CHINESE-AMERICAN LUNG ASSOCIATION

CALA Happy Friday Seminar

January 20th, 2023

Time: EST 10:30 am; PST: 7:30 am; Beijing time: 11:30pm

Zoom: 849 9682 9273 (Password: 654321)

Metabolic Mechanisms of Chemical Toxicity in the Lung

Xinxin Ding, Ph.D.

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Bio: Dr. Ding obtained his B.S. from Nanjing University and completed Ph.D. training at The University of Michigan, Ann Arbor. Then he joined the State University of New York (SUNY) at Albany in 1994 as Assistant Professor and became Associate professor in 1997 and Professor in 2004. Dr. Ding joined the University of Arizona as the department Head. His lab studies enzyme function, regulation and genetics as applied to translational research for drug safety and efficacy and genetic and environmental risks for chemical toxicity. Dr. Ding has published more than 200 papers and have been awarded numerous grants from NCI and NIEHS.

Abstract: The ability of many environmental chemicals, including constituents of tobacco smoke, to cause cancer may depend on how efficiently they are bioactivated in the body by biotransformation enzymes, such as the cytochrome P450 monooxygenases. For most chemicals that require bioactivation to cause cancer, it is unclear whether this bioactivation process needs to occur in the target tissue for tumorigenesis, which enzymes or metabolic pathways are most important, or whether variations in the bioactivation enzymes can dictate cancer susceptibility. Dr. Ding will describe the efforts of his laboratory to develop novel approaches and genetically engineered mouse models to address these questions, with a focus on acute lung injury and lung carcinogenesis.