China plans major shake-up of academy

[BEIJING] China's leaders have approved a plan by the Chinese Academy of Sciences to carry out a drastic re-organization of its 123 institutes, which employ 68,000 researchers.

The plan will be implemented in three phases over the next 13 years. Substantial amounts of new money will be directed into selected research areas and regions, with hundreds of new staff being recruited from overseas. Some institutes will be merged, some closed down.

In line with government priorities, the academy aims to "embrace the era of knowledge economy" and "build up a national innovative system". To achieve this, it is seeking an extra 2 billion yuan (\$240 million) a year — increasing by half its institutes' current funding from a number of sources, such as the National Natural Science Foundation of China and the Ministry of Science and Technology, as well as the academy itself.

The proposed extra budget has yet to receive official approval from the financial authorities. But China's top committee for science, technology and education, headed by Premier Zhu Rongji, pledged its support

last month and the plan won backing earlier this year from President Jiang Zemin. A decision on the budget is expected in about a month's time, according to Bai Chunli, one of the academy vice-presidents.

In the first phase, from 1998 to 2000, extra resources will be invested in priority research areas and regions (see table). Research groups from about 40 of the academy's 123 institutes are expected to participate, and 600 new staff will be recruited from outside the academy.

It is hoped that many of these will be bright young researchers from overseas, says Bai. As well as basic scientists, the academy will be seeking individuals with good research management skills.

New research centres will be created in the selected fields and regions by combining strong groups from different institutes. It is hoped to create 10,000 positions (more than double the current number) for 'mobile' researchers such as postgraduate students, postdoctoral fellows and visiting professors.

The aim is to reduce the 68,000 permanent positions to 30,000 through retire-

Priority research areas and regions, first phase (1998-2000)	
Location	Research area(s)
Shanghai	life sciences
Beijing	material sciences
North-west (Lanzhou)	natural resources, environment, and sustainable development
South-west (Kunming)	biological resources, biodiversity, conservation
Shanghai	high technology
Beijing	information technology
North-east (Changchun)	high-performance materials, advanced manufacturing technology

ments and re-assigning people to other jobs by 2010, says Bai, while increasing the number of mobile researchers to 30,000.

A 'tenure track' system will be introduced for full-time employees, with assessments every four years up to the twelfth year, before a decision on lifetime employment is made. Details of the first phase of the re-organization plan, such as which institutes will participate in the priority areas, will be finalized in about two months.

David Swinbanks

Australia builds on biological successes with a broad new centre

[SYDNEY] A broad-based Biological Sciences Institute is being set up at the University of Queensland, Brisbane. Unusual in scope outside the pharmaceutical industry, it will be the best-funded new research facility established in Australia for many years.

A four-way financing deal, raising A\$55 million (US\$33 million), was sealed last month, three days before a closely fought State election. Australia's federal science minister, John Moore, whose electorate covers the campus, announced a grant of A\$15 million, matching one pledged a year ago by Rob Borbidge, then Premier of Queensland's coalition government.

The federal contribution is the first grant to be made for scientific purposes by the Commonwealth Federation Fund, which usually finances large-scale public works such as roads, railways and dams. The university is contributing A\$15 million and the university's vice-chancellor, John Hay, has announced a commitment of A\$10 million from an anonymous private source, thought to be from North America.

The institute will house divisions in genomic research, developmental biology, cellular biology, structural biology, molecular design and bioinformatics. A 14,000 square-metre building is due to be completed in two years. An initial staff of 350 is expected to double by 2005.

The Commonwealth Scientific and Industrial Research Organisation has

Designs on biology: John Mattick, seated, John Hay and acting manager Emma Puttick.

expressed interest in joining the project. Its own staff would focus on agricultural biotechnology — including plant and animal genomics — and may add up to 8,000 square metres more research space.

Project leader John Mattick describes the scheme as a "maxi form of Co-operative Research Centre", a reference to Australia's scheme combining research by universities, government agencies and industry.

Four existing centres at the university will be incorporated into the new institute. These are Mattick's Centre for Molecular and Cellular Biology, the Centre for Drug Design and Development headed by Peter Andrews, the Centre for Microscopy and Microanalysis and the Australian National Genome Research Facility. Alliances with

drug companies are expected, and the institute will provide substantial space for other research organizations.

The centres have already been involved in a range of projects, often with national and international collaborators. These have included bacterial, plant and mammalian genome sequencing. Their work in molecular genetics and in developmental, cancer and cell biology has already led to the identification of several developmentally important genes, and staff have investigated the dynamics of cell membranes (see *Nature*, 384, 427-432, 1996 and 392, 193-197, 1998).

The structural basis of novel venoms and toxins has been unravelled from cone shells and other tropical species. High throughput screening of products from Queensland's coral reefs and rainforests is giving promising leads in the development of novel drugs for central nervous system and cardiovascular disorders.

The timing of the announcement raised criticism that it was a last-minute effort to gain political credit before the State election. (In fact, Borbidge was defeated, in a result that rocked Australia's Liberal government.) But Moore has denied that political considerations were at work. Mattick says the project has always enjoyed bi-partisan support, and is confident that Queensland's new Labor Premier, Peter Beattie, will remain committed to the funding. Building work is due to start shortly.

Peter Pockley