Special Issue

The Functional Analysis of Uremic Toxins by Metabolomics

Message from the Guest Editors

Metabolomic analysis is the comprehensive analysis of small molecules within the body. These small molecules are known as metabolites, and reflect the underlying biochemical activity and state of cells or tissues. Thus, metabolomic analysis using mass spectrometry is a powerful tool to capture disease-metabolic signatures, and widely used for biomarker discovery and understanding of pathogenesis. Renal failure results in the accumulation of various uremic toxins, which are produced by biological synthetic pathway or microbiome in the circulation. Accumulated uremic toxins exert deleterious and cytotoxic effects on organs, and related to a variety of symptoms and organ-dysfunction in renal failure, such as renal damage, cardiovascular damage, mineral and bone disorder. Recently, it revealed that accumulated uremic toxins, indoxyl sulphate, p-cresyl sulphate and phenyl sulphate, in the circulation are imported into whole body organs in renal failure conditions.

Guest Editors

Dr. Emiko Sato

Tohoku University | Division of Clinical Pharmacology and Therapeutics, Graduate School of Pharmaceutical Sciences, Sendai, Japan

Dr. Daisuke Saigusa

Tohoku University | Department of Integrative Genomics, Tohoku Medical Megabank Organization, Sendai, Japan

Deadline for manuscript submissions

closed (30 November 2020)

Toxins

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/34538

Toxins
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
toxins@mdpi.com

mdpi.com/journal/toxins

Toxins

an Open Access Journal by MDPI

Impact Factor 4.0
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/toxins

About the Journal

Message from the Editor-in-Chief

Toxinology is an incredibly diverse area of study, ranging from field surveys of environmental toxins to the study of toxin action at the molecular level. The editorial board and staff of *Toxins* are dedicated to providing a timely, peer-reviewed outlet for exciting, innovative primary research articles and concise, informative reviews from investigators in the myriad of disciplines contributing to our knowledge on toxins. We are committed to meeting the needs of the toxin research community by offering useful and timely reviews of all manuscripts submitted. Please consider *Toxins* when submitting your work for publication.

Editor-in-Chief

Prof. Dr. Jay Fox
Department of Microbiology, University of Virginia, Charlottesville, VA, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Toxicology) / CiteScore - Q1 (Toxicology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).

MDPI