SOP for TCS SP5 Laser Scanning Confocal Microscope
Location: Block Health Science Building (HSB 052C)

Justification:
Confocal microscope will be used to image (include a description of the work to be done and the nature of the BSL1/BSL2 agent or tissue(s))

General Information and Regulations:
• The Confocal microscope is located in BHSB 052C
• All users from the lab will read and follow this SOP form.

General Rules:
• Samples will be prepared within the PIs lab (BLDG/Room Number) prior to arrival to the imaging center.
• The confocal microscope imaging center managers will be contacted prior to use and consulted on proper sample preparation before samples are acquired.
• Samples will be transferred to and from the imaging center in a sealed secondary container that is leak and puncture proof with a tight-fitting lid.
• Lab personnel will operate the confocal microscope equipment.

Procedure:
• Users will enter the room with appropriate PPE protection for working with BSL-2 agents or cells.
• Switch on the instrument by using “ON/OFF’ switch and the instrument condition set by user interference software in the confocal microscope desktop
• The green LED integrated “ON/OFF’ switch lights up to indicate that the instrument is ready for operation
• Position the plate or slide on the stage with the sample to be observed on the upper surface of the plate
• After the experiment, the plate or slide is removed, transported back to the laboratory in the transport container for proper disposal

Post-sample Acquisition Procedure:
• If a spill occurs, it will be treated with 10% bleach solution.
• In the event of a spill onto the equipment, it will be treated with 70% ethanol while maintaining a total contact time of 15 minutes (min. 10 minutes) and wiped with paper towels that are then discarded into a red bag from the spill kit
• Clean the front lens with a cotton tipped applicator wetted with 70% ethanol
• Wipe the bottom of Oil immersion lens of a fast absorbing tissue paper before and after using the lens
• Users will remove PPE upon exiting the room
• All solid waste (tubes, pipette tips) within the confocal microscope room will be collected in an autoclave bag and sealed prior to removal from the room or disposed of in the red bin in HSB052A.

Additional Information:
• In the event of any malfunction of the Confocal microscope, the person in charge of the core facility will be notified (Andrea Kalinoski, 419-383-4205).
• The biosafety officer will be immediately informed (Skyler Rohrs, 419-383-5089).
• If there is an exposure, then the affected person will go immediately to UToldeo hospital emergency room and an accident report will be filled out.