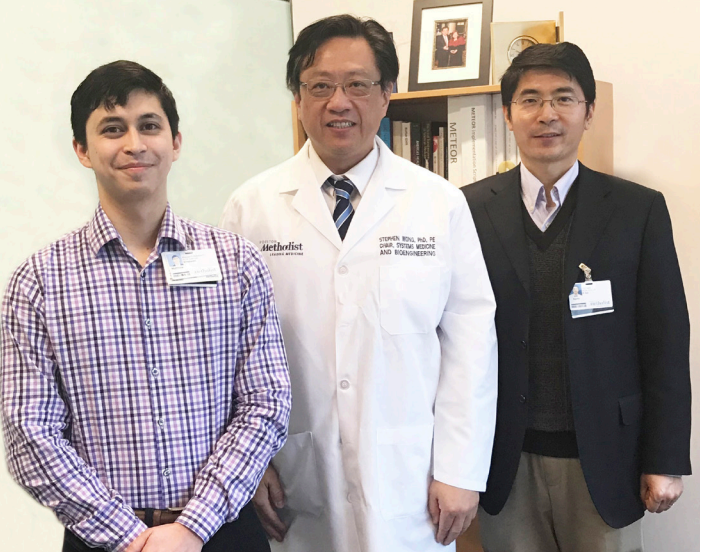

The Advanced Cellular and Tissue Microscopy Core is staffed by experienced professionals who provide assistance with experimental design, specimen preparation, advanced microscope imaging techniques, and complex imaging processing software for quantitative data analysis. We will help troubleshoot and optimize experiments to ensure the highest quality data is acquired.

Advanced Cellular and Tissue Microscopy Core

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Email: kcui@houstonmethodist.org
713.441.7270

houstonmethodist.org/tissue-cellular-imaging

MAP LEGEND

- METRORAIL
- HOUSTON METHODIST RESEARCH INSTITUTE
- R — DRYDEN/TMC METRORAIL STATION
- A — ACCOMODATIONS
- P — PARKING

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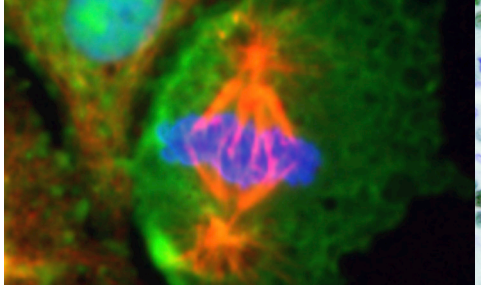
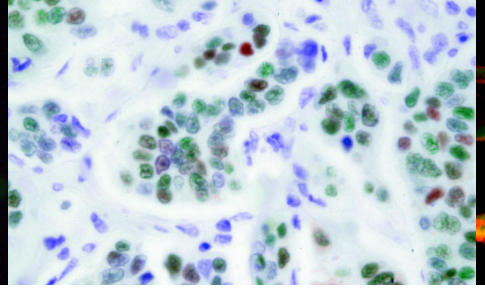
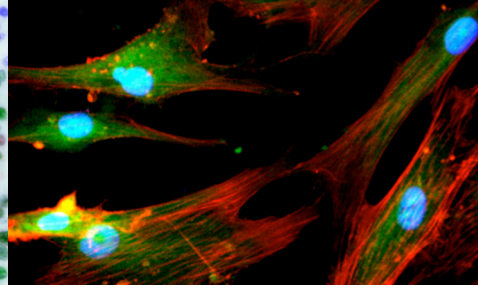
HOUSTON METHODIST
RESEARCH INSTITUTE

ADVANCED CELLULAR AND TISSUE MICROSCOPY CORE

Advanced Cellular and Tissue Microscopy Core

The Core provides Houston Methodist and the community access to advanced high-performance microscopy for cell biology and tissue pathology studies. The facility specializes in various forms of wide field imaging, high resolution laser scanning confocal microscopies, various living cell imaging systems, and two high content screening systems (ImagestreamX and ImageXpress).

EQUIPMENT & RESOURCES

- **ImagestreamX Imaging Cytometer High Content Screening System**
  - 1,000 cells per second and up to 5 lasers (488, 405, 561, 592, 658 nm)
  - 6 channels imaging and multiple magnifications (20X, 40X and 60X)
- **ImageXpress Micro High Content Screening System**
  - Automated microscopy imaging solutions for 100+ most common assays
  - Captures > 10 million cells/hour in a low-resolution; 1 million cells/hour in high resolution
- **Live Cell Spinning Disk Confocal Imaging System**
  - Fully motorized disk control, easy switching between confocal and wide-field
  - Excellent for live-cell imaging with fast acquisition and minimal phototoxicity
- **FluoView™ FV1000 Confocal Microscope**
  - High resolution confocal imaging of live cells and fixed tissues
  - Phase contrast, DIC, 4X, 10X, 20X, 40X, 40X, 60X & 100X
- **IncuCyte® S3 Live-Cell Imaging System-A Microscope Within an Incubator (R6-411)**
  - Ideal for critical time-lapse images of live cells with two fluorescent channels
  - Supporting hundreds of vessels (plates, flasks, dishes and slides)
- **Laser Capture Micro-Dissection (LCM, Arcturus)**
  - Ideal for micro-dissection of single cells under bright-field and fluorescence
  - Combine LCM and UV laser cutting for flexibility
- **Total Internal Reflection Fluorescence Microscopy**
  - A key technique in the study of molecular interactions near cell surface
  - Two lasers (488, mArgon and 543 HeNe), EM-CCD camera and 100X (NA 1.49)
- **Nikon A1 Confocal Imaging System**
  - High-quality images at high speed and enhanced sensitivity
  - High resolution images up to 4096 X 4096 pixels
- **Spero® Infrared Chemical Imaging Microscope (R6-417)**
  - A high resolution infrared spectroscopic imaging micro-spectrometer
  - 1.4 um per pixel resolution at rates over 20 times faster than FTIR-based imaging systems
- **SZX16 Research Stereo Microscope (R6-417)**
  - Both bright field and fluorescent (DAPI, GFP, RFP, and Cy7) illumination
  - With maximum numerical aperture (NA) of 0.3 and large zoom ratio of 16.4:1
- **EVOS™ FL Auto Imaging System (R6-417)**
  - A fully-automated, digital, inverted multi-channel fluorescence and transmitted light imaging system
  - With outstanding workflow efficiency and a broad range of applications (mosaic tiling and multi-position well scanning)
- **Inverted/Upright Fluorescent Microscopes (R6-411)**
  - 2X, 4X, 10X, 20X, 40X, 60X and 100X, bright-field and phase contrast
  - Fluorescence (DAPI, FITC, TRITC, Texas Red and Cy5)