UPRIGHT CONFOCAL MICROSCOPE

LEICA SP8

Location: CSB L12 Support Room 8

Applications: High-sensitive imaging at low-light levels, microinjection, FRAP, FRET

Specifications:
• Upright fixed-stage fluorescence microscope with micro injection rig, micromanipulator for electrodes
• Laser scanning confocal function with 405nm, 488nm, 555nm and 639nm lasers with two-channel MA-PMT and a HyD Detector with transmitted light detector (T-PMT) for brightfield imaging
• Objectives: 10x, 20x, 40x oil and 60x oil with high NA
• Ceramic dipping extra-long working distance 20x and 40x with interference contrast optics
• DAPI, GFP, RFP filter cubes for visualisation
• Fluorescence recovery after photo bleaching (FRAP) and fluorescence resonance energy transfer (FRET) modules
• Motorised XY-stage to accommodate a variety of dishes and plates as well as microscope slides
• XYZt-imaging
• LAS-X Control Software

Contact: Prof David Becker at david.becker@ntu.edu.sg

<table>
<thead>
<tr>
<th>Microscope</th>
<th>Location</th>
<th>NTU</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upright Confocal Microscope - SP8</td>
<td>CSB L12</td>
<td>50</td>
<td>60</td>
</tr>
</tbody>
</table>

Latest as of 1 June 2020
UPRIGHT CONFOCAL MICROSCOPE

LEICA TCS SPE

Location: CSB L12 Support Room 7

Applications: Suitable for immunohistochemistry imaging of fixed cells/tissue sections

Specifications:
• Upright microscope with motorised fluorescent filter turret, Z-drive and condenser
• Objectives: Plan Apo objectives 10x air, 40x oil and 60x oil
• DAPI, GFP, RFP filter cubes for Visualisation
• 405nm, 488nm, 561nm and 635nm Laser lines for scanning
• A spectral detector with one photomultiplier tube (PMT)
• XYZ-imaging
• LAS-X Control Software
• 3D visualisation module with the following features: volume rendering, max projection, depth coding, shadow projection, multi-channel clipping tool and movie editor and 3D output to a stereo monitor.

Contact: Prof David Becker at david.becker@ntu.edu.sg

<table>
<thead>
<tr>
<th>User fee/hour ($)</th>
<th>Location</th>
<th>NTU</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microscope</td>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upright Confocal Microscope - SPE</td>
<td>CSB L12</td>
<td>15</td>
<td>20</td>
</tr>
</tbody>
</table>

Latest as of 1 June 2020
UPRIGHT CONFOCAL MICROSCOPE

ZEISS LSM800

Location: EMB L4 Zebrafish Facility

Applications: Suitable for zebrafish embryo, fixed cells and tissue sections. XYZλ-t imaging

Specifications:
- Upright confocal with 405nm (DAPI), 488nm (FITC), 561nm (rhodamine) and 640nm (Cy5) laser lines
- Objectives: 5x/0.16 Plan Neofluor, 10x/0.3 Plan Neofluor, 20x/0.5 N-Achromplan WD, 40x/0.75 N-Achromplan WD, 63x/1.3 N-Achromplan WD, and 40x/1.3 oil DIC Plan Apochromat
- Motorised filter turret and nosepiece, manual stage
- Two-channel multi-alkali PMT detectors
- Brightfield (DIC) imaging
- Zen software for image acquisition and 3D image reconstruction/analysis

<table>
<thead>
<tr>
<th>User fee/hour ($)</th>
<th>Location</th>
<th>NTU</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microscope</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upright Confocal Microscope - LSM800</td>
<td>EMB L4</td>
<td>35</td>
<td>45</td>
</tr>
</tbody>
</table>

Latest as of 1 June 2020