

# Australian research facilities under threat

Political stand off leaves key programmes preparing for shut down.

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ANFF-NSW

Researchers at a cleanroom in the University of New South Wales, an Australian National Fabrication Facility.

Much of Australia's shared national research infrastructure — used in disciplines from astronomy to materials research — is under threat of closure because it is not clear whether it will get the Aus\$150 million (US\$116 million) allocated in its 2015–16 budget. The cash is tied to the passage of controversial higher-education-reform legislation, which has been held up in parliament. With money for the programmes set to run out on 30 June, last week organizations representing Australian scientists [wrote an open letter](#) to Australian Prime Minister Tony Abbott warning about the crisis. *Nature* explains what is at stake.

## Which research facilities are at risk?

Many of the 27 facilities under the umbrella of the National Collaborative Research Infrastructure Strategy (NCRIS) will have to close if their funding does not come through. These facilities employ some 1,700 staff, including scientists and support and management personnel.

“Many NCRIS staff have been put on provisional notice of termination, and the consequent exodus of highly specialised skills has begun and will only accelerate as the end of the year [30 June] draws closer,” says the 4 March letter from the National Research Alliance (NRA), a group of organizations that covers private and public research bodies.

The NCRIS facilities include the Australian Phenomics Network (APN) in Canberra, a cluster of laboratories run by partner organizations around the country, which provide services such as breeding genetically modified mice for researchers studying diseases such as cancer and diabetes. Also under threat is the Australian National Fabrication Facility (ANFF), which provides facilities spread across 21 institutions for research into advanced materials with applications such as sensors, medical devices and high-end electronics. Another NCRIS-supported facility is Astronomy Australia Limited (AAL), which helps to fund national facilities and also gives scientists access to overseas facilities such as the Gemini telescopes in Hawaii and Chile and the Magellan telescopes in Chile.

## What does it mean if they shut down?

“The damage to Australia's domestic and collaborative international research effort that will result from such closures is immense,”

says the NRA letter.

More than 800 medical researchers used the APN's services in 2014, says its chief executive Michael Dobbie. But the APN will have to cut 18 of its 41 staff soon if it does not get its promised funding, he says. And four of the APN's partners, including the Victorian Centre for Functional Genomics in Melbourne, have left the network during the past six months amid uncertainty over funding. Three of them have suspended their services, Dobbie says.

The ANFF employs 94 staff and will have to wind down all its operations from 30 June if it is not funded, its chief executive Rosie Hicks says. And Australia's access to international astronomical facilities will be curtailed if there is no longer NCRIS funding, says Matthew Colless, director of the Australian National University's Research School of Astronomy and Astrophysics, one of the member organizations of Astronomy Australia Limited. "Most Australian institutions would no longer have access to the world's best optical telescopes," he says.

#### **How did it come to this?**

In a word: politics. The funding has been tied to a higher-education-reform package, which proposes to deregulate university tuition fees — allowing institutions to charge Australian students fees that are as high as those for international students. (The government would in turn cut its contribution to tuition costs). The bill has passed through Australia's lower house, but uncertainty surrounds its fate when it goes to the Senate, where the ruling coalition government does not hold a majority.

#### **Can't the government fund the facilities without passing the bill?**

The government says that unless it achieves savings delivered by the bill, it does not have the money to fund the NCRIS. "If the higher education reforms don't pass, funds do not exist for NCRIS," education minister Christopher Pyne said in a statement. A spokesman for Pyne says that the government wants the Senate to deal with the bill by the end of March.

But Les Field, the science-policy secretary of the Australian Academy of Science, says: "It is disappointing that the government is holding NCRIS hostage to its higher-education-reform package."

Field says that successive Australian governments have failed to commit to long-term funding of large-scale research infrastructure, much of which has a lifespan of decades. "We need a long-term strategy that recognises that major infrastructure is a long-term investment," he says.

The threats to national infrastructure follow cuts to science, research and innovation in [last year's budget](#). The government allocated around Aus\$9.2 billion for 2014–15, down on Aus\$9.6 billion for the year before; government science agencies and the Australian Research Council (a national research funding agency), were hit.

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