

# ImageXpress (Bio21)

## INSTRUMENT SPECIFICATION SHEET



|                                 |  |                   |                         |                         |                            |
|---------------------------------|--|-------------------|-------------------------|-------------------------|----------------------------|
| <b>Location</b>                 | Room 144 (inside 133A), Advanced Microscopy Facility, Bio21 Institute  |                   |                         |                         |                            |
| <b>Stand</b>                    | Inverted, Custom Built   |                   |                         |                         |                            |
| <b>Illumination</b>             | <b>Transmitted</b>   |                   |                         | <b>Fluorescence</b>     |                            |
|                                 | Nikon 100 W Pillar Diascopic Illuminator   |                   |                         | Lumencor                |                            |
| <b>Filters</b>                  | <b>Name</b>  | <b>Excitation</b> | <b>Dichroic</b>         | <b>Emission</b>         | <b>Semrock</b>             |
|                                 | DAPI   | BP 377/50         | 327-404(R), 415-950 (T) | BP 447/60               | 5060C                      |
|                                 | FITC   | BP482/35          | 350-500(R), 513-950 (T) | BP 536/40               | 3540C                      |
|                                 | TX-RED   | BP 562/40         | 350-585(R), 601-950 (T) | BP 624/40               | 4040C                      |
|                                 | Cy3  | BP531/40          | 350-555(R), 569-950 (T) | BP 593/40               | 4040C                      |
|                                 | Cy5  | BP 628/40         | 350-651(R), 669-950 (T) | BP 692/40               | 4040C                      |
|                                 | CFP  | BP 438/24         | 426-450(R), 467-950 (T) | BP 483/32               | 2432C                      |
|                                 | YFP  | BP 500/24         | 350-512(R), 528-950 (T) | BP 542/27               | 2427B                      |
|                                 | TRITC  | BP 543/22         | 350-555(R), 569-950 (T) | BP 593/40               | TRITC-B                    |
|                                 | GFP  | BP472/30          | 350-488(R), 502-950 (T) | BP 520/35               | 3035D                      |
| <b>Stage control</b>            | xyz motorized stage  |                   |                         |                         |                            |
| <b>Objectives Specification</b> | <b>Magnification</b>   | <b>Type</b>       | <b>NA</b>               | <b>Working distance</b> | <b>Coverslip Thickness</b> |
| Plan Fluor Ph1 DL MRH20101      | 10x  | Air               | 0.3                     | 16mm                    | 0.17 mm                    |
| Plan Fluor MRH00101             | 10x  | Air               | 0.3                     | 15.2 mm                 | 1.2mm                      |
| S Plan Fluor ELWD MRH08230      | 20x  | Air               | 0.45                    | 6.9 - 8.2mm             | 0-2mm (Correction collar)  |
| S Plan Fluor ELWD Ph1 MRH08230  | 20x  | Air               | 0.45                    | 6.9 - 8.2mm             | 0-2mm (Correction collar)  |
| S Plan Fluor ELWD MRH08430      | 40 x   | Air               | 0.6                     | 2.8 – 3.6mm             | 0-2 mm (Correction collar) |
| <b>Detectors</b>                | <b>#</b>   | <b>Type</b>       | <b>Details</b>          |                         |                            |
|                                 | 1  | PCO               | sCMOS 16-bit            |                         |                            |
| <b>Software</b>                 | Meta Express & Acuity Express  |                   |                         |                         |                            |
| <b>Holder</b>                   | Culture plates (e.g. 384, 96 well), slides, culture dishes   |                   |                         |                         |                            |
| <b>Applications</b>             | Live cell imaging with heated chambers and gas controls<br>Cell incubator is available for temporary storage |                   |                         |                         |                            |
| <b>File Saving</b>              | External USB   |                   |                         |                         |                            |