



## Microscopy and Image Analysis Facility

**Microscope:** Olympus Provis AX-70 Upright Epifluorescent Microscope

**Camera:** Retiga Exi Digital Camera and Toshiba Video Camera

**Software:** Image Pro Plus v7.0

<u>Filter Cube</u>	<u>Cat No.</u>	<u>Wavelength</u>	<u>Excitation</u>	<u>Emission</u>	<u>Stains</u>
CY3	41007A; 41002A	Narrow Green	545/30	610/75	Chlorophyll/Tyramide/ Propidium Iodide
U-MWU	U-M536	Ultra Violet	330-385		DAPI
FITC	U- M41001; 41001	Narrow Blue	480/40	535/50	AO, FITC, SYBR Green/ Alexa 488
U-MSWB	U-M518	Super Wide Blue	420-480		ELF
CY5	41008 HQ	Near Infrared	620/60	700/75	Alexa 647

*Table 1: Filter Cubes associated with the Olympus AX-70 epifluorescent microscope including the Catalogue number, wavelength of light including excitation and emission in nm and the relevant stains.*

<u>Objective</u>	<u>Eyepiece Grid Area um<sup>2</sup></u>	<u>Imaged Area um<sup>2</sup></u>	
		<u>Digital v7.0</u>	<u>Video</u>
<b>4x</b>	<b>4,972,900</b>	<b>1,440,392</b>	<b>2,647,759</b>
<b>10x</b>	<b>819,025</b>	<b>1,403,019</b>	<b>456,157</b>
<b>20x</b>	<b>202,500</b>	<b>345,814</b>	<b>108,673</b>
<b>40x</b>	<b>51,984</b>	<b>86,986</b>	<b>26,532</b>
<b>60x</b>	<b>21,904</b>	<b>37,681</b>	<b>11,810</b>
<b>100x</b>	<b>8,281</b>	<b>13,588</b>	<b>4,353</b>

*Table 2: Microscope Objectives and the areas associated with the eyepiece grid and image area for the Retiga Exi Digital and Toshiba Video cameras.*