**DESCRIPTION**

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Membrane proteins; computational structural biology; drug discovery; transporters; channels

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Membrane proteins, lipid-protein interactions, hydrogen bonding, proton transfer, molecular simulations and modelling

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Skin lipid organisation; biophysical methods; stratum corneum; interactions between ceramides/cholesterol and fatty acids; drug transport

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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

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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; hydro-x-DHA; cancer; glioma; glioblastoma; lung cancer; Alzheimer's disease; Adult Polyglucosan Body Disease; neuropathic pain

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Membrane proteins; ion channels; protein assembly and dynamics; molecular dynamics simulations; channel recordings

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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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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; limomics; 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; lippopolysaccharide; 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

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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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