DESCRIPTION

*BBA Bioenergetics* covers the area of *biological membranes* involved in energy transfer and conversion. In particular, it focuses on the structures obtained by X-ray crystallography and other approaches, and molecular mechanisms of the components of *photosynthesis*, mitochondrial and bacterial *respiration*, oxidative phosphorylation, motility and transport. It spans applications of *structural biology*, molecular modeling, spectroscopy and biophysics in these systems, through bioenergetic aspects of mitochondrial biology including biomedicine aspects of *energy metabolism* in *mitochondrial disorders*, neurodegenerative diseases like Parkinson’s and Alzheimer’s, *aging*, diabetes and even *cancer*.

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AUDIENCE

Biochemists, biophysicists, cell biologists and biomedical scientist interested in the structures, mechanisms and consequences of cellular energy metabolism.

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Jerzy Duszynski, Nencki Institute of Experimental Biology PAS, Warsaw, Poland
Mitochondrial stress; mitochondrial transporters; mitochondrial diseases; cellular bioenergetics; cell signaling

Masamitsu Futai, Iwate Medical University, Iwate, Japan
ATPase, proton (ion) transport, acidic organelles, vesicles, ATP synthesis

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Peter Heathcote, Queen Mary, University of London (QMUL), London, UK
EPR spectroscopy, Photosynthesis, Reaction Centres, Respiratory complexes, Protein cofactor interactions.

Jonathan Hosler, University of Mississippi, Jackson, Mississippi, USA
Carola Hunte, Albert-Ludwigs-Universität Freiburg, Freiburg, Germany
Respiratory complexes, ion transport, structural biology, membrane proteins, X-ray crystallography.

Nils-Göran Larsson, Max Planck Institute (MPI) for the Biology of Aging, Köln, Germany
Mitochondria, mitochondrial disease, mtDNA, mitochondrial transcription, mitochondrial translation

Bernard Lemire, University of Alberta, Edmonton, Alberta, Canada
C. elegans, mitochondria, aging, bioenergetics

**Fraser MacMillan**, University of East Anglia, Norwich, UK

Biological Magnetic Resonance, Electron Transfer, Membrane Proteins, Cofactors, Spin Labelling

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**Conrad Mullineaux**, University of London, London, UK

Light-harvesting, Electron transport, Membrane dynamics, Cyanobacteria, Fluorescence imaging

**Richard Porter**, Trinity College, Dublin 2, Ireland

Uncoupling proteins; Mitochondria; Proton leak; Transporters; oxygen

**Agnès Rötig**, INSERM, Paris - cedex 15, France

mitochondrial disorders, respiratory chain deficiency, gene identification, drug screening, genetic diagnosis

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**Lixin Zhang**, Chinese Academy of Sciences (CAS), Beijing, China

chloroplast biogenesis; chloroplast gene expression; photosynthetic protein complex assembly; protein degradation; retrograde signalling

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respiratory complex I, structural biology, redox-linked proton translocation, assembly, mitochondrial diseases
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