BIOCHIMICA ET BIOPHYSICA ACTA - BIOMEMBRANES

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DESCRIPTION

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Peripheral membrane proteins; lipid membranes; protein-membrane interactions; lipid specificity; pore-forming toxins; actinoporins; MACPF/CDC proteins; aerolysin and related toxins; biophysical methods for molecular interactions; surface plasmon resonance; microscale thermophoresis; model membrane systems; liposomes; lipid nanodiscs
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Skin lipid organisation; biophysical methods; stratum corneum; interactions between ceramides/cholesterol and fatty acids; drug transport
Amitabha Chattopadhyay, Centre for Cellular and Molecular Biology CSIR, Hyderabad, India
Lipid-protein interaction; membrane receptors; cholesterol; fluorescence spectroscopy; tryptophan fluorescence

**Lukasz Cwiklik**, Czech Academy of Sciences, Praha, Czech Republic
Molecular dynamics simulations; lipid membranes; lipid monolayers; tear film; Langmuir-Blodgett trough

**Pablo V. Escribá**, University of the Balearic Islands, Palma de Mallorca, Spain
Membrane lipid therapy; membrane structure; membrane microdomain; protein-lipid interactions; G proteins; amphitropic proteins; G protein-coupled receptors; cell signaling; sphingomyelin; Sphingomyelin synthase; SMS1 and SMS2; phosphatidylethanolamine; hexagonal phase; fatty acid; oleic acid; hydroxyoleic acid; DHA; hydrox-DHA; cancer; glioma; glioblastoma; lung cancer; Alzheimer's disease; Adult Polyglucosan Body Disease; neuropathic pain

**Wolfgang Fischer**, National Yang-Ming University, Taipei, Taiwan
Membrane proteins; ion channels; protein assembly and dynamics; molecular dynamics simulations; channel recordings

**Klaus Gawrisch**, National Institute on Alcohol Abuse and Alcoholism, Rockville, Maryland, United States
Biomembranes; NMR; polyunsaturated lipids; DHA; GPCR; rhodopsin; cannabinoid receptors

**Gerald Gimpl**, Johannes Gutenberg University, Mainz, Germany
Oxytocin receptor; cholesterol; cholesterol-receptor interaction; cholesterol trafficking; fluorescence microscopy

**Félix M. Goñi**, University of the Basque Country Department of Biochemistry, Leioa, Spain
Lipids

**Kalina Hristova**, Johns Hopkins University, Baltimore, Maryland, United States
Membrane receptors, membrane structure, membrane protein interactions, antimicrobial peptides, fluorescence methods

**Huey W. Huang**, Rice University, Houston, Texas, United States
Membrane-active peptides; membrane fusion; diffraction techniques

**John Katsaras**, Oak Ridge National Laboratory, Oak Ridge, Tennessee, United States
Biomembranes; MD simulations; X-ray and neutron scattering

**Sandro Keller**, TU Kaiserslautern University, Kaiserslautern, Germany
New membrane-mimetic lipid-bilayer nanodiscs on the basis of amphiphilic copolymers; novel fluorinated surfactants for membrane-protein research; folding, functions, and interactions of membrane proteins; membrane biophysics; membrane-mimetic systems; membrane proteins; polymer-based nanodiscs

**Jeffery Klauda**, University of Maryland at College Park, College Park, Maryland, United States
Cell membranes; molecular simulations; lipids; force fields; computational biology

**Victor Lemeshko**, National University of Colombia Medellin, Medellin, Colombia
Mitochondrial membranes and cell energy metabolism regulation; membrane-permeabilizing peptides

**Ilya Levental**, University of Texas Health Science Center at Houston, Houston, Texas, United States
Membrane; lipid; raft; lipomics; fluidity; cholesterol; plasma membrane; cell membrane; domain; liquid-ordered; phase separation

**Irena Levitan**, University of Illinois at Chicago College of Medicine, Chicago, Illinois, United States
Cholesterol regulation of ion channels; lipid-protein interactions; membrane biomechanics; mechanotransduction

**Marjorie Longo**, University of California Davis, Davis, California, United States
Experiments in supported membranes; confined membranes; membrane phase behavior; membrane mechanical properties; membrane protein reconstitution; membranes containing polymers; membrane nanodiscs; lipid-stabilized microbubbles; monolayers; fluorescence methods.

**Maria Luisa Mangoni**, University of Rome La Sapienza, Roma, Italy
Antimicrobial peptides; peptide-membrane interaction; lipopolysaccharide; antibiotic resistance; antimicrobial/anti-endotoxin activities; pore-forming peptides

**Isabelle Marcotte**, University of Quebec at Montreal Department of Chemistry, Montreal, Quebec, Canada
Biological solid-state NMR; model membranes; lipid interactions; NMR of intact cells; protein structure

**Katsumi Matsuzaki**, Kyoto University, Kyoto, Japan
Peptide (protein)-lipid interaction; antimicrobial peptides; amyloids; transmembrane helices

**Sergei Noskov**, University of Calgary, Calgary, Alberta, Canada
Theoretical biophysics; molecular dynamics simulations; ion channels and secondary transporters; statistical mechanics

**Jesus Perez-Gil**, Complutense University of Madrid, Madrid, Spain
Pulmonary surfactant; lipid-protein interactions; monolayer and bilayer membrane models; membrane domains and structure; membrane protein structure

**Elmar Prenner**, University of Calgary, Calgary, Alberta, Canada
Biomimetic membranes; lateral membrane organization; biophysical methods; metal-membrane interactions; pulmonary drug delivery; nanoparticles

**Manuel Prieto**, University of Lisbon, Lisbon, Portugal
Lipid phase diagrams and lipid domains (rafts); fluorescence (FRET) and fluorescence microscopy (FCS and FLIM); lipid-protein interaction; ceramides; ion channels; amyloid fiber formation

**Ayyalusamy Ramamoorthy**, University of Michigan, Ann Arbor, Michigan, United States
Membrane protein; structure; amyloids; antimicrobial peptides; NMR

**Marina Rautenbach**, Stellenbosch University, Stellenbosch, South Africa
Antimicrobial peptides; biophysical analysis; bioactivity assays; mass spectrometry; peptide chemistry

**Tomasz Róg**, University of Helsinki, Helsinki, Finland
Biomolecular simulations and modelling; lipid bilayer biophysics; cholesterol; lipids in nanotechnology; membrane proteins

**Dirk Schneider**, Johannes Gutenberg University, Mainz, Germany
Membrane dynamics; membrane proteins; membrane protein folding and assembly; protein-lipid interactions; thylakoid membrane

**Yechiel Shai**, Weizmann Institute of Science, Rehovot, Israel
Peptide-membrane interaction; peptide-peptide interaction within the membrane; virus-cell fusion; membrane fusion; antimicrobial peptides; molecular recognition within the membrane; innate immunity peptides; fluorescent studies

**Stephen Sligar**, University of Illinois at Urbana-Champaign, Champaign, Illinois, United States
NMR and other biophysical techniques; peripherally-associated and integral membrane proteins; protein-protein interactions; protein-lipid interactions; antimicrobial peptides

**Suzana Strauss**, The University of British Columbia, Vancouver, British Columbia, Canada
Membrane structure and dynamics; lipid-protein interactions; NMR of membrane proteins; membrane fusion

**William Wimley**, Tulane University, New Orleans, Louisiana, United States
Antimicrobial peptide; pore forming peptide; membrane active peptides; cell penetrating peptide; antiviral peptide

**Christopher Yip**, University of Toronto, Toronto, Ontario, Canada
Scanning probe microscopy; molecular dynamics; spectroscopy; single molecule biophysics; computational biophysics
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