



**THE CHINESE UNIVERSITY OF HONG KONG  
FACULTY OF MEDICINE  
SCHOOL OF BIOMEDICAL SCIENCES,  
INSTITUTE FOR TISSUE ENGINEERING AND REGENERATIVE MEDICINE  
& CENTER FOR NEUROMUSCULOSKELETAL RESTORATIVE MEDICINE**

## **SBS-iTERM-CNRM PI Seminar Series 2023-2024**

**Prof. WANG Dan Michelle**

Assistant Professor

School of Biomedical Sciences, Faculty of Medicine /  
Institute for Tissue Engineering and Regenerative Medicine  
The Chinese University of Hong Kong

will present a seminar entitled

### ***“Modulating the Cellular Microenvironment to Enhance Tendon Regeneration: From Basic Science to Translational Applications”***

Tendons are dense collagenous tissues that connect muscle to bone, playing a crucial role in force transmission during musculoskeletal movement. However, repairing tendon injuries presents significant clinical challenges due to insufficient endogenous regeneration and high mechanical demands. To address this issue, Professor Wang and her team have been focusing on extracellular matrix (ECM)-centric approaches to enhance tendon regeneration and understand their mechanisms of action. Their work has led to the development of clinically practical biomaterials, such as a tendon ECM-based tough hydrogel with high tendon regenerative capacity, and a hydrogel-polyurethane hybrid scaffold that provides robust mechanical support and excellent tenogenic bioactivity. These efforts will advance our understanding and application of ECM-based technologies, ultimately assisting in clinical tendon repair.

**16 May 2024, Thursday, 4:00 – 5:00 pm**

Room G02, Lo Kwee-Seong Integrated Biomedical Sciences Building,  
Area 39, The Chinese University of Hong Kong