





"Integration of multiomics data in cancer epidemiologic research"

Presentation by: Dr. Lang Wu

Professor of Interdisciplinary Oncology and Genetics Associate Director of Population Science, LSU-LCMC Health Cancer Center Co-Director, Population Science and Cancer Control Program, LSU-LCMC Health Cancer Center

Louisiana State University Health Sciences Center

Date: September 30th

Time: 12-1 PM

Room: LEC Room 303

Refreshments will be provided





Meeting ID: 937 2091 6075

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Associate Director of Population Science, LSU-LCMC Health Cancer Center
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Cancer Center
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Title: Integration of multi-omics data in cancer epidemiologic research

Brief description of presentation:

The etiology of prostate and pancreatic cancer is not fully understood. A large proportion of genetic heritability to prostate and pancreatic cancer still remains elusive. Furthermore, the identification of other layers of –omic markers, such as DNA methylation, protein, and metabolite markers, remains challenging, even though a growing body of literature supports crucial roles of relevant markers in etiology of prostate and pancreatic cancer. In this talk, Dr. Wu will talk about several integrative multi-omics (genomics, transcriptomics, methylomics, proteomics, and metabolomics) studies to identify novel susceptibility genes and biomarkers for prostate and pancreatic cancer. He will also discuss the ongoing efforts for identifying population-specific and tissue-specific biomarkers for relevant cancers across different populations.

Speaker Brief Bio:

Dr. Lang Wu is a Professor of Interdisciplinary Oncology and Genetics at Louisiana State University Health Sciences Center. He also serves as the Associate Director of Population Science at LSU-LCMC Health Cancer Center, and Co-Director of its Population Science and Cancer Control Program. Before joining LSUHSC, Dr. Wu was a tenured faculty at University of Hawaii Cancer Center, and served as the Founding Director of the Pacific Center for Genome Research, a University-wide multicomponent Center dedicated to foster innovative genomic research, genomic workforce development, and community engagement of genomic research across the entire University of Hawai'i, established with a NIH Center grant for which Dr. Wu serves as the contact PI. Dr. Wu received his PhD degree at Mayo Clinic College of Medicine, and conducted postdoctoral training at Vanderbilt University Medical Center. His main research area is genetic and molecular epidemiology of human chronic diseases, especially cancer. He has served as the principal investigator (PI) or contact MPI for various grants from US NIH and V Foundation, with total costs of approximately \$19 million dollars. He has authored or co-authored over 140 peer-reviewed scientific papers addressing a wide range of issues related to cancer epidemiology, genetics, and etiology. Many of these papers were published in high impact journals such as Nature Genetics, Nature Communications, Cancer Research, and Genome Medicine etc. He currently chairs steering committee of the Centers for Genome Research Consortium, which encompasses six NHGRI-funded centers for genome research nationwide. Dr.

Wu frequently serves on study sections and review panels of NIH, V Foundation, and other international institutes and grant agencies of UK and Switzerland. He serves as an Associate Editor of *Molecular Carcinogenesis*, and an Editorial Board Member of *Cancer Epidemiology, Biomarkers & Prevention, BMC Cancer*, and *Frontiers in Genetics*. Dr. Wu has received several honors and awards for his work, including Mayo Clinic Early-Career Alumni Award, American College of Epidemiology's Early Career Epidemiologist Award, V Foundation V Scholar Award, University of Hawai'i Nominee for the 2024 Governor's Awards for Distinguished State Service (State Employee of the Year), Dr. Herbert and Nicole Wertheim Leadership in Healthcare and Medicine Lectureship, NCI Epidemiology and Genomics Research Program (EGRP)'s Research Highlights, and top 10 most-cited papers published by International Journal of Cancer etc.