

PENN VET IMAGING CORE FACILITY

MOLECULAR DEVICES IMAGEXPRESS MICRO 4 HIGH CONTENT IMAGING DEVICE

Location: Old Vet building, room 389E

Applications:

- Multi-well culture plate endpoint fluorescence assays such as virus infection and inhibitor assays, nuclear translocation assays, and many more
- Long-term live cell kinetic assays (fluorescence and/or phase contrast) such as scratch (wound healing) assays, cell health assays, and many more.
- Imaging and analysis of chamber slides.

Microscope Stand: Microscope components, motorized stage, cameras, and environmental regulation, are integrated into a single unit. The system has both laser-based and image-based focus capabilities.

Software: MetaXpress with "digital confocal" option in acquisition and a full suite of all available analysis modules and the custom application module editor.

Camera:

• Large sensor scientific CMOS detector

Objective Lenses:

(Configurable for 4 lenses at a time, must include 10x)

- 4x (0.2 NA) PLAN APO LAMBDA, 20 mm WD
- 10x (0.3 NA) PLAN FLUOR
- 20x (0.45 NA) Ph1 S PLAN FLUOR ELWD ADM
- 20x (0.75 NA) PLAN APO LAMBDA, 1 mm WD
- 20x (0.45 NA) S PLAN FLUOR ELWD, correction collar 0-2mm
- 40x (0.6 NA) S PLAN FLUOR ELWD, correction collar 0-2mm
- 60x (0.95 NA), PLAN APO LAMBDA, 0.11mm to 0.21 WD



Light Source:

• Lumencor Sola Light Engine (solid-state white light for fluorescence excitation)

Filter Cubes:

- DAPI
- FITC
- TRITC
- Texas Red
- Cy5

Formats for specimen preparation :

• Any standard footprint multi-well culture plate (plate format may need to be programmed in if not previously used with this machine)

• Chamber slides (slide adapter is available)

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