

## **“Epigenetic Factors, DNMT3b and LncRNA MEG3, Contributes to Nickel Lung Carcinogenesis”**

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The Seminar will provide results from our most recently studies defining a novel effect of nickel on lncRNAs MEG3 reduction and the upstream epigenetic regulator DNMT3b leading to this reduction, as well as the mechanisms underlying MEG3 interaction with downstream effector c-Jun, consequently resulting in attenuation of PHLPP1 expression, Akt/p70S60K/S6 activation, HIF-1 $\alpha$  protein translation as well as malignant transformation of human bronchial epithelial cells. These findings demonstrate the driving force of DNMT3b/MEG3 axis in nickel-caused lung tumorigenesis and provide novel insights into understanding of the nature of nickel lung carcinogenic effect in human.

### **Bio:**

Dr. Chuanshu Huang is a Professor of Department of Environmental Medicine, Urology, Biochemistry and Molecular Pharmacology and Deputy Director of Nelson Institute of Environmental medicine, New York University School of Medicine. Dr. Huang is a PI currently holding three NIH/NCI RO1s and a Project Director and a Core Director of PO1 grants. He has been invited to give talks in many national and international conferences and symposiums. He has also served as a reviewer in many national Study Sections and international Review Panels. Dr. Huang's major research addresses fundamental questions concerning the responses of mammalian cells to environmental carcinogens at the levels of protein kinases, transcription factors and their target genes, as well as protein modification both in vitro and in vivo. His research also includes bladder cancer invasion and metastasis, as well as screening and identifying novel anti-cancer drugs and the molecular mechanisms underlying their anti-cancer effect. Dr. Huang published more than 310 research papers and many of them are in the top scientific journals, such as Advanced Science, Autophagy, PNAS, J Cell Biol, Oncogene, Cancer Res, Clin Can Res and MCB, with over 15,000 citations.