# Imaging Facility

950 W. 28<sup>th</sup> Ave., Vancouver BC V5Z 4H4 604.875.2000 X 7564, Imaging Suite A4-110, jinwang@bcchr.ubc.ca

## **Contacts:**

Manager:Dr. Jingsong Wang, 604-875-2000 X 7564, jinwang@bcchr.ubc.caAccounting:Michael Hockertz, 604-875-3816, hockertz@cmmt.ubc.caDirector:Dr. Bruce Verchere

#### Fees are assessed on an hourly basis with 0.5 h minimum and 0.5 h intervals:

Station	Unassisted Use	Training/Assisted Use	Extra hours for live cell
Olympus BX61	\$15/h	\$25/h	NA
Leica SP5 II Confocal	\$25/h	\$35/h	Negotiable
Leica SP8X STED Confocal	\$25/h	\$35/h	\$20/h after working hours
Image Analysis	\$5/h	\$15/h	NA

• Users will be billed for actual time used plus 50% of unused reservation time.

#### **Getting Started**

- 1. Submit a completed UBC Journal Voucher(JV) to Michael Hockertz.
- 2. Arrange training from Image Core Facility Manager.
- 3. Reserve time on the microscope/computer via online websites.
- 4. Log your login and logoff hours on the sign-in log sheet of the reserved microscope/computer.

#### Users

- Only BCCHRI (including CMMT) users may use the facility. Non- BCCHRI/CMMT academic user may access to the facility after negotiation of rates and approval by the Director/Manager.
- No one should bump or delete other's existing reservation.
- Members from the lab of a specific equipment owner have priority on booking that equipment.
- All users should be trained and qualified by Manager. Only trained and qualified user of any specific equipment could reserve, log, and operate that equipment. Unqualified user should not reserve, log, or operate one's unqualified equipment.
- No user should use Imaging Core properties to train any other user.

#### Workplace

Follow all laws, rules, policies and procedures of governments of Canada and BC, UBC, BCCHRI and BCCHRI Imaging Core Facility, especially those regarding security and safety.

Microscopes/computers are available Monday through Friday from 9am to 5pm. The Imaging Core has no authority to approve anyone's off-working hour access to BCCHRI, or 4<sup>th</sup> floor of TRB, or Imaging Core suite. However if any user get authorized to access Imaging Core Facility on the 4<sup>th</sup> floor of TRB of BCCHRI during off-work time, such user still need an approval from Core Manager for independent operation of equipment.

#### Reservation

- Reservation must be done one hour before the actual station time.
- The maximum reservation a day is four consecutive hours for Confocal, and three hours for the rest. Contact Manager for longer time if needed.
- Late users and no-shows will be charged 50% of the reserved no-show time. Reserved no-show times may be opened to other users after half an hour passed the reserved beginning time.

SP5 II Confocal Microscope online calendar is http://www.my.calendars.net/cfri\_sp5.

BX61 Fluorescence Microscope online calendar is http://www.my.calendars.net/cfri\_imagingbx61

Leica SP8X STED Confocal online calendar is http://www.brownbearsw.com/cal/cmmt\_sp8\_superres

The image analysis PC online calendar is http://www.my.calendars.net/cfri\_analysis\_pc

After training, username and password will be given in person.

#### How to make an online reservation:

1. Go to the online calendar and click a date to add event, using the user name and password given.

2. Type your name, PI name, your contact phone, specify number of persons on site, and special needs, and set starting and ending time. For BX61, if one is doing bright field imaging only or image analysis only, one should specify such requirement, as the default usage is fluorescence imaging, and X-cite lamp should be remained on for the rest users booked on the same day.

3. Check carefully before submitting your event. <u>Once an event was submitted and displayed normal</u> on the calendar, the user could still cancel or modify it one hour before the reserved event. If one need to cancel or modify an event within one hour because of unexpected circumstance, contact manager. The reserved time period would be billed if not canceled.

4. View calendar.

5. Verify you reservation. <u>If something mistyped go back to step 3 above.</u>

Each online calendar is dynamically changing with one user access for creating and editing, and multi accesses for viewing. If you could access the website, please "press F5" or refresh IE ("press F5" or reload for Firefox), another person might be creating or editing one's reservation.

#### **Training schedule**

Training should be scheduled with Manager on availabilities of trainer, trainee and instrument booking.

Whoever first reserved first served. Other users may join a reserved session upon agreements.

## Computing

- <u>Image file storage on any Image Core computer is prohibited</u>. All image and data files <u>could be deleted weekly without notice</u>.
- Users should not download or install any software onto any Core's computer.
- Users may not use a microscope image acquisition computer for data analysis for longer than one hour per day. Contact Manager for extra analysis hours. A stand-alone computer with off-line analysis software is available for image data processing and analysis.

#### **File Transfer**

- <u>NO removable device is allowed to use on any Imaging Core computers, including USB</u> drivers, external hard drivers, memory cards, CDRW and DVDRW disks.
- Four secure options available to transfer image data from imaging core computers, details will be provided upon training.
  - 1. transfer files to one's BCCHRI group folder online.
  - 2. use BCCHRI histology online share folder.
  - 3. burn files to blank CD-R or DVD+R disks.

#### Finance

- Payment by a standing JV is mandatory. No service could be provided without a standing JV.
- The Imaging Core is a not-for-profit core facility laboratory. User fees could only recover a small part of the costs of service contracts, maintenance, repair, upgrades, consumable, and training. The Imaging Core is subsidized by BCCHRI, and grants to investigators of the programs of Diabetes, and Nutrition & Metabolism research, and The Immunity in Health & Disease research cluster from the CFI and MSFHR.

#### Safety

- Protect your eyes, as lasers and high intensity fluorescence light could damage your eyes.
- Waste receptacles will not be provided in the imaging suite. Waste must be disposed of at your own lab.

## **Community relations**

- Training and reservations for all microscopes and analysis computer are mandatory.
- No charges will be billed for a cancellation if one hour notice is given. Please drop in, email or call Manager to cancel a reservation.
- Reservations will be released after half an hour of "no-show". No-shows and late users will be billed for 50% of the reserved while no-show time.
- Report on Log sheet and notify Manager of any accidents, damage or problems immediately.
- Return the microscope and software to its default settings before you leave.
- Acknowledgement of the core lab is very important for our continued funding. We appreciate your acknowledgement to the BCCHRI Histology and Imaging Facility in your posters, seminars and publications.

## **Imaging Facility**

950 W. 28<sup>th</sup> Ave., Vancouver BC V5Z 4H4 604.875.2000 X 7564, Imaging Suite A4-110, jinwang@bcchr.ubc.ca

## Welcome to Imaging Core. Seeing is Believing!

#### Take nothing but your images

Following the file transfer rules, do move your image files as soon as you finished your experiments.

#### **Restore everything but your experience**

<u>Restore all the hardware and software to their defaults or initials.</u> If you have to change any setup, configuration and profiles, please restore to their initials. Please "save as" your setup, configuration and profiles files with your name within your user folder on Driver D. Pleases do not save any files to system driver C.

#### Leave nothing but your Login/Logout.

<u>User should log in on the log sheet in the beginning, and log out at the end.</u> Imaging Core provides immersion oil for oil objectives, DI water for water objective, lens tissue and cotton tip for cleaning oil or water from objectives, cover slips, and plates. Use Imaging Core provided cleaning supplies only. Disposing your samples, slides, culture, dishes and plates in your lab, as Imaging Core is not equipped to dispose bio hazarders.

#### Happy imaging!

#### Appendix: <u>Microscopy Society of America</u> (MSA) Policy on Digital Imaging

The MSA position on digital image processing has been approved as follows:

"Ethical digital imaging requires that the original uncompressed image file be stored on archival media (e.g., CD-R) without any image manipulation or processing operation. All parameters of the production and acquisition of this file, as well as any subsequent processing steps, must be documented and reported to ensure reproducibility.

Generally, acceptable (non-reportable) imaging operations include gamma correction, histogram stretching, and brightness and contrast adjustments. All other operations (such as Unsharp-Masking, Gaussian Blur, etc.) must be directly identified by the author as part of the experimental methodology. However, for diffraction data or any other image data that is used for subsequent quantification, all imaging operations must be reported."

This policy was formulated by the Digital Image Processing & Ethics Group of the MSA Education Committee and was adopted as MSA policy at the Summer Council meeting August 2-3, 2003."