

Special Issue on **Interplay of Oxidative Stress and Metabolic Signaling in Cardiovascular Disease**

CALL FOR PAPERS

Cardiovascular disease remains the leading cause of death in the world and is estimated to account for one of every two adult deaths worldwide. As more patients survive a heart attack and the population ages, more cardiovascular diseases related morbidity develops, including cardiomyopathy, heart failure, nephropathy, retinopathy, and peripheral arterial disease. These diseases, interplaying with nutritional and metabolic alterations, are associated with an imbalance of redox homeostasis, increased oxidative stress, and exacerbated epidemic situation of metabolic diseases such as Type 2 diabetes and obesity. Therefore, understanding the regulation and dysregulation of nutritional and metabolic pathways and their interplay with oxidative stress in the context of cardiovascular disorders becomes one important research area. Such studies will provide a great tool to help refine strategies against the metabolic and cardiovascular diseases. We would like to invite investigators to contribute their original research and review articles to this rapidly developing research area.

Potential topics include but are not limited to the following:

- ▶ Redox Signaling pathways that control cardiac energy substrate metabolism and their alterations in heart failure, ischemic heart disease, and diabetic cardiomyopathy
- ▶ Mitochondrial dysfunction and oxidative stress in failing or diabetic heart
- ▶ Autophagic regulation/contributions to energy substrate metabolism and redox homeostasis
- ▶ Gene regulatory control of myocardial energy metabolism and oxidative stress, including epigenetic and posttranslational regulation of metabolism
- ▶ Role of thyroid hormone and oxidative stress in cardiac metabolism and disease
- ▶ Interactions of novel nuclear hormone receptors (GR and MR) in cardiac energy metabolism and redox homeostasis
- ▶ Glucose metabolism, mitochondrial oxidative stress, and cardiac hypertrophy
- ▶ Preclinical therapies targeting mitochondrial function, oxidative stress and cardiac metabolism
- ▶ ROS-dependent pathways that control vascular cell energy homeostasis
- ▶ ROS-related microRNA in cardiovascular metabolism
- ▶ Antioxidant therapy and diabetes, atherosclerosis and other nutrition-related epidemics of metabolic and cardiovascular diseases

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/omcl/mcsd/>.

Lead Guest Editor

Xinchun Pi, Baylor College of Medicine,
Houston, USA
xpi@bcm.edu

Guest Editors

Aldrin V. Gomes, University of
California, Davis, USA
avgomes@ucdavis.edu

Zhiyong Lin, Case Western Reserve
University School of Medicine,
Cleveland, USA
zhiyong.lin@case.edu

Monte S. Willis, University of North
Carolina, Chapel Hill, USA
monte_willis@med.unc.edu

Manuscript Due

Friday, 20 January 2017

First Round of Reviews

Friday, 14 April 2017

Publication Date

Friday, 9 June 2017