DESCRIPTION

*BBA General Subjects* accepts for submission either original, hypothesis-driven studies or reviews covering subjects in *biochemistry* and *biophysics* that have general scientific interest for a wide audience. *Interdisciplinary* studies are encouraged. Descriptive studies without biochemical or biophysical mechanistic evidence and insights are discouraged. **Preferred topics are:**

**biomedicine:** fundamental and emerging topics in biochemistry/biophysics with potential medical implications

**nanobiology/nanotechnology:** nanoparticles, nanotoxicology, nanomedicine

**omics:** genomics, proteomics, lipidomics, glycomics, bioinformatics experimentally addressing a defined biological question

**chemical biology:** chemical compounds, drug mechanisms, synthesis of novel compounds, click chemistry

**structural biology:** crystallography, NMR, multimeric proteins, protein dynamics, nucleic acids

**novel complexes:** nucleic acids, pure natural compounds, synthetic compounds, protein complexes, nucleic acid derivatives

**cellular signaling:** receptor signaling, protein phosphorylation cascades, phosphatases, secondary messengers, transcription regulation, gene expression

**glycobiology:** sugar metabolites and metabolism, glycosylated proteins, membrane protein, glycosylation, glycomics

**redox biology:** redox switches, glutathione and thioredoxin systems, oxygen and nitrogen radical species, superoxide, hydrogen peroxide, hydroxyl radical, nitric oxide, peroxides, hypoxia, redox regulation of transcription factors

**neurobiology:** neuronal growth factors and nerve signaling, glial cells, autonomic and central nervous systems

**stem cells:** differentiation, stem cell isolation and cultivation, growth factors

**mechanistic characterization of compounds** having biochemical importance and general interest (drug leads, toxicants, nutrients, metabolites). BBA General Subjects does not consider studies on the biological effects of crude extracts of natural sources unless the exact active molecules are identified, singularly characterized and evaluated.

AUDIENCE

Biochemists, molecular biologists, glycobiologists, developmental biologists
ABSTRACTING AND INDEXING

Science Citation Index
EMBiology
Sociedad Iberoamericana de Informacion Cientifica (SIIC) Data Bases
BIOSIS Citation Index
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Embase
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Signal transduction, phosphoinositide signalling, PI3-kinase/PDK1 signalling pathway, cell migration and invasion, ABC transporters, Pharmacology, Cannabinoids, Extracellular vesicles
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Glycobiology, Congenital Disorders of Glycosylation, Glycosylation, Golgi, vesicular trafficking, ion homeostasis
Xiao-Dong Gao, Jiangnan University, Wuxi, Jiangsu, China
congenital disorders of glycosylation (CDG), glyco-engineering, Chemical-glycobiology, Glycobiology, Molecular Biology
Sara Goldstein, Hebrew University of Jerusalem, Jerusalem, Israel
Pulse radiolysis, kinetics, nitroxides, peroxynitrite, NO-donors, HNO donors, hydroxamic acids, nitrosocarbonyls

**Raffaella Gozzelino**, Nova University of Lisbon, Lisboa, Portugal
Iron metabolism, Heme, Inflammation, Infection, Neurodegenerative diseases.

**Lee M. Graves**, The University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina, United States of America
Cellular mechanisms of drug resistance in cancer, Protein phosphorylation and protein kinase-mediated signaling pathways, application of proteomics, Protein kinase inhibitors, Regulation of metabolic enzymes by phosphorylation and interacting proteins

**Elin Gray**, Edith Cowan University, Joondalup, Australia
Cancer genetics, Molecular biology, Circulating tumour cells, Circulating tumour DNA, Exosomes, Single cell sequencing.

** Yoichiro Harada**, Kagoshima University, Kagoshima, Japan
Endoplasmic reticulum, Exosomes, Extracellular vesicles, Glucose metabolism, Glycosylation, Glycan metabolism

**Rong-Qiao He**, Chinese Academy of Sciences, Beijing, China
tau Proteins, Xenopus, Kinetics, Atomic Force Microscopy, Protein Denaturation and Folding

**Johannes Herrmann**, Rheinland-Pfalzische Technische Universitat (RPTU), Kaiserslautern, Germany
mitochondrial biogenesis, protein targeting, redox biology, membrane biology, mitochondrial ribosomes, yeast genetics

**Hidenori Ichijo**, The University of Tokyo, Bunkyo-Ku, Japan
Endoplasmic-reticulum-associated protein degradation (ERAD), superoxide dismutase (SOD), NAMPT, necrosis (necrotic death), mitogen-activated protein kinase (MAPK), c-Jun N-terminal kinase (JNK), endoplasmic reticulum stress (ER stress), p38 MAPK, apoptosis signal-regulating kinase 1 (ASK1), cell death, osmotic swelling

**Zahra Iqbal**, The University of Sydney, Sydney, New South Wales, Australia
Cancer, Drug Resistance, Drug targeting, Iron metabolism, Multidrug resistance, Oxidative stress

**Anders H. Johnsen**, Copenhagen University Hospital, København, Denmark
Neuropeptides, Post-Translational Protein Processing, Molecular Sequence Data, High Pressure Liquid Chromatography, Mass Spectrometry, Radioimmunoassay, protein chemistry

**Hyun (Joy) Kim**, Seoul National University, Gwanak-gu, South Korea
Membrane proteins, translocon, signal peptidase, endoplasmic reticulum, protein targeting

**Yasuhiko Kizuka**, Gifu University, Gifu, Japan
Glycosylation, Glycobiology, Epigenetics, Alzheimer’s disease, Sugar analog, Chemical biology

**Antonis E. Koromilas**, Université McGill, Montréal, Quebec, Canada
mRNA translation, translation initiation factor eIF2, environmental stress, mTOR, protein phosphorylation, STATs, oncogenes, tumor suppressors, transgenic mice, lung cancer, breast cancer

**Zaklina Kovacevic**, The University of Sydney, Sydney, New South Wales, Australia
Metastasis, Epithelial to mesenchymal transition, NDRG1, EGFR signaling, Breast Cancer, Pancreatic Cancer

**Sharon La Fontaine**, Deakin University, Burwood, Victoria, Australia
copper, copper transport, copper P-type ATPase, copper chaperone, metal transport, metal homeostasis, iron, glutaredoxin, redox biology, Menkes disease, Wilson disease, neurodegenerative disease, distal hereditary motor neuropathy

**Darius Lane**, Parkville, Melbourne, Victoria, Australia
Cell culture, Cell signaling, Chelator, Epithelial-Mesenchymal Transition, Erythropoiesis, Ferritin, Hypoxia, Iron, Iron homeostasis, Metal chelator, Metastasis, Mitochondrial Diseases, Reactive Oxygen Species, ROS

**Gordan Lauc**, University of Zagreb, Faculty of Pharmacy and Biochemistry, Zagreb, Croatia
Protein glycosylation, High-throughput glycomics, Genetic regulation of protein glycosylation, Glycosylation in disease

**Christopher Horst Lillig**, University of Greifswald, Greifswald, Germany
Glutaredoxins, Oxidation-Reduction, Molecular Sequence Data, Mitochondria, Oxidative Stress, Thioredoxins

**Mary Lipton**, Pacific Northwest National Laboratory, Richland, Washington, United States of America
Proteomics, Multi-omics, Functional Analyses, Microbial Communities, Stable Isotope Labeling

**Laurence Motte**, Sorbonne North Paris University, Villelaineuse, France
Inorganic nanoparticles, synthesis, surface functionalisation, nanomedicine, imaging contrast agents

**Jose Renato Pinto**, Florida State University College of Medicine, Tallahassee, Florida, United States of America
Striated muscle regulation, Troponin, Muscle biophysics, Cross-bridge kinetics, Cardiomyopathies

**Oliver Rackham**, Harry Perkins Institute of Medical Research, Perth, Australia
synthetic biology, RNA-binding proteins, ribosomes, protein engineering, directed evolution

**Des R. Richardson**, Griffith University, Nathan, Queensland, Australia
Iron, Copper, Melanoma, Copper transport, Zinc, Frataxin, Metal, Transferrin, Iron-sulfur protein, Metal ion-protein interaction, Tumor therapy, Iron metabolism, Metal homeostasis, Metalloenzyme, Transport metal

**Sumit Sahni**, The University of Sydney, Sydney, New South Wales, Australia
Hypoxia in Cancer Progression, pancreatic cancer, autophagy, AMPK energy homeostasis pathway, tumor microenvironment, biomarkers

**Tomáš Šimůnek**, Charles University, Faculty of Pharmacy in Hradec Králové, Hradec Králové, Czechia
mitochondria, oxidative stress, topoisomerase II, anthracycline cardiotoxicity, ton metabolism

**Suzy Torti**, University of Connecticut, Department of Molecular Biology and Biophysics, Farmington, Connecticut, United States of America
Cancer cell biology, iron metabolism, oxidative stress, biochemistry

**Renata Veselska**, Masaryk University, Brno, Czechia
tumor biology, tumor markers, cancer stem cells, cytoskeleton, pediatric solid tumors

**Rebecca Wade**, Heidelberg Institute for Theoretical Studies, Heidelberg, Germany
Molecular modelling and simulation, structure-based drug design, bioinformatics, molecular systems biology, biomolecular recognition, protein-ligand interactions.

**Zefeng Wang**, Partner Institute for Computational Biology Chinese Academy of Sciences and Max Planck Society, Shanghai, China
Gene regulation, RNA binding protein, RNA turnover, protein motif, RNA-protein interaction, computation, protein engineering, RNA splicing, translation control, translation initiation factor, RNA metabolism, biophysics, translation initiation, RNA processing, ribozyme (catalytic RNA) (RNA enzyme), bioinformatics

**Yau-Huei Wei**, Changhua Christian Hospital, Changhua, Taiwan
Mitochondria, mitochondrial disorders, bioenergetics, oxidative stress, metabolic regulation, stem cell research, metabolic reprogramming, induced pluripotent stem cells

**Christopher West**, University of Georgia, Athens, Georgia, United States of America
Glycobiology, Ubiquitin Ligase, Cell Wall, Hypoxia, O2-Sensing, Prolyl Hydroxylation., Protozoa

**Hans Westerhoff**, University of Amsterdam, Amsterdam, Netherlands
Systems biology

**Weidong Wu**, Xinxiang Medical University, Xinxiang, China
Health effect and molecular mechanisms of air pollution, epidemiology, oxidative stress, inflammatory cell signaling, protein phosphorylation, regulation of inflammatory gene expression, antioxidant intervention, airway or gut microbiome and health., air pollution

**Yoshiki Yamaguchi**, Institute of Physical and Chemical Research, Wako, Japan
Structural Glycobiology, NMR, Glycan Recognition, Lectin Receptors, Glycoconjugates

**Aixin Yan**, The University of Hong Kong, Hong Kong, Hong Kong
Microbiology, Antibiotic Resistance, Microbial Stress Response, CRISPR-Cas, Antimicrobial Development, Biometals

**Wei Yue**, The University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma, United States of America
antibiotics, cardiac glycosides, antidiabetic and anticancer agents, Drug interaction, Drug toxicity, Drug transport, drug transport proteins, drug-disease interactions, immunosuppressants, OATP, Organic anion transporting polypeptides, pharmacokinetics, RNA interference, statins

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Mitochondria, Membrane Proteins, Bioenergetics, Complex I, Proteomics
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Full-length research articles (Regular paper), Review articles and Mini-reviews, brief reports (BBA Research Letters)

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