

UNSW - Electron Microscope Unit Advice for Project Grant Applications

The Electron Microscope Unit can provide assistance for project grant applications including ARC and NHMRC, in

- Determining the appropriate types of instrumentation and experiments required for a project
- Determining the appropriate number of hours of instrument access required by a project
- Budgeting for instrument access charges and associated costs (eg sample preparation)
- Providing a clear statement of the extent to which access charges are subsidised by University and Government funding

General advice is summarised here. Advice specific to the different research facilities operated by the Electron Microscope Unit can be found via the links on our website, srv.emunit.unsw.edu.au. The Electron Microscope Unit is part of the UNSW Analytical Centre and boarder facilities are available in this centre. Advice specific to the different research facilities operated by the Analytical Centre can be found via the links on the our website, www.analytical.unsw.edu.au

Instrument Access and Related Costs

The major cost for an experiments carried out in the Electron Microscope Unit will normally be instrument access charges. Guidelines on incorporating these in your budget are given below for ARC and NHMRC applications.

Depending on the techniques involved, there may be costs associated with, for example specialist sample preparation. If necessary, contact the Director of the Electron Microscope Unit to discuss your particular needs and for guidance on budgeting for specialised experiments.

Electron Microscope Unit staff will provide training for your researchers and students to enable them to run their own experiments. If you need advice on justification of personnel (e.g. what level of expertise might be required and hence what level of appointment is needed to support the project), discuss your specific needs with Unit staff.

Access to External Facilities

Your project may require access to experimental facilities not available at UNSW. The Electron Microscope Unit is part of the Australian Microscopy and Microanalysis Research Facility (AMMRF) with formal linkages to other microscopy facilities. Through AMMRF, UNSW researchers have access to cutting edge facilities at other institutions. Details can be found at www.ammrf.org.au

Contact

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EXAMPLE 1, ARC Discovery

Budget

This example relates to a project that requires an average of 4 hr per week of microscopy. Include a line item in the Budget Table C1 for the appropriate years, as shown below.

Column 1 Source of Funds	2 ARC	3 University	4 Other	5 Total
DIRECT COSTS				
Other				
Electron Microscope Analysis (200 hr @ \$30/hr)	\$6,000	\$12,000	\$0	\$18,000

Section C2; 'Justification of Funding'

"The research project requires the scanning electron microscope analysis of prepared membranes at the rate of 2 samples per week for 50 weeks in years 2 and 3, with an estimated 2 hours instrument time per sample. The base cost for student operated access to electron microscopes is \$90/hr to which the university contributes \$60/hr (for UNSW projects. A balance of \$30/hr is requested from the ARC."

If space permits add further specific explanation of why electron microscopy is necessary, for example: "Scanning electron microscope is at present the most effective method of assessing the structure of these materials at the required resolution."

EXAMPLE 2, NHMRC

Budget

This example relates to a project that requires access to electron microscopy for one sample per week, at 4 hours per sample, for 45 weeks. This yields 180 h of beam time and a total project cost of \$5,400 at the subsidised internal rate of \$30 per hour. Add your calculated access fees for each year into your total Direct Research Costs and insert the total into the appropriate year box in Section 8.3. Justify each item of Direct Research Costs in Section 8.4.

Section 8.4; 'Justification of Direct Research Costs'

"This research project requires the examination of one sample per week using advanced microscopy and microanalysis with an estimated 4 hours per specimen at a subsidised cost of \$30 per hour of instrument time."

If there is space, you can add further specific explanation of why the microscopy is necessary.