

Proposed operation of the Confocal Microscope

Monash University has a BIO-RAD MRC 1024 confocal mounted on a Nikon e600 upright epi-fluorescence microscope with objective magnifications of 10x, 20x, 40x oil and 60x oil. It is fitted with a three line Kr/Ag laser, excitation lines: 488, 568, 647 nm. The acquisition software used is BIO-RAD LaserSharp2000 The confocal microscope has been relocated from Monash Medical School to the AMREP site. Monash is the majority user although there are current users from both Burnet and Baker. It is located in the Morphology room, shared imaging facility, AMREP basement. The following outlines the proposed operation of the resource.

Management

- The confocal microscope will remain property of Monash University, Dept. of Pathology & Immunology and will therefore be managed by Monash University
- As a Monash resource the confocal will be covered under Monash's insurance policy
- Future upgrades and modifications of the equipment will be the responsibility of Monash and will be undertaken at their discretion.

The resource will be openly available to other AMREP partners on a user pays scenario.

The hourly rate will be calculated for operational cost recovery. Such costs include, but not limited to, the service agreement between Monash and BioRad. The current rate is \$10.00/hr. This rate will be reviewed annually to be kept in line with the operational costs.

Booking

Booking of the resource shall be made through the University's Web based 'Calendar' system (maximum booking slot of 3 hrs at a time).

<https://calendar1.monash.edu.au/cgi-bin/nscal/login.cgi>

Baker and Burnet users shall be given access to this system to facilitate bookings. Confirmation of bookings will be managed from Monash's resource office. It is envisaged that there will not be limits, other than the 3 hrs /session, placed on booking. However, demand may require this issue to be revised at a future date.

Access

The Confocal computer uses Microsoft NT operating system. Individuals wishing to use the confocal will be set up as users on the system. The 'event log', which monitors logins and the duration, will act as a time record for billing.

Log Book

Users are required to fill in the lamp usage log and record comments of the session in the log book to enable troubleshooting.

Training

Monash do not provide a dedicated confocal operator. Bio-Rad performed the initial training of key personnel from each of the Monash research groups. The key person from each group is responsible for training of other group members and providing them with technical support. In earlier discussion between interested parties from Baker, Burnet and Monash it was envisaged that a user group / email list be established where technical issues be discussed and assistance sought.

Brian Jones of BMRI has undertaken to instruct new users from the Baker Institute.

Simon Barrett and Mark Malin provide initial instruction to Monash users and administrate the machine

Bio-rad ran a tutorial session for key personnel in November 02

Service & repairs

Routine servicing is covered under the service agreement with BioRad. Cost of repairs is also covered under the service agreement. Monash should be notified immediately of any irregularities with the Confocal Microscope and shall take the responsibility of organising service calls. Email notification should be sent via <http://www.med.monash.edu.au/cecs/Forms/EquipmentRep.html>

Security

Given the proximity of the shared imaging facility within AMREP, control of the proximity card access shall remain under Baker's control.

Networking

Control of the IT infrastructure in the imaging facility is under the control of the Baker. It is envisaged that a virtual LAN covering the data point to which the confocal shall be connected will enable the confocal to hang off the Monash network.

Data storage

Confocal images are large files and storage space is always at a premium. Therefore rules for local storage shall be enforced. Only files recently collected and yet to be analysed are stored on the machine. A user limit is set and monitored weekly. Those users exceeding the limit will be notified and asked to remove their files. Those files not removed in a timely manner will be removed by the administrator.

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