

UW SMPH Electron Microscope (EM) Facility Statement

The SMPH Electron Microscopy Facility provides support to researchers and scientists working on advanced imaging projects. Our facility partners with other research cores to offer high-quality histological, ultrastructural, and 3-D topographical analysis, as well as consultative services. We focus on the creation of specialized preparations of biological specimens, and quantitative morphometric analyses via imaging on a fee-for-service basis. Our team of highly skilled scientists/technicians provide expertise in ultrastructural analysis, histology, molecular techniques, and digital imaging to assist with data acquisition and analysis.

Our facility is equipped with state-of-the-art electron microscopes and other advanced imaging equipment to support the shared instruments and its users. We have two campus lab locations with space for histology, EM sample preparation, freeze substitution service, with separate rooms for core imaging instruments, and our east campus location offers convenience to WIMR researchers. Our services encompass general histology, electron microscope preparations (TEM, SEM, SBFSEM), negative/positive staining for microorganisms and macromolecules, high pressure freezing, image acquisitions and analysis, and customized molecular pathology.

Our team consists of a diverse and highly trained staff, including a core manager, three technicians, and faculty director with extensive electron microscopy imaging experience. We own many instruments to meet clinical and translational investigators' research demands. We have recently installed high pressure freezing capabilities with a Leica EM ICE high pressure freezer with E-stim and Light stim. We also have a Zeiss Gemini SEM with Gatan 3View for three dimensional tomography. In addition, we have three transmission electron microscopes equipped with digital camera capture capabilities to aid with imaging and quantitation of electron microscopy imaging experiments.

Our facility is directed by Mrinalini Hoon, PhD, Assistant Professor in the Department of Ophthalmology and Visual Sciences, who also serves as the Director of the UW SMPH EM Facility. We provide services to researchers and scientists from the campus community and beyond. Our facility is located on the third floor of the Wisconsin Institute for Medical Research Tower II (WIMR II), and we have additional space within the Bardeen Medical Labs building, the facilities manager office, and space for lab personnel and training.

Upgrade your research capabilities with our all-in-one electron microscopy facility.

Locations and Maps:

Bardeen Medical Labs

Physical Address:

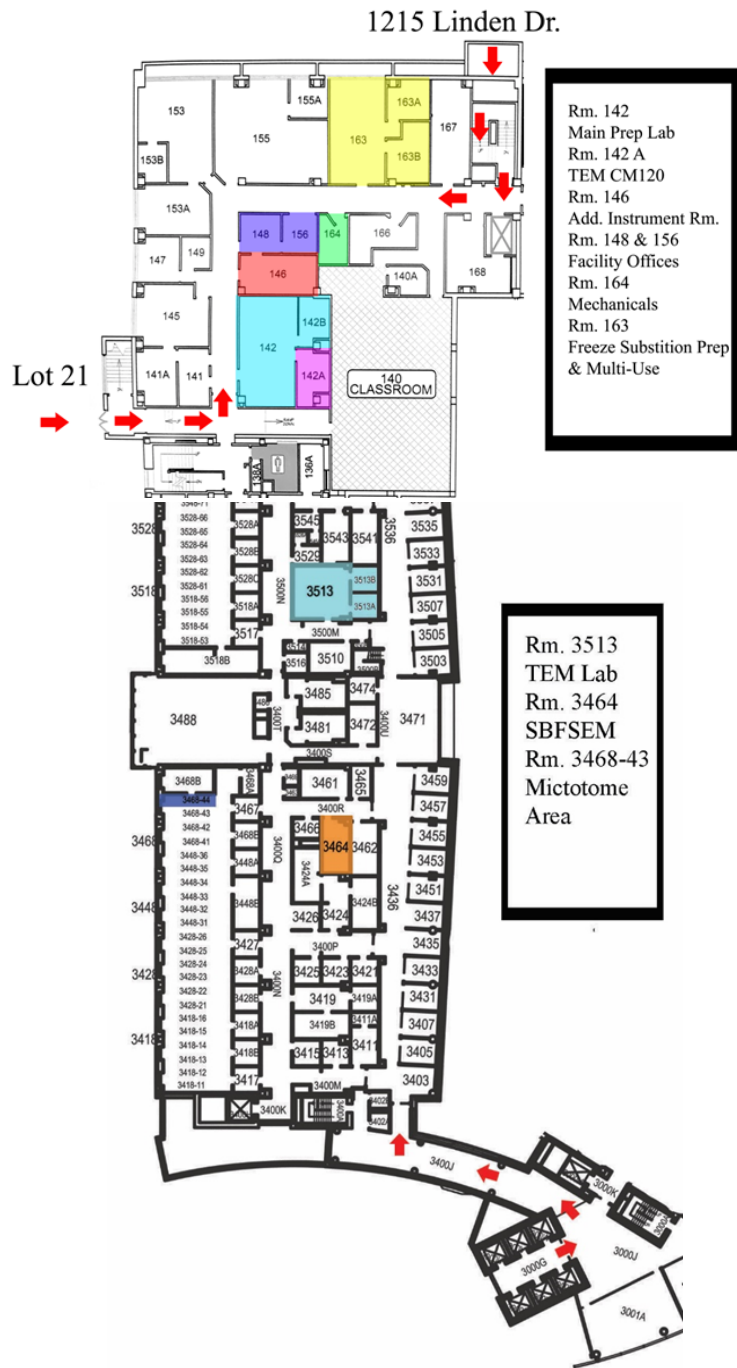
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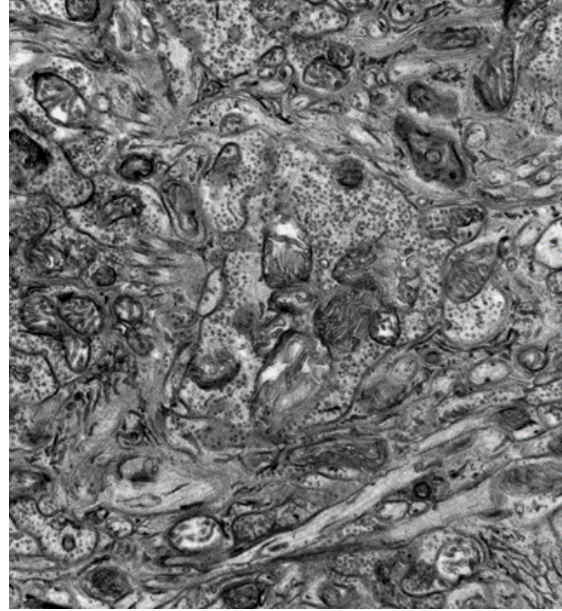
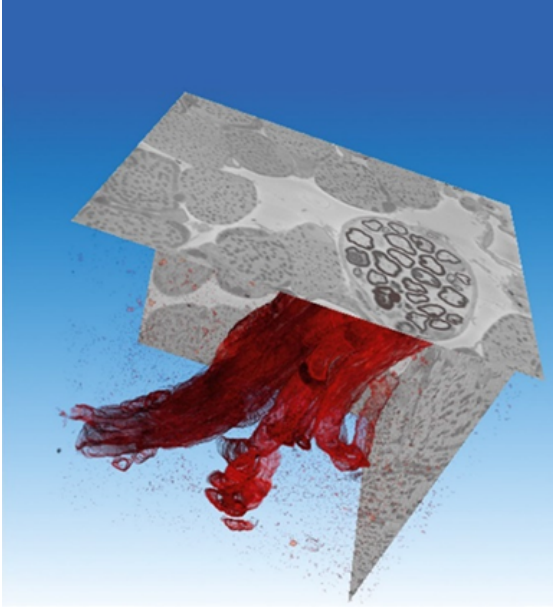
Mailing Address:

1300 University Ave.

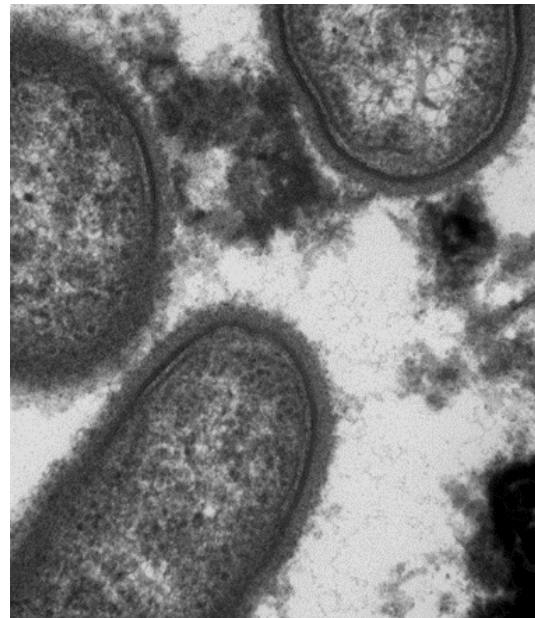
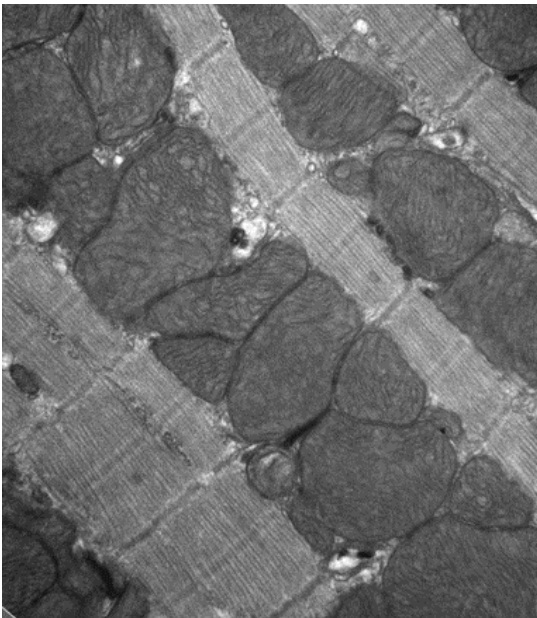
WIMR II

1111 Highland Ave.

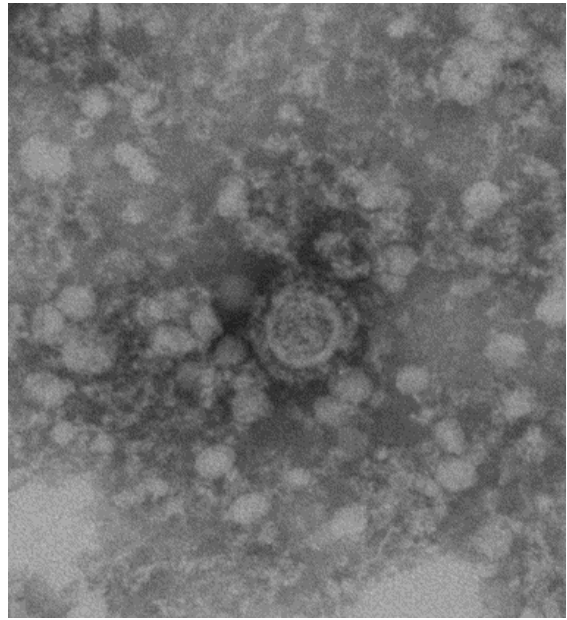
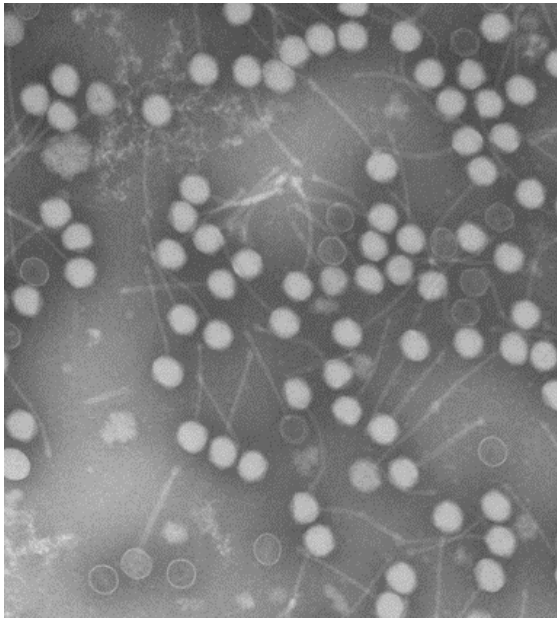




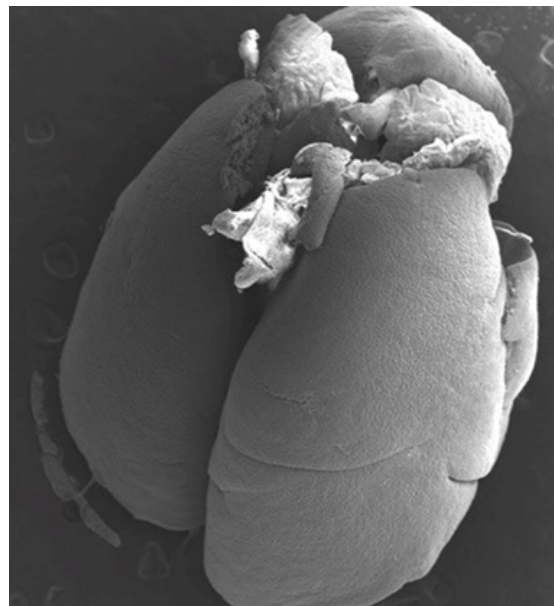
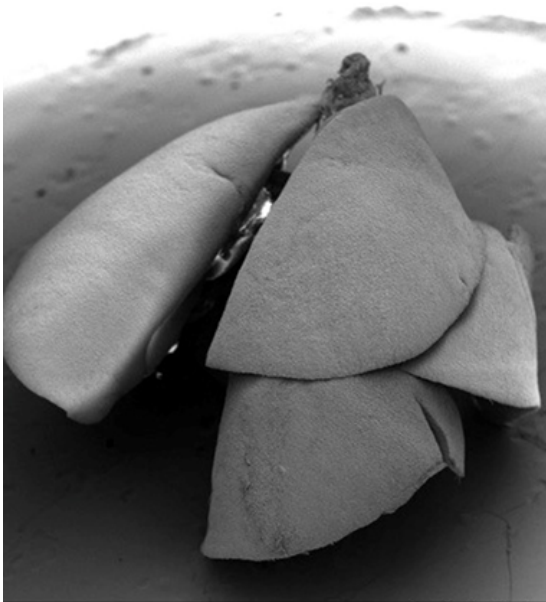
Serial Block Face Scanning Electron Microscopy



Transmission Electron Microscopy



Negative staining and positive methyl cellulose/UA staining



Scanning Electron Microscopy