



# FRBM SPECIAL ISSUE

## *Regulation of cardiovascular redox signaling in health and disease*



This Special Issue will contain a collection of state-of-the-art review articles by twenty specialists, providing novel insights into the physiological and pathological mechanisms underlying redox signaling in the heart and vascular wall.

The Issue will be of interest to researchers in the field, as well as, postdoctoral fellows, graduate students and grant awarding agencies.

### Guest Editors:

*Santiago Lamas,*

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## List of confirmed review articles for this special issue:

- 1) **Redox regulation of electrophilic signaling by reactive persulfides in cardiac cells**, by Takaaki Akaike (*Tohoku University, Japan*) and Motohiro Nishida (*National Institute for Physiological Sciences, Okazaki, Japan*)
- 2) **Redox Regulation of Macrophage Function and Phenotypic Fate**, by Reto Asmis (*University of Texas Health Science Center, USA*)
- 3) **Regulation of cardiovascular homeostasis by glutaredoxin-1 and thiol modifications**, by Marcus Bachschmid (*Boston University, USA*)
- 4) **Systems biology approaches for cellular redox signaling**, by Vsevolod Belousov (*Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Moscow Russia*)
- 5) **Organizers and activators: Cytosolic Nox proteins impacting on vascular function**, by Ralf Brandes and Katrin Schröder (*University of Frankfurt, Germany*) and K
- 6) **Immunomodulatory function of mitochondrial and NOX-derived RONS**, Andreas Daiber (**University of Mainz, Germany**)
- 7) **How widespread is stable protein S-nitrosylation as an end-effector of protein regulation?**, by Philip Eaton and Kathryn Wolhuter (*Kings College London, UK*)
- 8) **Redox modification of caveolar proteins: role in cellular signaling and disease**, by Gemma Figtree (*University of Sydney, Australia*)
- 9) **Role of autophagy in redox homeostasis**, by Toren Finkel (*National Institutes of Health, Bethesda, USA*)
- 10) **Regulated methionine oxidation by monooxygenases**, by Vadim Gladyshev and Bruno Manta (*Brigham and Women's Hospital, Harvard Medical School, USA*)
- 11) **Redox regulation of the cytoskeleton and cell-matrix interactions**, by Kathy Griendling (*Emory University, Atlanta, USA*)
- 12) **Vascular remodeling: a highly redox-modulated mechanism of vessel caliber regulation**, by Francisco Laurindo (*University of Sao Paulo, Brazil*)
- 13) **Responses to Reductive Stress in the Cardiovascular System**, by Joseph Loscalzo and Diane Handy (*Brigham and Women's Hospital, Harvard Medical School, Boston, USA*)
- 14) **Microvascular NADPH oxidase in health and disease**, by Patrick Pagano (*University of Pittsburgh, Pittsburgh, USA*)
- 15) **Signaling mechanisms mediated by Thioredoxin 1**, by Junichi Sadoshima (*Rutgers New Jersey Medical School, Newark, USA*)
- 16) **Animal models to study cardiovascular redox signaling in vivo (orig paper)**, by Massimo Santoro (*Vesalius Research Center, Leuven, Belgium*)
- 17) **Divergent roles of endothelial nitric oxide synthases system in maintaining cardiovascular homeostasis**, by Hiroaki Shimokawa (*Tohoku University Graduate School of Medicine, Japan*)

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