENG HAN, JIEMIN PAN, YUQIAN BAO, HAOYONG YU, SR., Shanghai, China

1233-P  Relationship between Taste Recognition Thresholds and Obesity in Type 2 Diabetes
CHIEKO SAKAI, Tottori, Japan
1234-P  Impact of Treatment Adherence to Observed Weight Loss in the GLOW Study
LORIEN E. URBAN, CAROLINE APOVIAN, LOUIS ARONNE, HARRY LEIDER, Boston, MA, New York, NY

1235-P  Metabolic Syndrome Is a Risk Factor for Hospitalization and Mortality from COVID-19 Independent of Other Comorbidities
SHANNON WU, JAMES F. BEN, KEREN ZHOU, ANITA D. MISRA-HEBERT, SANGEETA KASHYAP, Cleveland, OH

1236-P  Association between Body Mass Index (BMI) and Brachial-Ankle Pulse Wave Velocity (BAPWV) in Women with Type 2 Diabetes
YAO CHEN, BINGWEI MA, SHEN QU, XINGCHUN WANG, DONG WEI, Chengdu, China, Shanghai, China

ISLET BIOLOGY—APOPTOSIS

1237-P  Generation of Targeted Nanoparticles for ß-Cell-Selective Delivery of Antioxidant Drugs
ALISSA NOVAK, TANMAYE NALLAN CHAKRAVARTHULA, JUSTIN CROWDER, NATHAN J. ALVES, JOHANNES BROICHHAGEN, DAVID HODSON, AMANDA BEDWELL, AMELIA K. LINNEMANN, Indianapolis, IN, Berlin, Germany, Birmingham, United Kingdom

1238-P  The Proinflammatory but Not Cytotoxic Effect of Aggregated IAPP on Islet Endothelial Cells Requires TLR2/4 Signaling
JOSEPH J. CASTILLO, ALFRED APLIN, MEGHAN F. HOGAN, ANDREW T. TEMPLIN, NATHALIE ESSER, REHANA AKTER, REBECCA L. HULL, Seattle, WA, Indianapolis, IN

1239-P  Evidence of Altered Alpha- and Beta-Cell Lysosomes prior to Onset of Type 1 Diabetes
CHARANYA NYMALIDHARAN, JUSTIN CROWDER, AMELIA K. LINNEMANN, Indianapolis, IN

1240-P  Changes in Protein Expression during Islet Regeneration in a Cystic Fibrosis-Related Diabetes (CFRD) Ferret Model
HEBA M. ISMAIL, RAGHAVENDRA G. MIRMIRA, CARMELLA EVANS-MOLINA, ROBERT N. BONE, Indianapolis, IN, Chicago, IL

1241-P  Inhibition of MiR-146a-5p Prevents Mitochondrial Dysfunction and ß-Cell Apoptosis, and Improves Insulin Secretion
PREETHI KRISHNAN, FAROOQ SYED, STACI A. WEAVER, CHIH-CHUN LEE, CARMELLA EVANS-MOLINA, Indianapolis, IN

ISLET BIOLOGY—BETA CELL—DEVELOPMENT AND POSTNATAL GROWTH

1242-P  Defining the Nkx6.1 Interactome in Beta Cells Reveals a Novel Interaction with Pdx1
CONNOR C. LITTLEFIELD, NATHANIEL C. JENSEN, JONATHAN T. HILL, JOHN C. PRICE, JEFFERY S. TESSEM, Salt Lake City, UT, Provo, UT

1243-P  The Chd4 Helicase Regulates Pdx1-Controlled Genes Involved in ß-Cell Function
REBECCA K. DAVIDSON, NOLAN CASEY, SUKRATI KANOJIA, JASON SPAETH, Indianapolis, IN

1244-P  The Protein Phosphatase PPM1k Regulates Ribosomal Protein S6 Phosphorylation in Beta Cells
YANN DELEYE, JACOB HERRING, KAVAN H. HESS, BRENNAN LEININGER, ROBERT W. MCGARRAH, III, JEFFERY S. TESSEM, PHILLIP J. WHITE, Provo, UT, Los Angeles, CA, Durham, NC

1245-P  Characteristic Distribution of GRP78 in Islets and Intra-Islet Ductal Cells of Diabetic C414A-CRY1 Transgenic Mice
SATOSHI OKANO, AKIRA YASUI, SHIN-ICHRO KANNO, KENNICHI SATOH, MASAHIKO IGARASHI, OSAMU NAKAJIMA, Yamagata, Japan, Sendai, Japan
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<td>1246-P</td>
<td>Microcirculatory Circuit of Pancreatic Islets in Diabetic Fetopathy and Congenital Hyperinsulinism</td>
<td>Alexandra Proshchina, Diliara Gubaeva, Yuliya Krivova, Dmitry Otlyga, Maria Melikyan</td>
<td>Moscow, Russian Federation</td>
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<td>1247-P</td>
<td>The SND1 Coregulator Controls β-Cell Function and Identity</td>
<td>Sukrati Kanoojia, Rebecca K. Davidson, Nolan Casey, Jason Spaeth</td>
<td>Indianapolis, IN</td>
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<td>Histone Deacetylase Inhibition Improves Store-Operated Calcium Entry and Glucose-Stimulated Insulin Secretion in Cytokine-Stressed Pancreatic β-Cells</td>
<td>Chi-Hun Lee, Tatsuyoshi Kono, Staci A. Weaver, Paul Sohn, Carmella Evans-Molina</td>
<td>Indianapolis, IN</td>
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<td>Reg3g Mediates Sex-Specific Islet Dysfunction in Offspring of Obese Mice via Heparan Sulfate Glycan Polymerization</td>
<td>James C. Jarrell, Jose Casasnovas, Lim Kua</td>
<td>Indianapolis, IN</td>
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<td>1251-P</td>
<td>Pancreatic β-Cell Specific Deletion of Complement 1q Like-3 Secreted Protein Improves Glucose Tolerance by Increasing Insulin Secretion</td>
<td>Md Mostafizur Rahman, Haifa Alsharif, John E. Trombley, Asmita Pathak, Sushant Bhatnagar</td>
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<td>1252-P</td>
<td>Alteration of Alternative Splicing of RYR2 Modulates Insulin Biosynthesis in Pancreatic β-Cells</td>
<td>Mai Makino, Asako Itaya-Hironaka, Akiyo Yamauchi, Sumiyo Sakuramoto-Tsuchida, Yoshinori Takeda, Tomoko Uchiyama, Shin Takasawa, Kashihara, Japan</td>
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<td>1253-P</td>
<td>Markers of Beta-Cell Death and Insulin Secretion in Ketosis-Prone Diabetes (KPDM)</td>
<td>Priyathama Vellanki, Omolaide Oladejo, Maya Fayfman, Georgia Davis, Alexandra Migdal, Lisa R. Staimez, Alicia K. Smith, Guillermo E. Umpierrez</td>
<td>Atlanta, GA</td>
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<td>1254-P</td>
<td>β-Cell Cdk1 Deletion Reveals α- and β-Cell Compensatory Mechanisms for Hypoplasia</td>
<td>Sophia Sdao, Melissa Adams, Hannah R. Foster, Barak Blum, Matthew J. Merrins</td>
<td>Madison, WI</td>
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<td>1255-P</td>
<td>The Role of BA13 Adhesion G-Protein Coupled Receptor in Insulin Secretion and Glucose Tolerance</td>
<td>Haifa Alsharif, Md Mostafizur Rahman, Asmita Pathak, John E. Trombley, Sushant Bhatnagar</td>
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<td>1256-P</td>
<td>Insights into Acetyl-Coa-Carboxylase (ACC1) Phospho-Regulation in Pancreatic Beta Cells</td>
<td>Rula Bany Bakar, Sabrina Liberatori, Anna Veprik, Nchimunya N. Tbeke, Bruce E. Kemp, Shabaz Mohammed, James Cantley</td>
<td>Oxford, United Kingdom, Slough, United Kingdom, Fitzroy, Australia, Dundee, United Kingdom</td>
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<td>1257-P</td>
<td>LncRNA Kcnq1ot1Affects Islet β-Cell Proliferation and Insulin Secretion</td>
<td>Yalan Chen, Yanli Li, Ziyu Liu, Wen Xu, Beisi Lin, Yanna Su, Jinhua Yan, Wagen Li</td>
<td>Guangzhou, China</td>
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<td>1258-P</td>
<td>IL-1β-Induced Transcription of NF-κB Target Genes Is Repressed by Bet Bromodomain Inhibitors in Pancreatic β-Cells</td>
<td>Joshua Nord, Sarah Wynia-Smith, Brian C. Smith, Rachel Jones Lipinski</td>
<td>Milwaukee, WI</td>
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Late Breaking Poster Session Titles

COMPLICATIONS—HYPOGLYCEMIA

1-LB Advancing Therapy in Basal Insulin Users with Type 2 Diabetes (T2D): Hypoglycemia as a Function of HbA1c in the SoliMix Trial
RORY J. MCCRIMMON, PHILIP HOME, ALICE Y. CHENG, FRANCESCO GIORGINO, VIVIAN FONSECA, ELISABETH SOUHAMI, AGUSTINA ALVAREZ, ANDERS H. BOSS, LYDIE MELAS-MELT, JULIO ROSENSTOCK, Dundee, United Kingdom, Newcastle upon Tyne, United Kingdom, Mississauga, ON, Canada, Bari, Italy, New Orleans, LA, Paris, France, Buenos Aires, Argentina, Princeton, NJ, Levallois-Perret, France, Dallas, TX

2-LB Flash Glucose Monitoring in the Reduction of Hypoglycemia in Diabetic Kidney Disease: A Randomised Controlled Trial
JAMES LING, JACK K. NG, RONALD C. MA, ALICE P. KONG, ANDREA LUK, CHEUK CHUN SZETO, JULIANA C. CHAN, ELAINE CHOW, Hong Kong, China, Shatin, Hong Kong

3-LB Glutamate Metabolism Is Coupled to Lactate Production from Astrocytes under Low-Glucose Conditions
DANIEL A. APPADURAI, OWEN CHAN, Salt Lake City, UT

4-LB Adaptation and Performance of a Validated Hypoglycemia Risk Stratification Tool in a U.S Claims Database
EMILY R. HANKOSKY, CARLOS R. VALLARINO, BEVERLY FALCON, SIEW HOONG WONG-JACOBOSN, BOBBI B. BENTZ, BETH MITCHELL, Indianapolis, IN, Morgantown, IN

5-LB A Machine Learning–Based Approach to Noninvasively Detect Hypoglycemia from Gaze Behavior While Driving
VERA LEHMANN, MARTIN MARITSCH, THOMAS ZUEGER, ANDREAS MARXER, CATERINA BÉRUBÉ, MATHIAS KRAUS, CAROLINE ALBRECHT, STEFAN FEUERRIEGEL, TOBIAS KOWATSCH, ELGAR FLEISCH, FELIX WORTMANN, CHRISTOPH STETTLER, Bern, Switzerland, Zürich, Switzerland, Nuremberg, Germany, St. Gallen, Switzerland

COMPLICATIONS—MACROVASCULAR—ATHEROSCLEROTIC CARDIOVASCULAR DISEASE AND HUMAN DIABETES

6-LB Estimated Fluid Volume Status following Initiation of Empagliflozin in Patients with Type 2 Diabetes and Cardiovascular Disease
ATSUSHI TANAKA, KOICHI NODE, EMBLEM TRIAL INVESTIGATORS, Saga, Japan

7-LB Lowering of Blood Pressure and Pulse Rate by Switching from DPP-4 Inhibitor to Luseogliflozin in Patients with Type 2 Diabetes and Hypertension: A Multicenter, Prospective, Randomized, Open-Label, Parallel-Group Comparison Trial
REINA HASHIMOTO-KAMEDA, KYUYONG CHO, HIROSHI NOMOTO, AKINOU NAKAMURA, KAZUNO OMORI, SHINICHIRO KAWATA, HIRAKU KAMEDA, TATSUYA ATSUMI, HIDEAKI MIYOSHI, Sapporo, Japan

8-LB Risk Profile of Comorbid Diabetes and Benefit of Rivaroxaban in Patients with Critical Limb Ischemia: Insights from VOYAGER PAD
CECILIA C. LOW WANG, MARK R. NEHLER, LLOYD HASKELL, SCOTT D. BERKOWITZ, RUPERT M. BAUERSACHS, MARC P. BONACA, Raritan, NJ, Whippany, NJ, Darmstadt, Germany, Aurora, CO

COMPLICATIONS—MACROVASCULAR—CELLULAR MECHANISMS OF ATHEROGENESIS IN DIABETES

9-LB Effects of Hyperglycemia-Induced Stress in a Human Cardiomyocyte Cell Line
HIRAL WAGHELA, VIKRAM THAKUR, MUNMUN CHATTOPADHYAY, El Paso, TX

10-LB The Apelinergic System Improves Angiogenesis and Blood Flow Reperfusion in Diabetic Mouse Model of Lower Limb Ischemia
STEPHANIE ROBILLARD, PEDRO GERALDES, Sherbrooke, QC, Canada
COMPLICATIONS—NEPHROPATHY—BASIC AND EXPERIMENTAL SCIENCE

11-LB  Deficiency of Dock 5 Associated with the Progression of Diabetic Glomerular Pathology
HUA QU, XIUFEI LIU, YI ZHENG, HONGTING ZHENG, Chongqing, China

12-LB  Reduced Disease-Associated Microglial Phenotype Is Associated with Diabetes-Associated Alzheimer’s Disease
XUEMIN PENG, Wuhan, China

COMPLICATIONS—NEPHROPATHY—CLINICAL AND TRANSLATIONAL RESEARCH

13-LB  Measured vs. Estimated GFR in Young Adults with Uncomplicated T1D
KAROLINA GAEBE, CHRISTINE A. WHITE, FARID H. MAHMUD, JAMES W. SCOLEY, LAURA MOTRAN, MARVILYN PALAGANAS, YESMINO T. ELIA, DAVID CHERNEY, ETIENNE B. SOCHETT, Kingston, ON, Canada, Toronto, ON, Canada

14-LB  Finerenone in Patients with CKD and T2D by SGLT2i Treatment: An Analysis of the FIDELIO-DKD Study
PETER ROSSING, RAJIV AGARWAL, STEFAN ANKER, GERASIMOS FILIPPATOS, BERTRAM PIT, LUIS M. RUILOPE, JULIANA C. CHAN, ADRIAN KOY, KIERAN MCCAFFERTY, GUNTRAM SCHEIMTHANER, CHRISTOPH WANNER, AMER JOSEPH, MARKUS F. SCHEERER, CHARLIE SCOTT, GEORGE BAKRIS, Gentofte, Denmark, Indianapolis, IN, Athens, Greece, Ann Arbor, MI, Madrid, Spain, Hong Kong, China, Hoogeveen, Netherlands, London, United Kingdom, Vienna, Austria, Würzburg, Germany, Berlin, Germany, Reading, United Kingdom, Chicago, IL

15-LB  Prediction of Chronic Kidney Disease (CKD) in People with Diabetes
NADER AFSHAR, TONY HUSCHTO, MAGÍ ANDORRÀ, SIVA CHITTAJALLU, CHRISTIAN RINGEMANN, JOHN T. ODEGARD, HEATHER MIKULSKI, VALERIE N. BABINSKY, HELENONI KÖNIG, INDERJIT SINGH, Mannheim, Germany, Sant Cugat del Vallès, Spain, Indianapolis, IN, Vienna, Austria

COMPLICATIONS—NEUROPATHY

16-LB  Long-Term 10 kHz Spinal Cord Stimulation in Painful Diabetic Neuropathy: A Randomized Controlled Trial
ERIKA PETERSEN, JAMES SCOWCROFT, ELIZABETH S. BROOKS, JUDITH L. WHITE, KASRA AMIRDELFAN, MAGED GUIRGUIS, JJUN XU, DENIS G. PATTERSON, VINCENT GALAN, NEEL MEHTA, PAUL W. WU, CHARLES ARGOFF, CHRISTIAN E. NASR, ROD TAYLOR, SENZA-PDN STUDY GROUP, Little Rock, AR, Lees Summit, MO, Redwood City, CA, Orlando, FL, Walnut Creek, CA, New Orleans, LA, Cleveland, OH, Reno, NV, Stockbridge, GA, New York, NY, Ft. Lauderdale, FL, Albany, NY, Glasgow, United Kingdom

17-LB  Disruption of Circadian Clocks Promote Progression of Alzheimer’s Disease in Diabetic Mice
JIAOJIAO HUANG, Wuhan, China

18-LB  Histone Modifications and CXCR4 Chemokine Receptor Signaling in Hyperglycemic DRG Neurons
NATALIE SATTERFIELD, VIKRAM THAKUR, MUNMUN CHATTOPADHYAY, El Paso, TX

DIABETIC DYSLIPIDEMIA

19-LB  Statin Use as a Primary Prevention in Patients with Type 1 Diabetes: Where Do We Stand?
DALAL S.A. ALI, TOMAS P. GRIFFIN, RACHEL CROWLEY, RONAN CANAVAN, Dublin, Ireland, Galway, Ireland

FOOT CARE—LOWER EXTREMITIES

20-LB  A M1/M2-Macrophages Regulating New Drug in an International Phase 3 Study
MIN-LIANG KUO, Taipei, Taiwan
DIABETES EDUCATION

21-LB Development and Validation of the Barriers and Supports Evaluation for Working-Age Adults with Type 1 Diabetes
ELIZABETH D. COX, ELIZABETH M. PLANALP, HARALD KLIEMS, MARI PALTA, TAMARA J. LECAIRE, BETTY A. CHEWNING, Madison, WI

22-LB Use of a Novel Virtual Patient Simulation Application to Assess Providers’ Knowledge in Management of T2 Diabetes
BORIS DRAZNIN, IGAL IANCU, Aurora, CO, Tel Aviv, Israel

23-LB Economic Outcomes and Health Care Utilization of DSMES Interventions: A Systematic Review and Recommendations for Research
CHRISTINA WHITEHOUSE, SNEHA B. SRIVASTAVA, ADONICA I. KAUWE TUITAMA, JULIA E. BLANCHETTE, STARLIN A. HAYDON-GREATTING, VERONICA J. BRADY, TIERRA SMITH, MICHELLE L. LITCHMAN, KIRSTEN E. YEHL, ANDREW BZOWYCKYJ, Villanova, PA, North Chicago, IL, Springfield, IL, Houston, TX, Elkins Park, PA, Salt Lake City, UT, Chicago, IL, Hillsboro, OR

24-LB Using Q-Methodology to Inform Personalized Diabetes Education for Koreans with Type 2 Diabetes on Insulin Therapy
EUNSEOK CHA, MYOUNGHWAN SHIN, MICHAEL J. SMART, HYE SUN JANG, JOOSEON LEE, KYONG HYE JOUNG, HYUN JIN KIM, MELISSA S. FAULKNER, Daejeon, Korea, Republic of, Busan, Korea, Republic of, Atlanta, GA, Daejeon, Korea, Republic of

25-LB Are You a Good Steward of Data?
REBECCA BAKER, JOHN M. OWEN, Palm Harbor, Fl, Austin, TX

EXERCISE

28-LB RTCGM Performance at Different Sensor Wear Sites during Prolonged Aerobic Exercise
MICHAEL MUELLER-KORBSCHE, LISA FREUHWALD, MICHAEL HEER, GERSINA REGA-KAUN, MARIA FANGMEYER-BINDER, PETER FASCHING, Wien, Austria, Vienna, Austria

29-LB Exercise Effects on ?3-AMPK Activity, Akt Substrate of 160 kDa Phosphorylation, and Glucose Uptake in Muscle of Normal and Insulin-Resistant Female Rats
HAIYAN WANG, EDWARD B. ARIAS, AMY ZHENG, SEONGEUN KWAK, JIAHUI ZHAO, GENGFU DONG, GREGORY D. CARTEE, Ann Arbor, MI

30-LB Effect of Intense Lifestyle Therapy in People with Obesity and Type 2 Diabetes
MIHOKO YOSHINO, JUN YOSHINO, ADAM J. BITTEL, DANIEL BITTEL, DOMINIC REEDS, RICHARD STEIN, DAVID R. SINACORE, WILLIAM T. CADE, ADEWOLE L. OKUNADE, BRUCE W. PATTERSON, SAMUEL KLEIN, Saint Louis, MO, Washington, DC, Washington DC, DC, High Point, NC, Durham, NC
Limited Physical Activity among Overweight and Obese Young Adults with Type 1 Diabetes: Results from Advancing Care for Type 1 Diabetes and Obesity Network (ACT1ON)
DESSI P. ZAHARIEVA, FRANKLIN R. MUNTIS, NORA ARRIZON-RIUZ, JOAN THOMAS, ELIZABETH J. MAYER-DAVIS, ANANTA ADDALA, MARK A. CLEMENTS, AVINASH KOLLU, MICHAEL RIDDELL, DAVID M. MAAHS, FOR THE ACT1ON STUDY, Stanford, CA, Chapel Hill, NC, Kansas City, MO, Toronto, ON, Canada

Interstitial Glucose Levels during Exercise in Persons with and without Type 1 Diabetes

NUTRITION—CLINICAL

Vitamin D Supplementation and Risk of Type 2 Diabetes in Patients with Prediabetes: A Meta-analysis of Individual Participant Data from Randomized, Placebo-Controlled Trials
ANASTASSIOS G. PITTAS, TETSUYA KAWAHARA, ROLF JORDE, JASON P. NELSON, EDITH ANGELLOTTI, ELLEN VICKERY, BESS DAWSON-HUGHES, THOMAS TRIKALINOS, ETHAN M. BALK, Boston, MA, Kitakyushu, Japan, Tromsø, Norway, Providence, RI

Effects of Three Different 8h Time-Restricted Eating Schedules over 4 Weeks on Body Weight and Waist/Hip Circumferences in Adults with Overweight/Obesity: A Pilot Randomized Trial
MANUEL DOTE MONTERO, RAQUEL SEVILLA-LORENTE, ELISA MERCHAN-RAIMEREZ, JOSE CARLOS NUÑEZ-LOPEZ, SOL MOCHÓN-BENGUIGUI, FRANCISCO J. AMARO-GAHETE, FRANCISCO ACOSTA, GUILLERMO SANCHEZ-DELGAIDO, IDOIA LABAYEN, JONATAN R. RUIZ, Granada, Spain, Baton Rouge, LA, Pamplona, Spain

The Effect of Dietary Carbohydrate Restriction on Health-Related Quality of Life and Cognition: A Randomized Trial
NICOLE J. JENSEN, HELENA Z. WODSCHOW, MADS J. SKYTTE, AMIRSALAR SAMKANI, ARNE ASTRUP, JAN FRYSTYK, BOLETTE HARTMANN, JENS J. HOLST, THOMAS M. LARSEN, STEN MAADBOS, FAIDON MAGKOS, KAMILA MISKOWIAK, JOERGEN RUNGBY, STEEN B. HAUGAARD, THURE KRARUP, MADS N. THOMSEN, Odense, Denmark, Copenhagen, Denmark

Very-Low-Dose Premal Whey Protein Microgels Reduce Postprandial (PP) Glucose in Type 2 Diabetes: A Randomized, Placebo-Controlled Crossover Study
LUÍZ H. DE GREGORIO, JAN NEELAND, ROBERTO ZAGURY, BO AHRÉN, JOEL M. NEUTEL, KEMUEL REYES, EMILIE PERRIN, EVAN BERK, MAXIMILIAN VON EYATTEN, ODDE R. E. JOHANSEN, Rio de Janeiro, Brazil, Cleveland, OH, Lund, Sweden, Tustin, CA, Bridgewater, NJ, Nyon, Switzerland, Vevey, Switzerland

Reduced Carbohydrate and Increased Protein and Fat during Weight Loss Improve the Atherogenic Lipid Profile in Type 2 Diabetes
MADS N. THOMSEN, MADS J. SKYTTE, AMIRSALAR SAMKANI, ARNE ASTRUP, JAN FRYSTYK, ELIZAVETA CHABANOVA, BOLETTE HARTMANN, JENS J. HOLST, THOMAS M. LARSEN, STEN MAADBOS, FAIDON MAGKOS, HENRIK S. THOMSEN, ROSEMARY WALZEM, STEEN B. HAUGAARD, THURE KRARUP, Copenhagen, Denmark

Estimating Basal Metabolic Rate in People with Diabetes
YDO WEXLER, DAN GOLDNER, New York, NY
40-LB  COVID-19 Severity in a Geographically Diverse, U.S.-based, Ambulatory Population with Type 2 Diabetes on a Medically Supervised Ketogenic Diet  
BRITTANIE M. VOLK, CAROLINE G.P. ROBERTS, MICHELLE VANTIEGHEM, AMY L. MCKENZIE, PATRICIA GEORGE, SHAMINIE J. ATHINARAYANAN, REBECCA N. ADAMS, STEPHEN PHINNEY, ROBERT E. RATNER, San Francisco, CA, Denver, CO

41-LB  Changes in Circulating Metabolites, Including Butyrate, Points to Underlying Mechanism of a Probiotic Intervention That Improves Postprandial Hyperglycemia in Subjects with Type 2 Diabetes  
PAUL MCMURDIE, MAGDALENA K. STOEVA, MADELEINE NEMCHEK, SURABHI TYAGI, JESSICA GINES, JOHN EID, ORVILLE G. KOLTERMAN, San Francisco, CA

PSYCHOSOCIAL/BEHAVIORAL MEDICINE

42-LB  Medication Adherence in Young Adults with Youth-Onset Type 2 Diabetes: The iCount Study  
PAULA M. TRIEF, DIANE USCHNER, MELINDA TUNG, KIMBERLY DREWS, SETH KALICHMAN, BARBARA ANDERSON, JANE D. BULGER, RUTH S. WEINSTOCK, Syracuse, NY, Washington, DC, Rockville, MD, Storrs, CT, Houston, TX

43-LB  Evaluating Health Status in the PRONTO-Pump-2 Study  
ROSIRENE PACZKOWSKI, CAROLINA PIÑAS DE OLIVEIRA, JANG IK CHO, ANDREA GOLDYN, JIAT LING POON, EMILY R. HANKOSKY, DEBRA A. IGNAUT, Indianapolis, IN

44-LB  Insulin Treatment Satisfaction Questionnaire Results for PRONTO-Pump-2 Study  
CAROLINA PIÑAS DE OLIVEIRA, ROSIRENE PACZKOWSKI, JANG IK CHO, RATTAN JUNEJA, JIAT LING POON, EMILY R. HANKOSKY, DEBRA A. IGNAUT, Indianapolis, IN

45-LB  Improving Resiliency in Children with Type 1 Diabetes  
SYNTHEA S. PUFFENBERGER, FRANCINE HOEKSTRA, CHIRAG R. KAPADIA, GABRIEL Q. SHAIBI, MELISSA CHAMBERS, Phoenix, AZ

46-LB  Humor and A1C: The Interaction between Humor and Diabetes Control  
DAVID S. GREENE, Greeley, CO

47-LB  Patient Factors Associated with Diabetes Distress among Veterans with Poorly Controlled Type 2 Diabetes  
JASHALYNN GERMAN, ELIZABETH A. KOBE, DIANA SOLIMAN, ALLISON LEWINSKI, AMY S. JEFFREYS, CYNTHIA COFFMAN, DAVID EDELMAN, MATTHEW J. CROWLEY, Durham, NC

48-LB  Associations between Health Literacy and Patient Perceptions of Care in Poorly Controlled Diabetes  
ELIZABETH A. KOBE, JASHALYNN GERMAN, DIANA SOLIMAN, ANASTASIA-STEINERIA ALEXOPOULOS, AMY S. JEFFREYS, DAVID EDELMAN, CYNTHIA COFFMAN, MATTHEW CROWLEY, Durham, NC

49-LB  Navigating Barriers to Affording and Obtaining Diabetes Treatment  
ANNABELLE WILCOX, LINDA KERANDI, KASIA J. LIPSKA, STUART A. WEINZIMER, LAURA M. NALLY, North Haven, CT, New Haven, CT

50-LB  Using Cluster Analysis to Identify Attitudes towards Diabetes-Related Technology  
ELIZABETH L. EBY, JUDITH J. STEPHENSON, FELICIA GESLEY, JIAT LING POON, SAMUEL B. GOVERNOR, CHI NGUYEN, VINCENT WILLEY, Indianapolis, IN, Centennial, CO, Wilmington, DE

51-LB  Emotional Impact of Hypoglycemia and Use of Glucagon: Perspectives of People with T1D  
ALLYSON HUGHES, KATHERINE S. M. CHAPMAN, JEOFFREY BISPHAM, NAZANIN M. HEYDARIAN, JEANNETT DIMSITS, STUART A. WEINZIMER, WENDY WOLF, Boston, MA, Austin, TX, Soeborg, Denmark, New Haven, CT

52-LB  Weight Management Practices among U.S. Safety-Net Health Center Patients with Diabetes or Other Metabolic Disorders  
JASON J. WANG, ZUMIN SHI, ALICE YAN, West Friendship, MD, Doha, Qatar, Milwaukee, WI
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<td>LU HU, XINYI XU, SHUWEN YANG, LEI LEI, HAN BAO, BAOLUN FAN, MARY ANN SEVICK, flushing, NY, New York, NY</td>
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<td>54-LB</td>
<td>Multidimensional Lifestyle Measures as Tools for Self-Reflection in Type 2 Diabetes</td>
<td>SHANPIN FANCHIANG, KEIYANA MORRIS, MATTHEW F. BOUCHONVILLE, II, Los Angeles, CA, Albuquerque, NM</td>
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<td>Generalized Anxiety Disorder and HbA1c, Mediated by Executive Functioning and Adherence in Youth with T1D</td>
<td>PREETI PENTAL, RANDI PHELPS, DANNY C. DUKE, Tacoma, WA, Portland, OR</td>
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<td>The Mediating Role of Shared Responsibility in the Relationship of Trait Mindfulness and Diabetes-Related Outcomes</td>
<td>HIBA ABUJARADEH, PUSHPA VISWANATHAN, SUSAN M. SEREIKA, MONICA M. DINARDO, CHRISTINE A. FEELEY, DENISE CHARRON-PROCHOWNIK, Pittsburgh, PA, Monroeville, PA</td>
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<td>57-LB</td>
<td>Daily Communal Coping and Blood Glucose in Young Adult Couples with Type 1 Diabetes</td>
<td>JEREMY B. YORGASON, JENNIFER SAYLOR, CYNTHIA BERG, SUSANNAH RELLAFORD, DANIELLE (ELLIE) L. STEEGER, ADAM DAVEY, Provo, UT, Newark, DE, Salt Lake City, UT</td>
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<td>58-LB</td>
<td>ß-Cell Targeted Immune Suppressive PD-1 Bispecific Agonists: A Novel Approach to Treat Type 1 Diabetes</td>
<td>GIOVANNA BOSSI, ADAM P. CURNOCK, PETER WEBER, JYOTHI KUMARAN, LINDSAY J. BAWDEN, RITA FIGUEIREDO, KATHERINE E. WISEMAN, RONAN O’DYWER, DAVID OVERTON, VERONICA GONZALEZ, CHRISTINA M.A. LUCATO, KEITH PAGE, NICOLA SMITH, LORRAINE WHALEY, HEMZA GHADBANE, DAVID KNIGHT, EMMA HENDERSON, STEPHEN HEARTY, TARA MAHON, PETER WEBER, Abingdon, United Kingdom, Oxford, United Kingdom, Milton Park, Abingdon, Oxfordshire, United Kingdom, Didcot, United Kingdom</td>
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<td>59-LB</td>
<td>The Impact of Glycemic Variability on the Relationship between Hypoglycemia and HbA1c</td>
<td>R. BRETT MCQUEEN, MAGALY PEREZ-NIEVES, GUY T. ALONSO, RATTAN JUNEJA, KATIA HANNAH, LUDI FAN, EMILY R. HANKOSKY, VIRAL SHAH, YU YAN, SAMUEL ELLIS, Indianapolis, IN, Denver, CO, Aurora, CO</td>
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<td>Dendritic Cells Engineered with Tailored Multiepitopes-Encoding mRNA as Precision Medicine for Immunotherapy of Type 1 Diabetes</td>
<td>REBUMA FIRDESSA FITE, REMI J. CREUSOT, New York, NY</td>
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<td>Continuous Glucose Monitoring (CGM) in ICU Patients during COVID-19: A Pilot Study</td>
<td>RENU JOSHI, VANESSA M. SNELL, KAREN L. GOOD, YIJIN WERT, AMY M. HELMUTH, Mechanicsburg, PA, Harrisburg, PA</td>
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<td>Achieving Both Target Time-in-Range and Coefficient of Variation</td>
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<td>64-LB</td>
<td>Glucose Control after Initiation of Flash Glucose Monitoring in Type 2 Diabetes Managed with Basal Insulin: A Retrospective Real-World Chart Review Study from the U.S.</td>
<td>ANDERS L. CARLSON, TIMOTHY D. DANIEL, ANDREA DESANTIS, SERGE JABBOUR, ESRA KARSILOGLU-FRENCH, DAVIDA F. KRUGER, EDEN MILLER, KEREM OZER, Minneapolis, MN, Pearlard, TX, Charlotte, NC, Philadelphia, PA, Pittsburgh, PA, Detroit, MI, Bend, OR, Austin, TX</td>
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RICHARD M. BERGENSTAL, ELISE HACHMANN-NIELSEN, JENS TARP, KAJSKVIST, JOHN B. BUSE, Minneapolis, MN, Søborg, Denmark, Chapel Hill, NC

Real-Time Continuous Glucose Monitor (RTCGM) Use Associated with Decreased Diabetes Medical Costs for Patients with Type 2 Diabetes (T2D)
GREGORY J. NORMAN, MISTI L. PAUDEL, TIM BANCROFT, PETER M. LYNCH, San Diego, CA, Eden Prairie, MN

A Comparison of Continuous Glucose Monitors in Reducing A1C in Type 1 and Type 2 Diabetes: FreeStyle Libre and Dexcom
EDEN MILLER, JENNIFER JOSEPH, IGNACIO J. REYES, YELENA NABUTOVSKY, NAUNIHAL VIRDI, IRL HIRSCH, Bend, OR, Santa Clara, CA, Sylmar, CA, Alameda, CA, Seattle, WA

Acute Diabetes Events and All-Cause Hospitalizations among Continuous Glucose Monitoring Device Recipients with Type 1 and Type 2 Diabetes: A Comparison of FreeStyle Libre and Dexcom
IRL B. HIRSCH, GREGORY J. ROBERTS, JENNIFER JOSEPH, YELENA NABUTOVSKY, NAUNIHAL VIRDI, EDEN MILLER, Seattle, WA, Sylmar, CA, Santa Clara, CA, Alameda, CA, Bend, OR

Nonadjunctive Continuous Glucose Monitoring to Control Hypoglycemia (COACH)
STAYCE BECK, COLLEEN KELLY, NELLY NJERU, JEREMY J. GORELICK, JEFF C. BOWERS, DAVID A. PRICE, San Diego, CA, Carlsbad, CA

Continuous Glucose Monitoring Data Sharing in Older Adults with Type 1 Diabetes and Their Care Partners
NANCY A. ALLEN, MICHELLE L. LITCHMAN, JAMES CHAMBERLAIN, ERNEST GRIGORIAN, ELI IACOB, CYNTHIA BERG, Salt Lake City, UT

Meta-analysis of Two Real-World Chart Review Studies to Determine the Effectiveness of FreeStyle Libre Flash Glucose Monitoring System on HbA1c in Adults with Type 2 Diabetes Managed with Basal Insulin
ANDERS L. CARLSON, TIMOTHY D. DANIEL, ANDREA DESANTIS, SERGE JABBOUR, ESRA KARSIIOGLU-FRENCH, DAVIDA F. KRUGER, EDEN MILLER, KEREM OZER, TOM ELLIOTT, Minneapolis, MN, Pearland, TX, Charlotte, NC, Philadelphia, PA, Pittsburgh, PA, Detroit, MI, Bend, OR, Austin, TX, Vancouver, BC, Canada

Clinical Evaluation of a Long-Term Optical Continuous Glucose Monitoring (CGM) System: Lumeek Glucose
KHANH Q. TRAN, CHLOE NGUYEN, HIEP T. NGUYEN, SOYA J. GAMSEY, CLAYTON G. LEPAK, KERSTIN REBRIN, Ho Chi Minh, Viet Nam, Emeryville, CA

Continuous Glucose Monitoring Utilization and Associated Metrics in People with Diabetes on Insulin Therapy in the U.S.
MAGALY PEREZ-NIEVES, EMILY R. HANKOSKY, LUDI FAN, FELICIA GELSEY, ELIZABETH L. EBY, TRACY J. SIMS, EMEKA UMEH, MICHAEL BETTS, CHRIS LAVALLEE, RATTAN JUNEJA, Indianapolis, IN, Centennial, CO, Somerville, MA, Nashville, TN, Austin, TX

Sudden Changes in Interstitial Glucose Sensing by Remote Real-Time Continuous Glucose Monitoring as a Marker of Hypoperfusion in Critically-Ill Patients with COVID-19
JOI HESTER, GEORGIA M. DAVIS, FRANCISCO J. PASQUEL, MARINA RABINOVICH, NORMA POINDEXTER, SEEMA TEKWANI, Atlanta, GA

Can Continuous Glucose Monitoring Be Utilized to Monitor Adherence to Time-Limited Eating in Adolescents with Obesity?
MONICA NAGUIB, MICHAEL I. GORAN, JENNIFER RAYMOND, ELIZABETH HEGEDUS, CHOO PHEI WEE, ALAINA VIDMAR, Los Angeles, CA

Baseline A1C Values and Magnitude of A1C Reductions during Nonadjunctive Continuous Glucose Monitoring Use in the COACH Study
STAYCE BECK, COLLEEN KELLY, NELLY NJERU, JEREMY GORELICK, JEFFREY C. BOWERS, DAVID A. PRICE, San Diego, CA, Carlsbad, CA
A Retrospective Analysis of the Association between HbA1c and Continuous Glucose Monitor Use for U.S. Patients with Type 2 Diabetes
GREGORY J. NORMAN, MISTI L. PAUDEL, TIM BANCROFT, PETER M. LYNCH, Eden Prairie, MN, San Diego, CA

Efficacy and Safety of Tirzepatide, a Dual GIP/GLP-1 Receptor Agonist, Compared with Insulin Degludec in Patients with Type 2 Diabetes (SURPASS-3)
BERNHARD LUDVIK, FRANCESCO GIORGINO, ESTEBAN JODAR, JUAN PABLO FRIAS, LAURA FERNANDEZ LANDO, KATELYN BROWN, ROSS BRAY, ÁNGEL RODRÍGUEZ, Vienna, Austria, Bari, Italy, Madrid, Spain, Los Angeles, CA, Indianapolis, IN, Alcobendas, Spain

Pharmacokinetics and Pharmacodynamics of Avexitide (Exendin 9-39) in Neonates and Infants with Congenital Hyperinsulinism
COLLEEN CRAIG, DIVA D. DE LEON, Palo Alto, CA, Philadelphia, PA

Tirzepatide, a Dual GIP/GLP-1 Receptor Agonist, is Effective and Safe When Added to Basal Insulin for Treatment of Type 2 Diabetes (SURPASS-5)
DOMINIK DAHL, YUKIKO ONISHI, PAUL NORWOOD, RUTH HUH, HIREN PATEL, ÁNGEL RODRÍGUEZ, Hamburg, Germany, Tokyo, Japan, Fresno, CA, Indianapolis, IN

Patient-Reported Outcomes in Patients with Type 2 Diabetes Treated with Tirzepatide or Placebo (SURPASS-1)
KRISTINA BOYE, MARIA YU, CLARE LEE, HUZHANG MAO, XUEWEI CUI, LAURA FERNANDEZ LANDO, VIVIAN THIEU, Indianapolis, IN

Total Costs of Care in Patients with T2D and Cardiovascular Disease: A Comparative Cohort Study (OFFSET)
MARC EVANS, ABHISHEK SHANKAR CHANDRAMOULI, MADS FAURBY, KASPER S. MATTHIESSEN, PHILLIP BREDahl MOGENSEN, SUBODH VERMA, Cardiff, United Kingdom, Bangalore, India, Søborg, Denmark, Humlebæk, Denmark, Toronto, ON, Canada

Adherence and Persistence in Patients with T2D Initiating Once-Weekly vs. Once-Daily Injectable GLP-1RA in U.S. Clinical Practice: STAY Study
ANDREAS LIEBL, RIYA ARORA, MADS FAURBY, JOAO DIIGO DA ROCHA FERNANDES, WILLIAM H. POLONSKY, Bad Heilbrunn, Germany, Bangalore, India, Søborg, Denmark, San Diego, CA

Efficacy and Safety of Tirzepatide vs. Semaglutide Once-Weekly as Add-On Therapy to Metformin in People with Type 2 Diabetes (SURPASS-2)
JUAN PABLO FRIAS, MELANIE J. DAVIES, JULIO ROSENSTOCK, FEDERICO C. PEREZ MANGHI, LAURA FERNANDEZ LANDO, BRANDON BERGMAN, BING LIU, XUEWEI CUI, KATELYN BROWN, Los Angeles, CA, Leicester, United Kingdom, Dallas, TX, Buenos Aires, Argentina, Indianapolis, IN

Glucose-Dependent Insulinotropic Polypeptide (GIP) Contributes Substantially to the Improved Beta-Cell Function during Sitagliptin Treatment in Persons with Type 2 Diabetes
SIGNE STENSEN, LÆRKE S. GASBJERG, METTE M. ROSENKILDE, BOLETTE HARTMANN, TINA VILSBØLL, JENS J. HOLST, MIKKEL B. CHRISTENSEN, FILIP K. KNOP, Hellerup, Denmark, Copenhagen, Denmark

Real-World Effectiveness of Oral Semaglutide (OS) from a U.S. Commercially Insured and Medicare Advantage Population
NITIN SHIVAPPA, CAROLINE SWIFT, JOSHUA NOONE, SIMO DU, MICHAEL RADIN, CORY GAMBLE, HIANGKIAT (JASON) TAN, VINCENT WILLEY, Wilmington, DE, Plainsboro, NJ, Watertown, MA, Washington Xing, PA

Binding Kinetics, Bias, Receptor Internalization, and Effects on Insulin Secretion for a Novel GLP1R-GIPR Dual Agonist, HISHS-2001
YUSMAN MANCHANDA, BEN JONES, GAELLE CARRAT, ZENOUSKA RAMCHUNDER, PIERO MARCHETTI, ISABELLE LECLERC, RAJAMANAR THENNATI, VINOD S. BURADE, ALEJANDRA TOMAS, GUY A. RUTTER, London, United Kingdom, Pisa, Italy, Vadodara, India
88-LB  Kidney and Metabolic Benefits by Adding GLP-1 Agonists and/or SGLT2 Inhibitors on Metformin in Obese Type 2 Diabetes (T2DM) Patients: 24-Month Real-World Data from Both Urban and Rural Clinics
IOANNIS ZOUPAS, ATHANASIA PAPAZAFIROPOULOU, MARIA XENOU, DIMITRIOS LYGNOS, EVANGELOS FOUSTERIS, Athens, Greece, Piraeus, Greece

89-LB  Oral Administration of Exendin, Using Diabetology’s Axcess Formulation: A Preclinical Study
ROGER R.C. NEW, MICHAL BOGUS, MICHAEL BURNET, ULRIKE HAHN, London, United Kingdom, Tübingen, Germany, Tübingen, Germany

90-LB  Soliqua (Lixilan): Sustained Long-Term Cost Efficacy and Safety When Used in Combination with Metformin and Glimirepiride
UDAYA M. KABADI, SARAH EXLEY, Clive, IA, Des Moines, IA

91-LB  Once-Weekly Exenatide in Youth with Type 2 Diabetes: A Pivotal Phase III Randomized Study
WILLIAM V. TAMBORLANE, RAAFAT BISHAI, DAVID GELLER, NAIM SHEHADEH, DALIA AL-ABDULRAZZAQ, ÉVA KÁROLY, ORLANDO DOEHRING, DEBRA CARTER, JOHN MONYAK, C. DAVID SJÖSTRÖM, New Haven, CT, Gaithersburg, MD, Los Angeles, CA, Haifa, Israel, Kuwait City, Kuwait, Baja, Hungary, Cambridge, United Kingdom, Mölnadal, Sweden

CLINICAL THERAPEUTICS/NEW TECHNOLOGY—INSULIN DELIVERY SYSTEMS

92-LB  Insulin Delivery Patterns Vary across Age Groups with Use of Control-IQ Technology
JORDAN E. PINSKER, HARSIMRAN SINGH, ALEXANDRA CONSTANTIN, BETSY DOKKEN, KIRSTIN N. WHITE, MOLLY MCELWEE-MALLOY, LARS MUELLER, STEPHANIE HABIF, Santa Barbara, CA, San Diego, CA, La Jolla, CA

93-LB  Comparison of Glycemic Control between Multiple Daily Injections and Hybrid Closed-Loop System in Children and Adolescents during the Restrictions Due to COVID-19
GORAN PETROVSKI, JUDITH CAMPBELL, KHALID HUSSAIN, ALKHALAF AND CONSULTANTS/EDUCATORS, Doha, Qatar

94-LB  IV Insulin via Glucommander, an Electronic Glycemic Management System (eGMS) Demonstrates Low Rates of Hypoglycemia in Patients with Low Glomerular Filtration Rate (GFR) Compared with Other eGMS
BRUCE W. BODE, JOHN CLARKE, JORDAN MESSLER, ROBERT BOOTH, Atlanta, GA, Largo, FL, Greenville, SC

95-LB  LixilanONE CAN: Randomized Trial Comparing a Daily vs. Weekly Titration Algorithm for Switching from Basal Insulin to iGlarLixi Fixed-Ratio Combination in People with T2DM in Canada
IRENE HRAMIAK, HERTZEL C. GERSTEIN, LAWRENCE A. LEITER, JEAN-FRANÇOIS YALE, HARPREET S. BAJAJ, JOHN A. STEWART, MARIE-JOSEE TOUTOUNJI, STEWART B. HARRIS, London, ON, Canada, Hamilton, ON, Canada, Toronto, ON, Canada, Montreal, QC, Canada, Brampton, ON, Canada, Laval, QC, Canada

96-LB  Glycemic Management over 6 Months with the Omnipod 5 Automated Insulin Delivery System
ANDERS L. CARLSON, AMY B. CRIEGO, GREGORY P. FORLENZA, BRUCE W. BODE, CAROL J. LEVY, DAVID W. HANSEN, IRL B. HIRSCH, SUE A. BROWN, RICHARD M. BERGENSTAL, JENNIFER SHERR, SANJEET N. MEHTA, LORI M. LAFFEL, VIRAL SHAH, ANUJ BHARGAVA, RUTH S. WEINSTOCK, SARAH A. MACLEISH, DANIEL DESALVO, THOMAS C. JONES, GRAZIA ALEPPO, BRUCE A. BUCKINGHAM, TRANG T. LY, OMNIPOD 5 RESEARCH GROUP, Minneapolis, MN, Atlanta, GA, New York, NY, Seattle, WA, Charlottesville, VA, New Haven, CT, Boston, MA, Aurora, CO, West Des Moines, IA, Syracuse, NY, Cleveland, OH, Houston, TX, Macon, GA, Chicago, IL, Stanford, CA, Acton, MA

97-LB  Bringing Simulation Technologies to People with T1D: A Pilot Study
PATRICIO COLMEGNA, ALESSANDRO BISIO, RYAN MCFADDEN, CHRISTIAN A. WAKEMAN, MARY C. OLIVERI, RALF NASS, MARC D. BRETON, Charlottesville, VA
Diabeloop DBL4K Hybrid Closed-Loop System Improves Time-in-Range without Increasing Time-in-Hypoglycemia in Children Aged 6–12 Years
DULANJALEE KARIYAWASAM, CAROLE MORIN, KRISTINA CASTEELS, CLAIRE LE TALLEC, CECILE GODOT, ANNIE SFEZ, NATHALIE GARREC, MICHEL POLAK, GUILLAUME CHARPENTIER, SYLVIA FRANC, JACQUES BELTRAN, Leuven, Belgium, Toulouse, France, Paris, France, Jossigny, France, Corbeil Essonnes, France

A Phase 2b Study of Oral Insulin (Capsulin) Administered to Patients with Type 2 Diabetes
ROGER R.C. NEW, MICHAL BOGUS, GLEN N. TRAVERS, GAJANAN S. NAMJOSHI, London, United Kingdom, Mumbai, India

Infusion Set Survival and Performance during the Medtronic Extended-Wear Infusion Set (EWIS) Pivotal Trial
BRUCE A. BUCKINGHAM, RONALD L. BRAZG, TIMOTHY S. BAILEY, YOGISH C. KUDVA, SATISH K. GARG, GEORGE GRUNBERGER, JAMES THRASHER, ARVIND CAVALE, ANUJ BHARGAVA, BARRY HOROWITZ, KEVIN B. KAISERMAN, SUIYING HUANG, VIVIAN CHEN, GINA ZHANG, SARNATH CHATTARAJ, JOHN SHIN, ROBERT VIGERSKY, Stanford, CA, Renton, WA, Escondido, CA, Rochester, MN, Aurora, CO, Bloomfield Hills, MI, Little Rock, AR, Feasterville, PA, West Des Moines, IA, West Palm Beach, FL, Torrance, CA, Northridge, CA

Reported Satisfaction during the Medtronic Extended-Wear Infusion Set (EWIS) Pivotal Trial
RONALD L. BRAZG, TIMOTHY S. BAILEY, YOGISH C. KUDVA, SATISH K. GARG, GEORGE GRUNBERGER, ARVIND CAVALE, JAMES THRASHER, ANUJ BHARGAVA, BRUCE A. BUCKINGHAM, BARRY HOROWITZ, KEVIN B. KAISERMAN, SUIYING HUANG, VIVIAN CHEN, GINA ZHANG, SARNATH CHATTARAJ, JOHN SHIN, ROBERT VIGERSKY, Renton, WA, Escondido, CA, Rochester, MN, Aurora, CO, Bloomfield Hills, MI, Feasterville, PA, Little Rock, AR, West Des Moines, IA, Stanford, CA, West Palm Beach, FL, Torrance, CA, Northridge, CA

Six-Month Glycemic Control with a Hybrid Closed-Loop System in Type 1 Diabetes Patients during COVID-19 Pandemic in Argentina
ADRIAN E. PROIETTI, MARCIAL A. ANGÓS, ALEJANDRO DAIN, MARIELA I. ECHENIQUE, MARÍA L. KABAKIAN, MARIA P. PAZ, MARCELA RAGGIO, GRACIELA B. RUBIN, ANTONIO SALEME, MARIA P. SANTUCCI, MATIAS CASTRO, ANDREA DAGHERO, LUIS A. GROSEMBAKER, Neuquén, Argentina, Cordoba, Argentina, Buenos Aires, Argentina, Santa Fe, Argentina, Caba, Argentina, Santiago de Chile, Chile, Ciudad de Buenos Aires, Argentina

Real-World Persistence, Adherence, Health Care Resource Utilization, and Costs in People with Type 2 Diabetes (T2D) Switching from Basal Insulin (BI) to Second-Generation BI (Insulin Glargine 300 U/mL [Gla-300]) vs. First-Generation BI (Insulin Glargine 1
EUGENE WRIGHT, JASVINDER GILL, SAMUEL HUSE, XUAN LI, TIMOTHY REID, FANG L. ZHOU, Charlotte, NC, Bridgewater, NJ, Bethesda, MD, Janesville, WI

Assessing Infusion Site Reactions with URLi in Continuous Subcutaneous Insulin Infusion
DEBRA A. IGNAUT, JANG IK CHO, JOHN C. ELPERS, FARAI B. CHIGUTSA, CAROLINA PIRAS DE OLIVEIRA, Indianapolis, IN

Real-World Outcomes of Addition of Insulin Glargine 300 U/mL (Gla-300) to GLP-1RA Therapy in People with Type 2 Diabetes (PWD2): The DELIVER-G Study
TIMOTHY S. BAILEY, JUKKA WESTERBACKA, CHARLIE NICHOLLS, JASVINDER GILL, MERWYN JONES S, LAXMI SHENOY, Escondido, CA, Paris, France, Guildford, United Kingdom, Bridgewater, NJ, Bangalore, India

Real-Life Efficacy and Safety of IDegLira in Type 2 Diabetic Patients during COVID-19: A 6-Month Follow-Up by Teleconsultation in Bucaramanga, Colombia
GUSTAVO A. PARRA SERRANO, MARIA PAULA TORRESLANGHAMMER, SERGIO SERRANOGOMEZ, ANDREA J. PINTOARIAS, Bucaramanga, Colombia, Florida blanca, Colombia
107-LB Relative Contribution of Fasting Plasma and Postprandial Glucose to HbA1c and TIR in People with T1D on Basal-Bolus Insulin Therapy
CAROLINA PIRAS DE OLIVEIRA, MARY A. DELLVA, JULIANA M. BUE-VALLESKEY, ANNETTE M. CHANG, FARAI B. CHIGUTSA, BIRONG LIAO, Indianapolis, IN

108-LB Ultrarapid Lispro (URLi) Accelerates Insulin Lispro Absorption and Insulin Action vs. Humalog (Lispro) in Healthy Chinese Subjects
YERONG YU, HAOXUN TAO, JENNIFER LEOHR, ELIZABETH S. LABELL, DAVID E. COUTANT, HUI LIU, CHENXI QIAN, Chengdu, China, Indianapolis, IN

109-LB Comparative Effectiveness of Insulin Glargine 300 U/mL (Gla-300) and Insulin Degludec 100 U/mL (iDeg-100) in Insulin-Naïve Type 2 Diabetes Adults: RESTORE-2 Real-World Study
GIAN PAOLO FADINI, RAFFAELLA BUZZETTI, ANTONIO NICOLUCCI, MARIA CHIARA ROSSI, MONICA LAROSA, DOMENICO CUCINOTTA, ON BEHALF OF RESTORE-2 STUDY GROUP, Padova, Italy, Rome, Italy, Pescara, Italy, Milan, Italy, Messina, Italy

110-LB Efficacy, Safety, and Appropriateness of iGlarLixi, a Fixed-Ratio Combination (FRC) in Type 2 Diabetes (T2D) in Real-World Settings: Results from the ENSURE Study
RICCARDO CANDIDO, MONICA MODUGNO, ENRICO GABELLIERI, ANTONIO NICOLUCCI, MARIA CHIARA ROSSI, MONICA LAROSA, ON BEHALF OF ENSURE STUDY GROUP, Trieste, Italy, Bari, Italy, Alessandria, Italy, Pescara, Italy, Milan, Italy

111-LB Preadmission Insulin Treatment Was Associated with Increased In-Hospital Mortality among Critically Ill Patients with Type 2 Diabetes
RONGPING FAN, Wuhan, Hubei, China

112-LB Pulsatile Insulin Treatment as a Treatment Option for Patients with Type 2 Diabetes and Stage 3 Kidney Failure
SOPHIA QUACH, ANASTASIOS MANESSIS, Long Island City, NY

CLINICAL THERAPEUTICS/NEW TECHNOLOGY—OTHER THERAPEUTIC AGENTS

113-LB The Role of "Osmotoxicity" in Type 2 Diabetes Mellitus: A Retrospective Comparative Analysis of the Effect of Pretreatment with IV 0.9% Saline on Glycemic Control in Subcritical Hyperglycemia
PICHAKACHERI SURESHKUMAR, Kozhikkode, India

114-LB Metformin-Associated Lactic Acidosis Risk Assessment in Veterans on Continuous Oxygen Therapy
STACEY J. LUTZ-MCCAIN, BETH E. DESANZO, BRANDON HERK, MEGHAN MCLINDEN, MONICA M. DINARDÒ, RONALD CODARIO, Pittsburgh, PA

115-LB Liver-Derived FGF21 Mediates the Promoting Effect of Glucagon Receptor Antagonism on Beta-Cell Regeneration in Type 2 Diabetic Mice
XIAONA CUI, TIANJIAO WEI, JIN FENG, JIN YANG, HAI YAN, RUI WEI, TIANPEI HONG, Beijing, China, Camarillo, CA

116-LB Efruxifermin Is Associated with Improved Glucose Metabolism in Patients with NASH and Type 2 Diabetes
JUAN PABLO FRIAS, RESHMA SHRINGARPURE, ERIK J. TILLMAN, CHEN HU, ERICA FONG, BRITTANY DE TEMPLE, TIMOTHY ROLPH, ANDREW CHENG, KITTY YALE, STEPHEN A. HARRISON, Los Angeles, CA, Cincinnati, OH, South San Francisco, CA, San Francisco, CA, Live Oak, TX

117-LB Glucokinase Activator Dorzagliatin (HMS5552) Regulates GLP-1 Release in T2D Patients and Is Synergistic with Sitagliptin and Empagliflozin in Optimizing Beta-Cell Function
LI CHEN, JIAYI ZHANG, RONG YANG, LINGGE FENG, HUA MEDICINE, Shanghai, China

118-LB Efficacy and Safety of iGlarLixi vs. IDegAsp: Systematic Review and Indirect Treatment Comparison (ITC)
PHILIP HOME, ROOPA MEHTA, KHADIJA HAFIDH, OLEWSA GUROVA, AGUSTINA ALVAREZ, PAUL SERAFINI, MIR-MASOUAD POURRAHMA, Newcastle upon Tyne, United Kingdom, Mexico City, Mexico, Dubai, United Arab Emirates, Moscow, Russian Federation, Buenos Aires, Argentina, Vancouver, BC, Canada
119-LB  Increased Adiponectin following Efruxifermin Treatment Is Associated with Improvements in Dyslipidemia, Glucose Metabolism, and Liver Health in a 16-Week, Randomized, Placebo-Controlled NASH Trial
JUAN PABLO FRIAS, ERIK J. TILLMAN, RESHMA SHRINGARPURE, ERICA FONG, BRITTANY DE TEMPLE, TIMOTHY ROLPH, ANDREW CHENG, KITTY YALE, STEPHEN A. HARRISON, Los Angeles, CA, South San Francisco, CA, Live Oak, TX

120-LB  The Metabolic Effects of Initiation Pitavastatin vs. Rosuvastatin: Twelve Months Real-World Data on Hyperlipidemic Patients with and without Diabetes (DM)
DIMITRIOS LYGNOS, ATHANASIA PAPAZAFIROPOULOU, SOTERIS SOTERIADES, NIKOLAOS D. LOXAS, MARIA XENOU, IOANNIS ZOUPAS, EVANGELOS FOUSTERIS, York, United Kingdom, Zakynthos, Greece, Athens, Greece, Piraeus, Greece

121-LB  Glucose- and Glucagon-Lowering Effect of a Single Oral Leptin Dose in Type 1 Diabetes Patients
MIRIAM KIDRON, SHARON PERLES, RAM WEISS, Jerusalem, Israel, Haifa, Israel

122-LB  In Vitro Pharmacodynamic Studies of IDG-16177, a Potent GPR40 Agonist, for the Treatment of Type 2 Diabetes
JONGMIN YOON, HAENGJIN SONG, DON-GIL LEE, JUNG HO KIM, DAHAE HONG, CHORONG SHIN, EUNHYE JANG, JISU KIM, SEOLHEE LEE, YEARIN JUN, KYUNGMI AN, CHANG-HEE HONG, HYUN-JUNG KWAK, IN-GYU JE, HYO-JUNG SONG, Hwaseong-si, Korea, Republic of, Hwaseong-si, Gyeonggi-do, Korea, Republic of, Seoul, Korea, Republic of

123-LB  IDG-16177, a Potent, Orally-Bioavailable GPR40 Agonist, Improves Glycemic Control and Glucose-Stimulated Insulin Secretion in Preclinical Studies
JONGMIN YOON, DON-GIL LEE, JUNG HO KIM, DAHAE HONG, CHORONG SHIN, EUNHYE JANG, JISU KIM, HAENGJIN SONG, SEOLHEE LEE, YEARIN JUN, KYUNGMI AN, CHANG-HEE HONG, HYUN-JUNG KWAK, IN-GYU JE, HYO-JUNG SONG, Hwaseong-si, Korea, Republic of, Hwaseong-si, Gyeonggi-do, Korea, Republic of, Seoul, Korea, Republic of

124-LB  Development of IDG-16177, a Selective and Safe GPR40 Agonist for the Treatment of Type 2 Diabetes
JONGMIN YOON, HAENGJIN SONG, JUNG HO KIM, SEOLHEE LEE, CHORONG SHIN, YEARIN JUN, DAHAE HONG, DON-GIL LEE, EUNHYE JANG, JISU KIM, KYUNGMI AN, CHANG-HEE HONG, HYUN-JUNG KWAK, IN-GYU JE, HYO-JUNG SONG, Hwaseong-si, Korea, Republic of, Hwaseong-si, Gyeonggi-do, Korea, Republic of, Seoul, Korea, Republic of

125-LB  Differential Influences of Gastric Bypass and Sleeve Gastrectomy on Glucose-Reducing Effects of DPP-4 Inhibitor
HENRI HONKA, MARIA S. RAYAS, RALPH A. DEFRONZO, AMALIA GASTALDELLI, MARZIEH SALEHI, San Antonio, TX, Pisa, Italy

126-LB  Evaluation of the Efficacy of the Therapeutic Agent Cytoreg in Patients with Diabetic Foot: A Clinical Humanitarian Protocol
DARIO A. CARRILLO, KATIUJSCA VILLASANA, GEIZON TORRES, LEWIS J. POZO, WILLIAM J. JIMENEZ, WILLIAM E. BAUTA, LEONARDO DUGARTE, SR., Merida, Venezuela, Bolivarian Republic of, San Francisco, Venezuela, Bolivarian Republic of, Humble, TX, Kingwood, TX

CLINICAL THERAPEUTICS/NEW TECHNOLOGY—SGLT INHIBITORS

127-LB  Effectiveness and Safety of Empagliflozin in Routine Care in Europe and East Asia: Results from the Empagliflozin Comparative Effectiveness and Safety (EMPRISE) Study
AVRAHAM KARASIK, STEFANIE LANZINGER, ELISE C.H. TAN, DAISUKE YABE, DAE JUNG KIM, WAYNE H-H SHEU, CHELI MEZLER COHEN, REINHARD W. HOBB, KYOUNG HWA HA, THOMAS NYSTROM, LEO K. NISKANEN, MAIKEN LINNEMANN JENSEN, MOE H. KYAW, JULIO NUNEZ, EMPRISE EU AND EAST ASIA STUDY GROUP, Tel Hashomer, Israel, Taipei City, Taiwan, Kobe, Japan, Suwon, Korea, Republic of, Taichung, Taiwan, Tel Aviv, Israel, Ulm, Germany, Gyeonggi-do, Korea, Republic of, Stockholm, Sweden, Lahti, Finland, Copenhagen Ø, Denmark, Ridgefield, CT, Valencia, Spain
128-LB  Sodium–Glucose Cotransporter-2 Inhibitors and Risk of Retinal Vein Occlusion among Patients with Type 2 Diabetes: A Propensity Score–Matched Cohort Study
MIN-KYUNG LEE, KYUNGDONG HAN, HYUK-SANG KWON, YOUNG-JUNG ROH, Goyang-si, Gyeonggi-do, Korea, Republic of, Seoul, Korea, Republic of

129-LB  Kidney and Cardiovascular Effects of Canagliflozin According to Age and Sex in the CREDENCE Trial
TAE WON YI, BRENDAN SMYTH, AMY KANG, KATHRYN CARDOZA, GIAN LUCA DI TANNA, CLARE ARNOTT, CAROL A. POLLOCK, RAJIV AGARWAL, GEORGE BAKRIS, CHRISTOPHER P. CANNON, DICK DE ZEEUW, HIDDO L. HEERSPINK, ADEERA LEVIN, BRUCE NEAL, DAVID C. WHEELER, HONG ZHANG, BERNARD ZINMAN, KENNETH W. MAHAFFY, VLADO PERKOVIC, MEG J. JARDINE, CREDENCE TRIAL INVESTIGATORS, Newtown, Australia, Kogarah, Australia, Newtown NSW, Australia, Indianapolis, IN, Chicago, IL, Boston, MA, Groningen, Netherlands, Vancouver, BC, Canada, Sydney, Australia, London, United Kingdom, Beijing Shi, China, Toronto, ON, Canada, Stanford, CA, Sydney, NSW, Australia

130-LB  Dapagliflozin and the Incidence of Type 2 Diabetes in Patients with Chronic Kidney Disease
PETER ROSSING, PRIYA VART, GLENN M. CHERTOW, FAN FAN HOU, NIELS JONGS, JOHN J. McMURRAY, RICARDO CORREA-ROTTER, BERGUR STEFANSSON, ROBERT D. TOTO, ANNA MARIA LANGKILDE, DAVID C. WHEELER, HIDDO L. HEERSPINK, DAPA-CKD STUDY GROUP, Gentofte, Denmark, Palo Alto, CA, Guangzhou, China, Groningen, Netherlands, Stockholm, Sweden, Gothenburg, Sweden, Toronto, ON, Canada, Shanghai, China

131-LB  The Impact of Canagliflozin on the Risk of Neuropathy Events: Results from the CREDENCE Trial
JINLAN LIAO, AMY KANG, CHAO XIA, CLARE ARNOTT, GIANG LUCA DI TANNA, ARUN V. KRISHNAN, CAROL A. POLLOCK, RAJIV AGARWAL, GEORGE BAKRIS, HIDDO L. HEERSPINK, ADEERA LEVIN, DICK DE ZEEUW, BRUCE NEAL, HONG ZHANG, DAVID C. WHEELER, BERNARD ZINMAN, KENNETH W. MAHAFFY, VLADO PERKOVIC, MEG J. JARDINE, BRENDAN SMYTH, Shenzhen, China, Sydney, Australia, Chengdu, China, Indianapolis, IN, Chicago, IL, Groningen, Netherlands, Vancouver, BC, Canada, Beijing Shi, China, London, United Kingdom, Toronto, ON, Canada, Stanford, CA

132-LB  The Safety and Efficacy of Canagliflozin in Women with Polycystic Ovary Syndrome: A Randomized Control Trial
MEILI CAI, YUQIN ZHANG, SHEN QU, MANNA ZHANG, Shanghai, China

133-LB  Canagliflozin Improves Cardiovascular and Renal Outcomes across Broad Geographic Regions: Results from CREDENCE
KATHRYN CARDOZA, AMY KANG, BRENDAN SMYTH, TAE WON YI, GIAN LUCA DI TANNA, CAROL A. POLLOCK, DICK DE ZEEUW, DAVID C. WHEELER, CHRISTOPHER P. CANNON, BERNARD ZINMAN, MEG J. JARDINE, CLARE ARNOTT, ADEERA LEVIN, KENNETH W. MAHAFFY, Newtown NSW, Australia, Kogarah, Australia, Vancouver, BC, Canada, Newtown, Australia, Sydney, Australia, Groningen, Netherlands, London, United Kingdom, Boston, MA, Toronto, ON, Canada, Stanford, CA

134-LB  Efficacy and Safety of Dapagliflozin in Type 1 Diabetes: The RISING-STAR Study
MASAHIDE HAMAGUCHI, MASAHIRO YAMAZAKI, TORU TANAKA, MICHIYO ISHII, HIROSHI OKADA, KAZUTERU MITSUHASHI, NORIYUKI KITAGAWA, GOJI HASEGAWA, MICHIKI MIYADZAWA, Otsu, Japan, Moriguchi, Japan, Fukuchiyama, Japan, Kameoka, Japan, Kyoto, Japan

HEALTH CARE DELIVERY—ECONOMICS

135-LB  Cost Effectiveness of the FreeStyle Libre System vs. Self-Monitoring of Blood Glucose in People with Type 2 Diabetes on Insulin Treatment Not Reaching Glycemic Goals in Sweden
JOHAN H. JENDLE, KATARINA EGG-OLFOSSON, ANN-MARIE SVENSSON, STEFAN FRANZÉN, MARK LAMOTTE, FLEUR LEVRAT-GUILLEN, Örebro, Sweden, Göteborg, Sweden, Gothenburg, Sweden, Zaventem, Belgium, London, United Kingdom

136-LB  Budget Impact of Adding Flash Continuous Glucose Monitoring (CGM) to Medicaid Formularies
JERRY FRANK, RICHARD HELLMUND, NAUNIHAL VIRDI, DEIRDRE B. BLISSETT, Dix Hills, NY, Alameda, CA, Winchester, United Kingdom
HEALTH CARE DELIVERY—QUALITY IMPROVEMENT

137-LB  An Audit on the Management of Diabetic Ketoacidosis during the COVID-19 Pandemic in St. Vincent’s University Hospital, Dublin, Ireland
A. MARY MCCARTHY, RACHEL CROWLEY, Dublin, Ireland

138-LB  Managing Hyperglycemia in Patients on an Insulin Pump: A Quality Improvement Study
ALEXA YUEN, VAFA TABATABAIE, Bronx, NY

139-LB  Understanding Attitudes towards Influenza Vaccination among Children with Diabetes in a NYC Hospital
JENNIFER APSAN, EMILY COPPEDGE, ZOLTAN ANTAL, New York, NY

140-LB  Improving Translation of Diabetes Management Practices in Community Primary Care
CELESTE C. THOMAS, MONICA E. PEEK, CARLIE PAUL, MARGARET ALLISON, ANNA HEILBRUN, SANDRA TILMON, ROSHAWNDA THOMPSON, DANIEL C. JOHNSON, Chicago, IL

141-LB  MOVE! Enhanced: A Virtual Diabetes and Weight Management Pilot
CARLOS E. MENDEZ, JILL M. HANSEN, AARON FEEST, JILLIAN TAXMAN, KRISTEN BERTRAM, ALFRED V. HANLEY, Milwaukee, WI

142-LB  Comparing Two Telehealth Interventions for Patients with Clinic-Refractory Type 2 Diabetes: A Randomized Controlled Trial
MATTHEW J. CROWLEY, PHILLIP E. TARKINGTON, HAYDEN B. BOSWORTH, MATTHEW L. MACIEJEWSKI, KAREN STEINHAUSER, AMY S. JEFFREYS, CYNTHIA COFFMAN, VALERIE SMITH, SUSANNE DANUS, DEBORAH H. JETER, ELIZABETH STRAWBRIDGE, THERESA C. WILMOT, GLENDA A. TISDALE, TERESA MARCANO, DONNA L. OVERBY, MELISSA A. DURKEE, SUSAN BULLARD, MOAHAD DAR, AMY MUNDY, STEVEN T. SZABO, SHIVAN DESAI, ELIZABETH A. KOBE, NADYA MAJETTE ELLIOTT, DAVID EDELMAN, Durham, NC, Manchester, NH, Greenville, NC, Richmond, VA

143-LB  Changes in Perceptions and Confidence of Health Care Professionals across Medical Specialties Regarding Use of SGLT2 and GLP-1 for Cardiorenal Benefit in Type 2 Diabetes
DEENA ZYTNICK, RYAN WOOLLEY, MICHELLE BRUNS, CHRISTINA M. SHAY, Dallas, TX, Arlington, VA

144-LB  Collaborative Telehealth Approach Where Traditional Care Fails Diabetes Care Network
KRISTY CLARK, MEG J. LARSON, STACEY J. LUTZ-MCCAIN, ARCHANA BANDI, Edinboro, PA, Seneca, PA, Pittsburgh, PA

145-LB  Glycemic Control Is Not an Independent Predictor of Mortality or Length of Stay for Patients Hospitalized with Coronavirus 2019 (COVID-19)
MICHAEL G. JAKOBY, IV, VANESSA WILLIAMS, STACEY WARD, SCOTT K. LEE, MICHAEL BUHNERKEMPE, KENNETH IZUORA, Springfield, IL, Las Vegas, NV

146-LB  Association of Serum 1,5-Anhydroglucitol with Severe COVID-19 in T2D patients
GAZTAMBIDE SONIA, ERIC A. BUTTON, MIRELIA ZULUETA, EUNATE ARANA, ANA B. DE LA HOZ, LEIRE MENDIZABAL, JUAN DEL OLMO, RAQUEL MUÑOZ, LAUREANO SIMON, LUIS CASTANO, Cruces-Baracaldo, Spain, Raleigh, NC, San Sebastian, Spain, Barakaldo, Spain

147-LB  Targeted Intervention for At-Risk Patients with Diabetes to Reduce Readmissions
ASHLEY HARRIS, KRISTINE GRDINOVAC, Kansas City, KS

148-LB  Demographic Factors Predict Successful Transition to Adult Care in Adolescents and Emerging Adults with Type 1 Diabetes
DANIEL R. TILDEN, SARAH S. JASER, Nashville, TN
PEDIATRICS—OBESITY AND TYPE 2 DIABETES

149-LB Fasting Blood Glucose (FBG) and Cardiovascular Disease (CVD) Risk in Hispanic Youth with Obesity
REEM S. SHAWAR, MAURICE R. PUYAU, FIDA BACHA, Houston, TX

150-LB Changes in OGTT-Derived Biomarkers following Lifestyle Intervention among High-Risk Youth
ARMANDO PENA, JOON YOUNG KIM, JESSICA A. REYES, KILEY B. VANDER WYST, MICAHL OLSON, STEPHANIE AYERS, ALLISON WILLIAMS, GABRIEL Q. SHAIBI, Phoenix, AZ, Syracuse, NY, Indianapolis, IN

151-LB Impact of Concurrent Use of Selective Serotonin Reuptake Inhibitors and Second-Generation Antipsychotic Medications on Cardiometabolic Health in Children
RUPINDER THANDI, ALEJANDRA M. WIEDEMAN, ANGELA M. DEVLIN, CONSTADINA PANAGIOTOPoulos, Vancouver, BC, Canada

152-LB Homeostatic Model Assessment of Adiponectin (HOMA-AD) in Youth across the Spectrum of Adiposity and along the Span of Glycemia
JORDAN JACOB, JOON YOUNG KIM, SILVA A. ARSLANIAN, Syracuse, NY, Pittsburgh, PA

153-LB Initial Presentation of Children with Type 2 Diabetes during the COVID-19 Pandemic
DANIEL S. HSIA, MARIA LIM, ROBBIE A. BEYL, HIRA A. HASAN, JAMES GARDNER, New Orleans, LA, Baton Rouge, LA

154-LB Impact of Maternal Diabetes Exposure on Soluble Adhesion Molecules
SAMANTHA B. LANDRETH, APRIL M. TEAGUE, MARY ELLEN JENSEN, SHELLY GULATI, JEANIE B. TRYGGSTAD, Oklahoma City, OK, Oklahoma, OK

PEDIATRICS—TYPE 1 DIABETES

155-LB Counterregulatory Response to Hypoglycemia after Short-Term Use of Low and Very Low Carbohydrate Diets in Children with Type 1 Diabetes (T1D)
LARRY FOX, JOSEPH W. PERMUY, DELIAMILLE PEREZ SANTIAGO, MARY LOUISE FOX, MD JOBAYER HOSSAIN, Jacksonville, FL, Danville, PA, Wilmington, DE

156-LB Family Exposure and Impact of COVID-19 on a Pediatric T1D Population
ERIN C. COBRY, TIMOTHY B. VIGERS, LAURA PYLE, LISA J. MELTZER, Aurora, CO, Denver, CO

157-LB Association of Glycemic Ranges and Sleep Measures in Youth with T1D and Their Parents
ANGELA J. KARAMI, LAURA PYLE, EMILY JOST, R. PAUL WADWA, LISA J. MELTZER, ERIN C. COBRY, Aurora, CO, Denver, CO

158-LB A Complete-Panel Islet Autoantibody Multiplex ECL Assay
LING HE, XIAOFAN JIA, DONGMEI MIAO, CRISTY GENO RASMUSSEN, MARIAN REWERS, LIping YU, Englewood, CO, Aurora, CO

159-LB High-Affinity ZnT8 Autoantibodies by Electrochemiluminescence Assay Improve the Risk Prediction for Type 1 Diabetes
XIAOFAN JIA, LING HE, DONGMEI MIAO, KATHLEEN WAUGH, CRISTY GENO RASMUSSEN, FRAN DONG, MARIAN REWERS, LIping YU, Englewood, CO, Aurora, CO

PREGNANCY—BASIC SCIENCE/TRANSLATIONAL

160-LB PCSK-9 in Pregnancy: Longitudinal Changes and Correlations with Individual Lipid Levels
CHANDNI H. ANADKAT, JONATHAN Q. PURNELL, NICOLE E. MARSHALL, AMY M. VALENT, JANNE BOONE-HEINONEN, KIMBERLY VESCO, Portland, OR
PREGNANCY—CLINICAL/EPIDEMIOLOGY

161-LB Role of Child Physical Activity and Sleep Efficiency in Relation to Prenatal Exposure to Gestational Diabetes on Adiposity
JASMIN M. ALVES, ALEXIS W. DEFENDIS, TING CHOW, SELENA T. NGUYEN-RODRIGUEZ, ANNY XIAOV, KATHLEEN A. PAGE, Los Angeles, CA, Long Beach, CA, Pasadena, CA

162-LB Plasma Glycated CD59 Predicts Postpartum Glucose Intolerance after Gestational Diabetes
KATRIN BENHALIMA, DONGDONG MA, MICHELLE TOOTH CASTILLO, ANNOUSHKA LAENEN, CHANTAL MATHIEU, JOSE HALPERIN, Boston, MA, Leuven, Belgium

163-LB Differences in Maternal and Fetal Outcomes by CGM Use in a T1D Specialty Clinic
VALERIE GAO, LISA SHER, JAEK K. SNELL-BERGEON, EMILY MALECHA, ELIZABETH WESTFELDT, PATRICK SULLIVAN, SARIT POLSKY, Aurora, CO, Denver, CO

164-LB Association of Maternal Insulin Sensitivity during Gestation and Neonatal Size
SAYALI DESHPANDE-JOSHI, HEMANT DAMLE, MADHURA K. DESHMUKH, DATTATRAY BHAT, NILAM S. MEMANE, ABOLI A. BHALERAO, RASIKI LADKAT, PRADEEP TIWARI, SUHAS R. OTIV, OTILIA PERICHART-PERERA, MIREILLE VAN POPPEL, CHRISTINA A. VINTER, DORTE M. JENSEN, GERNOT DESOYE, CHITTARANJAN S. YAJNIK, Pune, India, Mexico City, Mexico, Odense C, Denmark, Graz, Austria, Boston, MA

165-LB Development of Subsequent Diabetes Mellitus after Gestational Diabetes among Immigrant Women: Population-Based Cohort Study
JESSICA S.S. HO, STEPHANIE H. READ, LAURA ROSELLA, HOWARD BERGER, DENICE FEIG, KAREN FLEMING, JOEL G. RAY, ISRAA R. SHAH, SHOHINEE SARMA, LORRAINE LIPSCOMBE, Kingston, ON, Canada, Toronto, ON, Canada

EPIDEMIOLOGY—AGING

166-LB Targeting Deprescribing in Type 2 Diabetes Mellitus Using a Pragmatic Electronic Health Record Measure of Frailty
CHINENYE USOH, KRISTIN M. LENOIR, NICHOLAS M. PAJEWSKI, KATHRYN E. CALLAHAN, Winston Salem, NC

EPIDEMIOLOGY—CLINICAL—DIAGNOSIS AND SCREENING

167-LB Pandemic Changes and Usage of At-Home Collected Hemoglobin A1c and Lipid Profiles
EMMA J. DION, DEVON HUMPHREYS, KAYLAN OLDS, THUSHANI SIRIWARDHANE, TIMOTHY BAUER, Austin, TX

168-LB Latent Autoimmune Diabetes in Youth (15–29 Years Old): The Heavier End of an Autoimmune Disease Spectrum
JIN CHENG, XIAOHAN TANG, XIANG YAN, SHUOMING LUO, XIA LI, ZHIGUANG ZOU, Changsha, China

169-LB Type 1 Diabetes Mellitus and Stiff-Person Syndrome
CÁTIA A. ARAÚJO, CARLA BAPTISTA, ISABEL PAIVA, ANA MORGADINHO, Coimbra, Portugal

170-LB Obesity-Related Metabolites and Risk of Type 2 Diabetes in Chinese Adults
XIONG-FEI PAN, ZSU-ZSU CHEN, THOMAS WANG, WEI ZHENG, ROBERT E. GERSZTEN, XIAO-OU SHU, DANXIA YU, Nashville, TN, Boston, MA, Dallas, MA

171-LB Stress Hyperglycemia Is Associated with Higher Preadmission Glucose and Post-Discharge Diabetes Incidence
SHUYANG FANG, SAMUEL AIYEDIPE, ANJALI KHAKHARIA, ERICA GIRALDI, KIRK A. EASLEY, LAWRENCE S. PHILLIPS, MARY K. RHEE, Atlanta, GA, Decatur, GA
EPIDEMIOLOGY—DIABETES COMPLICATIONS

172-LB Identification of Specific Risk Factors for Mortality in Patients with Diabetes Mellitus Hospitalized with COVID-19
PEDRO J. PINÉS-CORRALES, MARIA MOLINA, LOURDES GARCÍA-BLASCO, ROSA QUILEZ TOBOSO, MARINA ALCARAZ, LUIS VICENTE GUTIÉRREZ, GEMA PATERNIA MELLINAS, JUAN MARIA CALBO MAYO, JOSÉ-JOAQUÍN ALFARO-MARTÍNEZ, Albacete, Spain

173-LB Association between Glucagon-Like Peptide-1 Receptor Agonist (GLP-1RA) and Sodium–Glucose Cotransporter 2 Inhibitor (SGLT2i) Use and COVID-19 Outcomes
ANNA KAHKOSKA, TRINE J. ABRAHAMSEN, CALEB ALEXANDER, TELLEN D. BENNETT, CHRISTOPHER G. CHUTE, KLARA KLEIN, MELISSA HAENDEL, HEMALKUMAR B. MEHTA, JOSHUA D. MILLER, RICHARD A. MOFFITT, TIL STÜRMER, KAISA KVIST, JOHN B. BUSE, Bagsvaerd, Denmark, Baltimore, MD, Chapel Hill, NC, Aurora, CO, East Setauket, NY, Stony Brook, NY, Søborg, Denmark

174-LB Severe Hypoglycemia, High Anxiety, and Depressive Symptoms Are Associated with Erectile Dysfunction in Male Adults with Type 1 Diabetes in a Brazilian Tertiary Hospital
PAULA R. JASKULSKI, ELIZABETH J. PAVIN, SR., MÔNICA S. SILVEIRA, MARIA B. KOELLE, Campinas, Brazil

175-LB Stress Hyperglycemia Predicts Mechanical Ventilation and Death in COVID-19 Infected Adults
MARIE E. MCDONNELL, DONALD C. SIMONSON, GRACE CROMWELL, GEETHA GOPALAKRISHNAN, MARGARET GREENFIELD, MATTHEW JOHNSON, SAI R. KATTA, JASMIN LEBASTCHI, JOANNA MITRI, NADINE E. PALERMO, RAMYA RATHAKRISHNAN, GREGORY P. WESTCOTT, RUTH S. WEINSTOCK, RAJESH GARG, East Providence, RI, Providence, RI, Boston, MA, Syracuse, NY, Miami, FL

176-LB The Impact of COVID-19 Infection on Subsequent Glycemic Control
EMILIA G. THURBER, MARIE E. MCDONNELL, GRACE CROMWELL, MATTHEW JOHNSON, DONALD C. SIMONSON, NADINE E. PALERMO, Boston, MA

177-LB The Association between the Baseline Glycemic Control and Antihyperglycemic Therapy with the Severity of SAR-CoV2 Infection in Ethnic Minority Patients with Diabetes
JERONIMO BERARDO, DAN MIHAILESCU, BETTINA TAHSIN, LEON FOEGELFELD, Chicago, IL

EPIDEMIOLOGY—NUTRITION

178-LB Food Insecurity and Dietary Intake Adequacy in Youth and Young Adults with Type 1 and Type 2 Diabetes

EPIDEMIOLOGY—OTHER

179-LB Association of Leptin and Adiponectin with the Incidence of Type 2 Diabetes Independent of Visceral Adiposity and Liver Fat
IZUMI SHIBATA, MIKIKO SHIBATA, KYOKO K. SATO, SHINICHIRO UEHARA, NARIMITSU NISHIDA, KAORI OKAMURA, YOSHIHIKO YUYAMA, HIDEO KOH, YONEZO HIKITA, WILFRED Y. FUJIMOTO, EDWARD J. BOYKO, TOMOSHIGE HAYASHI, Osaka, Japan, Seattle, WA

180-LB Effects of Proton Pump Inhibitors on Glycemic Control and Risk of Incident Diabetes: A Systematic Review and Meta-analysis
CAROL CHIUNG-HUI PENG, KHULOOD BUKHARI, HUEI-KAI HUANG, YU-KANG TU, GIN YI LEE, HUAI-EN CHANG, YUTING HUANG, YUNTING FU, KASHIF M. MUNIR, Hualien, Taiwan, Taipei, Taiwan, Danbury, CT, Baltimore, MD

181-LB Hyperglycemia at Hospital Presentation Associated with Severity and Mortality in COVID-19 Patients without Type 2 Diabetes
NIPITH CHAROENNGAM, MICHAEL F. HOLICK, CAROLINE APOVIAN, Boston, MA
Hospitalizations for Hyperglycemic Crisis during COVID-19 Pandemic
AIMAN RIAZ, CHELSEA GORDNER, ALICE EHRESMAN, Springfield, MA

Incidence and Characteristics of Type 1 and Type 2 Diabetes among Youths in the COVID-19 Pandemic
ANGEL NIP, TARIQ AHMAD, San Francisco, CA, Oakland, CA

Lipid and HbA1c Profiles among People with Lean and Overweight Type 2 Diabetes in the Peruvian Amazon
DAVID C. ROBBINS, BARTHOLOMEW C. DEAN, CHAD GERHOLD, M J MOSHER, JULIANA CAMARGO, Kansas City, KS, Lawrence, KS, Okoboji, IA, Bellingham, WA

Effect of the COVID-19 Lockdown on Glycemic Control in Adult Patients with Type 2 Diabetes Mellitus
IS-HAQ O. MALIK, KAMRUN NAHER, KOMANDUR THRUPTHI, BUSHRA ZAIDI, VIVIEN LEUNG, Bronx, NY

EPIDEMIOLOGY—TYPE 1 DIABETES

T1D Exchange Registry: Current Insights on Participant Outcomes
CAROLINA LEON, JINGWEN LIU, JULIA RAVELSON, KATHERINE S.M. CHAPMAN, ALLYSON HUGHES, WENDY WOLF, Boston, MA

GENETICS—TYPE 2 DIABETES

Leveraging Information across Multiple Related Glycaemic Traits Improves Fine-Mapping Resolution
JANA SOENKSEN, JI CHEN, JENNIFER L. ASIMIT, MAGIC, INÉS BARROSO, Exeter, United Kingdom, Cambridge, United Kingdom

Type 2 Diabetes Is Genetically Correlated with Multiple Long-Term Conditions but These Correlations Are Only Partly Explained by BMI
LUKE C. PILLING, FRANK DUBBRIDGE, DAVID MELZER, JACK BOWDEN, TIMOTHY M. FRAYLING, Leicester, United Kingdom, Exeter, United Kingdom

Using Genetics to Separate Childhood from Adult BMI Shows That Higher Childhood BMI Has No Direct Effect on Reduced Insulin Secretion or Sensitivity in Later Life
GARETH HAWKES, TOM G. RICHARDSON, GRACE M. POWER, GEORGE DAVEY SMITH, TIMOTHY M. FRAYLING, Exeter, United Kingdom, Bristol, United Kingdom

Using Genetics to Uncouple Higher Adiposity from Its Adverse Metabolic Effects
SUSAN MARTIN, JESSICA TYRRELL, ELIZABETH L. THOMAS, MATTHEW BOWN, JAMES T. ELDER, CHRISTOPHER KABRHEI, NIKOS PAPADIMITRIOU, MARC GUNTER, EMMA E. VINCENT, JIMMY D. BELL, TIMOTHY M. FRAYLING, HANIEH YAGHOOTKAR, Exeter, United Kingdom, London, United Kingdom, Leicester, United Kingdom, Ann Arbor, MI, Boston, MA, Lyon, France, Bristol, United Kingdom

Impact of Subsistence and Genetics on Lipid Profiles in Ethnically Diverse Africans

IMMUNOLOGY

Human CD4+CD25+CD226- Regulatory T Cells Demonstrate High Purity and Lineage Stability following In Vitro Expansion for Adoptive Cell Therapy
MATTHEW E. BROWN, SEIF R. HANBALI, LUZ MARINA GOMEZ RODRIGUEZ, JUAN M. ARNOLETTI, EMMA B. CARPENTER, TODD M. BRUSKO, Gainesville, FL

A Puzzling Case of Hypoglycemia in a Patient with Type 1 Diabetes Mellitus and Cushing Syndrome
MEHDIA AMINI, AYE H. KHINE, SIMARJEET S. LAMBA, SHREELA MISHRA, SOE NAING, VARSHA BABU, Fresno, CA
194-LB  Case of Pembrolizumab-Induced Type 1 Diabetes Mellitus
STAVROULA SPYROPOULOS, ANASTASIOS MANESSIS, New York, NY

195-LB  Lower Nonresponse Rates to 3-Antigen HBV Vaccine among Adults with Diabetes, Age 45 and Over, or Obesity Compared with a Single-Antigen HBV Vaccine: PROTECT Study
FRANCISCO DIAZ-MITOMA, TIMO VESIKARI, JOANNE M. LANGLEY, ALOMGIR HOSSAIN, NATHALIE MACHLUF, JOHANNA SPAANS, BEBI YASSIN-RAJKUMAR, DAVID E. ANDERSON, VLAD POPOVIC, PROTECT STUDY GROUP, Nepean, ON, Canada, Tampere, Finland, Halifax, NS, Canada, Ottawa, ON, Canada, Rehovot, Israel, Cambridge, MA

TRANSPLANTATION

196-LB  Stem Cell–Derived Islet Replacement Therapy (VC-02) Demonstrates Production of C-Peptide in Patients with Type 1 Diabetes (T1D) and Hypoglycemia Unawareness
BART KEYMEULEN, SR., DANIEL JACOBS-TULLENEERS-THEVISSEN, EVERT J. KROON, MANASI S. JAIMAN, MARK DANIELS, RICHARD WANG, DANIEL PIPELEERS, KEVIN D'AMOUR, HOWARD L. FOYT, Brussels, Belgium, San Diego, CA

INSULIN ACTION—ADIPOCYTE BIOLOGY

197-LB  The Regulation of HSL by Macrophage Migration Inhibitory Factor (MIF) Contributes to Adipocyte Hypertrophy and Development of Obesity
LIUJUN CHEN, YIHENG HUANG, LISHA LI, HALEH ZABIHI, YADAN QJ, LIN LENG, GUANG SUN, RICHARD BUCALA, DAKE QJ, Winnipeg, MB, Canada, London, ON, Canada, St. John's, NL, Canada, New Haven, CT

198-LB  A Novel Heterozygous Mutation in Peroxisome Proliferator-Activated Receptor Gamma (PPAR-γ) Gene in a Woman with Familial Partial Lipodystrophy
PATRÍCIA V. WANDERLEY, JOAO C. DIAS, MARTA W. VIEIRA, GIANE GARCIA, ITUO T. FILHO, RAYSSA F. CHAMMA, LILIAN S. GUGONI, RAFAEL B. GIORGI, CRISTIANO R.G. BARCELLOS, São Paulo, Brazil

199-LB  ATF4 Deletion in Brown Adipose Tissue Impairs Adaptive Thermogenesis but Attenuates Diet-Induced Insulin Resistance
SARAH BJORKMAN, ALEX A. MARTI, ERIC T. WEATHERFORD, LUIS M. GARCÍA-PEÑA, MATTHEW J. POTTHOFF, EVAN D. ABEL, RENATA PEREIRA, Iowa City, IA

200-LB  Circadian Regulation of the MRTF-SRF Signaling Promotes Beige Adipocyte Development
XUEKAI XIONG, RUYA LIU, VIJAY YECHOOR, PRADIP SAHA, KE MA, Duarte, CA, Pittsburgh, PA, Houston, TX

201-LB  Arx and Nr2f6 Transcriptionally Regulate Visceral and Brown Fat Phenotype
AARTHI MAGANTI, JINGYI CHI, PAUL COHEN, New York, NY

INTEGRATED PHYSIOLOGY—INSULIN SECRETION IN VIVO

202-LB  Reduced Glucose Effectiveness Exacerbates Impaired Glucose Tolerance in Prediabetic Dogs
CATHRYN M. KOLKA, JAY PORTER, MARILYN ADER, RICHARD N. BERGMAN, Los Angeles, CA

203-LB  Boosted Beta-Cell Function with Selective Deletion of the Adaptor Protein Mig6
BRANDON M. BAUER, ELIZABETH A. BLOOM-SALDANA, JOSE M. IRIMIA-DOMINGUEZ, PATRICK T. FUEGER, Duarte, CA

INTEGRATED PHYSIOLOGY—LIVER

204-LB  GADD45b Regulates Hepatic Gluconeogenesis via Modulating the Protein Stability of FoxO1
HYUNMI KIM, Daejeon, Korea, Republic of
205-LB  HGFAC Is a ChREBP-Regulated Hepatokine That Enhances Glucose and Lipid Homeostasis  
ASHOT SARGSYAN, LUĐIVINE DORIDOT, SARAH A. HANNOU, WENXIN TONG, HARINI SRINIVASAN, RACHAEL IVISON, RUBY MONN, HENRY H. KOU, JONATHAN HALDEMAN, INNA ASTAPOVA, LINUS T. TSAI, MARK A. HERMAN,  
Paris, France, Durham, NC, Boston, MA, Philadelphia, PA, St. Louis, MO

206-LB  Indian Americans as Compared with Indians Exhibit Increased Beta-Cell Responsivity and Insulin Clearance in Absence of Changes in Insulin Sensitivity  
VEDAVATI PURANDARE, ALFONSO GALDERISI, MARIANGELA MAERTINO, ANANDA BASU, CLAUDIO COBELLI, AMBIKA GOPALAKRISHNAN UNNIKRISHNAN, RITA BASU, Padova, Italy, Charlottesville, VA, Pune, India

207-LB  Simultaneous 2H/13C Assessment of Liver and Kidney Metabolic Fluxes Reveals Reciprocal Upregulation of Renal Gluconeogenesis in Hepatic PEPCK-C Knockout Mice  
MOHSIN RAHIM, CLINTON M. HASENOUR, TOMASZ BEDNARSKI, CURTIS C. HUGHEY, DAVID WASSERMAN, JAMEY YOUNG, Nashville, TN, Minneapolis, MN

208-LB  Peripheral CB1 Inverse Agonism Improves Metabolism in DIO Mice Independent of Hepatic FGF21  
JIE LIU, Rockville, MD

209-LB  RNA-Seq Analysis of Liver from Diabetic and NASH Model Mouse Treated with Streptozotocin, High-Fat Diet  
LIN MAIN, TONI H. JENSEN, MALIN NILSSON, JANUS D. NYBING, FREDERIK H. LINDEN, ERIK HØGH-SCHMIDT, MIKAEL P. BOESEN, STEN MADSBAD, SR., HENDRIK VILSTRUP, ELIAS B. RASHU, LISE GLUUD, STEEN B. HAUGAARD, JENS J. HOLST, JOERGEN RUNGBY, NICOLAI J. WEWER ALBRECHTSEN, Copenhagen N, Denmark, Copenhagen, Denmark, Copenhagen NV, Denmark, Copenhagen N., Denmark, Aarhus, Denmark, Hvidovre, Denmark, Frederiksberg, Denmark

210-LB  Exploring Mechanisms of Insulin Resistance in Mental Illness: Antipsychotic Drugs Alter Metabolic, Inflammatory, and Nonalcoholic Fatty Liver Disease (NAFLD)–Associated Human and Mouse Proteomes in the Absence of Weight Gain  
MEGHAN MAY, MEGAN BEAUCHEMIN, CALVIN VARY, CELESTE BOUCHARD, KAREN L. HOUSEKNECHT, Biddeford, ME, Scarborough, ME, Rochester, MN

211-LB  Antifibrotic Effect of a Novel Long-Acting GLP-1/GCG/FGF21/Anticytokine Tetra-Specific Liver Microenvironment-Targeting Drug (OGB21502) in CCI4-Induced Liver Fibrosis Mice Model  
MIN SUN KIM, Suwon-si, Gyeonggi-do, Korea, Republic of

212-LB  Therapeutic Effect of a Novel Long-Acting GLP-1/GCG/FGF21/Anticytokine Tetra-Specific Liver Microenvironment-Targeting Drug (OGB21502) in MCD-Induced NASH Mice Model  
MIN SUN KIM, Suwon-si, Gyeonggi-do, Korea, Republic of

213-LB  Mechanisms of Metabolic Cross Talk between Mitochondrial Pyruvate Carrier Inhibition and Branched-Chain Amino Acid Catabolism in Hepatocytes  
DANIEL FERGUSON, NICOLE K.H. YIEW, KYLE S. MCCOMMIS, JERRY R. COLCA, BRIAN N. FINCK, St Louis, MO, Saint Louis, MO, St. Louis, MO, Kalamazoo, MI

INTEGRATED PHYSIOLOGY—MACRONUTRIENT METABOLISM AND FOOD INTAKE

214-LB  WITHDRAWN

215-LB  The Role of GLP-1 in Glycemic Response to Protein Ingestion after Gastric Bypass Surgery or Sleeve Gastrectomy  
MARIA S. RAYAS, HENRI HONKA, RALPH A. DEFRONZO, AMALIA GASTALDELLI, MARZIEH SALEHI, San Antonio, TX

INTEGRATED PHYSIOLOGY—OTHER HORMONES

216-LB  Development and Evaluation of a Glucagon Sensitivity Test in Humans  
SASHA KJELDSEN, NICOLE J. JENSEN, MALIN NILSSON, JANUS D. NYBING, FREDERIK H. LINDEN, ERIK HØGH-SCHMIDT, MIKAEL P. BOESEN, STEN MADSBAD, SR., HENDRIK VILSTRUP, ELIAS B. RASHU, LISE GLUUD, STEEN B. HAUGAARD, JENS J. HOLST, JOERGEN RUNGBY, NICOLAI J. WEWER ALBRECHTSEN, Copenhagen N, Denmark, Copenhagen, Denmark, Copenhagen NV, Denmark, Copenhagen N., Denmark, Aarhus, Denmark, Hvidovre, Denmark, Frederiksberg, Denmark
OBESITY—ANIMAL

217-LB  YH34160, a Novel Long- Acting GDF15 Fusion Protein, Elicits Potent and Sustained Body Weight Loss in Obese Animal Models
SEYOUNG LIM, JIEUN YANG, DO- HOON KIM, MI KYEONG JU, SUKYUNG KIM, YOUNG BONG PARK, BO RA SIM, JUNHWAN KIM, JONG GYUN KIM, SE-WOONG OH, Seoul, Korea, Republic of, Yongin, Korea, Republic of, Yong-in, Korea, Republic of, Yong-in-si, Korea, Republic of

218-LB  Age, Sex, and Fat Mass Affects Erythropoietin Metabolic Response in Mice
HEATHER ROGERS, CONSTANCE T. NOGUCHI, Bethesda, MD

OBESITY—HUMAN

219-LB  The Changes in Body Composition in Obese Patients with Polycystic Ovary Syndrome after Laparoscopic Sleeve Gastrectomy: A 12-Month Follow-Up
MEILI CAI, JINGYANG GAO, DU LEI, XIAOYUN CHENG, JIANGFAN ZHU, SHEN QU, MANNA ZHANG, Shanghai, China

220-LB  Serum Lipocalin-2 (LCN2): Potential Indices Associated with Weight Loss and Metabolic Improvement after Laparoscopic Sleeve Gastrectomy (LSG)
NANNAN LI, KELIBINUER MUTAILIPU, HUI YOU, YUEYE HUANG, BING ZHU, LILI SU, XIN WEN, SHIHUI LEI, SHEN QU, LE BU, Shanghai, China

221-LB  Effects of Liraglutide on Visceral and Ectopic Fat in Adults with Overweight/Obesity at High Cardiovascular Risk: A Randomized Clinical Trial
IAN NEELAND, STEVEN P. MARSO, COLBY AYERS, AMBARISH PANDEY, PARAG H. JOSHI, Cleveland, OH, Kansas City, MO, Dallas, TX

ISLET BIOLOGY—BETA CELL—DEVELOPMENT AND POSTNATAL GROWTH

222-LB  Canonical Wnt Signaling Regulates Beta-Cell Neogenesis from Pancreatic Duct Cells
SOLOMON AFELIK, ZHAN YU, Chicago, IL

ISLET BIOLOGY—BETA CELL—STIMULUS-SECRETION COUPLING AND METABOLISM

223-LB  Jagged 1 - Notch Signaling Determines β-Cell Maturity and Function
NINA SUDA, UTPAL PAJVANI, New York, NY

224-LB  A Study to Evaluate the Glucagon and Incretin Responses and Identify the Role of Extrapancreatic Glucagon in Patients with Fibrocalcific Pancreatic Diabetes
ANAND SHANKAR, Patna, India

225-LB  Targeting β-Cell Endoplasmic Reticulum (ER) TALK-1 Channels to Restore Ca2+ Homeostasis and Reduce ER Stress in Diabetes
ARYA Y. NAKHE, PRASANNA DADI, DAVID WESTOVER, EMILY DAYS, JEROD DENTON, DAVID JACOBSON, Nashville, TN

226-LB  Elimination of the Progesterone Receptor in β Cells Improves β-Cell Function and Glucose Tolerance during Pregnancy and Diet-Induced Insulin Resistance in Female Mice
PAULA MOTA DE SA, MIRZA MUHAMMAD FAHD QADIR, FRANCK MAUVAIS-JARVIS, New Orleans, LA

227-LB  GLP-1 Activation of HCN Channels Increases Glucose-Stimulated β- and δ- Cell Ca2+ Oscillation Frequency
KAROLINA E. ZABORSKA, KELLI L. JORDAN, PRASANNA DADI, MATTHEW DICKERSON, SARAH M. GRAFF, DAVID JACOBSON, Nashville, TN, Georgetown, TX
ISLET BIOLOGY—SIGNAL TRANSDUCTION

228-LB  β-arrestin-2 Deletion Influences GLP-1 Receptor Signaling in Pancreatic β Cells In Vivo
STAVROULA BITSI, KINGA SUBA, NIMCO MOHAMED, ISABELLE LECLERC, GUY A. RUTTER, VICTORIA SALEM, BEN JONES, ALEJANDRA TOMAS, London, United Kingdom

229-LB  Quantification of GLP-1R Internalization and Recycling in Live β Cells
SARAH M. GRAY, KYLE SLOOP, PETER RAVN, JONATHAN CAMPBELL, DAVID A. D'ALESSIO, Durham, NC, Indianapolis, IN, Cambridge, United Kingdom

230-LB  Differential Roles of Beta-Cell IP3R and RyR ER Ca2+ Channels in Tunicamycin-Induced Disruption of Beta-Cell Ca2+ Homeostasis
IRINA ZHANG, VISHAL S. PAREKH, JUAN J. LEON, LESLIE S. SATIN, Ann Arbor, MI, Cambridge, MA, Gainesville, FL