

In Vivo Imaging Core Facility

- 1) **Guideline:** We follow a strict SOP that has been drafted with comparative medicine to ensure the machine is properly maintained to IACUC standards of shared equipment. All personnel needing to use the machine are trained by Dr. Lewis' staff. Once people have completed the training, their ID badges will be activated to the room.
- 2) **Core hours:** Typically, the IVIS is available M-F, from 8am-5pm. Upon notification of core staff, the IVIS can be used after hours. There is no additional charge to use the IVIS after hours, or on the weekend. Users need to be aware that no late night imaging can be done, since the IVIS undergoes a back-up overnight starting at midnight.
- 3) **Scheduling appointments:** This is done through RSS website, under Core Facilities.
- 4) **Basic Usage:** It takes 1-3 minutes to image the mice, depending on signal strength. Once the IVIS has been initialized ~5-10 minutes you can begin imaging mice. Our imaging system can image up to 5 mice at a time, which cuts down imaging time. The cost to use the machine is \$20/hour. Labs are required to provide their own nose cones (for mice or rats), isoflurane and black construction paper to be used in the IVIS. This ordering information is given to users upon requesting training.
- 5) **System Information:** The imaging system we have is the Perkin Elmer IVIS Spectrum (124262), located in BCC A.12.317. The software used to acquire and analyze the images is Living Image 4.5 (latest version). This instrument can image for bioluminescence and 18 color fluorescence, trans-illumination and 3D-topography.
- 6) **Basic Training:** Includes use of fluorescence or luminescence, in 2D format. Trans-illumination or 3D-topography requires additional advanced training, which can be scheduled at the users request.

Fluorescence wavelength range is 400-950nm. It has 10 narrow band excitation filters: 415-760nm and 18 narrow band emission filters 490-850nm

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