Oxidative Medicine and Cellular Longevity

Hindawi

Special Issue on

Free Radicals as Signalling Molecules in Metabolism, Metabolic Disease, and Exercise

CALL FOR PAPERS

Free radicals such as reactive oxygen (ROS) and nitrogen (NO) species are produced by the mitochondria during normal oxidative phosphorylation, as well as by numerous biochemical pathways found both intra- and extracellularly. Free radicals have traditionally been associated with cellular damage, disease progression, and aging. However, in the last decade it has become increasingly clear that they also play an important role in normal homeostatic signaling and can act as messengers for stress responses. Metabolic pathways appear to be particularly sensitive to free radicals, and increases in RONS production have been implicated in both the enhancement of insulin sensitivity and development of metabolic diseases, together with the promotion of exercise-training and life-span extending adaptation.

We invite investigators to contribute both original research and review articles that offer insight into the role of free radicals as signaling molecules in normal metabolic function (including exercise) and disease states.

Potential topics include, but are not limited to:

- The role of free radicals in normal metabolic function and/or prevention of disease
- Molecular and cellular mechanisms through which free radicals may contribute to the development of diabetes and metabolic disease
- Unraveling the role of specific reactive oxygen or nitrogen species and/or site of production on molecular signaling cascades
- Do free radicals mediate the beneficial metabolic effects of exercise?
- The importance of free radicals in aging

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/omcl/frs/.

Lead Guest Editor
Troy Merry, University of Auckland, Auckland, New Zealand
troy.merry@gmail.com

Guest Editors
Glenn McConell, Victoria University, Melbourne, Australia
glenn.mcconell@yahoo.com.au

Kim Zarse, Swiss Federal Institute of Technology (ETH), Zurich, Switzerland
kim-zarse@ethz.ch

Anthony Hickey, University of Auckland, Auckland, New Zealand
a.hickey@auckland.ac.nz

Manuscript Due
Friday, 24 June 2016

First Round of Reviews
Friday, 16 September 2016

Publication Date
Friday, 11 November 2016