

Biography: Dr. Kezhou Wu

Dr. Kezhou Wu is a postdoctoral fellow in the research lab of Dr. Nadr M Jomha at the University of Alberta. Prior to this, Dr. Wu moved to Edmonton to start his PhD research with Dr. Nadr M Jomha and Dr. Janet AW Elliott in the Department of Surgery in 2016.

Dr. Wu's research project focuses on the optimization of vitrification for articular cartilage, which is a promising technique to preserve viable articular cartilage at super low temperatures for long-term storage. Dr. Wu's research goal is to alleviate the shortage of viable cartilage tissue required for clinical repair of cartilage defects in the articulating joints. In the current study, Dr. Wu and colleague developed and validated successful protocols for the vitrification of human and porcine particulate articular cartilage using the mathematical models. The team experimentally measured chondrocyte viability, metabolic activity, matrix productivity of particulate articular cartilage with a high recovery after implementing the designed vitrification protocols. The next phase of Dr. Wu's research is to translate the research findings on preclinical animal models.

During the time in Jomha lab, Dr. Wu has received several travel awards from the department and faculty to present his research work internationally. Dr. Wu has served as the member of Society for Cryobiology, the member of Canadian Association of Postdoctoral Scholars, and the member of University of Alberta Postdoctoral Fellows Association.