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PHYSIOLOGY

Volume 24, February 2009

Editorial	2
Managing the Business of Science	
Highlights From the Literature	4

REVIEWS

Mutations in Phosphoinositide Metabolizing Enzymes and Human Disease	8
Heather J. McCrea and Pietro De Camilli	
Review of the diseases linked to inheritable or somatic mutations of phosphoinositide metabolizing enzymes.	
Novel Mechanisms in the Regulation of Phosphorus Homeostasis	17
Theresa Berndt and Rajiv Kumar	
Review discussing how organisms sense changes in phosphate concentrations and how changes in hormonal factors result in the conservation or excretion of phosphorus.	
Modulation of BK_{Ca} Channel Gating by Endogenous Signaling Molecules	26
Shangwei Hou, Stefan H. Heinemann, and Toshinori Hoshi	
Review of modulation of BK _{Ca} channels by small endogenous molecules, emphasizing their molecular mechanisms.	
Intercellular Communication in Atherosclerosis	36
Laurent Burnier, Pierre Fontana, Anne Angelillo-Scherer, Brenda R. Kwak	
Review of the pathophysiology of atherosclerosis and discussion of the role of connexins throughout the different stages of the disease.	
The Plastic Nature of the Vascular Wall: A Continuum of Remodeling Events Contributing to Control of Arteriolar Diameter and Structure	45
Luis A. Martinez-Lemus, Michael A. Hill, and Gerald A. Meininger	
This review explores the hypothesis that a continuum of remodeling events in the vascular wall of resistance arteries plays an intricate part in both the acute and chronic control of arteriolar diameter.	
Maternal Uterine Vascular Remodeling During Pregnancy	58
George Osol and Maurizio Mandala	
This review summarizes the patterns, pathways, and mechanisms involved in maternal uterine vascular remodeling during pregnancy.	

On the cover: Schematic drawing of the secretory and endocytic pathways illustrating the heterogeneous localization of phosphoinositides on membrane of these pathways. Phosphoinositides contribute to define an identity code for each membrane and help recruit and regulate cytosolic proteins at the membrane interface. Membranes enriched in a specific phosphoinositide are color coded. Phosphoinositides, either directly or indirectly, are implicated in the regulation of a wide variety of cellular functions, and a growing number of human genetic diseases is being linked to disruption of the turnover and localization of these phospholipids. See McCrea and De Camilli, p. 8.