CONTENTS

VOLUME 222 NUMBER 2

REVIEWS
Clocks for all seasons: unwinding the roles and mechanisms of circadian and interval timers in the hypothalamus and pituitary R39–R59
Shona Wood & Andrew Loudon
Endocrine regulation of airway contractility is overlooked R61–R73
Ynuk Bossé
Circadian regulation of metabolism R75–R96
Shannon M Bailey, Uduak S Udoh & Martin E Young

SCIENCE GUIDELINE
METABOLIC PHENOTYPING
GUIDELINES: Studying eating behaviour in humans G1–G12
Catherine Gibbons, Graham Finlayson, Michelle Dalton, Phillipa Caudwell & John E Blundell

RESEARCH
Different modes of GH administration influence gene expression in the male rat brain 181–190
Marion Walser, Linus Schöler, Jan Oscarsson, Maria Å Åberg, Johan Svensson, N David Åberg & Jörgen Isgaard
Kᵢᵢ₅ channel as well as SGLT1 participates in GIP secretion in the diabetic state 191–200
Gpr1 is an active chemerin receptor influencing glucose homeostasis in obese mice 201–215
Jillian L Rourke, Shanmugam Muruganandan, Helen J Draina, Nichole M McMullen & Christopher J Sinal
Effects of genetics and in utero diet on murine pancreatic development 217–227
Chia-Li Lin, Lydla Williams, Yoshinori Seki, Harpreet Kaur, Kirsten Hartli, Ariana Fiallo, A Scott Glenn, Ellen B Katz, Maureen J Charron & Patricia M Vuguin
Hyperinsulinemia induces insulin resistance and immune suppression via Ptpn6/Shp1 in zebrafish 229–241
Rubén Marín-Juez, Susanne Jong-Raadsen, Shuxin Yang & Herman P Spaink

Contents continued on the inside back cover
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In seasonal mammals photoperiod drives the endocrine system, resulting in changes in moult and reproductive cycles. New evidence highlights a role for specialized timer cells within the pituitary gland, which respond to the hormone melatonin. This figure is reproduced on page R40 of this issue. Figure adapted from Lincoln et al. (2003) Journal of Endocrinology 179 1–13.

Credit: GA Lincoln & H Andersson, University of Edinburgh; and A Loudon, University of Manchester.