

Standard Operating Procedure #340

General Animal Scan Procedure for the RS Scanner

Page	lo	t .
------	----	-----

Investigator: Jan Markowski

Location: MicroCT Imaging Lab

Revision: 00

1. Introduction

- 1.1 X-Ray equipment, if not properly used, may cause injury. The GE eXplore Locus utilizes a radiation emitting x-ray source and complies with US and Canadian cabinet x-ray standards which allow the system to be safely operated without additional x-ray shielding.
- 1.2 Use of the Locus (RS) scanner is restricted to individuals that have had documented safety, operation, and maintenance training of the scanner by a facility technician (Joseph Umoh). One or more animal technicians execute procedures related to animal preparation and decontamination of the area in compliance with local policies from *The University of Western Ontario Council for Animal Care* (UCAC).
- 1.3 This general animal scanning procedure provides the guidelines required for performing a low risk level scan on an animal with no pathogens. All scans whereby the specimen to be scanned is a live animal require this SOP as well as SOP#xxx: Standard Scanning Procedure for the RS Scanner to be complied regardless of any additional equipment that is used or of any extended procedures (supporting SOPs) that are followed.

2. General Animal Scan Procedure

- 2.1 The animal technician must wear nitrile medical examination gloves when handling an animal.
- 2.2 Animals are held in cages located in the ventilated animal tray area. All cages are HEPA filtered.
- Animal work (e.g. anaesthetization) is performed at the animal preparation area located across from the animal tray area. The animal preparation area's countertop is to be covered with absorbent cloths.
- 2.4 Only one animal can be scanned at a time. An animal technician removes a specific animal from a cage and must carefully move it to the animal preparation area.
- 2.5 Each animal prior to being scanned must be administered a dose of an anaesthetization drug that will immobilize the animal for the duration of the scan.
- An incontinent pad must be placed under an animal during a scan. The same incontinent pad may be used only if it is in the same scan session and more animals (of the <u>same</u> species) are waiting to be scanned.
- 2.7 The animal technician must carefully move and place the animal on the scanning bed. Apply ivy tape across the animal and tape it gently to the scanner bed. This ensures that the animal remains immobilized if it should awake amidst a scan.
- Operator may proceed to perform a scan as soon as an animal specimen has been secured to the scanning bed. (SOP#xxx: RS Scanner Acquisition and Reconstruction.)
- 2.9 Decontamination of the area is done according to SOP#xxx: MicroCT Decontamination Procedure.

Originator:	DOC #: 340		Active Date:	Retired Date:	
Reviewed:			Approved:		
Name & Title		Date	Name & Title		Date