



toxins



an Open Access Journal by MDPI

Mycotoxin Biomarkers: Innovation and Utility

Guest Editors:

Dr. Mark W. Sumarah

Agriculture and Agri-Food
Canada, Edmonton, AB, Canada

Prof. Dr. J. David Miller

Department of Chemistry,
Carleton University, Ottawa,
Canada

Deadline for manuscript
submissions:

closed (25 August 2022)

Message from the Guest Editors

The early epidemiology studies of aflatoxin exposure and liver cancer provided conflicting results. By the late 1980s, the need for a biomarker was apparent, notably to understand the attributable risk of disease. The pioneering work by Professors Chris Wild and John Groopman provided useful information on aflatoxin exposure by measuring the aflatoxin–lysine adduct in serum samples. This led to the production of the seminal papers on liver cancer in relation to aflatoxin exposure in Southern China. Reliable biomarkers of exposure for the other agriculturally important mycotoxins, namely fumonisin B₁, deoxynivalenol, zearalenone and ochratoxin A, remain a challenge. Barriers include an understanding of the toxicokinetics of these four toxins in humans across a range of exposures and the impact of nutrition on interpreting the data. Further challenges include the availability and purity of isotopically labelled standards and improvement in the sensitivity of the analytical methods to allow smaller samples to be collected from study participants.



mdpi.com/si/76176

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Jay Fox

Department of Microbiology,
University of Virginia,
Charlottesville, VA, USA

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.

Author Benefits

Open Access: free for readers, with **article processing charges (APC)** paid by authors or their institutions.

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*)

Contact Us

Toxins Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/toxins
toxins@mdpi.com
[X@Toxins_Mdpi](https://twitter.com/Toxins_Mdpi)