

## **Integrated Microscopy Facility Policies for Investigators**

*This document is intended for **supervisors of trainees** using our facility. Please refer to the complimentary document for trainees for additional information*

### **1. About the Facility:**

- a. **Who we are:** The Biotron Integrated Microscopy Facility (BIMF) is a core microscopy service facility affiliated with the Biology Department, within Western's Faculty of Science. We serve the Western community as well as external Academic and Industrial clients.
- b. **Services:**
  - i. Please refer to our website at [https://www.uwo.ca/sci/research/biotron/integrated\\_microscopy/index.html](https://www.uwo.ca/sci/research/biotron/integrated_microscopy/index.html) for a full description of our services.
  - ii. We offer complete instrument and software training for light, fluorescence and transmission electron microscopy, image analysis support, and a full wet lab containing various equipment for the preparation of quality microscopy samples.
  - iii. We offer a range of options from hands-on training through to full fee-for-service
  - iv. Technical time for instrument training is free for Western students. Sample preparation training and image analysis setup can be arranged based on either hourly or project rates. Refer to our rate sheet and dedicated project support flyers.
- c. **Location:** We are located on the Western University campus in the Biotron Building, Suite #105, 1<sup>st</sup> floor. It is accessible from Perth Drive next to the Biology greenhouses, or through the Biology/Materials Science lobby on the 1<sup>st</sup> floor. [Google Maps Location](#)
- d. **Staff and Contact Information:**
  - i. **For General inquiries:** about registration, training, and booking, email [biotron\\_microscopy@uwo.ca](mailto:biotron_microscopy@uwo.ca) so that any one of our staff can assist you.
  - ii. **Karen Nygard, Microscopy Technical Specialist:** oversees the facility and supports light microscopy, sample preparation, and image analysis. [knygard@uwo.ca](mailto:knygard@uwo.ca), x 88061
  - iii. **Reza Khazae, TEM specialist:** TEM-specific inquiries. [rkhazae@uwo.ca](mailto:rkhazae@uwo.ca), x88624
  - iv. **Western Intern/Workstudy Student:** Marc Courchesne, [mcourch4@uwo.ca](mailto:mcourch4@uwo.ca), x 85601 currently provides general support and technical help.
  - v. **Carrie Hamilton, Facility Operations Manager, Biotron/Biology:** Handles financial matters, building access and staffing [carrie.hamilton@uwo.ca](mailto:carrie.hamilton@uwo.ca) x83777
  - vi. **Shared Fax:** # 519-661-4162
  - vii. **Shipping/mailing address:**

Western University, Integrated Microscopy Facility,  
Biotron Experimental Climate Change Research Centre,  
Biotron Building, Room #105, 1<sup>st</sup> Floor (Dock# 65),  
1151 Richmond St. N.  
London, ON N6A 5B7
- e. **Hours of Operation:**

- i. Business hours are 8:30 AM to 4:30 PM from Monday to Friday.
- ii. We remain open during Western Reading Weeks but are closed on statutory holidays.
- iii. Training hours must be pre-scheduled from 9AM-4PM.

## 2. User Training and Access:

- a. **Free Consultation or Demonstration:** We strongly encourage you to take advantage of our offer of a free one hour consultation or demonstration before the work begins, preferably together with your trainees. Defining goals and potential problems together goes a long way in heading off problems and saving costs.
- b. **New User Training:** The Biotron is unique in providing Western students with free training on light microscopy systems. Instrument time is still billable at regular rates during training. Staff and external users do pay for technical time during training at current rates.
- c. **Experienced Users:** Users are not permitted to train other users regardless of experience. Training by our staff is mandatory even for experienced users from other facilities.
- d. **Assistance and Refresher Training:** We strongly encourage assistance. Help is free except in instances where use of our time for the same issues becomes excessive.
- e. **After-Hours Use:** Granting access is a privilege decided solely at the discretion of staff. Normal rate hours are 8:00 AM-5:00 PM. Users must have completed 5-10 independent sessions on our systems in the daytime and proven competence and reliability. A form must be signed by the supervisor acknowledging responsibility for both the student and our equipment when unsupervised onsite. Refer to that document for further information.
- f. **External Users Without Western Safety Training:** Due to liability issues, any user who does not have appropriate Western University-specific safety training certificates cannot be left unsupervised. External users can choose fee-for-service work, or, if they prefer to operate the equipment themselves, they must enroll as a Western “Associated Person” and complete all relevant safety training.

## 3. Acceptable Samples Types and Precautions:

- a. **Sample Types:** We offer services for both Life Science and Materials Science samples.
- b. **Before you Bring Samples:** All samples and materials within the facility must comply with any applicable Western or Facility policies. Transfer of hazardous materials, live organisms or cells, and nanoparticles must be discussed with the Technical Specialist BEFORE arrival at the facility.
- c. **Biological Materials:** Whenever possible, organisms and samples that fall under C.F.I.A. and P.H.A.C. guidelines should be chemically fixed before being brought to the lab. The main lab and most instruments are governed by a limited level 1 Biohazardous Agents Permit, which entails containment of live (Level 1 only) samples in closed dishes or under sealed coverslips only.
- d. **Live imaging of Biological Materials-Level 1 and 2:** A Level 2 Biological permit area for live cell imaging is available. Arrangements must be made before bringing in live or unfixed materials. We require a copy of your Biohazardous Agents Permit as well as SDS sheets for any live organisms entering the facility. Samples must be safely contained when transported to the lab, according to Western guidelines.
- e. **Chemicals:** Users should follow chemical transfer procedures as per Western guidelines. SDS sheets must be provided. Transport, labeling & handling guidelines must be followed.

- f. **Nanoparticles:** Define the size and format of the particles before sending them to the facility. Particles less than 100 nm should be provided in liquid suspension whenever possible, or they may be handled onsite in a laminar flow hood only. The researcher is responsible for removing and discarding them when the work is complete.
- g. **Radioactive Materials:** Any radioactive materials of a quantity above C.N.S.C. guidelines are forbidden in this area.

#### 4. Publication, Authorship and Responsibilities:

- a. **Acknowledgement:** in publications and presentations arising from work performed here is essential for our continued financial support. In making use of our equipment, software, training or support, you agree to acknowledge the “**STAFF MEMBER NAME at Biotron Integrated Microscopy Facility, Western University**” in all publications and presentations referring to work performed here.
- b. **Notice of Publication:** As a courtesy, the Integrated Microscopy Facility should also be notified of all publications resulting from work carried out in the facility. Please email: [biotron\\_microscopy@uwo.ca](mailto:biotron_microscopy@uwo.ca)
- c. **Authorship:** For any work that requires development of techniques or processes by our staff, it is expected that suitable credit will be given to that staff member in any resulting publications. This may take the form of acknowledgement or co-authorship, as appropriate, and should be discussed before the work is completed.
- d. **Unsatisfactory Results:** Good microscopy is dependent on excellence in sample preparation. We are not responsible for research outcomes beyond our control. Instrument time is still billable even if results are unsatisfactory, unless the problem is specifically due to staff or instrument error. In such cases, an investigation will be undertaken and restitution will be applied if warranted. We always strive to be fair to all parties. In the case of new or untested sample types, please refer to the “sample” section of this document.

#### 5. Safety Policies:

- a. **Required Safety Training:** Trainees using the laboratory areas must comply with all Western University policies for Occupational Health and Safety. Before work can begin all users must present proof of up-to-date Occupational Health and Safety Training (refer to trainee policies for details). An onsite safety training and orientation will also be provided, including any relevant and current public health protocols and precautions.
- b. **Responsibility:** In the case of Western students and employees, the designated supervisor is ultimately responsible for the conduct and safety of their trainees while onsite in the facility. Trainees who fail to comply with Western and Biotron health and safety guidelines or engage in inappropriate behavior may be asked to leave the facility.

#### 6. Rates and Billing:

- a. **Fees:** The current rate sheet is available upon request or on our website. Our self-sustaining core facility is not associated with any principal investigator and thus we have no grant funds. User fees cover the cost of operation, maintenance, and supplies, while staff costs are supplemented by the Faculty of Science. Rates are reviewed annually and brought in line with similar Canadian facilities.
- b. **Estimates:** We are happy to prepare estimates of project costs, however these estimates are not quotations, and are non-binding due to the variable nature of research work. We will



attempt to warn you when a project is running over budget. Researchers are also encouraged to tell us if they have a budgetary cap.

- c. **Billing:** A Western speed code, account #, or PO# must be indicated on the registration form before work can proceed. Fees are billed monthly, generally within the first 2 weeks of the following month via Mustang Market. A breakdown of costs can be provided on request.
- d. **Training Fees:** Staff time for training is offered **\*\*FREE\*\*** to all Western students. Any instrument time used during the training will be billable at standard rates. Staff, researchers, post-doctoral fellows and external users will be billed for training at current technical rates.
- e. **Instrument Fees:** Instrument time is billed according to both the online booking calendar and the instrument log sheets. We strive to be fair if a user misjudges their time, but you may be billed for whichever time is greater on busy instruments, to be fair to those hoping to book sessions on the calendars.
- f. **Consumable Fees:** There will be reagent and consumable costs charged for some materials. These may arise from ordering supplies, or from accumulating bench costs and specialized reagent costs used for staining, or for specialized supplies required for TEM.
- g. **After Hours Fees:** “After hours” discounts may be offered for select instruments which are heavily booked during the daytime. “After hours” is considered to be time outside of 8:00 AM-5:00 PM. If a session begins during the daytime, it will be billed at full rates until 5:00 PM. Only trusted, experienced users are offered after-hours access at our discretion.
- h. **Fee-for-Service request:** We offer several paid services. Our primary priority is student and user training, so such requests will only be undertaken when staff are available. Please refer to our rate sheet, or request an estimate.
- i. **Sample Failure and Instrument Malfunctions:** Proper sample preparation is the responsibility of the user. Instrument and technical fees are billable regardless of outcome, unless instrument failure, staff error or one of our reagents is specifically at fault. If an instrument malfunctions during use, we will discount the charges if the trainee informs us.
- j. **Unusual samples:** We continually strive to develop suitable preparation methods for new and unusual sample types. If outcomes are unsure, a preliminary Memorandum of Understanding will be required. We recommend doing pilot studies with clearly outlined cost limits defined in these cases, and we may offer you a “developmental” pricing rate in some cases.
- k. **Instrument Damage:** We expect breakdowns of equipment due to normal wear and tear from time to time, however supervisors may be asked to contribute to repairs for any negligent damage caused by users who fail to comply with our training and rules.

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I, \_\_\_\_\_ have read and understood the Standard Operating Procedures as outlined in this document.

Date \_\_\_\_\_ Signature \_\_\_\_\_