DESCRIPTION

*BBA Biomembranes* has its main focus on **membrane structure**, **function** and **biomolecular organization**, membrane proteins, receptors, channels and anchors, fluidity and composition, model membranes and liposomes, membrane surface studies and ligand interactions, transport studies, and membrane dynamics.

Types of Papers: regular papers, reviews and mini-reviews.

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Lipid-protein interaction; membrane receptors; cholesterol; fluorescence spectroscopy; tryptophan fluorescence

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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; hydroxr-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

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Oxytocin receptor; cholesterol; cholesterol-receptor interaction; cholesterol trafficking; fluorescence microscopy

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Membrane receptors, membrane structure, membrane protein interactions, antimicrobial peptides, fluorescence methods

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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

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Biomolecular simulations and modelling; lipid bilayer biophysics; cholesterol; lipids in nanotechnology; membrane proteins

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Membrane dynamics; membrane proteins; membrane protein folding and assembly; protein-lipid interactions; thylakoid membrane

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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
Suzana Strauss, The University of British Columbia, Vancouver, British Columbia, Canada
NMR and other biophysical techniques; peripherally-associated and integral membrane proteins; protein-protein interactions; protein-lipid interactions; antimicrobial peptides

**Lukas Tamm**, University of Virginia, Charlottesville, Virginia, United States
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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