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DESCRIPTION

*BBA Molecular Basis of Disease* addresses the *biochemistry* and *molecular genetics* of *disease* processes and models of human disease. This journal covers aspects of aging, cancer, metabolic-, neurological-, and immunological-based disease. Manuscripts focused on using animal models to elucidate biochemical and mechanistic insight in each of these conditions, are particularly encouraged. Manuscripts should emphasize the underlying mechanisms of disease pathways and provide novel contributions to the understanding and/or treatment of these disorders. Highly descriptive and method development submissions may be declined without full review.

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AUDIENCE

Basic and clinical researchers studying molecular aspects of disease processes, Human geneticists, Biochemists, Molecular biologists, Cell biologists, Cell physiologists

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Prostanoid; prostaglandin; thromboxane; G protein coupled receptor; cardiovascular; cancer; signalling

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Chronic diseases, cardiovascular diseases, diabetes, cell signaling, cell death, inflammation, autophagy, mitochondria, insulin, intraorganellar communication.

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Aging, cell signaling, IGF-1, yeast models of aging

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Hepatotoxicity Model hepatotoxics (e.g. acetaminophen, carbon tetrachloride) Hepatobiliary disposition of xenobiotics Hepatoprotection Peroxisome proliferators Transport proteins Covalent binding in hepatotoxicity Reactive intermediates in hepatotoxicity

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Chronic diseases, cardiovascular diseases, diabetes, cell signaling, cell death, inflammation, autophagy, mitochondria, insulin, intraorganellar communication.

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AGE/metabolic stress signaling, Bone mechanobiology, Molecular oncology, Signaling pathways in tumorigenesis, cancer mechanobiology, signal transduction to transcription factors in health and disease

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Epigenetic mechanisms, DNA and Histone modifications, DNA demethylase and DNA demethylation mechanisms, regulation of gene expression, membrane lipid raft structure and signaling, Ras-MAPK and Hedgehog signaling pathways, Cancer stem cell and pluripotency.

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Mitochondria, sirtuin, trauma, sepsis, oxidative stress, inflammation

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endothelium; trophoblast; fetus; placenta; insulin resistance; diabetes; preeclampsia; obesity in pregnancy; membrane transport; membrane receptors; adenosine; nitric oxide; L-arginine; pH; endoplasmic reticulum stress; exosomes; extracellular vesicles

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Cardiac, heart failure, stem cells, Akt kinase, Pim-1 kinase, myocardial biology

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Aging, Alzheimer's disease, Bioenergetics, Metabolism, Mitochondria, Neurodegeneration

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Insulin resistance; obesity; non-alcoholic fatty liver disease; incretins; brown adipose tissue

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Kidney Genetic Disease, gene therapy, Polycystic kidney disease, Stem cells, regenerative medicine, Kidney Cancer

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cholesterol, Niemann-Pick, neurodegeneration, liver, lipids, oxidative stress

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Mitochondrial Disease; Oxidative Phosphorylation; mitochondrial respiratory chain; mitochondrial DNA; mtDNA mutation.

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INTRODUCTION

BBA Molecular Basis of Disease addresses the biochemistry and molecular genetics of disease processes and their models with a specific focus on human disease.

The section covers metabolic, membrane, receptor and immunological disorders, and includes the biochemistry of differentiation disorders, tissue damage and aging. Manuscripts should emphasize the underlying mechanisms of disease pathways and provide novel contributions to the understanding and treatment of these processes. Highly descriptive and method development submissions may be declined without full review.

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