

Biographical Sketch

Yongneng Zhang, PhD, MBBS

Yongneng Zhang earned his MBBS (Bachelor of Medicine, Bachelor of Surgery) from Nanchang University followed by an MSc degree from Shantou University in China. After completing his residency training in internal medicine, he moved to Canada to pursue doctoral studies. Yongneng is currently a Postdoctoral Fellow in the Department of Medicine at the University of Alberta, where he also completed his PhD, under the supervision of Dr. Evangelos Michelakis, a clinician-scientist in the Division of Cardiology and Director of the Cardiovascular Research Institute.

Yongneng's PhD research focused on pulmonary vascular pathophysiology in pulmonary arterial hypertension (PAH), and his postdoctoral work centres on the right heart failure and organ hibernation. During his doctoral training, he developed a SIRT3 and uncoupling protein-2 (UCP2) double-knockout mouse model of PAH that spontaneously develops severe PAH and recapitulates key features of human disease. The work was published in the *Journal of the American Heart Association (JAHA)*.

More recently, Yongneng investigated how loss of UCP2 drives fibroblast activation and fibroblasts-to-myofibroblasts transformation in the right ventricle, contributing to RV failure in PAH. He published these findings as first author in *Circulation*. In recognition of this translational work, he was selected as a finalist for the 2023 Cournand and Comroe Early Career Investigator Award of the American Heart Association, one of the most prestigious international competitions for early-career cardiovascular scientists. He also received the Paroian Family PH Research Scholarship from Pulmonary Hypertension Association Canada.

In the University of Alberta, Yongneng has been recognized with several competitive awards, including the Ballermann Translational Research Award, acknowledging outstanding contributions to translational research, and Med Star Award for Postdoctoral or Clinical Fellows, which recognizes excellence on recent scientific publications.