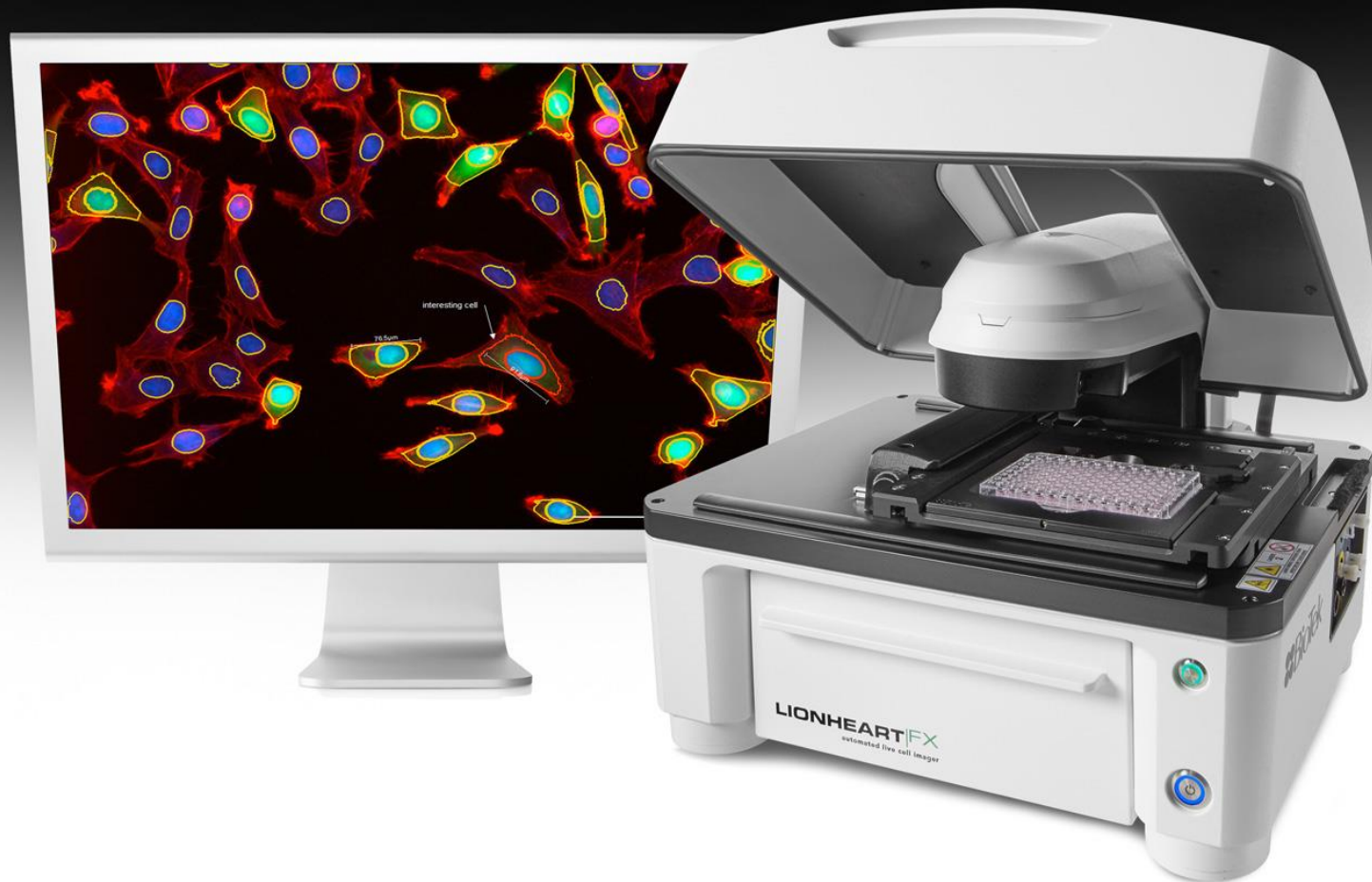


LIONHEART|FX
automated live cell imager

Brilliant Images are Only the Beginning



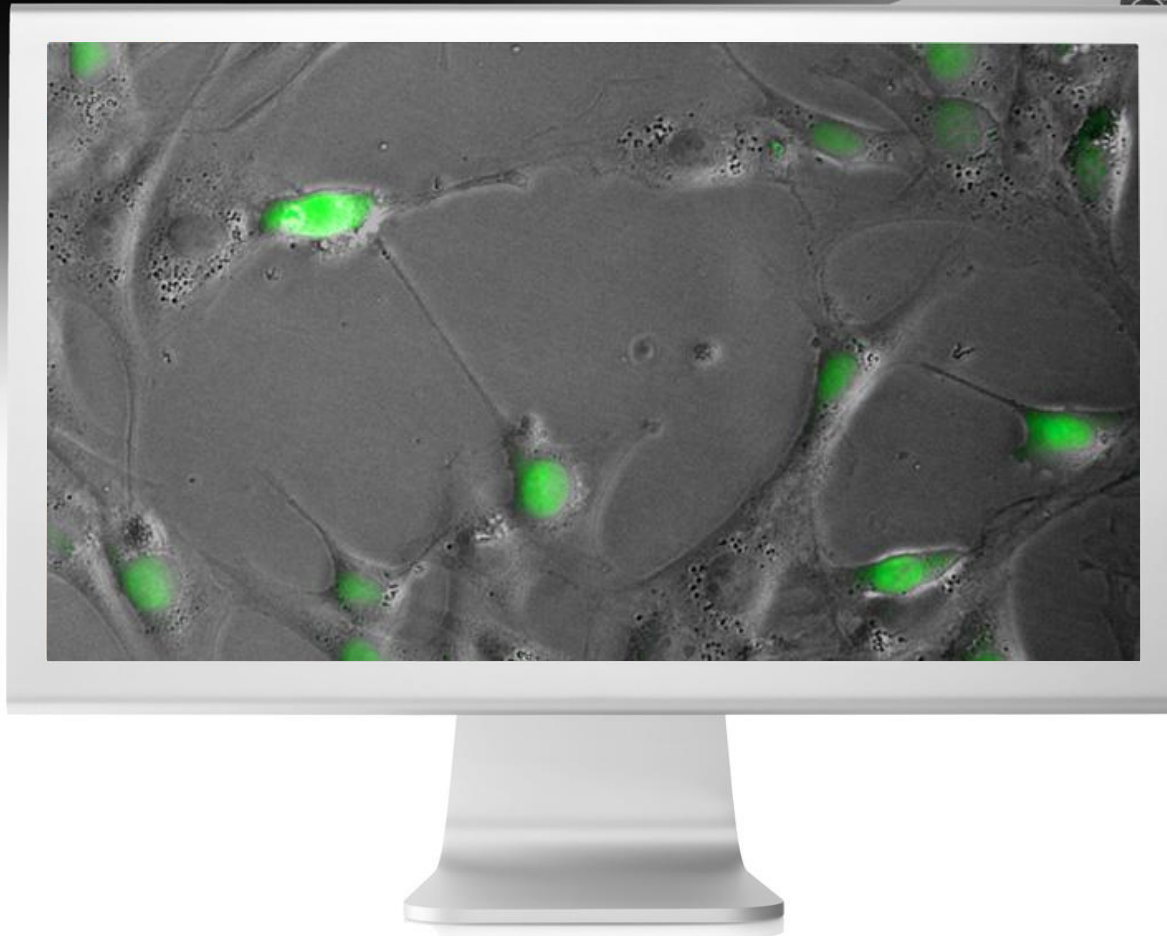
A close-up photograph of the Lionheart FX Automated Live Cell Imager. The device is a black, industrial-grade microscope with a large objective lens positioned above a multi-well plate. The plate is illuminated from below with a bright blue light, highlighting the wells. The background is dark, emphasizing the machine's sleek design.

LIONHEART™ FX
AUTOMATED LIVE CELL IMAGER

The Complete Qualitative & Quantitative
Automated Microscopy System

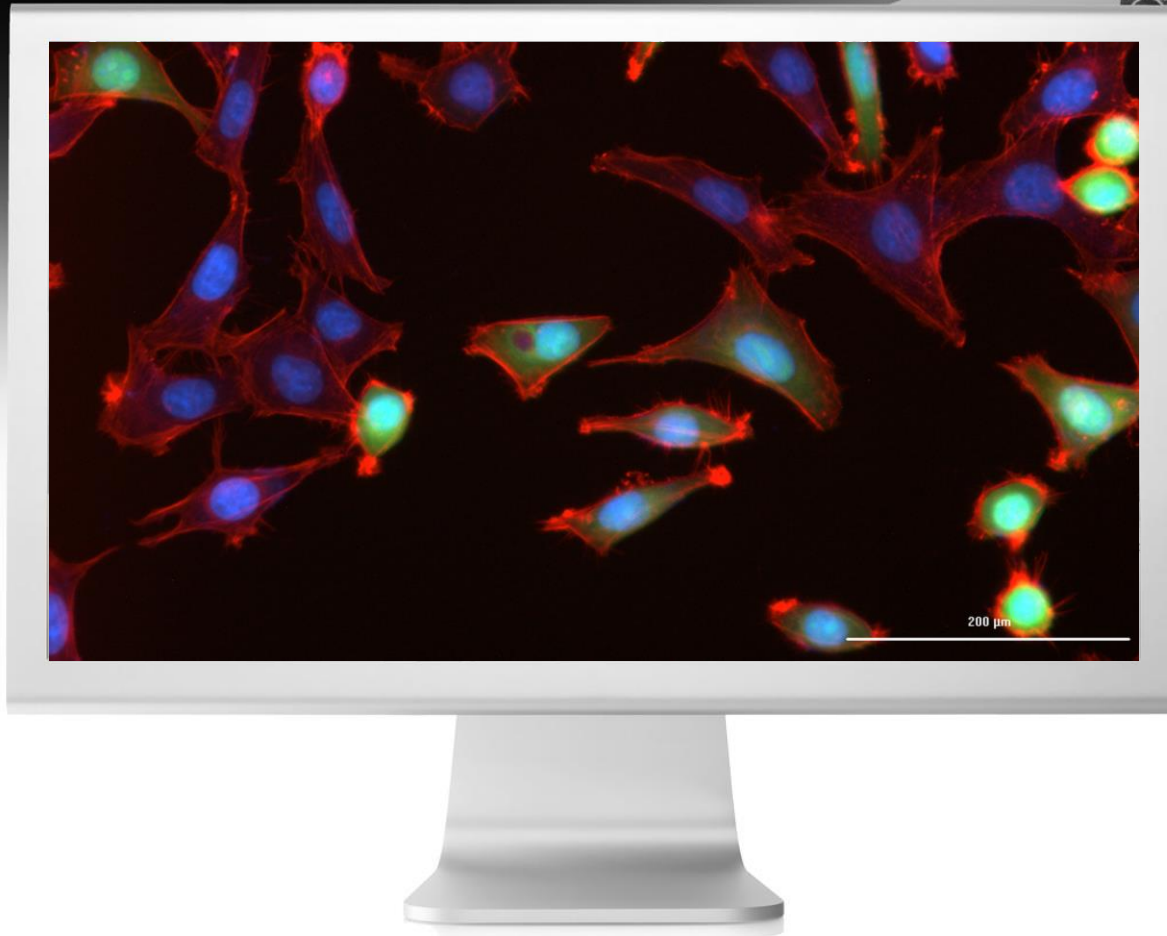
Driven by powerful Gen5™ 3.0 software,
you'll benefit from:

automated image capture



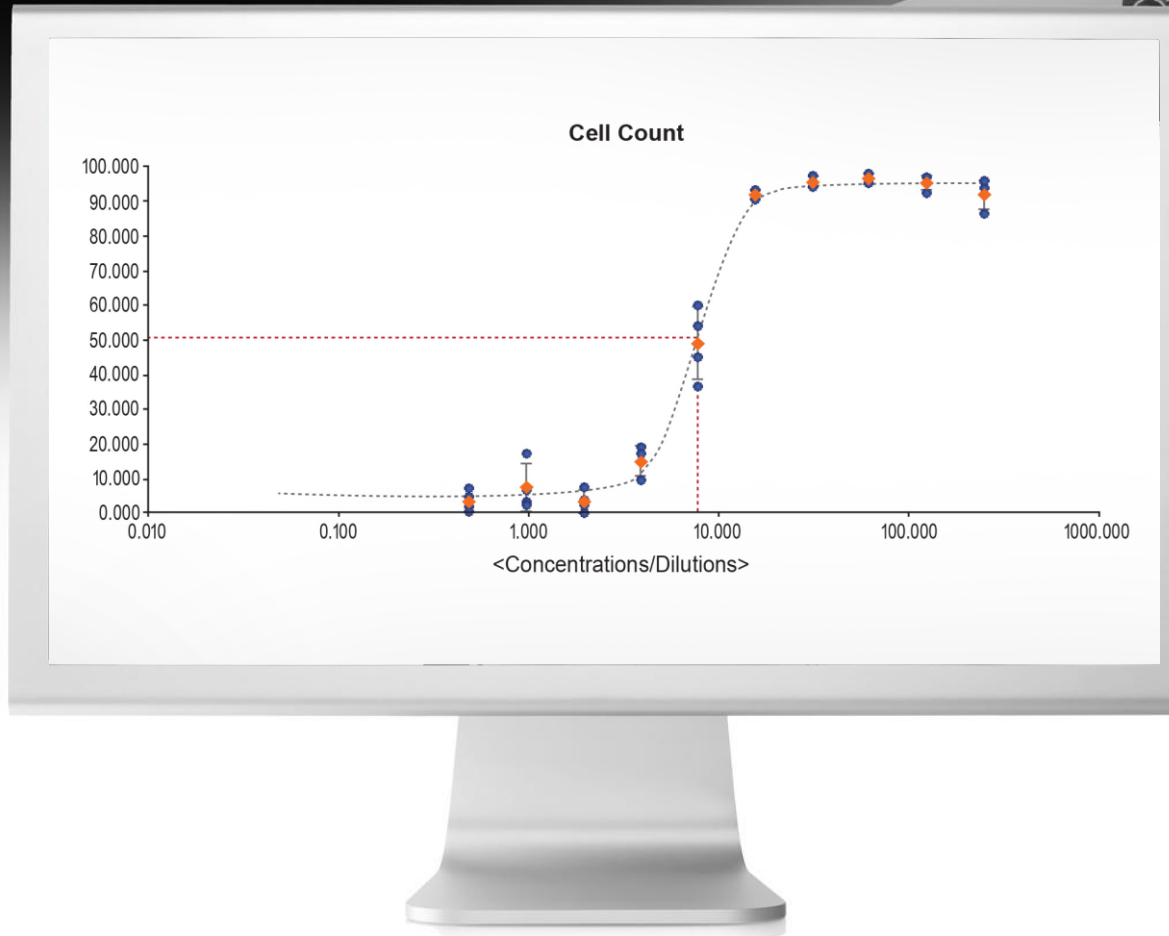
Driven by powerful Gen5™ 3.0 software,
you'll benefit from:

automated image analysis



Driven by powerful Gen5™ 3.0 software,
you'll benefit from:

automated data analysis



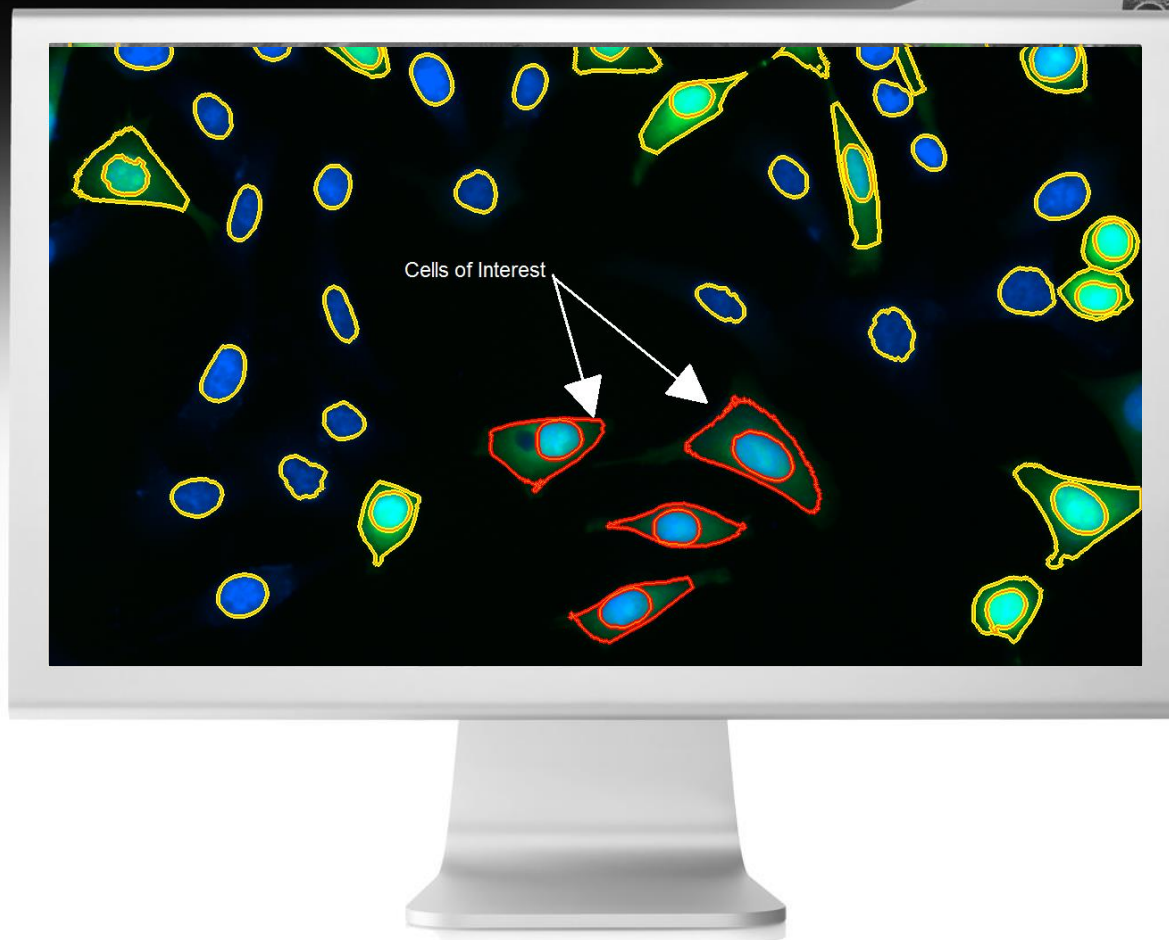
Driven by powerful Gen5™ 3.0 software,
you'll benefit from:

automated movie making

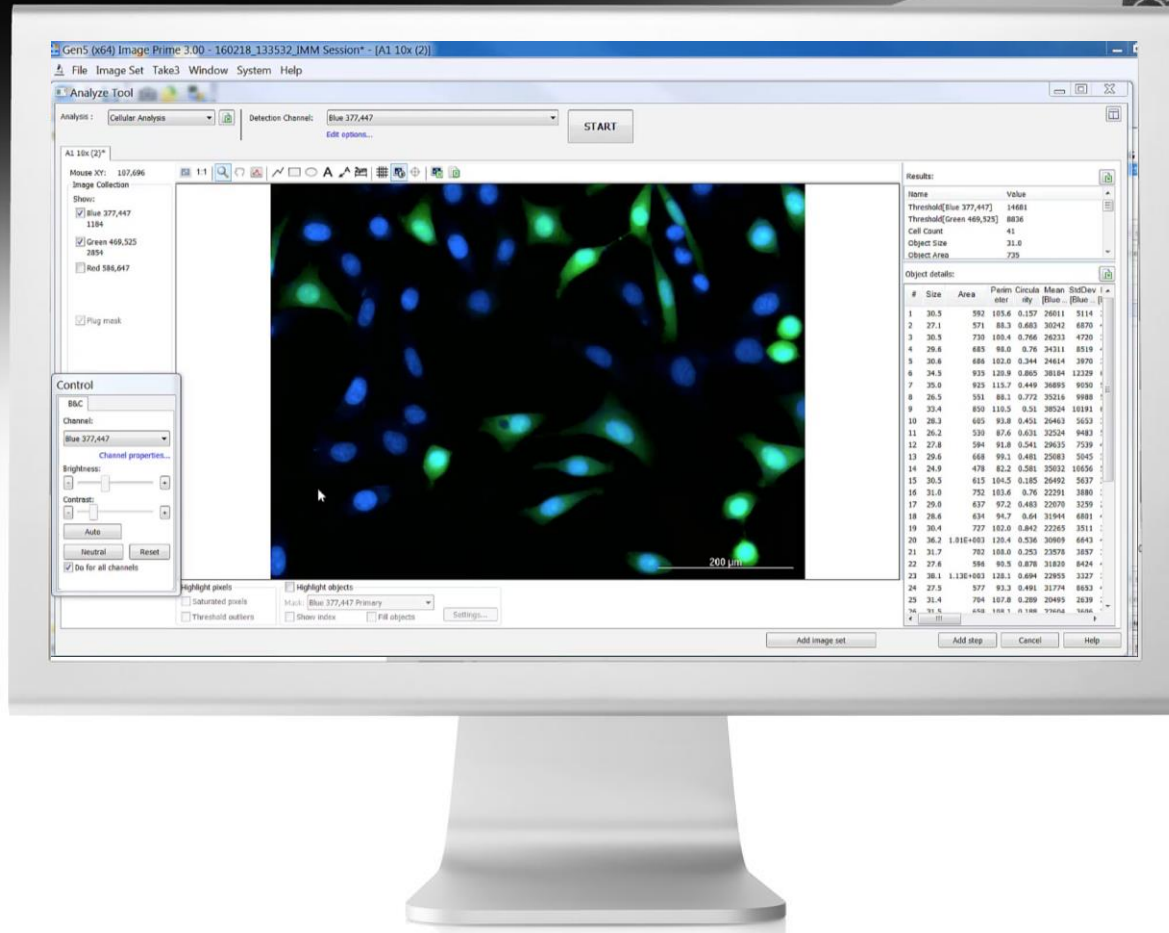


Driven by powerful Gen5™ 3.0 software,
you'll benefit from:

image annotation tools



All with no extensive training required!

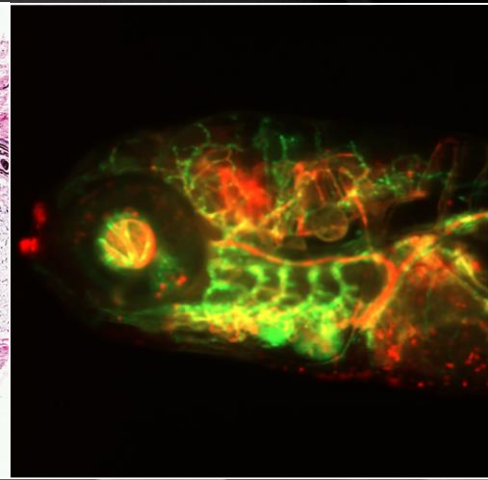
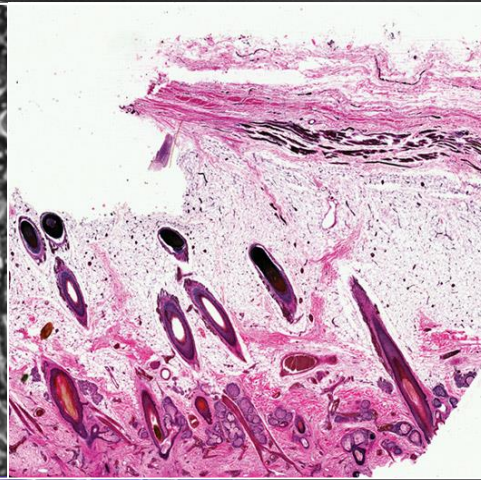
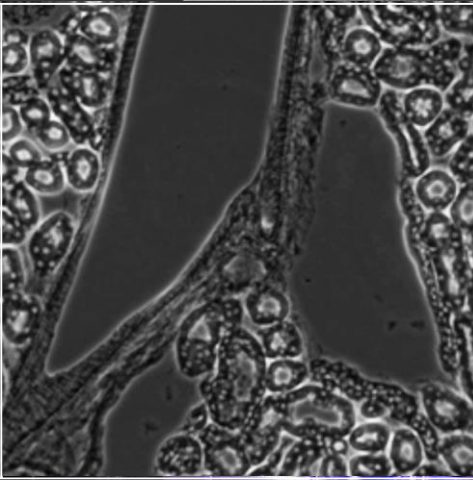
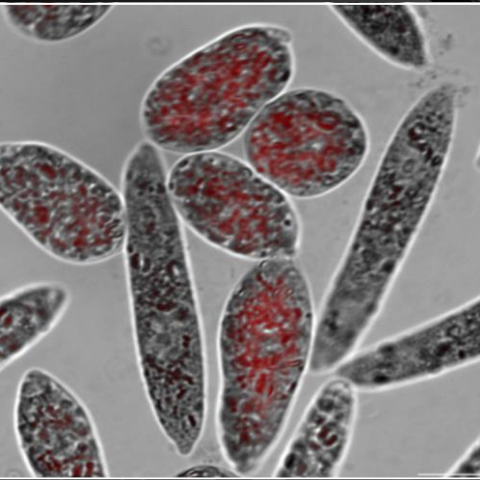


Brightfield

Phase Contrast

Color Brightfield

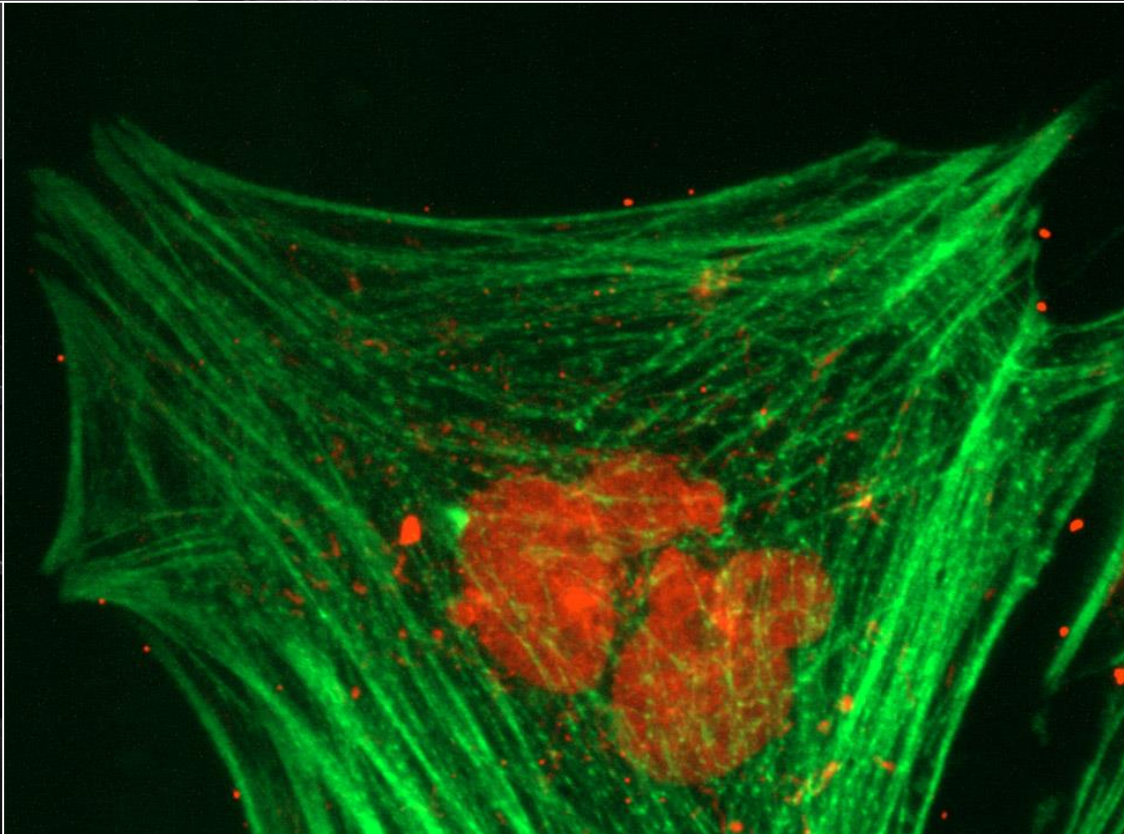
Fluorescence



▶ Very broad range of applications, from fixed cells, to live cells, to automated slide scanning

▶ With image and laser autofocus

Magnification from 1.25x to 100x oil immersion, for applications from whole organism studies (zebra fish, *C. elegans*) to detailed intracellular imaging



Kinetic live cell assay support with temperature and CO₂/O₂ control, humidity and reagent injectors



ONHEART|FX
automated live cell imager

Biotek

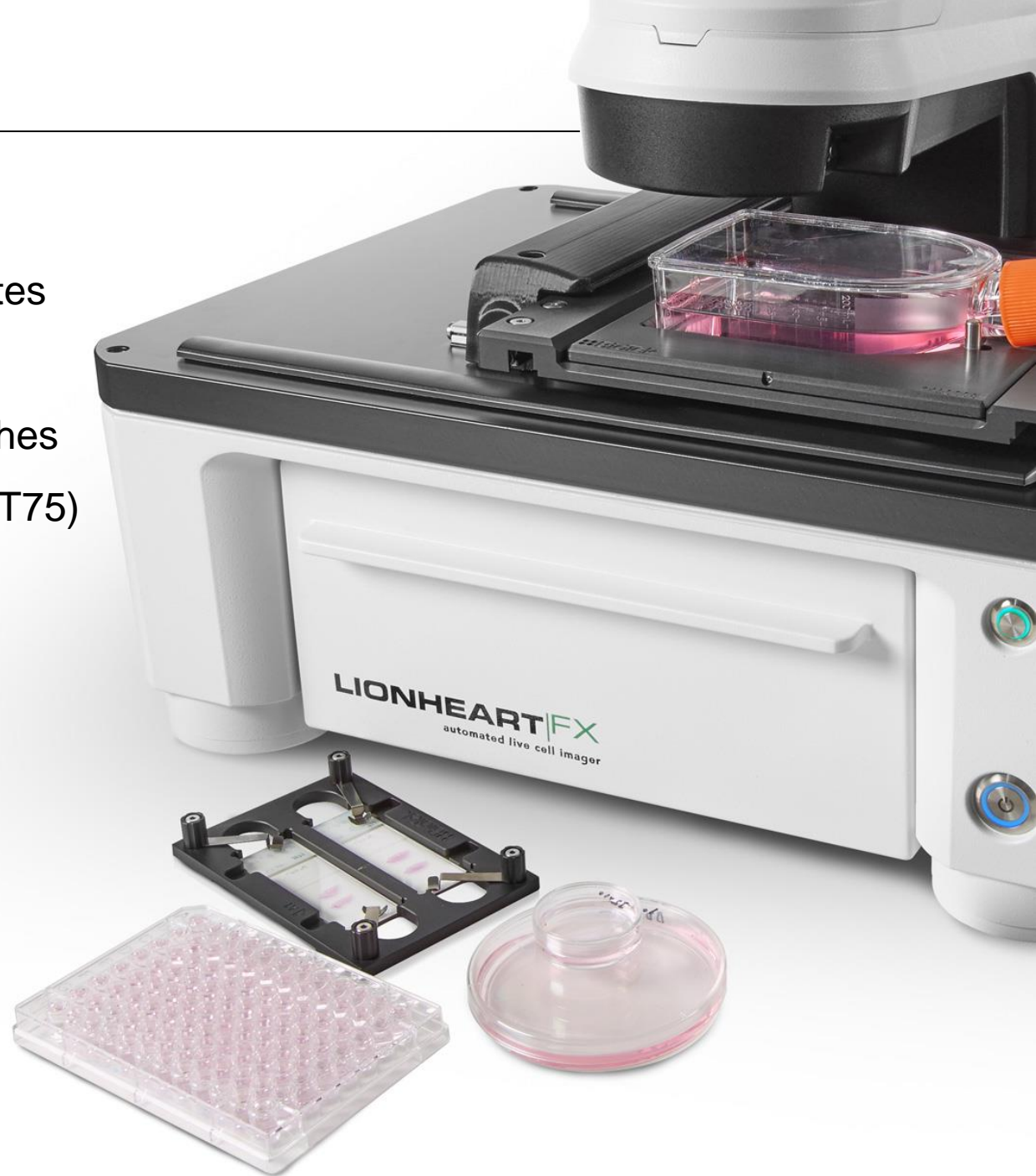
POWER CO₂ ALARM BUZZER CO₂ OUT OF RANGE FAN ALARM PUMP ALARM O₂ OUT OF RANGE O₂ GAS
CO₂ / O₂ Gas Controller Biotek

Fully integrated and compact design offers quick installation and setup



COMPATIBLE WITH:


- ▶ 6- to 1536-well microplates
- ▶ Microscope slides
- ▶ Petri and cell culture dishes
- ▶ Cell culture flasks (T25, T75)
- ▶ Counting chambers
- ▶ Chamber slides



Live Cell Imaging: short and long term measurements

- ▶ Live cell imaging over seconds, minutes, hours or days
- ▶ The environmental control cover contains the required temperature and gas circulation





The humidity chamber offers added protection for cells during measurements

- ▶ A unique gas recharge station ensures gas levels regain quickly to maintain physiological levels

Dual reagent injectors support investigation of both rapidly changing cellular activities (milliseconds) and long-term cellular responses (days)



Advanced Image Analysis Tools: Gen5™ 3.0

Gen5 Image Prime advanced analysis tools include:

- ▶ Secondary mask for analyzing cytoplasm or whole cell
- ▶ Nuclear mask expansion and dilation
- ▶ Custom object-level measurements for translocation analysis and subpopulation analysis



APPLICATIONS

- ▶ Kinetic live cell assays (normal & fast)
- ▶ Translocation
- ▶ Wound migration
- ▶ Cell migration and invasion
- ▶ Cell culture QC
- ▶ Cell proliferation
- ▶ Apoptosis
- ▶ 3D cell imaging
- ▶ Tumor invasion
- ▶ Signal transduction
- ▶ Phenotypic assays
- ▶ Calcium flux
- ▶ Translocation
- ▶ Cytotoxicity
- ▶ Cell viability
- ▶ Stem cell differentiation
- ▶ Phagocytosis



Lionheart™ FX Automated Live Cell Imager, the complete qualitative and quantitative automated microscopy system

LIONHEART|FX
automated live cell imager

100 μm

