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**1914** Failure of Homeostatic Model Assessment of Insulin Resistance to Detect Marked Diet-Induced Insulin Resistance in Dogs

M. Ader, D. Stefanovski, J.M. Richey, S.P. Kim, C.M. Kolka, V. Ionut, M. Kabir, and R.N. Bergman

## SIGNAL TRANSDUCTION

**1920** The Extracellular Matrix Protein MAGP1 Supports Thermogenesis and Protects Against Obesity and Diabetes Through Regulation of TGF- $\beta$

C.S. Craft, T.A. Pietka, T. Schappe, T. Coleman, M.D. Combs, S. Klein, N.A. Abumrad, and R.P. Mecham

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- 1933** Increased Interaction With Insulin Receptor Substrate 1, a Novel Abnormality in Insulin Resistance and Type 2 Diabetes  
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#### OBESITY STUDIES

- 1948** RAGE Regulates the Metabolic and Inflammatory Response to High-Fat Feeding in Mice  
F. Song, C. Hurtado del Pozo, R. Rosario, Y.S. Zou, R. Ananthakrishnan, X. Xu, P.R. Patel, V.M. Benoit, S.F. Yan, H. Li, R.A. Friedman, J.K. Kim, R. Ramasamy, A.W. Ferrante Jr., and A.M. Schmidt
- 1966** T Cell-Derived IL-22 Amplifies IL-1 $\beta$ -Driven Inflammation in Human Adipose Tissue: Relevance to Obesity and Type 2 Diabetes  
E. Dalmas, N. Venteclef, C. Caer, C. Poitou, I. Cremer, J. Aron-Wisniewsky, S. Lacroix-Desmazes, J. Bayry, S.V. Kaveri, K. Clément, S. André, and M. Guerre-Millo

#### ISLET STUDIES

- 1978** RNA Sequencing Identifies Dysregulation of the Human Pancreatic Islet Transcriptome by the Saturated Fatty Acid Palmitate  
M. Cnop, B. Abdulkarim, G. Bottu, D.A. Cunha, M. Igoillo-Esteve, M. Masini, J.-V. Turatsinze, T. Griebel, O. Villate, I. Santin, M. Bugliani, L. Ladriere, L. Marselli, M.I. McCarthy, P. Marchetti, M. Sammeth, and D.L. Eizirik
- 1994** The MafA Transcription Factor Becomes Essential to Islet  $\beta$ -Cells Soon After Birth  
Y. Hang, T. Yamamoto, R.K.P. Benninger, M. Brissova, M. Guo, W. Bush, D.W. Piston, A.C. Powers, M. Magnuson, D.C. Thurmond, and R. Stein
- 2006** Compromised Gut Microbiota Networks in Children With Anti-Islet Cell Autoimmunity  
D. Endesfelder, W. zu Castell, A. Ardissonne, A.G. Davis-Richardson, P. Achenbach, M. Hagen, M. Pflueger, K.A. Gano, J.R. Fagen, J.C. Drew, C.T. Brown, B. Kolaczowski, M. Atkinson, D. Schatz, E. Bonifacio, E.W. Triplett, and A.-G. Ziegler

#### IMMUNOLOGY AND TRANSPLANTATION

- 2015** Combination Therapy With an Anti-IL-1 $\beta$  Antibody and GAD65 DNA Vaccine Can Reverse Recent-Onset Diabetes in the RIP-GP Mouse Model  
P.P. Pagni, D. Bresson, T. Rodriguez-Calvo, A. Bel Hani, Y. Manenkova, N. Amirian, A. Blaszczyk, S. Fatou, S. Sachithanatham, and M.G. von Herrath
- 2026** Dietary Supplementation With High Doses of Regular Vitamin D<sub>3</sub> Safely Reduces Diabetes Incidence in NOD Mice When Given Early and Long Term  
T. Takiishi, L. Ding, F. Baeke, I. Spagnuolo, G. Sebastiani, J. Laureys, A. Verstuyf, G. Carmeliet, F. Dotta, T.L. Van Belle, C.A. Gysemans, and C. Mathieu
- 2037** Endogenous Oils Derived From Human Adipocytes Are Potent Adjuvants That Promote IL-1 $\alpha$ -Dependent Inflammation  
G.A. Tynan, C.H. Hearnden, E. Oleszycka, C.L. Lyons, G. Coutts, J. O'Connell, M.A. Corrigan, L. Lynch, M. Campbell, J.J. Callanan, K.H. Mok, J. Geoghegan, C. O'Farrelly, S.M. Allan, H.M. Roche, D.B. O'Shea, and E.C. Lavelle
- 2051** Induction of Mixed Chimerism Depletes Pre-existing and De Novo-Developed Autoreactive B Cells in Autoimmune NOD Mice  
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#### PATHOPHYSIOLOGY

- 2063** Epidermal Growth Factor Receptor Inhibition Slows Progression of Diabetic Nephropathy in Association With a Decrease in Endoplasmic Reticulum Stress and an Increase in Autophagy  
M.-Z. Zhang, Y. Wang, P. Pauksakon, and R.C. Harris
- 2073** Vanin-1 Is a Key Activator for Hepatic Gluconeogenesis  
S. Chen, W. Zhang, C. Tang, X. Tang, L. Liu, and C. Liu
- 2086** IL-21 Is a Major Negative Regulator of IRF4-Dependent Lipolysis Affecting Tregs in Adipose Tissue and Systemic Insulin Sensitivity  
M. Fabrizi, V. Marchetti, M. Mavilio, A. Marino, V. Casagrande, M. Cavallera, J.M. Moreno-Navarrete, T. Mezza, G.P. Sorice, L. Fiorentino, R. Menghini, R. Lauro, G. Monteleone, A. Giaccari, J.M. Fernandez Real, and M. Federici
- 2097** Glycogen Synthase Kinase-3 $\beta$  Inhibition Ameliorates Cardiac Parasympathetic Dysfunction in Type 1 Diabetic Akita Mice  
Y. Zhang, C.M. Welzig, K.L. Picard, C. Du, B. Wang, J.Q. Pan, J.M. Kyriakis, M.J. Aronovitz, W.C. Claycomb, R.M. Blanton, H.-J. Park, and J.B. Galper
- 2114** Evidence for a Causal Relationship Between Early Exocrine Pancreatic Disease and Cystic Fibrosis-Related Diabetes: A Mendelian Randomization Study  
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- 2132** The Histone Acetylase Activator Pentadecylidenemalonate 1b Rescues Proliferation and Differentiation in the Human Cardiac Mesenchymal Cells of Type 2 Diabetic Patients  
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- 2158** Impact of Type 2 Diabetes Susceptibility Variants on Quantitative Glycemic Traits Reveals Mechanistic Heterogeneity  
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**2172** Polygenic Type 2 Diabetes Prediction at the Limit of Common Variant Detection  
J.L. Vassy, M.-F. Hivert, B. Porneala, M. Dauriz, J.C. Florez, J. Dupuis, D.S. Siscovick, M. Fornage, L.J. Rasmussen-Torvik, C. Bouchard, and J.B. Meigs

#### ERRATA

**2183** Body Fat Partitioning Does Not Explain the Interethnic Variation in Insulin Sensitivity Among Asian Ethnicity: The Singapore Adults Metabolism Study. *Diabetes* 2014;63:1093–1102  
C.M. Khoo, M.K.-S. Leow, S.A. Sadanathan, R. Lim, K. Venkataraman, E. Yin, H. Khoo, S.S. Velan, Y.T. Ong, R. Kambadur, C. McFarlane, P.D. Gluckman, Y.S. Lee, Y.S. Chong, and E.S. Tai

**2183** Incretin Therapy and Pancreatic Pathologies: Background Pathology Versus Drug-Induced Pathology in Rats. *Diabetes* 2014;63:1174–1178  
J.M. Egan and C.W. Chia

**2183** Hydrogen Sulfide Improves Wound Healing via Restoration of Endothelial Progenitor Cell Functions and Activation of Angiopoietin-1 in Type 2 Diabetes. *Diabetes* 2014;63:1763–1778  
F. Liu, D.-D. Chen, X. Sun, H.-H. Xie, H. Yuan, W.-P. Jia, and A.F. Chen

#### ISSUES AND EVENTS

**2184** Issues and Events



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