

FREQUENTLY ASKED QUESTIONS FOR USE OF THE IVIS LUMINA II

Who oversees the IVIS Lumina II?

ICCB-Longwood (<https://iccb.med.harvard.edu/hms-ivis>) staff currently oversees the IVIS Lumina II mouse imager. The NRB IVIS room is operated by the [Harvard Center for Comparative Medicine](#) (HCCM).

This instrument was purchased with funds from Harvard Medical School's Tools and Technologies Committee, Department of Cell Biology and Laboratory in Systems Pharmacology.

How do I gain access to the Lumina II in the NRB IVIS room?

If you are interested in using the Lumina II, the first step is to complete the NRB IVIS Access Request form. This form is available on the HCCM website and will automatically be forwarded to the appropriate contacts.

If you currently use another HCCM facility, you will follow the same access procedures as this location, except that you must also complete the form specific for NRB IVIS.

Once it is confirmed there is space for the cages requested and that any proposed hazardous or infectious agents can appropriately be housed in the room, you will receive an email with information on the next steps for scheduling your training.

What type of containment room is the NRB IVIS?

The Lumina II is in a non-barrier Biosafety Level II space. If you are interested in housing mice in the imaging room and then returning them to another HCCM-managed room, please contact HCCM to determine if this will be possible.

Are infected mice housed in the NRB IVIS room and imaged with the Lumina II?

It is possible that some mice may be treated with potentially infectious agents while they are in the NRB IVIS room. Note that only infectious agents compatible with nude and immunocompromised mice will be allowed in the NRB IVIS room, as many IVIS users require nude and immunocompromised mice for their experiments. The decision of what can be housed together in the NRB IVIS room will be made by HCCM veterinarians.

As will be discussed during initial Lumina II training, it is recommended that investigators thoroughly clean the IVIS Lumina II and surrounding work area before and after each use using Chlorox bleach wipes. In addition, two isolation chambers are available for use. Infectious mice must be imaged within isolation chambers. Investigators are responsible for cleaning isolation chambers before and after each use.

Is there an animal protocol that I can use to transfer my mice for imaging on the IVIS Lumina II and housing them in the NRB IVIS room?

No, there is not a core facility protocol to which you can transfer your mice in order to use the IVIS Lumina II. If your current animal protocol does not include use of the IVIS Lumina II, please work with Institutional Animal Care and Use Committee (IACUC, <https://iacuc.hms.harvard.edu/>) to make any necessary amendments to your protocol to ensure that it includes use of the IVIS Lumina II. The IVIS amendment to your protocol must be in place prior to submitting an access request form or rodent transfer request.

How do I transfer my mice into NRB IVIS?

Due to limited space in the NRB IVIS room, ICCB-Longwood is tracking cage space available for users. You **MUST** send an email to iccb_ivis@hms.harvard.edu prior to sending a request for mice to be moved into the NRB IVIS room (either through transfer or a new purchase). Please note that this information must be provided each time you plan to move mice into or increase the number of cages in NRB IVIS room. Do not assume cage space is available until you receive a confirmation email.

The standardized HCCM procedure for animal transfer is followed. Please consult the [HCCM website](#) for detailed instructions. Basically, you will label the cages to be transferred and complete a Rodent Transfer Request form. This form is submitted to the HCCM central office for processing. Once the transfer is approved (usually 24 hours), animal care staff will move the cages to NRB. Please keep in mind that HCCM staff has 72 business hours to complete the transfer.

Can mice be ordered directly to NRB IVIS?

Yes, mice can be ordered and delivered directly to the NRB IVIS room after cage space is reserved with ICCB-Longwood. The standardized HCCM procedure for animal ordering is followed. Please consult the [HCCM website](#) for detailed instructions.

Are there charges for use of the Lumina II?

Yes, there is a charge for training on the Lumina II and use of the instrument. These charges help recover some of the maintenance costs for the Lumina II. New users of the Lumina II will be charged a one-time training fee of \$244. In addition, there is a charge of \$70/hour for use of the Lumina II. Time is calculated from the PPMS scheduling software and will be charged on a quarterly basis. Please note these fees are in addition to access costs charged by HCCM (BLII rate).

Each investigator is responsible for his/her own experimental reagents and supplies as well as the associated animal husbandry and access costs charged by HCCM (BLII rate).

Investigators are responsible for supplying their own isofluorane.

Fees are reviewed and adjusted annually based upon the Harvard Fiscal Year (July 1 – June 30).

Please check the IVIS Imaging Core webpage (<https://iccb.med.harvard.edu/hms-ivis>) for the most up-to-date fees.

Will someone image my mice on the IVIS Lumina II?

No, each investigator is responsible for imaging his/her own mice on the Lumina II and for analysis of the data.

How do I reserve time for using the Lumina II?

There is an online calendar system, PPMS, accessible through the ICCB-Longwood website (<https://iccb.med.harvard.edu/equipment-booking-ppms>) that you will use to reserve the Lumina II for your experiments. If you are going to be performing a longitudinal experiment, please sign up in advance for all of the times you will need the instrument to ensure it will be available. You must also separately sign up for the laminar flow hood, total exhaust hood and analysis workstations. If you have any questions or there is a conflict with another scheduled experiment, please email iccb_l_ivis@hms.harvard.edu

Please note there are separate calendars for each piece of equipment in the room via ICCB-Longwood's PPMS equipment reservation system.

Points to keep in mind when using the calendar system:

- Please sign up for only the time you will need and be courteous of others who may also need the piece of equipment during peak hours.
- If your plans change before your scheduled use of the equipment, please change the schedule accordingly so others may use it.
- If you would like to modify your cage usage in the NRB IVIS room, email iccb_l_ivis@hms.harvard.edu immediately to determine if space will be available.
- Do not train others on the Lumina II.
- All access to NRB IVIS room is approved by ICCB-Longwood and Harvard Center for Comparative Medicine.

Who should I contact if I have questions about the Lumina II instrument or analysis workstations?

Please contact ICCB-Longwood staff for questions about the instrument and/or analysis workstations. The best way to do this is via email at iccb_l_ivis@hms.harvard.edu.

There is an electronic copy of the manual for the Lumina II on the desktop associated with the instrument and on the PPMS documents page.

Who should I contact if I have questions about my mice or working in NRB?

Please contact the HCCM NRB Supervisor

Where can I find more information about the IVIS Lumina II and its analysis software?

PerkinElmer's *In Vivo University*

(<http://www.perkinelmer.com/pages/020/imaging/invivouniversity.xhtml>) contains a wealth of useful information, including applications, education, a technical library and other resources.

There is an electronic copy of the manual for the Lumina II on the desktop associated with the instrument and on the PPMS documents page.

Who should I contact if I have a technical question regarding my experiments and obtaining data on the Lumina II?

PerkinElmer's technical support hotline is 1-508-435-9761 and the technical support email address is: global.techsupport@perkinelmer.com

For technical questions regarding your experiments on the IVIS Lumina II, please contact Scott McKinstry, our local IVIS and Quantum Product Specialist at PerkinElmer (mobile: 774-278-0796; email: scott.mckinstry@perkinelmer.com).

If you have specific consumable questions, please contact Emily Hewett, a Pre-Clinical Imaging Specialist at PerkinElmer (mobile: 617-538-7967; email: emily.hewett@perkinelmer.com).