ADVANCED SCIENCE RESEARCH CENTER
THE GRADUATE CENTER
CITY UNIVERSITY OF NEW YORK

FACILITY MANAGER: **YE HE**
212-413-3182
YHE1@GC.CUNY.EDU

LOCATION: **ASRC, GC/CUNY**
FOURTH/GROUND FLOOR

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.

ABOUT THE ASRC
LIVE IMAGING AND BIOENERGETICS FACILITY

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

FOR MORE INFORMATION, VISIT
ASRC.CUNY.EDU/LIVE-IMAGING

CU NY

85 SAINT NICHOLAS TERRACE, NEW YORK, NY
ASRC.CUNY.EDU | 212.413.3300