MOLECULAR GENETICS AND METABOLISM
Official journal of the Society for Inherited Metabolic Disorders

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DESCRIPTION

*Molecular Genetics and Metabolism* contributes to the understanding of the metabolic and molecular basis of disease. This peer reviewed journal publishes articles describing investigations that use the tools of *biochemical genetics* and *molecular genetics* for studies of normal and disease states in humans and animal models.

In addition to original research articles, minireviews reporting timely advances and commentaries providing novel insights are considered.

Research Areas include:

- Newborn Screening and Diagnosis of Inherited Metabolic Diseases
- Clinical Management and Treatment of Inborn Errors of Metabolism
- Normal and Pathogenic Functioning Related to Biochemical Genetic Disease
- Biochemical Studies of Primary and Secondary Enzyme Defects
- Thresholds, Moonlighting Functions of Proteins and Biochemical Network Modules
- Intercellular and Intracellular Metabolic Relationships

Authors are also welcome to submit to the journal’s open access companion title, *Molecular Genetics and Metabolism Reports*, which welcomes brief research articles, sequence reports, case reports and letters to the editors.

AUDIENCE

Molecular geneticists, biochemical geneticists, endocrinologists, metabolists, biochemists, molecular biologists

ABSTRACTING AND INDEXING

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INTRODUCTION
Molecular Genetics and Metabolism is a contribution to the understanding of the metabolic basis of disease. The journal publishes articles describing investigations that use the tools of biochemistry and molecular biology for studies of normal and diseased states.

Research Areas include:

- Inherited Metabolic Diseases
  - Biochemical studies of primary enzyme defects
  - Molecular genetic analyses of mutations
  - Pathogenesis of these disorders, including not only primary but also secondary metabolic alterations

- Systems Biology
  - Functional integration of biochemical network modules
  - Moonlighting functions of proteins

- Intercellular and Intracellular Metabolic Relationships
  - Biochemical interactions between subcellular compartments and distinct regions within these cellular spaces, termed microcompartments
  - Metabolic relations between individual enzymes and pathways

- Cellular Catalysts
  - Protein and nonprotein catalyst in normal and deranged cellular metabolism
  - Relationships between the structure and function of catalytic molecules
  - Interaction of these catalysts with other cellular components

- Disease Pathogenesis
  - Underlying mechanisms of inherited and acquired diseases
  - Relationships between genotype and phenotype at the biochemical and molecular levels

- Treatment
  - Drug, protein and dietary interventions
  - Transplantation and gene therapy
  - Multicenter clinical trials
  - Pharmacogenetics / Pharmacogenomics

Submitted manuscripts claiming to be a demonstration of a new mutation will be rejected and returned to authors without review unless the authors present results of a search for the new mutation in at least 100 chromosomes from unaffected individuals of the same ethnic background as the patient(s) with the new mutation.

Authors should perform a power calculation to determine how many subjects they need to study in order to find a significant association between a sequence variation and a disorder. The results of the power calculation should be included in the methods section of the manuscript. Submitted manuscripts without a power calculation will be rejected and returned to authors without review.

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Types of paper

In addition to original research articles, occasional minireviews reporting timely advances as well as brief communications and letters to the editor are considered.

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Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

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