



# **EXCELLENCE IN GENETICS & IMMUNOLOGY SEMINAR SERIES**



**Sidong Huang, Ph.D.**

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**Title: “Using functional genetics to guide targeted cancer therapy”**

**Wednesday, April 29, 2015**

***Martin Amphitheatre | Room 504, 12:00 PM***

*McIntyre Medical Sciences Building*

“Cancer therapy has been gradually shifting from classical approaches guided by histopathological criteria towards a genotype-based strategy, in which the signaling pathways that are altered by oncogenic mutations are targeted by highly selective molecules. Such genotype-based therapies hold great promise for the treatment of cancer as the use of these targeted drugs often lead to dramatic clinical responses with reduced toxicity. However, the benefit of these agents is often short-lived due to the rapid development of resistant disease. Thus, a better understanding of mechanisms of resistance is essential to enable the rational development of combination strategies to overcome this challenge. Functional genetic screens provide a powerful tool to uncover novel components of signaling pathways and can help to identify mechanisms of drug resistance in preclinical models of cancer. I will discuss recent examples where we utilized this unbiased approach to identify novel drug resistance genes and reveal their mechanisms of action in modulating drug responses in several cancer types.”

***This seminar is mandatory for Biochemistry Graduate students***

**LOCATION:** McIntyre Medical Sciences Building, Room 504, 12:00 PM

**HOSTED BY:** DRS SILVIA VIDAL & MAYA SALEH