

# Technical Specifications – FRET

- **Objectives:**

- 5X/0.15 Plan-Neofluar. Brightfield (H)
- 10X/0.45 Plan-Apochromat. Brightfield (H), Phase contrast (Ph1) and Nomarski (DIC II)
- 20X/0.6 Plan-Apochromat. Brightfield (H), Phase contrast (Ph2) and Nomarski (DIC II)
- 40X/1.3 oil Plan-Neofluar. Brightfield (H), Phase contrast (Ph3) and Nomarski (DIC II)
- 63X/1.4 oil Plan-Apochromat. Brightfield (H), Phase contrast (Ph3) and Nomarski (DIC II)
- 100X/1.45 oil Plan-Fluar. Brightfield (H)

**Other objectives to be requested:**

- 2,5x/0.075 Plan-Neofluar. Brightfield (H)
- 40X/1.2 Water C-Apochromat. Brightfield (H) and Nomarski (DIC III)
- 63X/1.2 Water C-Apochromat. Brightfield (H) and Nomarski (DIC III)

- **Fluorescence Excitation:**

|                |               |               |               |                 |               |  |
|----------------|---------------|---------------|---------------|-----------------|---------------|--|
| DAPI<br>395/25 | CFP<br>434/21 | GFP<br>470/24 | YFP<br>511/16 | TRITC<br>550/15 | Cy5<br>640/30 | TEXAS 575/25<br><b>(Request to SMOC)</b> |
|----------------|---------------|---------------|---------------|-----------------|---------------|--|

- **Reflector Turret:**

- Dapi/GFP/TRITC/Cy5 (**Dichroic:** 380-404 461-487 543-566 626-644 **Em:** 432/36 514/32 595/34 730/144)
- CFP (**Dichroic:** 455DCLP **Em:** 460-500) (Chroma)
- Analyzer
- **Dichroic** CFP/YFP (440-500 510-610)
- **Dichroic** FT600

- **Fluorescence Emission – Fast Filter Wheel Changer [LAMBDA 10-3 \(SUTTER\)](#)**

|                 |      |                |                |                |               |                |                  |                     |               |
|-----------------|------|----------------|----------------|----------------|---------------|----------------|------------------|---------------------|---------------|
| DAPI<br>414-450 | Open | CFP<br>460-500 | GFP<br>520-550 | YFP<br>529-556 | YFP<br>520 LP | GFP<br>503-538 | TRITC<br>565-595 | TexasRed<br>590-650 | Cy5<br>665 LP |
|-----------------|------|----------------|----------------|----------------|---------------|----------------|------------------|---------------------|---------------|

- **Optics:** Brightfield, Nomarski, Phase contrast and Fluorescence ([Spectra-X Lumencor](#))
- **Camera:** [PCO edge 4.2 bi \(PCO\)](#)
- **Motorized Stage** ([Marzhauser](#))
- **In vivo system:** Temp, CO<sub>2</sub> and perfusion system
- **Software:** Metamorph 7.10.3.279