

Journal of the Indian Institute of Science

A Multidisciplinary Reviews Journal

Volume 97 · Issue 1 · March 2017

EDITORIALS

Editor's Desk

T.N. Guru Row 1

Guest Editor's Desk

Sandhya S. Visweswariah 3

REVIEW ARTICLES

Integrin-Dependent Regulation of Small GTPases: Role in Cell Migration

A. Pawar · N. Balasubramanian 5

Inositol Pyrophosphates: Energetic, Omnipresent and Versatile Signalling Molecules

A. Shah · S. Ganguli · J. Sen · R. Bhandari 23

A Systems Perspective of Signalling Networks in Host-Pathogen Interactions

K. Korla · N. Chandra 41

Conceptualizing Eukaryotic Metabolic Sensing and Signaling

S. Laxman 59

Multifaceted Housekeeping Functions of Autophagy

S. Chinchwadkar · S. Padmanabhan · P. Mishra · S. Singh · S.N. Suresh · S. Vats · G. Barve · V. Ammanathan · R. Manjithaya 79

G protein Signaling, Journeys Beyond the Plasma Membrane

R.R. Nair · A. Kiran · D.K. Saini 95

Illuminating Cyclic Nucleotides: Sensors for cAMP and cGMP and Their Application in Live Cell Imaging

S. Sharma · S.S. Visweswariah 109

Cellular Dynamics Controlled by Phosphatases

P. Kumar · S. Maddika 129

Spatio-Temporal Control of Cellular and Organismal Physiology by Sirtuins

S. Deota · N. Shukla · U. Kolthur-Seetharam 147

Further articles can be found at www.springerlink.com

Indexed/abstracted in *Science Citation Index Expanded (SciSearch)*, *SCOPUS*, *Google Scholar*, *EBSCO Discovery Service*, *OCLC*, *Summon by ProQuest*, *Zoological Record*

Instructions for Authors for *J Indian Inst. of Science* are available at www.springer.com/41745