

IN THIS ISSUE

3223 In This Issue of *Diabetes*

PERSPECTIVES IN DIABETES

3225 Regulation of Glucose Handling by the Skeleton: Insights From Mouse and Human Studies

J.-M. Liu, C.J. Rosen, P. Ducy, S. Kousteni, and G. Karsenty

3233 Type 1 Diabetes Prevention: A Goal Dependent on Accepting a Diagnosis of an Asymptomatic Disease

A.-G. Ziegler, E. Bonifacio, A.C. Powers, J.A. Todd, L.C. Harrison, and M.A. Atkinson

COMMENTARIES

3240 Using Genotype-Based Recall to Estimate the Effects of *AMY1* Copy Number Variation in Substrate Metabolism

P.W. Franks and F. Renström

3243 Human Pancreatic Islet Production: From Research Protocols to Standardized Multicenter Manufacturing

F. Bertuzzi and L.G. De Carlis

3246 The Insulin-Like Growth Factor Axis: A New Player in Gestational Diabetes Mellitus?

R. Retnakaran

METABOLISM

3249 A Direct Comparison of Metabolic Responses to High-Fat Diet in C57BL/6J and C57BL/6NJ Mice

K.H. Fisher-Wellman, T.E. Ryan, C.D. Smith, L.A.A. Gilliam, C.-T. Lin, L.R. Reese, M.J. Torres, and P.D. Neuffer

3262 FNDC5 Alleviates Hepatosteatosis by Restoring AMPK/mTOR-Mediated Autophagy, Fatty Acid Oxidation, and Lipogenesis in Mice

T.-Y. Liu, X.-Q. Xiong, X.-S. Ren, M.-X. Zhao, C.-X. Shi, J.-J. Wang, Y.-B. Zhou, F. Zhang, Y. Han, X.-Y. Gao, Q. Chen, Y.-H. Li, Y.-M. Kang, and G.-Q. Zhu

3276 MicroRNA-451 Negatively Regulates Hepatic Glucose Production and Glucose Homeostasis by Targeting Glycerol Kinase-Mediated Gluconeogenesis

S. Zhuo, M. Yang, Y. Zhao, X. Chen, F. Zhang, N. Li, P. Yao, T. Zhu, H. Mei, S. Wang, Y. Li, S. Chen, and Y. Le

3289 Impaired Cardiolipin Biosynthesis Prevents Hepatic Steatosis and Diet-Induced Obesity

L.K. Cole, E.M. Mejia, M. Vandel, G.C. Sparagna, S.M. Claypool, L. Dyck-Chan, J. Klein, and G.M. Hatch

3301 White Adipocyte Adiponectin Exocytosis Is Stimulated via β_3 -Adrenergic Signaling and Activation of Epac1: Catecholamine Resistance in Obesity and Type 2 Diabetes

A.M. Komai, S. Musovic, E. Peris, A. Alrifaiy, M.F. El Hachmane, M. Johansson, I. Wernstedt Asterholm, and C.S. Olofsson

3314 Association Between Long-term Exposure to Air Pollution and Biomarkers Related to Insulin Resistance, Subclinical Inflammation, and Adipokines

K. Wolf, A. Popp, A. Schneider, S. Breitner, R. Hampel, W. Rathmann, C. Herder, M. Roden, W. Koenig, C. Meisinger, and A. Peters, for the KORA-Study Group

3327 The Inactivation of RabGAP Function of AS160 Promotes Lysosomal Degradation of GLUT4 and Causes Postprandial Hyperglycemia and Hyperinsulinemia

B. Xie, Q. Chen, L. Chen, Y. Sheng, H.Y. Wang, and S. Chen

3341 Deficiency in the Heat Stress Response Could Underlie Susceptibility to Metabolic Disease

R.S. Rogers, E.M. Morris, J.L. Wheatley, A.E. Archer, C.S. McCain, K.S. White, D.R. Wilson, G.M.E. Meers, L.G. Koch, S.L. Britton, J.P. Thyfault, and P.C. Geiger

3352 Salsalate (Salicylate) Uncouples Mitochondria, Improves Glucose Homeostasis, and Reduces Liver Lipids Independent of AMPK- β 1

B.K. Smith, R.J. Ford, E.M. Desjardins, A.E. Green, M.C. Hughes, V.P. Houde, E.A. Day, K. Marcinko, J.D. Crane, E.P. Mottillo, C.G.R. Perry, B.E. Kemp, M.A. Tarnopolsky, and G.R. Steinberg

3362 Metabolomic Profile of Low-Copy Number Carriers at the Salivary α -Amylase Gene Suggests a Metabolic Shift Toward Lipid-Based Energy Production

A. Arredouani, M. Stocchero, N. Culeddu, J.E.-S. Moustafa, D.E.S.I.R. Study Group, J. Tichet, B. Balkau, T. Brousseau, M. Manca, and M. Falchi

SIGNAL TRANSDUCTION

3369 CREBH Couples Circadian Clock With Hepatic Lipid Metabolism

Z. Zheng, H. Kim, Y. Qiu, X. Chen, R. Mendez, A. Dandekar, X. Zhang, C. Zhang, A.C. Liu, L. Yin, J.D. Lin, P.D. Walker, G. Kapatos, and K. Zhang

Keep up with the latest information for *Diabetes* and other ADA titles via Facebook (/ADAJournals) and Twitter (@ADA_Journals).

All articles in *Diabetes* are available online at diabetes.org/diabetes, are available free to subscribers, or can be purchased as e-prints or reprints.

ADA's Diabetes Core Update podcast is available at diabetesjournals.org and through iTunes.

Icons shown below appear on the first page of an article if more information is available online.



Free Article



Video



Podcast



Supplementary Data



Companion Article

OBESITY STUDIES

- 3384** Loss of *Mbd2* Protects Mice Against High-Fat Diet–Induced Obesity and Insulin Resistance by Regulating the Homeostasis of Energy Storage and Expenditure
J. Cheng, J. Song, X. He, M. Zhang, S. Hu, S. Zhang, Q. Yu, P. Yang, F. Xiong, D.W. Wang, J. Zhou, Q. Ning, Z. Chen, D.L. Eizirik, Z. Zhou, C. Zhao, and C.-Y. Wang
- 3396** Adipose-Specific Deficiency of Fumarate Hydratase in Mice Protects Against Obesity, Hepatic Steatosis, and Insulin Resistance
H. Yang, J.W. Wu, S.P. Wang, I. Severi, L. Sartini, N. Frizzell, S. Cinti, G. Yang, and G.A. Mitchell
- 3410** FGF21 Improves the Adipocyte Dysfunction Related to Seipin Deficiency
L. Dollet, C. Levrel, T. Coskun, S. Le Lay, C. Le May, A. Ayer, Q. Venara, A.C. Adams, R.E. Gimeno, J. Magré, B. Cariou, and X. Prieur

ISLET STUDIES

- 3418** National Institutes of Health–Sponsored Clinical Islet Transplantation Consortium Phase 3 Trial: Manufacture of a Complex Cellular Product at Eight Processing Facilities
C. Ricordi, J.S. Goldstein, A.N. Balamurugan, G.L. Szot, T. Kin, C. Liu, C.W. Czarniecki, B. Barbaro, N.D. Bridges, J. Cano, W.R. Clarke, T.L. Eggerman, L.G. Hunsicker, D.B. Kaufman, A. Khan, D.-E. Lafontant, E. Linetsky, X. Luo, J.F. Markmann, A. Naji, O. Korsgren, J. Oberholzer, N.A. Turgeon, D. Brandhorst, A.S. Friberg, J. Lei, L.-j. Wang, J.J. Wilhelm, J. Willits, X. Zhang, B.J. Hering, A.M. Posselt, P.G. Stock, and A.M.J. Shapiro

IMMUNOLOGY AND TRANSPLANTATION

- 3429** Peripheral Proinsulin Expression Controls Low-Avidity Proinsulin-Reactive CD8 T Cells in Type 1 Diabetes
T.C. Thayer, J.A. Pearson, E. De Leenheer, S.J. Hanna, J. Boldison, J. Davies, A. Tsui, S. Ahmed, P. Easton, L.K. Siew, L. Wen, and F.S. Wong
- 3440** Adipose Recruitment and Activation of Plasmacytoid Dendritic Cells Fuel Metaflammation
A.R. Ghosh, R. Bhattacharya, S. Bhattacharya, T. Nargis, O. Rahaman, P. Duttagupta, D. Raychaudhuri, C.S.C. Liu, S. Roy, P. Ghosh, S. Khanna, T. Chaudhuri, O. Tanti, S. Haak, S. Bandyopadhyay, S. Mukhopadhyay, P. Chakrabarti, and D. Ganguly

PATHOPHYSIOLOGY

- 3453** Renal Denervation Reverses Hepatic Insulin Resistance Induced by High-Fat Diet
M.S. Iyer, R.N. Bergman, J.E. Korman, O.O. Woolcott, M. Kabir, R.G. Victor, D.J. Clegg, and C. Kolka
- 3464** Metabolic Aberrations Impact Biophysical Integrity of Macromolecular Protein Pools in the Default Mode Network
S. Yang, M. Wu, O. Ajilore, M. Lamar, and A. Kumar
- 3473** Insulin Resistance Is Accompanied by Increased Fasting Glucagon and Delayed Glucagon Suppression in Individuals With Normal and Impaired Glucose Regulation
K. Færch, D. Vistisen, G. Pacini, S.S. Torekov, N.B. Johansen, D.R. Witte, A. Jonsson, O. Pedersen, T. Hansen, T. Lauritzen, M.E. Jørgensen, B. Ahrén, and J.J. Holst
- 3482** F₁F₀ ATP Synthase–Cyclophilin D Interaction Contributes to Diabetes-Induced Synaptic Dysfunction and Cognitive Decline
S. Yan, F. Du, L. Wu, Z. Zhang, C. Zhong, Q. Yu, Y. Wang, L.-F. Lue, D.G. Walker, J.T. Douglas, and S.S. Yan
- 3495** Insulin-Like Growth Factor Axis and Gestational Diabetes Mellitus: A Longitudinal Study in a Multiracial Cohort
Y. Zhu, P. Mendola, P.S. Albert, W. Bao, S.N. Hinkle, M.Y. Tsai, and C. Zhang

COMPLICATIONS

- 3505** Enhanced Integrin $\alpha 4\beta 1$ –Mediated Adhesion Contributes to a Mobilization Defect of Endothelial Progenitor Cells in Diabetes
W.T. Abplanalp, D.J. Conklin, J.M. Cantor, M.H. Ginsberg, M. Wysoczynski, A. Bhatnagar, and T.E. O’Toole

ERRATA

- 3516** Erratum. In This Issue of *Diabetes*. *Diabetes* 2016;65:2465–2466
M. Bingham
- 3516** Erratum. Docosahexaenoic Acid–Derived Fatty Acid Esters of Hydroxy Fatty Acids (FAHFAs) With Anti-inflammatory Properties. *Diabetes* 2016;65:2580–2590
O. Kuda, M. Brezinova, M. Rombaldova, B. Slavikova, M. Posta, P. Beier, P. Janovska, J. Veleba, J. Kopecky Jr., E. Kudova, T. Pelikanova, and J. Kopecky

ISSUES AND EVENTS

- 3517** Issues and Events