

# THE FUNCTIONAL DELINEATION OF THE MECHANISMS OF CARDIOVASCULAR DISEASE BY NOVEL GENETIC PLATFORMS

WEDNESDAY  
9<sup>th</sup> NOVEMBER 2016

2:00PM – 3:00PM

ANATOMY SEMINAR ROOM,  
L2, MD10, DEPARTMENT OF  
ANATOMY, NUS.

**Dr JIANG JIANMING**

Assistant Professor  
Department of Biochemistry &  
Cardiovascular Research Institute (CVRI)  
Yong Loo Lin School of Medicine, NUS.

## Abstract:

Genetic variants in sarcomere genes including. Myosin heavy chains (MHC), myosin binding protein C (MYBPC3) and titin (TTN) are the leading causes of hypertrophic cardiomyopathy (HCM) and dilated cardiomyopathy (DCM). Disease models recapitulating the genetics and clinical manifestations of cardiomyopathy in human patients were developed decades ago. However, our knowledge of how these variants in sarcomere genes lead to cardiomyopathy is limited due to tedious crossing, genetic modifiers in different mouse backgrounds, and lack of tissue or cell type specific knockout mice. In this seminar, Dr Jiang will be introducing a novel *in vivo* gene modulation system delivered by the recombinant adeno-associated virus (rAAV) to elucidate the molecular mechanisms that contribute to cardiomyopathy.