

Common Use Laboratory Equipment

February 11, 2014

1. Flow Cytometry Core Facility, 251
Flow cytometry (abbreviated: FCM) is a technique for counting and examining microscopic particles, such as <u>cells</u> and <u>chromosomes</u> , by suspending them in a stream of fluid and passing them by an electronic detection apparatus. It allows simultaneous <u>multiparametric analysis</u> of the physical and/or <u>chemical</u> characteristics of up to thousands of particles per second. Flow cytometry is routinely used in the diagnosis of health disorders, especially <u>blood cancers</u> , but has many other applications in both research and clinical practice. A common variation is to physically sort particles based on their properties, so as to purify populations of interest.
Usage: 36hrs (research) /750hours (total use) = 5% of cytometer use is for Research
2. Histopathology Core, 3rd Floor, Room B345
Olympus AX70 research microscope with DP70 digital camera (for bright-field, dark-field, epifluorescence, DIC, and phase), Image-Pro image analysis station, Leica Cryocut CM 1800 cryostat for frozen sections, Leica RM, 2125 Rotary microtome.
Usage: Equipment is available 25% of the time for outside researchers. Can only be used with permission and appointment from the Nephrology team leader, Dr. Barnes - users must be trained.
3. Centrifuges, Room S202
Sorvall RC 5C, Sorvall Discovery M120 micro-ultracentrifuge, Sorvall Super T21
4. Freezers, Room T202
Seven common use ultra-low freezers with 10% availability for temporary storage. (Temporary storage means short-term storage to defrost the user's other freezers)
5. Sterilizer in V203
Available for researchers for sterilizing glassware, liquids, cages and surgical instrumentation.
6. DI Water/Ultra-Pure water, Room V203
DI water is available for all VA labs.
7. Washer/Dryer, Room V203
NOTE: Soap is not provided by Research Administration
8. Applied Biosystems 7900 HT Fast Real-Time PCR System, Room S202
This instrument is used for nucleic acid quantification and detection. For efficient use of instrument, investigators need to reserve the instrument.
9. Spectrophotometer, Ultraspec 2100 Pro UV/Visible, Room B334.1
10. Polarization-Sensitive OCT system, UT Room 5.586U
The system will be useful for researchers who are interested in polarization-sensitive optical coherence tomography images (typically this would be for atherosclerosis, dental, or ocular imaging).

Usage: Cost breakdowns and hours of operation would really be dependent on the researcher interested in using the system. Options: collaboration with us on a project or just use the system. NOTE: users other than Dr. Feldman's group will have to be trained on the use of the system.
System usage charge is a standard rate of \$75/hour.
11. Xenogen IVIS-200 Optical In Vivo Imaging System, Veterinary Medical Unit (VMU) R221
This instrument is capable of imaging bioluminescence and fluorescence in living animals.
12. Center for Personalized/Genomics Medicine, W200
Technologies available include iScan (Goldengate, DASL, direct hybridization and infinium HD) and Hiseq (Exome enrichment, RNAseq, CHIPseq, nanostring, whole genome methylation). Please contact Dr. Sunil Ahuja for further information.
13. Packard 1900 TR Liquid Scintillation Analyzer, S202
14. Packard Cobra II Auto Gamma Counter, S202
15. Nikon T300 Microscope with fluorescent capability, U205
Please contact Dr. Zhang for equipment use
16. C-ARM, VMU U225 (coming soon)
An imaging scanner intensifier

Dark room for developing films is also available on the 3rd floor, Area B. Please contact Dr. Barnes lab before use.