This showcase is open to the University Community. Please feel free to share this invitation with colleagues or members of your lab/department.

Those interested in suggesting new workshop areas have an opportunity to do so online at:

http://boneandjoint.uwo.ca/how_to

Mr. Matthew Laurence
“3D Printed Polypyrrole Nanoparticle Scaffolds for Bone Regeneration” Lawrence

This project investigates the use of polypyrrole as a drug delivery polymer for the enhancement of bone regeneration. Polypyrrole is a “smart polymer” able to store and release dopant drug molecules according to pH changes, seen naturally in areas of bone regeneration. By harnessing these properties in a co-polymer scaffold, a controlled drug delivery device can be created for the sustained release of bone regeneration medications, mitigating off-target side effects while supporting cell ingrowth.

Mr. Samuel Papernick (Fenster)
“Spatially tracked 3D ultrasound imaging for monitoring the synovial membrane in knee arthritis”

Arthritis is one of the most common chronic health conditions in the United States and Canada. There is a tremendous clinical need for an objective imaging-based point-of-care tool to assess arthritis status, progression, and response to treatment. We propose the use of a handheld 3D ultrasound device we developed to assess knee arthritis at the patient’s bedside by quantifying knee cartilage volume and monitoring changes over time. Our 3D ultrasound device has the potential to reduce the need for MRI in knee arthritis clinical trials and care without added stress and discomfort to arthritis patients.

Dr. Michele Battie- (Think Tank Update)
“Common Spine Disorders - Phenotyping”

The goal of this Think Tank Series was to 1) become more familiar with interests and current Common Spine Disorder work happening in London and 2) identify specific projects to move forward as an interdisciplinary team. A special focus on improving specificity within the non-specific back/neck pain population was suggested.