



COLLOQUIUM SERIES

“Personalized Cancer Genomics”



Friday

January

13

10 a.m. – 11:30 a.m.

Discovery 1 | Rm. 140
915 Greene Street

Phillip Buckhaults, Ph.D.

Director, Cancer Genetics Lab

Associate Professor, Department of Drug Discovery and Biomedical Sciences,
The University of South Carolina School of Pharmacy

Profile

Phillip Buckhaults is an experienced molecular biologist and cancer geneticists with extensive experience with next-gen sequencing applications for global gene expression analysis and gene mutation detection. Dr. Buckhaults received his Doctorate of Philosophy in Biochemistry from the University of Georgia. He also served as a Postdoctoral Fellow in Molecular Genetics at the Johns Hopkins Oncology Center. Dr. Buckhaults is an experienced molecular biologist and cancer geneticists with extensive experience with next-gen sequencing applications for global gene expression analysis and gene mutation detection. Dr. Buckhaults characterized the expression landscapes of colon tumors to identify signatures of recurrence, the mutation landscapes of breast and colon tumors to identify novel cancer genes, and has profiled cancer gene mutation signatures in melanomas to determine novel therapeutic modalities based on targeting PI3K and BRAF pathways. Dr. Buckhaults uses somatic cell knockout technology to characterized variant alleles in human cells, and has discovered novel functions of a polymorphism in the TP53 gene.

The Cancer Genetics Lab focuses on determining biochemical mechanisms by which germline variants contribute to cancer health disparities that exist between people of different ethnic ancestries, and uses genome sequencing and functional genomics to develop novel personalized medicine approaches to treat cancer.



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Arnold School of Public Health