

Abstract

12th Conference on Metal Toxicity and Carcinogenesis
Stony Brook, New York, October 26-29, 2025

Organizing Committee:

Ke-Jian (Jim) Liu, PhD, Professor, Associate Director, Stony Brook Cancer Center
Paolo Boffetta, MD, MPH, Professor, Associate Director, Stony Brook Cancer Center
Fei Chen, PhD, Professor, Stony Brook Cancer Center, Department of Pathology

The 12th Conference on Metal Toxicity and Carcinogenesis, spanning for 4 days, aims to raise awareness about health effects of environmental and occupational metal exposure and to promote international collaborations in the fields of metal toxicity and carcinogenicity. This biennial event brings together the global environmental health community to share their latest research findings for critical evaluation and continuing education, and to discuss future directions in environmental health sciences, public health, metal toxicity, and carcinogenicity. This conference series, with 11 meetings being held across the U.S. and Canada, has evolved over the last 20 years to become the premier conference in the field in the U.S and internationally. National Institutes of Health (NIH) has sponsored the last 5 conferences and NIH program officials have actively participated in the meetings. The 12th Conference will take place at Stony Brook University, a hub for researchers studying metal carcinogenesis, climate changes, and environmental cancer risk factors. This venue offers a valuable opportunity for the research community to engage with a diverse group of scientists from government, academic and industries, as well as the next generation of environmental health scientists. The conference theme will be “Integration from genomics to epigenetic understanding of metal toxicity and carcinogenesis in humans”. Dr. Ke-Jian Liu has been a co-organizer of the 5th to 11th Conference in this series. Dr. Paolo Boffetta is a former Chief of the Unit of Environmental Cancer Epidemiology at the International Agency for Research on Cancer (IARC) and currently serving as Associate Director for Population Sciences at the Stony Brook Cancer Center. Dr. Fei Chen pioneers epigenetic and metabolic regulation of metal carcinogenesis and is a recurring invited speaker at all previous conferences in this series. Several esteemed and internationally recognized scientists will deliver keynote addresses on topics such as metal chemistry, cancer epigenetics, genome toxicity of metals, the impact of climate changes on environmental metal exposure, and tumorigenesis beyond genetics. To enhance diversity in the field, the conference will feature a wide array of speakers and poster presenters, including women and under-represented minorities. Attendance is expected to range between 100 and 120 participants.