The Live Imaging and Bioenergetics Facility at the CUNY ASRC will support a wide array of applications, including: in vivo imaging of live animals, time-lapse live cell imaging with high-resolution optical sectioning, deep imaging of fixed CLARITY tissues, calcium imaging, photo switching and photo uncaging, Fluorescence Recovery After Photobleaching (FRAP), Förster Resonance Energy Transfer (FRET), laser ablation, and measuring mitochondrial respiration and glycolysis in live cells in real time. The facility will also provide advanced imaging analysis software Imaris for data processing.

**AVAILABLE INSTRUMENTATION**

**ZEISS LSM 880 AIRYSCAN UPRIGHT TWO PHOTON CONFOCAL MICROSCOPE**

- Airyscan, FAST module
- Six laser lines 405, 458, 488, 514, 560 and 635nm
- 690nm-1040nm Spectra Physics Deepsee Multi Photon
- 10x, 20xWater and 40xWater objectives

**ZEISS LSM 880 AIRYSCAN INVERTED LIVE CELL CONFOCAL MICROSCOPE**

- Airyscan, FAST module
- Six laser lines 405, 458, 488, 514, 560 and 635nm
- 10x, 20x, 40xWater, 63xOil objectives
- Live cell incubation chamber

**IMARIS SOFTWARE**

- 3D/4D reconstruction and measurement
- Particle movement tracking
- Filament tracing
- Cell lineage tracking

**AGILENT SEAHORSE XFE24 LIVE CELL METABOLISM ANALYZER (24-WELL PLATE)**

- Cell metabolism phenotype characterization
- Mitochondrial respiration
- Glycolysis
- Automatic compound addition and mixing, label-free detection
- Measuring the oxygen consumption rate (OCR) and extracellular acidification rate (ECAR) in real time

**FACILITY MANAGER:**

YE HE
212-413-3182
YHE1@GC.CUNY.EDU

**LOCATION:**

ASRC, GC/CUNY FOURTH/GROUND FLOOR

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**ABOUT THE ASRC:**

The Advanced Science Research Center (ASRC) at the Graduate Center of the City University of New York (CUNY) elevates scientific research and education at CUNY through initiatives in five distinctive, but increasingly interconnected disciplines: environmental sciences, nanoscience, neuroscience, photonics, and structural biology. The ASRC promotes a collaborative, interdisciplinary research culture with researchers from each of the initiatives working side-by-side in the ASRC’s core facilities, sharing equipment that is among the most advanced available.

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**FOR MORE INFORMATION, VISIT**

ASRC.CUNY.EDU/LIVE-IMAGING

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