

## PENN VET IMAGING CORE FACILITY

### LEICA DM6000B UPRIGHT WIDEFIELD FLUORESCENCE MICROSCOPE

**Location:** Hill Pavilion, room 373

**Applications:**

- Acquisition of full-color images from histology slides
- Acquisition of fluorescence images
- Tile and stitch image acquisition with motorized stage
- Z-stack acquisition for deconvolution with Huygens software.

**Microscope Stand:** Leica DM6000B upright microscope with EL6000 fluorescence light source; Differential Interference Contrast (DIC) available for 40x, 63x, and 100x objective lenses; Motorized stage

**Software:** LAS X

**Cameras:**

- Leica DMC-2900 color camera (3.1 MP, 2048 x 1536)
- Hamamatsu Orca 03G CCD camera (1344 x 1024)

**Fluorescence Filter Cubes:**

	<u>Excitation</u>	<u>Dichroic</u>	<u>Emission</u>
DAPI	325-375	400LP	435-485
GFP	450-490	495LP	500-550
Y3	532-558	565LP	570-640
Y5	590-650	660LP	662-738
TXR	540-580	585LP	592-668

**Objective Lenses:**

- 5x HC PL FLUOTAR (0.15 NA), dry
- 10x HC PL APO (0.40 NA), dry
- 20x HC PL APO (0.70 NA), dry
- 40x HCX PL APO (1.25-0.75 NA, iris), oil immersion
- 63x HC PL APO (1.40-0.60 NA, iris), oil immersion
- 100x HC PL APO (1.40-0.70 NA, iris), oil immersion

