

Leaders' Update

**A message from Paul Fawcett, Ph.D.,
associate director for shared resources**

There are a few important updates regarding Massey's shared resource cores that I would like to share.

The first update is that the Molecular Imaging Developing Shared Resource (MIDSR) core has a new piece of equipment that will be available to Massey investigators beginning in July. The new technology is an Optoacoustic Imager that combines optical imaging with ultrasound tomographic capabilities. It has a broad range of applications for cancer, cardiovascular, neuroscience and drug pharmacokinetic imaging. In cancer, the technology can determine oxygen status in tumors, visualize and quantify microvasculature, measure overall blood flow and study tumor micro-environment. The system can use both endogenous and exogenous probes with high sensitivity. In conjunction with the acquired technology, the VCU Center for Molecular Imaging is developing a new class of optoacoustic gold nano-particle probes, conjugated to a number of ligands, for specific targeting of tumor entities and its micro-environment, including tumor-associated macrophages. In the near future, Jamal Zweit, Ph.D., D.Sc., director of the MIDSR, will announce the system and its capabilities and applications in more detail.

The second update is that the new Massey Vivarium will open in late July in the Massey building (which connects Goodwin Research Laboratory to North Hospital). The new facility will contain both barrier and non-barrier holding and procedure rooms with a total capacity of 2940 mouse cages – more than double the cages than the old facility offered. New features of the Vivarium include Iris scan-based security, Radio Frequency ID (RFID) census (gathering data for the move to cage-based per diem), X-ray irradiator and bulk vaporized hydrogen peroxide (VHP) decontamination chamber.

Please note that on Sunday, July 21, the IVIS will be decommissioned in MSB, and so all animal studies will need to be concluded by that date. No animals will be brought to the new Massey Vivarium from other facilities at VCU, with the exception of the MMRB barrier. Animals now in use at MSB will absolutely NOT be permitted to come to the new facility (whether in or outside of the barrier area). It is anticipated that the IVIS will become available again in its new location in a maximum of five business days, and investigators can initiate studies with new animals at that time.

Everyone must attend a training session before they will be granted access to the Massey Vivarium facilities. Donna Tignor, CMAR, rLATG, assistant director for program development at the Department of Animal Resources, will deliver and coordinate the initial training, which will include five sessions during the last week of June and the 2nd and 3rd weeks of July. Invitations providing more details about the training will be e-mailed soon.

Finally, please remember to cite your use of a shared resource in your research publication. The majority of funding that the National Cancer Institute provides Massey in its Cancer Center Support Grant (CCSG) – the grant that provides Massey its NCI designation – supports the shared resource cores, and member usage of share resources is a key factor considered in the amount of funding granted. An example of a citation for a core is as follows: "Services and products in support of the research project were generated by the VCU Massey Cancer Center Structural Biology Shared Resource supported, in part, with funding from NIH-NCI Cancer Center Support Grant P30 CA016059."

Please visit the [Massey Web site](#) for more information about the cancer center's shared resource cores.

Regards,

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