

JOURNAL OF ENDOCRINOLOGY

PHYSIOLOGY, METABOLISM
AND TRANSLATION

OCTOBER 2014
VOLUME 223
NUMBER 1

ISSN 0022-0795 (PRINT)
ISSN 1479-6805 (ONLINE)

CONTENTS

<http://joe.endocrinology-journals.org>



The cover image depicts (left) an obese (ob/ob) mouse and a normal mouse, and (right) the X-ray crystallographic structure of human leptin W100E.

Credits: (left) Oak Ridge National Laboratory/US Department of Energy/Science Photo Library; (right) F Peelman, L Zabeau, K Moharana, S N Savvides and J Tavernier, Ghent University, Ghent, Belgium.

EDITORIAL

20 YEARS OF LEPTIN: What we know and what the future holds
Steve O'Rahilly

E1–E3

THEMATIC REVIEWS

20 YEARS OF LEPTIN: Leptin at 20: an overview
Jeffrey Friedman

T1–T8

20 YEARS OF LEPTIN: Insights into signaling assemblies of the leptin receptor
Frank Peelman, Lennart Zabeau, Kedar Moharana, Savvas N Savvides & Jan Tavernier

T9–T23

20 YEARS OF LEPTIN: Connecting leptin signaling to biological function
Margaret B Allison & Martin G Myers Jr

T25–T35

20 YEARS OF LEPTIN: Leptin and reproduction: past milestones, present undertakings, and future endeavors
Farid F Chehab

T37–T48

20 YEARS OF LEPTIN: Role of leptin in human reproductive disorders
Sharon H Chou & Christos Mantzoros

T49–T62

20 YEARS OF LEPTIN: Human disorders of leptin action
I Sadaf Farooqi & Stephen O'Rahilly

T63–T70

20 YEARS OF LEPTIN: Leptin in common obesity and associated disorders of metabolism
Alex M DePaoli

T71–T81

20 YEARS OF LEPTIN: Role of leptin in energy homeostasis in humans
Michael Rosenbaum & Rudolph L Leibel

T83–T96

CONTENTS

THEMATIC RESEARCH

Morbid obesity attenuates the skeletal abnormalities associated with leptin deficiency in mice

Russell T Turner, Kenneth A Philbrick, Carmen P Wong, Dawn A Olson, Adam J Branscum & Urszula T Iwaniec

M1–M15

Early-postnatal changes in adiposity and lipids profile by transgenerational developmental programming in swine with obesity/leptin resistance

Antonio Gonzalez-Bulnes, Susana Astiz, Cristina Ovilo, Clemente J Lopez-Bote, Raul Sanchez-Sanchez, Maria L Perez-Solana, Laura Torres-Rovira, Miriam Ayuso & Jorge Gonzalez

M17–M29

UCP1 is present in porcine adipose tissue and is responsive to postnatal leptin

Alison Mostyn, Linda Attig, Thibaut Larcher, Samir Dou, Pascale Chavatte-Palmer, Monia Boukthir, Arieht Gertler, Jean Djiane, Michael E Symonds & Latifa Abdennebi-Najar

M31–M38

REVIEW

Thyroid hormone and the stunned myocardium

Dimitri Novitzky & David K C Cooper

R1–R8

RESEARCH

Altered VEGF-stimulated Ca²⁺ signaling in part underlies pregnancy-adapted eNOS activity in UAEC

Derek S Boeldt, Mary A Grummer, Ronald R Magness & Ian M Bird

1–11

Protocatechuic acid exerts a cardioprotective effect in type 1 diabetic rats

Yoswaris Semaming, Sirinart Kumfu, Patchareewan Pannangpetch, Siriporn C Chattipakorn & Nipon Chattipakorn

13–23

Low-dose PTH increases osteoblast activity via decreased *Mef2c/Sost* in senescent osteopenic mice

Zuzana Saidak, Carole Le Henaff, Sofia Azzi, Caroline Marty & Pierre J Marie

25–33

Regulation of FSH β induction in L β T2 cells by BMP2 and an Activin A/BMP2 chimera, AB215

Jae Woo Jung, Chihoon Ahn, Sun Young Shim, Peter C Gray, Witek Kwiatkowski & Senyon Choe

35–45

Phthalate exposure *in utero* causes epigenetic changes and impairs insulin signalling

Parsanathan Rajesh & Karundevi Balasubramanian

47–66

CONTENTS

Gastrin induces ductal cell dedifferentiation and β -cell neogenesis after 90% pancreatectomy

Noèlia Téllez & Eduard Montanya

67–78

Inhibitory roles of the mammalian GnIH ortholog RFRP3 in testicular activities in adult mice

Shabana Anjum, Amitabh Krishna & Kazuyoshi Tsutsui

79–91

Direct stimulation of bone mass by increased GH signalling in the osteoblasts of *Socs2*^{-/-} mice

R Dobie, V E MacRae, C Huesa, R van't Hof, S F Ahmed & C Farquharson

93–106