Summary
Our scanning electron microscope (SEM) can aid your medical device development and safety assessment. We’re able to run a variety of SEM studies to enhance your research and development program.

Types of SEM Studies:
- Surface analysis of tissue/medical device
- Elemental analysis (EDS)
- Cellular morphology/topography
- Biofilm assessment
- Analysis of pharmaceutical particles
- Analysis of nanoparticles
- Medical device wear debris
- Medical device corrosion
- Other study types are available – consult our team to learn more

Scanning Electron Microscopy

Origin
With over 20 years of electron microscopy experience, our scanning electron microscope (SEM) facility offers both low-vacuum (low resolution) and high-vacuum (high resolution) scanning electron microscopy imaging which can be tailored to your study needs.

Medical Device Studies
Our scanning electron microscope provides a variety of imaging options to support your medical device development and safety assessment. Low-vacuum scanning electron microscopy can provide valuable information on device topography, device-tissue interface information, and surface corrosion while ensuring that the tissue can still undergo histology after SEM evaluation of the device. Additionally, electron dispersion x-ray spectroscopy (EDS) facilitates elemental analysis of tissues containing device-related metallic materials. For studies requiring a higher level of cellular detail, we offer sputter-coating and high-vacuum scanning electron microscopy.

Other Studies
In addition to medical device studies, scanning electron microscopy can provide valuable information on biofilm formation, bacterial colony morphology, analysis of pharmaceutical particles, and morphology of cell and tissue surfaces, as well as many other study types. Our electron microscopy experts are available to help you determine what type of SEM analysis can enhance your research and development program.

Get Started Today