

**Submission to the  
National Research Infrastructure  
Taskforce**



# Association of Australian Medical Research Institutes

President: Professor Michael Good  
The Queensland Institute of Medical Research  
The Bancroft Centre, 300 Herston Road  
P.O. Royal Brisbane Hospital QLD 4029  
Tel: (07) 3362 0203  
Fax: (07) 3362 0110

National Office Canberra  
PO Box E15  
Kingston ACT 2604  
Tel: (02) 6239 6595  
Fax: (02) 6239 5571

28 August 2003

## Summary

The independent medical research institutes (MRIs) make a vital contribution to Australian health and medical research. They have an aggregate budget of more than \$160 million per annum, and educate more than 1100 Honours, Masters and PhD students each year. The AAMRI institutes have an international reputation for outstanding science and are a major partner in commercialisation of Australian biomedical discoveries.

Rapid advances in technology demand sophisticated, state-of-the-art equipment for Australian health and medical research to remain internationally competitive. Given the Federal national research priority of "Promoting and Maintaining Good Health", the MRIs must be included in any future research infrastructure strategy. A whole of Government approach that encourages partnership within Australia's own research sector will be critical to the nation's success in the global research arena.

A new system of infrastructure funding is imperative to redress the current deficiencies in infrastructure support across the entire research sector. Notably, there is an urgent need to address the issue of basic infrastructure within the independent MRIs, which are not eligible to receive any form of Federal infrastructure support, and overall, obtain State infrastructure funding at half the rate of the university sector (19% versus 37% of total, annual research income) (*The Case for Infrastructure Support to the Independent Medical Research Institutes, page 2*). In light of the national research priorities, this inequity is unacceptable.

Commonwealth infrastructure support linked to competitive research grants will deliver an equitable and transparent infrastructure funding system (see Issue 2). An appropriate strategy would require the Federal Government to provide infrastructure support on Federal grants, including NHMRC fellowships. State and Territory Governments should not reduce current levels of support and provide adequate levels of infrastructure support on non-Federal grants and State by State initiatives. Furthermore, additional funding will be required to ensure current funds to the universities are not decreased.

## Definition of Research Infrastructure

Research infrastructure has many components. For the purposes of this review, major research infrastructure has been defined as expensive equipment, data sets and networks, which all require support personnel.

In addition to major research infrastructure, there is basic infrastructure which indirectly supports research, and although essential, is not funded by research grants. Under this heading, as well as computing centres and the salaries of support staff which would be included in the above definition, such research infrastructure also includes libraries, animal houses, building maintenance, supply and service costs, salaries for management, administrative staff, and ethics and safety committees.

Conservative estimates of the full costs of research indicate each dollar of direct grant support requires 70 cents in infrastructure support. Notably, a Boston Consulting Group review requested by the National Board of Employment, Education and Training in 1992 estimated that research infrastructure costs add 70% to direct research costs.

## **Issue 1 - Australia's Future Research Infrastructure Needs**

The independent MRIs carry out some of Australia's most distinguished research in almost every aspect of human health and disease. They have an aggregate budget of more than \$160 million per annum and make a significant contribution to post-graduate biomedical education by training more than 1100 Honours, Masters and PhD students each year. The MRIs are also a major partner in commercialisation of Australian biomedical discoveries.

Just as for the university sector, rapid advances in technology necessitate high-end, state-of-the-art equipment for Australian health and medical research within the MRIs to remain internationally competitive. Currently, there is not enough funding to cover the cost of skilled personnel to operate sophisticated equipment. In addition, the current system does not cover the cost of depreciation of equipment.

The increasing success and expansion of Australian medical research post-Wills means the basic infrastructure costs that support research have also increased significantly. Notably, more than half of the MRI's research income is won competitively from the NHMRC who do not provide funding for infrastructure support. Unlike the university sector, the MRIs are not eligible to directly receive Federal infrastructure funding such as Research Infrastructure Block Grants (RIBG), the Institutional Grants Scheme (IGS), and the Systemic Infrastructure Initiative (SII). Furthermore, *Backing Australia's Ability* provided additional funding of \$337 million over five years for university infrastructure. The MRIs are excluded from this funding.

Some State governments provide direct infrastructure support to the MRIs, but the methods and levels of funding are variable across states, and even between institutes within the same state. An audit of 28 AAMRI institutes found total infrastructure funding to the MRIs from State governments was 19% of total, annual research income, compared to the university sector who overall, obtain 37% of total, annual research income in Federal infrastructure support (*The Case for Infrastructure Support to the Independent Medical Research Institutes, page 2*) see Figure 1, page 5. Given the Federal National Research Priority of "Promoting and Maintaining Good Health", this inequity in infrastructure funding is unacceptable.

The current system of infrastructure funding to the research sector is complex and lacks transparency. The Health and Medical Research Strategic Review 1999, which was endorsed by Cabinet, recommended that Australia develop a coherent approach to infrastructure funding for research. The report suggested a cooperative approach should involve the Commonwealth, including the Department of Education, Science and Training (DEST) and the Department of Health and Ageing (DHA), the States and Territories, the National Health and Medical Research Council (NHMRC) and the Australian Research Council (ARC) (section 5.3.3). This has yet to occur.

At present, lack of infrastructure support to the MRIs means research output is seriously threatened and the gains of Wills are not utilised anywhere near to their full extent. It is increasingly difficult for MRIs to function, with several facing severe financial difficulties because their operating costs exceed their ability to raise support for infrastructure. The current situation limits the growth of some MRIs who are unable to accept additional grants that do not provide infrastructure support.

## **Issue 2 - The Commonwealth's Research Infrastructure Funding System**

Given that a major weakness of the current research infrastructure funding system is that the MRIs are excluded from Federal infrastructure support, and Australia's resource base is modest at best, the productivity and quality of Australian health and medical research is under serious threat.

There is an urgent need for a new system of infrastructure funding to address the current deficiencies in infrastructure support across the research sector. Any forward looking strategy for research infrastructure, must foster collaborative use of research infrastructure and include the MRIs.

An efficient and effective infrastructure funding system, would at the very least, include Commonwealth infrastructure funding to be linked to competitive research grants. This approach would allow the research sector to obtain infrastructure support in a clearly defined and transparent fashion, improving accountability, and ensuring improved outcomes for the best health and medical research.

A suitable strategy for infrastructure funding to the health and medical research sector would be as follows:

- **The Federal Government should provide infrastructure support on Federal grants.**
- **State and Territory Governments should provide adequate infrastructure support on non-Federal grants and State by State initiatives.**
- **NHMRC fellowships should be included in the strategy, with a component for both instrumentation and administration of the fellowship.**
- **State/Territory infrastructure support to the MRIs must not be reduced.**

Additional funding will be required so current funds to the universities are not diluted.

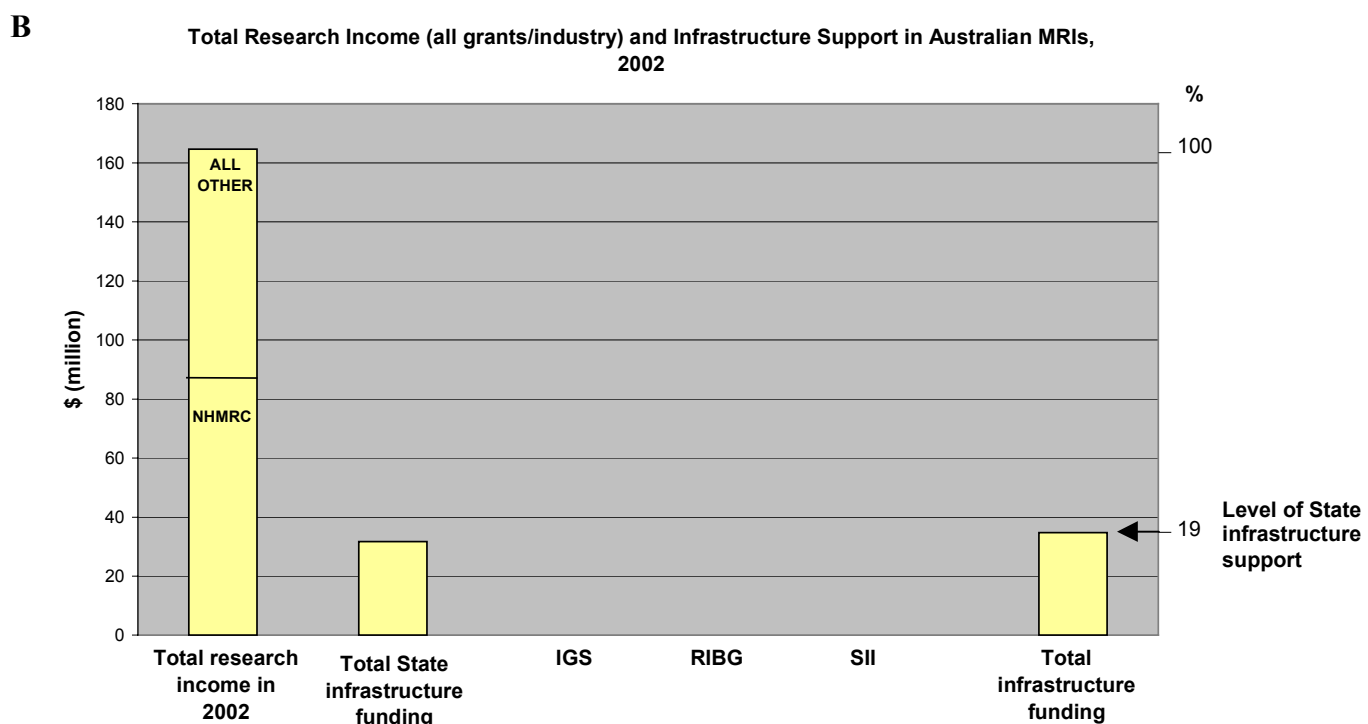
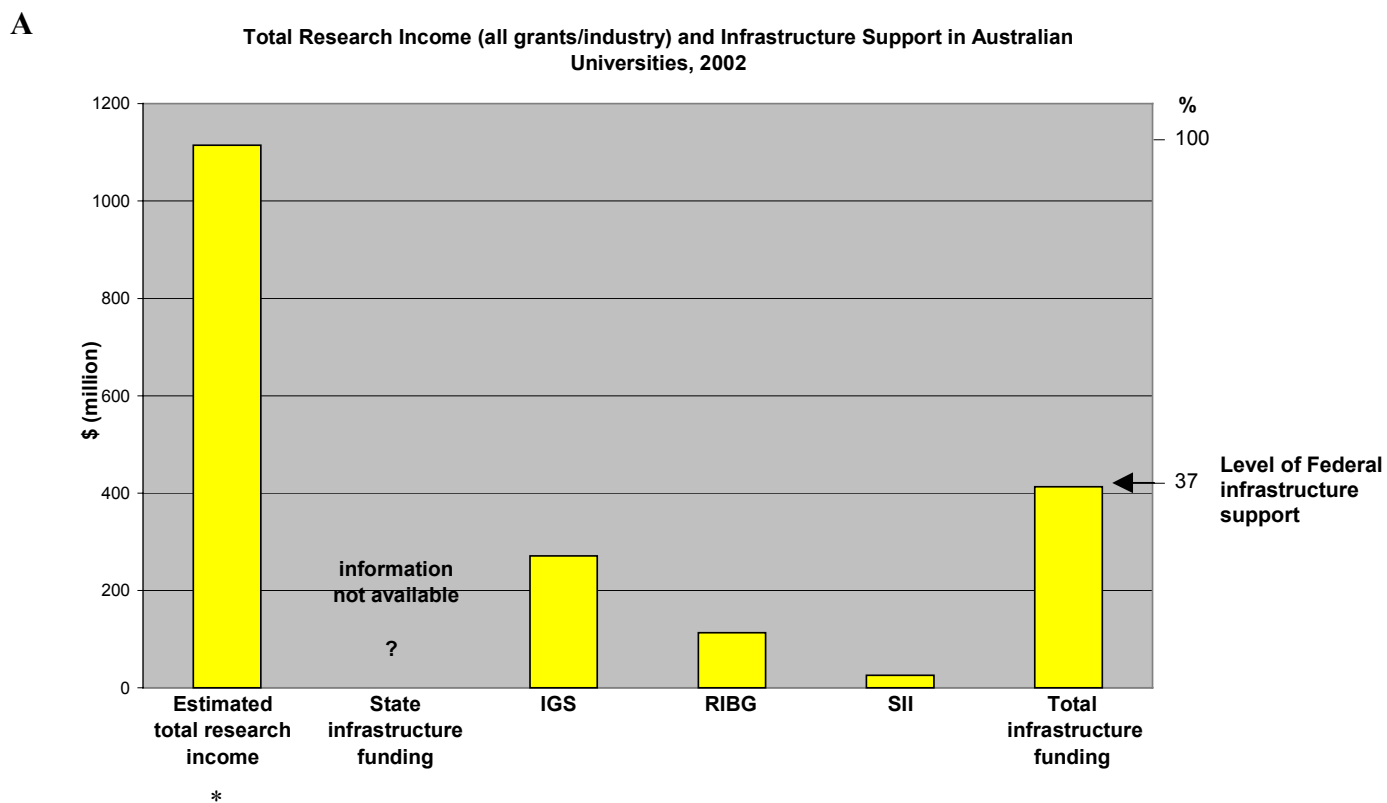
## **Issue 3 -The Acquisition, Development and Operation of Research Infrastructure**

Any future strategy for research infrastructure, and infrastructure funding, must be a whole of Government approach. Collaboration of the Commonwealth, States and Territories to improve major research infrastructure and infrastructure funding is vital to the nation's research success in the global arena.

## **Issue 4 - Processes for Domestic Research Infrastructure Collaboration and Access**

A future model that would facilitate domestic collaboration and access to major research infrastructure must involve a bipartisan approach from Government that encourages partnership within the nation's own research sector. AAMRI agrees the future standing of Australia's research will not only be dependent upon sophisticated facilities and networks, but also on both "national and international collaboration between researchers and research institutions". And yet, the independent MRIs remain largely unrecognised by the Federal Government as major players in the Australian research sector.

**Figure 1**



**Figure 1A** Graph shows total research income and infrastructure support in Australian universities in 2002. Federal infrastructure support is 37% of total, annual research income.

\* Estimate derived from "Key Statistics on Higher Education November 2002" by the Australian Vice-Chancellors Committee. In 1999, total income was \$914 million and had increased by \$63 million from 1998.

**Figure 1B** Graph shows total research income and infrastructure support in 28 AAMRI institutes in 2002. State infrastructure support is 19% of total, annual research income.