

Volume 109 Number 1 May 2010

Special Issue: Proceedings of 3rd International Symposium on Physiology and Pharmacology of Temperature Regulation: Matsue, Japan 2009

Guest Editors: Osamu Shido · Tatsuo Watanabe · Nigel A. S. Taylor · George Havenith

EDITORIAL

Introduction

O. Shido · T. Watanabe · N.A.S. Taylor · G. Havenith 1

REVIEW ARTICLES

Concepts to utilize in describing thermoregulation and neurophysiological evidence for how the system works

K. Kanosue · L.I. Crawshaw · K. Nagashima · T. Yoda 5

System properties, feedback control and effector coordination of human temperature regulation

J. Werner 13

Multiple thermoregulatory effectors with independent central controls

R.M. McAllen · M. Tanaka · Y. Ootsuka · M.J. McKinley 27

ORIGINAL ARTICLES

Effect of hypothermia on motor function of adult rats after neonatal hyperthermic hypoxic-ischemic brain insult

T. Hosono · A. Kamo · S. Hakotani · K. Minato · H. Akeno · Y. Taguchi · A. Miyano · T. Iseki 35

Gender differences in thermal comfort and mental performance at different vertical air temperatures

N. Hashiguchi · Y. Feng · Y. Tochiwara 41

Role of anterior hypothalamic natriuretic peptide in lipopolysaccharide-induced fever in rats

M. Miyoshi · T. Watanabe 49

The effects of swilling an L(-)-menthol solution during exercise in the heat

T. Mündel · D.A. Jones 59

Do sessions of cryostimulation have influence on white blood cell count, level of IL6 and total oxidative and antioxidative status in healthy men?

A. Lubkowska · Z. Szygula · A.J. Klimek · M. Torii 67

Differences in rectal temperatures measured at depths of 4–19 cm from the anal sphincter during exercise and rest

J.-Y. Lee · H. Wakabayashi · T. Wijayanto · Y. Tochiwara 73

Heat balance and cumulative heat storage during exercise performed in the heat in physically active younger and middle-aged men

G.P. Kenny · D. Gagnon · L.E. Dorman · S.G. Hardcastle · O. Jay 81

Sex-related differences in sweat gland cholinergic sensitivity exist irrespective of differences in aerobic capacity

L.G. Madeira · M.A. da Fonseca · I.A.T. Fonseca · K.P. de Oliveira · R.L. de Freitas Passos · C.A. Machado-Moreira · L.O.C. Rodrigues 93

Skin cooling aids cerebrovascular function more effectively under severe than moderate heat stress

R.A.I. Lucas · P.N. Ainslie · J.-L. Fan · L.C. Wilson · K.N. Thomas · J.D. Cotter 101

No effect of skin temperature on human ventilation response to hypercapnia during light exercise with a normothermic core temperature

J.G. Greiner · M.E. Clegg · M.L. Walsh · M.D. White 109

Effects of wind and rain on thermal responses of humans in a mildly cold environment

M. Yamane · Y. Oida · N. Ohnishi · T. Matsumoto · K. Kitagawa 117

Evaluation of artificial sweat in athletes with spinal cord injuries

R.C. Pritchett · P.A. Bishop · Z. Yang · K.L. Pritchett · J.M. Green · C.P. Katica · A.T. Del Pozzi 125

Enhancement of the finger cold-induced vasodilation response with exercise training

M.E. Keramidis · B. Musizza · S.N. Kounalakis · I.B. Mekjavic 133

Further articles can be found at www.springerlink.com

Indexed in/abstracted by *Current Contents* and *Index Medicus*

Instructions for Authors for *Eur J Appl Physiol* are available at <http://www.springer.com/00421>