# Special Issue

# Early-Life Heavy Metal Exposure: Effects on Fetal Growth, Birth Outcomes, and Offspring Health

## Message from the Guest Editors

Previous studies have mainly focused on the health effects of contemporary heavy metal exposure. Developmental Origins of Health and Disease (DOHaD) theory indicates that exposure to adverse factors in early life may impair not only fetal growth but also the development of chronic diseases in adulthood. Gestational exposure to heavy metals is known to induce fetal growth restriction, yet the effect and mechanism of exposure to heavy metals in early life on fetal growth, birth outcomes, and the offspring's health remain unclear. We expect the topics to cover a wide range of areas, including animal models and population studies that examine the effects of early life metal exposure on fetal growth and long-term health, exploring mechanisms such as the placenta/sperm–fetus–organ axis, epigenetics, and early biomarker screening for disease susceptibility, as well as discussion on advanced omics technologies, multi-omics approaches, and machine learning applications in the context of early life metal exposure.

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## Deadline for manuscript submissions

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*Toxics* (ISSN 2305-6304) is an international, peer-reviewed, open access journal which provides an advanced forum for studies related to all aspects of toxic chemicals and materials. We aim to publish high quality work that furthers our understanding of the exposure, effects, and risks of chemicals and materials in humans and the natural environment as well as approaches to assess and/or manage the toxicological and ecotoxicological risks of chemicals and materials. Please consider publishing in *Toxics* when preparing your next paper.

## Editor-in-Chief

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