

Biographical Sketch

Yongneng Zhang, Ph.D candidate, MSc, MBBS

Yongneng Zhang earned a degree of MBBS (Bachelor of Medicine, Bachelor of Surgery) from Nanchang University followed by a MSc degree from Shantou University, China. His master program focused on metabolic syndrome by studying the relationship between high uric acid and beta-cell function. He then worked in the division of cardiology at the first affiliated hospital of Shantou University Medical College as a resident in cardiology for 5 years. During this period as the attending physician, he went to Dr. Lorne Tyrrell's lab in the University of Alberta as a visiting scholar for 6 months and studied in the area of Hepatitis A and Hepatitis C in both animal cultures and cell systems.

Yongneng then entered the Ph.D program at the University of Alberta in the Department of Medicine from May 2017 under the supervision of Dr. Evangelos Michelakis, a clinician- scientist in the division of cardiology. He received a full Li Ka-shing scholarship (salary and tuition) which is very competitive both in China and Canada for the first 4 years of his Ph.D program, followed by the Motyl Graduate Studentship in cardiac sciences for another 2 years.

His Ph.D research focus on pulmonary arterial hypertension (PAH) and right ventricular failure. Under Dr. Michelakis' mentorship and guidance in the past 5 years, Yongneng became an expert on several complex methodological techniques including closed-chest right heart and pulmonary arterial catheterization, echocardiography, generation of transgenic mice, DNA sequencing for SNPs and generating pre-clinical models of PAH, among others.

By studying the correlation between the SNPs of genes encoding mitochondrial proteins Sirtuin3 (Sirt3) and Uncoupling Protein 2 (UCP2) with the severity of disease in PAH patients and generating a PAH mouse model lacking both SIRT3 and UCP2, Yongneng published a paper in the Journal of the American Heart Association as the first author. With this translational work, he had been selected as a finalist for the 2020 Cournand and Comroe Early Career Investigator Award of the American Heart Association, one of the most prestigious competitions in the world for junior cardiovascular scientists.

In the University of Alberta, Yongneng was also the recipient of several competitive awards including Paul Man Award which recognizes outstanding contribution to translational research and Med Star Graduate Student Award that recognizes excellence on recent publications.