

PERSPECTIVES IN DIABETES

- 1915** From Pancreatic β -Cell Gene Networks to Novel Therapies for Type 1 Diabetes
D.L. Eizirik, F. Szymczak, M.I. Alvelos, and F. Martin

COMMENTARY

- 1926** Surplus Ceramides: An Added Twist in the Tale of TREM2 and Insulin Resistance
K.L. Webster and L. Becker

DIABETES SYMPOSIUM

- 1929** The Role of GIP Receptor in the CNS for the Pathogenesis of Obesity
M. Fukuda
- 1938** GIPR Function in the Central Nervous System: Implications and Novel Perspectives for GIP-Based Therapies in Treating Metabolic Disorders
R.J. Samms, K.W. Sloop, F.M. Gribble, F. Reimann, and A.E. Adriaenssens
- 1945** Single-Cell Mapping of GLP-1 and GIP Receptor Expression in the Dorsal Vagal Complex
M.Q. Ludwig, P.V. Todorov, K.L. Egerod, D.P. Olson, and T.H. Pers
- 1956** The Role of GIP in the Regulation of GLP-1 Satiety and Nausea
M.R. Hayes, T. Borner, and B.C. De Jonghe

METHODOLOGY REVIEW

- 1962** Applying CRISPR Screen in Diabetes Research
P. Yi and N. Morrow

METABOLISM

- 1970** Adipocyte-Specific Deletion of Lamin A/C Largely Models Human Familial Partial Lipodystrophy Type 2
C.A.S. Corsa, C.M. Walsh, D.P. Bagchi, M.C. Foss Freitas, Z. Li, J. Hardij, K. Granger, H. Mori, R.L. Schill, K.T. Lewis, J.N. Maung, R.D. Azaria, A.E. Rothberg, E.A. Oral, and O.A. MacDougald
- 1985** Insulin Directly Regulates the Circadian Clock in Adipose Tissue
N. Tuvia, O. Pivovarova-Ramich, V. Murahovschi, S. Lück, A. Grudziecki, A.-C. Ost, M. Kruse, V.J. Nikiforova, M. Osterhoff, P. Gottmann, Ö. Gögebakan, C. Sticht, N. Gretz, M. Schupp, A. Schürmann, N. Rudovich, A.F.H. Pfeiffer, and A. Kramer

- 2000** TM4SF5 Knockout Protects Mice From Diet-Induced Obesity Partly by Regulating Autophagy in Adipose Tissue

C. Choi, Y. Son, J. Kim, Y.K. Cho, A. Saha, M. Kim, H. Im, K. Kim, J. Han, J.W. Lee, J.K. Seong, and Y.-H. Lee

- 2014** HIV-1 Viral Protein R Couples Metabolic Inflexibility With White Adipose Tissue Thermogenesis

N. Agarwal, D. Iyer, P. Saha, A.R. Cox, Y. Xia, N.S. Utay, A. Somasundaram, U. Schubert, J.E. Lake, S.M. Hartig, and A. Balasubramanyam

SIGNAL TRANSDUCTION

- 2026** STAT3 Regulates Mitochondrial Gene Expression in Pancreatic β -Cells and Its Deficiency Induces Glucose Intolerance in Obesity

A. Schaschkow, L. Pang, V. Vandenbempt, B. Elvira, S.A. Litwak, B. Vekeriotaitė, E. Maillard, M. Vermeersch, F.M.M. Paula, M. Pinget, D. Perez-Morga, D.J. Gough, and E.N. Gurzov

OBESITY STUDIES

- 2042** Beneficial Metabolic Effects of TREM2 in Obesity Are Uncoupled From Its Expression on Macrophages

O. Sharif, J.S. Brunner, A. Korosec, R. Martins, A. Jais, B. Snijder, A. Vogel, M. Caldera, A. Hladik, K. Lakovits, S. Saluzzo, B. Boehm, A.-D. Gorki, I. Mesteri, J. Lindroos-Christensen, K. Tillmann, D. Stoiber, J. Menche, G. Schabbauer, M. Bilban, G. Superti-Furga, H. Esterbauer, and S. Knapp

ISLET STUDIES

- 2058** The Anna Karenina Model of β -Cell Maturation in Development and Their Dedifferentiation in Type 1 and Type 2 Diabetes

S.D. Nimkulrat, M.N. Bernstein, Z. Ni, J. Brown, C. Kendzioriski, and B. Blum

IMMUNOLOGY AND TRANSPLANTATION

- 2067** Tolerogenic Dendritic Cells Shape a Transmissible Gut Microbiota That Protects From Metabolic Diseases

E. Lécuyer, T. Le Roy, A. Gestin, A. Lacombe, C. Philippe, M. Ponnaiah, J.-B. Huré, M. Fradet, F. Ichou, S. Boudebouze, T. Huby, E. Gautier, M. Rhimi, E. Maguin, N. Kapel, P. Gérard, N. Venteclaf, M. Garlatti, B. Chassaing, and P. Lesnik

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Podcast



Supplementary Data



Companion Article

PATHOPHYSIOLOGY

- 2081** Deletion of the Feeding-Induced Hepatokine TSK Ameliorates the Melanocortin Obesity Syndrome
Q. Wang, P. Zhang, I. Cakir, L. Mi, R.D. Cone, and J.D. Lin
- 2092** Profiles of Glucose Metabolism in Different Prediabetes Phenotypes, Classified by Fasting Glycemia, 2-Hour OGTT, Glycated Hemoglobin, and 1-Hour OGTT: An IMI DIRECT Study
A. Tura, E. Grespan, C.S. Göbl, R.W. Koivula, P.W. Franks, E.R. Pearson, M. Walker, I.M. Forgie, G.N. Giordano, I. Pavo, H. Ruetten, E.T. Dermitzakis, M.I. McCarthy, O. Pedersen, J.M. Schwenk, J. Adamski, F. De Masi, K.D. Tsigos, S. Brunak, A. Viñuela, A. Mahajan, T.J. McDonald, T. Kokkola, J. Vangipurapu, H. Cederberg, M. Laakso, F. Rutters, P.J.M. Elders, A.D.M. Koopman, J.W. Beulens, M. Ridderstråle, T.H. Hansen, K.H. Allin, T. Hansen, H. Vestergaard, and A. Mari, for the IMI DIRECT Consortium

COMPLICATIONS

- 2107** Toll-Like Receptor 2 (TLR2) Knockout Abrogates Diabetic and Obese Phenotypes While Restoring Endothelial Function via Inhibition of NOX1
Z. Guo, Y. Zhang, C. Liu, J.Y. Youn, and H. Cai
- 2120** LTB₄-Driven Inflammation and Increased Expression of ALOX5/ACE2 During Severe COVID-19 in Individuals With Diabetes
I. Bonyek-Silva, A.F.A. Machado, T. Cerqueira-Silva, S. Nunes, M.R.S. Cruz, J. Silva, R.L. Santos, A. Barral, P.R.S. Oliveira, R. Khouri, C.H. Serezani, C. Brodskyn, J.R. Caldas, M. Barral-Netto, V. Boaventura, and N.M. Tavares

- 2131** Cardiac Tissue Factor Regulates Inflammation, Hypertrophy, and Heart Failure in Mouse Model of Type 1 Diabetes
Dasan M.C., R. Sandireddy, H. Bogireddy, N. Tee, S.A.B. Abdul Ghani, B.K. Singh, N. Mackman, M.K. Singh, and A. Singh
- 2147** Vaccination Against Receptor for Advanced Glycation End Products Attenuates the Progression of Diabetic Kidney Disease
T. Azegami, T. Nakayama, K. Hayashi, A. Hishikawa, N. Yoshimoto, R. Nakamichi, and H. Itoh

ERRATA

- 2159** Erratum. NKG2D Signaling Within the Pancreatic Islets Reduces NOD Diabetes and Increases Protective Central Memory CD8⁺ T-Cell Numbers. *Diabetes* 2020;69:1749–1762
A.P. Trembath, K.L. Krausz, N. Sharma, I.C. Gerling, C.E. Mathews, and M.A. Markiewicz
- 2160** Erratum. A High-Fat Diet Attenuates AMPK α 1 in Adipocytes to Induce Exosome Shedding and Nonalcoholic Fatty Liver Development In Vivo. *Diabetes* 2021;70:577–588
C. Yan, X. Tian, J. Li, D. Liu, D. Ye, Z. Xie, Y. Han, and M.-H. Zou

ISSUES AND EVENTS

- 2161** Issues and Events

e-LETTERS — LETTER TO THE EDITOR

- e1** A Hundred Years of Insulin Innovation: When Science Meets Technology
T. Kjeldsen and P. Kurtzhals