

UBC Centre for High-Throughput PHENOGENOMICS

CHTP News

Wednesday, March 25, 2015

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New CHTP Website

We have updated the website to reflect some changes at the Centre. New equipment (Hitachi SU3500 SEM and Olympus LEXT Confocal) is now available for use; full specifications are now on the Equipment pages and bookings may be made in the online calendar.

We have streamlined the access request forms to be more user friendly, updated our pricing to include new equipment and minor fee adjustments to reflect operational costs.

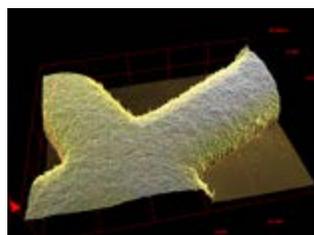
Finally, we are populating the Research Publications page to highlight users' research successes and promote the value of the CHTP to the research mandate of UBC. Send your publication and presentation information to pheno@dentistry.ubc.ca

>> www.phenogenomics.dentistry.ubc.ca

Olympus LEXT Confocal Microscope

New equipment: In February 2015, the CHTP received the Olympus LEXT Confocal Microscope through an equipment sharing agreement with CDRD. This confocal microscope differs from the existing cohort because it is specifically designed for surface imaging of materials (ceramics, glass, semiconductor chips, etc.). Analysis capabilities include feature width analysis, film or bump thicknesses, line or surface roughness and volume measurements.

>> [Olympus LEXT Confocal Microscope](#)



In addition to surface analysis this system may be an adjunct for the scanning electron microscopy user to broadly profile the surface of their samples prior to subsequent correlative downstream imaging obtained with the SEM.

Hitachi SU3500 Scanning Electron Microscope

New equipment: In February 2015, the CHTP also replaced the old Cambridge thermionic scanning electron microscope with a new variable pressure Hitachi SU3500 scanning electron microscope. Images show the move-in and setup of the new machine.

Facilities & Equipment

Facilities

- [Main Lab](#)
- [Cell Culture Facility](#)
- [Data Analysis Room](#)

Scanning Electron Microscopy

- [Helios FIB-SEM](#)
- [Hitachi SU3500](#)

Light Microscopy

- [Nikon Confocal](#)
- [Leica White Light Laser Confocal](#)
- [AxioPlan II Fluorescent Microscope](#)
- [Zeiss AxioVision/PALM Laser Capture](#)
- [Optical Projection Tomography \(OPT\)](#)
- [Olympus LEXT Confocal](#)

X-Ray Imaging

- [Micro-CT Specimen Scanner](#)
- [Micro-CT In Vivo Scanner](#)

Mass Spectrometry

- [MALDI](#)

Sample Preparation

- [Leica Cryostat](#)
- [Leica EM MED020 Coating System](#)
- [Critical Point Dryer](#)
- [Microwave Preparation](#)

New Users

To access the equipment housed within the Centre for High-Throughput Phenogenomics, principal investigators (normally faculty) need to fill in an



The Hitachi SU3500 is envisioned as the workhorse scanning electron microscope for the facility. A novice user will be able to quickly learn to operate the system independently with minimal training. With this equipment settings can be stored for each user, allowing users with multiple samples to quickly obtain their data without spending a significant amount of time optimizing acquisition settings between samples. This system supports large sample imaging with a large depth of focus to view the entire sample.

By adding this equipment to the suite of SEM imaging equipment we can designate the majority of basic SEM surface imaging to this new machine and we will free up the Helios Dual Beam for more advanced users that require EDS, EBSD, FIB, STEM, etc imaging capabilities.

User training will begin in early April. Any current Helios SEM users that are interested in switching to the Hitachi system should contact: pheno@dentistry.ubc.ca

>> [Hitachi SU3500 Scanning Electron Microscope](#)

About CHTP

The Centre for High-Throughput Phenogenomics offers a comprehensive suite of imaging technologies. Its broad goal provides two- and three-dimensional information and analysis about the structure of specimens using scanning electron microscopy, optical imaging, X-ray imaging, and mass spectroscopy.

The CHTP is a core facility, and welcomes collaborative, interdisciplinary research projects from across universities, research organizations, and corporate users.

CHTP Corporate Sponsors

Significant in-kind CFI support provided by the following corporate sponsors:



[Access Request Agreement Form \(PDF\)](#).

Access Updates for Registered Users

Have new personnel in your laboratory who need access to the Centre? Fill in an [Add User Form \(PDF\)](#).

Have current personnel who need access to additional equipment? Fill in an [Add Equipment Form \(PDF\)](#).

Submit Forms

Submit completed forms to Dr. Nancy Ford, Director of the Centre, at nlford@dentistry.ubc.ca

Pricing

Pricing for each item of equipment, as well as sample preparation, professional assistance and training is conveniently posted online.

[Review the pricing sheet \(PDF\)](#)

Booking

Registered users may book equipment online. Click the **booking link** on the [CHTP homepage](#) to find booking calendars for each item of equipment.

www.chtp.ubc.ca

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