

NCRIS 5.3 Characterisation - Linked Laboratories and Centres

Introduction

Capability 5.3 (Characterisation) in the current NCRIS round includes the establishment of a national capability in Microscopy and Microanalysis. It is intended to establish a national Advanced Microscopy Microanalysis Research Facility that will operate as Australia's leading facility for characterisation of matter on a fine scale. This facility will specialise in instrumentation, methodologies and applications of materials characterisation using ion and electron beams, scanned probes, x-rays as well as light and laser optics. This collaborative facility, comprised of research expertise and research infrastructure, will be accessible by all Australian researchers, enabling discovery, innovation and ingenuity in Australian science. The national facility is based around a nodal structure of major microscopy centres, together with linkages to other laboratories. It is proposed to establish a series of Linked Laboratories and Linked Centres across the facility for the provision of specialist research services or expertise. Our national facility is delighted to establish these highly strategic relationships to assist with the provision of research services to a national user base.

The following document outlines the protocols and policies to be used in the establishment and operation of Linked Laboratories and Centres

Background

It has been proposed to establish a number of "Linked Laboratories and Centres" as part of a national research facility for Microscopy and Microanalysis. This document describes the likely role, operational parameters, reporting requirements and criteria for selection of these entities. At present, it is expected that up to eight Linked Laboratories or Centres will be created.

A 'Linked Laboratory' will likely be a node of the network at an institution or organisation external to the principal nodes of the national facility, e.g. an institution within the university sector or some relevant part of a PFRA.

A 'Linked Centre' will likely be established in conjunction with a major research centres at a publicly funded institution, for example an ARC CoE node, or CRC node, etc

It is likely that there will be some degree of heterogeneity in the individual form and operation of these laboratories and centres. This background provides only indicative detail.

It is anticipated that these laboratories and centres would be funded, in total, to a level of ~ \$500,000 over a five year period. 50% of the funds would derive from NCRIS and 50% from the linked organisation. It is expected that funds would be used principally to hire a 'Microscopist' (probably at ~ Level A or equivalent). However, up to 10% of the total funds may be used for other non-personnel expenses, (travel, recruitment costs, staff development etc.) Any additional costs associated with hosting a Linked Laboratory or Centre will be borne by the linked institution or centre as an in-kind contribution.

The Linked Laboratory or Centre Microscopist would perform duties that would depend on the individual Laboratory or Centre, and its role in a national network.

For example, at a Linked Laboratory with specialist equipment or expertise, the Microscopist would:

- Act as the principal point of contact for Australian researchers who would like to access the facilities at that laboratory.
- Ensure interactions between the visiting researcher and Linked Laboratory occur in a timely and efficient manner with satisfactory research outcomes.
- Provide support and advice to users prior to instrument usage, in order to ensure the users are choosing the correct facilities for their particular scientific problem,
- Give support subsequent to the acquisition of data for data analysis and interpretation of data.
- Act as a contact point in assisting researchers native to that laboratory to access facility nodes elsewhere in the country.
- Advise local researchers on location and access to the most appropriate facilities for their needs.
- Assist local researchers in microscopy-focused research programs using facilities within the Linked Laboratory itself.

The Microscopist would report to a senior researcher/academic in that organisation. It is expected that the incumbent devote about 50% of their time to research services' for the broader national research community. The Linked Laboratory will levy access charges to non-local government-funded researchers. It is expected that these access charges will fall within the envelope of charges determined by the national facility of between \$40 and \$90/hr. The Linked Laboratory may charge corporate users at full cost recovery rates.

For a Linked Centre, the Microscopist would play a major, and pivotal, role in assisting that centre's researchers perform high level microscopy and microanalysis at the local facility node as well facility nodes across the country. They would likely be an experienced microscopist who is able to best advise researchers from that group on the most appropriate techniques and facilities to solve that user's research problems. Their duties would include

- Assisting in the acquisition of data, and provision of support in data analysis and interpretation.
- Assisting in the training of researchers from that centre in microscopy and microanalysis techniques.
- Prosecution of their own program of research, consistent with that research centre's mission

The Microscopist in a Linked Centre would report to the local node Microscopy Centre Director or an appropriate designee.

KPA's and KPI's

It has been determined that the national facility will perform against the broad KPA's of "Research Services, Research Training and Research Program". Different "Linked Laboratories and Centres" would likely perform against these KPA's, but in different ways

For example, in a Linked Laboratory there would be emphasis on provision of research services to researchers from across the country. This would inevitably involve research training in the specialist techniques located within that laboratory etc. For a Linked Centre there would be lower emphasis on research services, but a greater emphasis on research programs. There would be subtly different emphases on these differing KPA's for each different laboratory.

Like KPA's, different laboratories and centres might each define different KPI's. Overall, KPI's defined would be consistent with NCRIS principles on access to research infrastructure. Details of exact KPI's will be determined subsequently; some examples might include:

- *Research Services*: Number of users, number of user publications, number of beam hours provided, ease of access, user satisfaction etc.
- *Research Programs*: Number of microscopy-related publications produced by Laboratory/Centre members, grants awarded.
- *Research Training*: Number of independent (trained) users, attendance at courses.

COMMITMENT TO THE NATIONAL FACILITY

It is expected that the Linked Laboratory or Centre would exhibit a high level of commitment in its association with the national research facility to form a genuine, active partnership. It is expected that the participants agree to certain commonalities to accommodate their role in the national facility, such as.

- Standard costings for instrument access as part of a sustainable business plan for all nodes of the Facility.
- A common experience for all users across all nodes, irrespective of their institutional affiliation;
- A sense of belonging and membership to the national facility team for the local staff; and
- Participation in strategic planning exercises, appropriate branding, mutual promotion and active participation in specialist committees

REPORTING REQUIREMENTS AND ACCOUNTABILITY

The Linked Laboratories and Centres will report and liaise to the national facility via the facility's executive group. A Linked Laboratories and Centres committee will be established which manages interactions of these laboratories and centres with the national facility. It is expected that this committee would meet quarterly. It would also be expected that research leaders and the NCRIS-funded Microscopist would attend an annual facility workshop and other similar networking events.

The Linked Laboratories and Centres will be required to report financial, administrative and KPI-related data in a timely, accurate and efficient manner.

Linked Laboratories and Centres will report to the facility Chief Operating Officer a quarterly activity statement indicating, for example, the number of users, hours of access etc. and financial activity. Annual reporting requirements will involve these KPI's plus data on publications, grants etc.

All parts of the national facility will be reviewed annually including Linked Laboratories and Centres. Linked Laboratories and Centres will be expected to perform satisfactorily against their KPI's. Linked Laboratories and Centres that are unable to meet these reporting requirements will be asked to relinquish their obligations.

METHODS OF SELECTION (LINKED LABORATORIES)

Institutions who wish to be considered as a Linked Laboratory should send a formal expression of interest to the Professor Paul Munroe, Director - Electron Microscope Unit, University of New South Wales. This should be submitted electronically to p.munroe@unsw.edu.au by 5PM on September 22nd, 2006.

A Linked Laboratories and Centres selection committee has been formed who will review the applications and rank them against the section criteria. Linked Laboratories that best meet the criteria will be provided with a letter of offer from the Facilitator or his nominee. It is expected that offer letters will be provided by about September 30th, 2006.

If the institution wishes to accept this offer they will need to advise the facilitator or his nominee in writing. This acceptance should also include a letter from the relevant organisational senior executive (DVC(R), Chief of Research, Chief Scientist etc.) agreeing to the conditions of acceptance including a firm commitment of cash and in-kind contributions. Ultimately, a deed of agreement will be executed between the relevant organisational senior executive (DVC(R), Chief of Research, Chief Scientist etc.) and the national facility.

Selection Criteria

A Linked Laboratories and Centres selection committee has been formed consisting of members from the facility operations group. This committee will select Linked Laboratories against defined selection criteria. These criteria will include:

1. Commitment of the organisation to the national network. This would include commitment of cash (\$250,000 over five years), in-kind and, the provision of access to local instrumentation and expertise to researchers across the facility.
2. An indication of what facilities and expertise would be available to the Australian research community, and their value to the wider research community. The availability of access and the fraction of time on nominated instruments that will be made available should also be indicated.
3. An indication of the access rate to those facilities and any other costs that users may be charged for access.
4. The quality of the research environment: the track records of the research leadership within those institutions, the quality of the laboratory infrastructure etc.
5. The ability and commitment to provide access in a simple and effective means with minimal encumbrance.
6. The capacity and commitment to meet reporting requirements.

The method of application is by a written statement which addresses the above criteria. This should also include, if appropriate, details of any known planned down-time that the instrument/capability is scheduled for in the next 5 years (key staff going on sabbatical, major planned instrument maintenance, new building works etc.). Letters of application should not be longer than 5 written pages.

Further details can be provided by Professor Paul Munroe, Tel: 02-9385-4435, p.munroe@unsw.edu.au.

METHODS OF SELECTION (LINKED CENTRES)

Institutions who wish to be considered as a Linked Centre should send a formal expression of interest to the Professor Paul Munroe, Director - Electron Microscope Unit, University of New South Wales. This should be submitted electronically to p.munroe@unsw.edu.au by 5PM on September 22nd, 2006.

A Linked Laboratories and Centres selection committee has been formed who will review the applications and rank them against the section criteria. Linked Centres that best meet the criteria will be provided with a letter of offer from the Facilitator or his nominee. It is expected that offer letters will be provided by about September 30th, 2006.

If the institution wishes to accept this offer they will need to advise the facilitator or his nominee in writing. This acceptance should also include a letter from the relevant organisational senior executive (DVC(R), Chief of Research, Chief Scientist etc.) agreeing to the conditions of acceptance including a firm commitment of cash and in-kind contributions. Ultimately, a deed of agreement will be executed between the relevant organisational senior executive (DVC(R), Chief of Research, Chief Scientist etc.) and the national facility.

Selection Criteria

A Linked Laboratories and Centres selection committee has been formed consisting of members from the facility operations group. This committee will select Linked Laboratories and Centres against defined selection criteria. These criteria will include:

1. Commitment of the organisation to the national network. This would include commitment of cash (\$250,000 over five years).
2. The quality of the research environment of the Linked Centre: the track records of the research leadership within those institutions, the quality of the laboratory infrastructure etc.
3. The ability and commitment to provide support to the facility in a simple and effective means with minimal encumbrance.
4. The capacity and commitment to meet reporting requirements.

The method of application is by a written statement which addresses the above criteria. This should also include, if appropriate, details of any known planned encumbrance that would inhibit the successful prosecution of research programs in the next 5 years (key staff going on sabbatical, major planned instrument maintenance, new building works etc.). Letters of application should not be longer than 5 written pages.

Further details can be provided by Professor Paul Munroe, Tel: 02-9385-4435, p.munroe@unsw.edu.au.