JUNE 16th 2022 | 4PM CET
HYBRID – Wagi 12, 9th Floor

iPSZÜRICH

A Lecture Series Focused on Induced Pluripotent Stem Cells

funded by a GRC Grant, UZH

Institute of Biomedical Engineering
UNIVERSITY OF TORONTO

Prof. Sara S. Nunes de Vasconcelos
Institute of Biomedical Engineering, University of Toronto, Canada

MULTICELLULAR LIVING SYSTEMS AS FUNDAMENTAL TOOLS IN DISCOVERY AND TRANSLATION

Progress in tissue engineering has been instrumental in advancing the regenerative medicine field, from enabling cell-based regeneration strategies to developing *in vitro* biomimetic systems to improve our understanding of disease pathophysiology and for drug testing. In this talk, I will cover the major contributions of my lab to 1) developing effective vascularization strategies for organ regeneration in cardiovascular diseases and diabetes and 2) creating in vitro models of disease. In particular, I will discuss how microvessels can support remusculatization in complex disease models such as myocardial infarction (MI) in animal models of type 2 diabetes that better reflect the co-morbid conditions present in the clinic in patients with MI. I will also describe the different cardiac disease models we developed and how they have contributed to our understanding of disease and provided insight into the mechanism of action of potential drugs.

University of Zurich[UZH]
UNIVERSITÄTS-KINDERSPITAL ZÜRICH
Institute for Regenerative Medicine • IREM