Vascular Cell Locomotion: Osteopontin, NADPH Oxidase, and Matrix Metalloproteinase-9
Patrick J. Pagano, Mounir J. Haurani

When Hearts Fail So Does Skeletal Muscle: Breaking a Vicious Cycle
Brandon J. Biesiadecki, R. John Solaro

The Potential for the Transcriptome to Serve as a Clinical Biomarker for Cardiovascular Diseases
Andreas S. Barth, Joshua M. Hare

Molecular Diversity of Receptor Operated Channels in Vascular Smooth Muscle: A Role for Heteromultimeric TRP Channels?
Scott Earley

TRPC Channel Upregulation in Chronically Hypoxic Pulmonary Arteries: The HIF-1 Bandwagon Gathers Steam
Philip I. Aaronson

Smooth Muscle α-Actin Is a Direct Target of Notch/CSL
Michela Noseda, Yangxin Fu, Kyle Niessen, Fred Wong, Linda Chang, Graeme McLean, Aly Karsan

Induction of Cardiogenesis in Embryonic Stem Cells via Downregulation of Notch1 Signaling
Mohamed Nemir, Adrien Croquelois, Thierry Pedrazzini, Freddy Radtke

An Osteopontin–NADPH Oxidase Signaling Cascade Promotes Pro–Matrix Metalloproteinase 9 Activation in Aortic Mesenchymal Cells
Chung-Fang Lai, Venkat Seshadri, Kane Huang, Jian-Su Shao, Jun Cai, Radhika Vattikuti, Arwyn Schumacher, Arleen P. Loewy, David T. Denhardt, Susan R. Rittling, Dwight A. Towler

Integrin-Mediated Transcriptional Activation of Inhibitor of Apoptosis Proteins Protects Smooth Muscle Cells Against Apoptosis Induced by Degraded Collagen
Karín von Wnuck Lipinski, Petra Keul, Nicola Ferri, Susann Lucke, Gerd Heusch, Jens W. Fischer, Bodo Levkau

Selectivity of Connexin 43 Channels Is Regulated Through Protein Kinase C–Dependent Phosphorylation
Jose F. Ek-Vitorin, Timothy J. King, Nathanael S. Heyman, Paul D. Lampe, Janis M. Burt

Maximum Phosphorylation of the Cardiac Ryanodine Receptor at Serine-2809 by Protein Kinase A Produces Unique Modifications to Channel Gating and Conductance Not Observed at Lower Levels of Phosphorylation
Simon Carter, John Colyer, Rebecca Sitsapesan

Effects of Congestive Heart Failure on Ca2+ Handling in Skeletal Muscle During Fatigue
Per Kristian Lunde, Ole M. Sejersted, Hanne-Mari Schiøtz Thorud, Theis Tønnessen, Unni Lie Henriksen, Geir Christensen, Håkan Westerblad, Joseph Bruton

CIRCULATION RESEARCH (ISSN 0009-7330) is published semimonthly except one issue per month in January and December and three issues per month in April and September by Lippincott Williams & Wilkins, at 12107 Insurance Way, Hagerstown, MD 21740. Business offices are located at 227 East Washington Square, Philadelphia, PA 19106-3780. Production offices are located at 351 West Camden Street, Baltimore, MD 21201-2436. Individuals may subscribe for their personal use at the following annual rates: Domestic: $240 for members and $399 for nonmembers. International: $297 for members of an American Heart Association scientific council and $499 for nonmembers. Contact Lippincott Williams & Wilkins for single copy rates and subscription rates for medical professionals in training and for libraries, readers, and other multiple-use institutions. Periodicals postage paid at Hagerstown, MD, and additional mailing offices. POSTMASTER: Send address changes to CIRCULATION RESEARCH, American Heart Association, Lippincott Williams & Wilkins, 12107 Insurance Way, Hagerstown, MD 21740.
Heteromultimeric TRPC6-TRPC7 Channels Contribute to Arginine Vasopressin-Induced Cation Current of A7r5 Vascular Smooth Muscle Cells
Yoshiaki Maruyama, Yuko Nakanishi, Emma J. Walsh, David P. Wilson, Donald G. Welsh, William C. Cole

Hypoxia Inducible Factor 1 Mediates Hypoxia-Induced TRPC Expression and Elevated Intracellular Ca2+ in Pulmonary Arterial Smooth Muscle Cells
Jian Wang, Letitia Weigand, Wenju Lu, J.T. Sylvester, Gregg L. Semenza, Larissa A. Shimoda

14-3-3 Is a Regulator of the Cardiac Voltage-Gated Sodium Channel Nav1.5
Marie Allouis, Françoise Le Bouffant, Ronald Wilders, David Péroz, Jean-Jacques Schott, Jacques Noireaud, Hervé Le Marec, Jean Mérot, Denis Escande, Isabelle Bard

Integrative Physiology
Neural Crest Cells Retain Multipotential Characteristics in the Developing Valves and Label the Cardiac Conduction System
Tomoki Nakamura, Melissa C. Colbert, Jeffrey Robbins

Formation of the Venous Pole of the Heart From an Nkx2–5–Negative Precursor Population Requires Tbx18
Vincent M. Christoffels, Mathilda T.M. Mommersteeg, Mark-Oliver Trowe, Owen W.J. Prall, Corrie de Gier-de Vries, Alexandre T. Soufan, Markus Bussen, Karin Schuster-Gossler, Richard P. Harvey, Antoon F.M. Moorman, Andreas Kispert

UltraRapid Communication
Molecular Profiling Improves Diagnoses of Rejection and Infection in Transplanted Organs
Andrey Morgun, Natalia Shulzhenko, Ainhoa Perez-Diez, Rosiane V.Z. Diniz, Gerdine F. Sanson, Dirceu R. Almeida, Polly Matzinger, Maria Gerbase-DeLima

Abstract

Volume Author/Subject Index