

## PACUC Requirements for Live Animal Imaging

The Bioscience Imaging Facility (BIF) has PACUC-approved protocols that cover “Lumina II whole animal imaging” and “SPECT/CT whole animal imaging”. (Links to these protocols can be found under the “Resources” section of the Imaging Facility page on the Bindley website). These protocols cover the tracer/substrate injection *process (see below)*, administration of isoflurane anesthesia, and the imaging process. The principle investigator (PI) using the BIF must provide an additional, PACUC- approved protocol that covers all other aspects of experimental design related to the use of animals. These aspects should include (but may not be limited to)...

1. The total number and frequency of anesthetic treatments that each animal will receive over the course of the experiment.
2. The endpoint criteria (the conditions under which the animal will be euthanized) and method(s) of euthanasia.
3. A detailed description of any chemicals/drugs/reagents (besides isoflurane) that an animal will be administered over the course of the experiment, including their concentration(s), route, and frequency of administration.

*SPECT imaging:* Our PACUC imaging protocol and REM radioactivity project covers the injection (either i.p or i.v.) of Tc99m at an activity of up to 40 mCi. (We are currently not approved to use any other isotope). The protocol of the PI using the facility must specify the identity of the tracer molecule/ligand.

Prospective BIF users can begin live animal imaging at the BIF after they possess PACUC-approved protocols that provide the additional information listed above. Please sign below to indicate that you have obtained the necessary additional PACUC approvals. Please contact the BIF manager for additional information or assistance with the PACUC approval process.

I, \_\_\_\_\_ (print), have read the paragraphs above and possess PACUC-approved protocols that provide this additional information and allow me to do live animal imaging.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

PACUC Protocol Number: \_\_\_\_\_