## Center for Biofilm Engineering General Facilities

The CBE core laboratories and offices have been housed in Barnard Hall (formerly Engineering and Physical Sciences Building) since 1997. The >20,000 $ft^2$ facility includes a conference and classroom, student computer lab, offices for faculty, staff, and graduate students, and twelve fully equipped research laboratories. General use areas include an analytical instrument lab, a microbiology lab with media preparation area and autoclaves, and a general molecular area with two thermocyclers, a gel running and imaging station, and spectrophotometers for nucleic acid quantification, as well as an isolated radioactive isotope lab. See below for a comprehensive list of shared equipment available.

Analytical Instrument Lab- Barnard Hall 332

- Plate Reader- Synergy Hybrid H1MF MultiMode with Take3 Plate
- Anion Chromatograph- Dionex ICS 1100
- Gas Chromatograph- SRI 8610C with TCD
- Gas Chromatograph- SRI Multi-Gas 5 with TCD and FID
- HPLC- Dionex Ultimate 3000SD with VWD and RID
- HPLC- Dionex Ultimate 3000RS with FLD
- GC-Mass Spec- Agilent (6890/5973N)
- Micro Balance- Mettler Toledo MT5
- TOC Analyzer- Scalar LAS160
- NanoDrop- Spectrophotometer ND1000
- NanoDrop- Fluorospectrometer ND3300
- 2 Genesys 10S UV-VIS scanning spectrophotometers
- Corbett research Rotor-Gene RG-3000 qPCR thermocycler

Radioisotope Laboratory- Barnard Hall 329

- Liquid Scintillation Counter- Packard Tricarb 1900 CA

Microbiology/Media Preparation Lab-Barnard Hall 325

- Autoclave- Primus Gravity Eagle P ET21-104-00203
- Autoclave- Consolidated
- Autoclave- Consolidated 20x20x38 with nickel clad chamber SSR-3A-PB
- Autoclave- Market Forge STM-E
- Dishwasher- Napco Floor Model NLW-200
- Centrifuge- Sorvall RC-5C floor model
- 2 Centrifuge- Sorvall Legend XTR CF8
- Water Purification System- Millipore Advantage A10
- Gel Documentation System- Point Grey Chameleon3 CM3-U3-31S4M Camera
- 2 Thermocycler- Eppendorf Mastercycler ep gradient
- Oven- Thermo Fisher Scientific 664
- 2 Shaking Incubators- VWR-Troemner, Ambient +5°C to 60°C
- Incubators at 30°C and 37°C

## Center for Biofilm Engineering Microscope Facilities

- 2 Nikon Eclipse E-800 research microscopes equipped with Photometrics MYO cooled CCD cameras and Universal Imaging Corporation's MetaVue software (v7.4.6)
- Leica M 205 FA computer-controlled stereomicroscope and Leica DFC3000G fluorescence camera
- Nikon SMZ-1500 barrel zoom stereomicroscope equipped with a color camera
- Leica CM1800 cryostat
- Dry ice maker
- Leica SP5 Confocal Scanning Laser Microscope- inverted confocal microscope with 405, 488, 561 and 633 nm laser excitation lines, equipped with a tandem scanner, an environmental control chamber, and a motorized stage with Mark-and-Find and image tiling capabilities
- Leica SP5 Confocal Scanning Laser Microscope- upright confocal microscope with 405, 488, 561 and 633 nm lasers, a motorized stage, Mark-and-Find, and tiling capabilities, with a removable heated chamber that encloses the entire microscope and is equipped with Fluorescence Lifetime Imaging (FLIM), also referred to as Single Molecule Detection.
- ThorLabs Ganymede Series 200 Spectral Domain OCT (Optical Coherence Tomography)
- Leica LMD6 Laser Microdissection Microscope

Raman and Single Cell Analysis Lab- Barnard Hall 331

- Horiba Scientific LabRam HR Evolution NIR fully integrated high resolution Raman confocal microscope
- Modified Horiba Scientific LabRam HR Evolution NIR fully integrated high resolution Raman confocal microscope equipped with optical tweezers and fast-mapping fluorescence capability with 500 mW 532 nm laser and a 100 mW 785 nm laser and ultra-low frequency filters for Stokes and anti-Stokes measurements