

Returning Chinese power the 'NIH' of Taiwan

An ambitious project to form a miniature equivalent of the US National Institutes of Health in Taiwan is moving forward rapidly led by Chinese scientists who have recently returned to Taiwan after many years in the United States. Their return is part of a much larger 'brain drain' of top Chinese scientists and engineers from the United States to the booming economies of Asia.

Taiwan's National Health Research Institutes (NHRI) does not yet have legal status — legislation to establish the NHRI is expected to be passed early this year — but an extramural grant programme for NHRI that started three years ago is already having an impact on the medical research community throughout the country, and an intramural programme, which will grow to about 500 researchers in 5 years, is likely to start in a few months.

NHRI is the brainchild of Cheng-Wen Wu, director of the Institute of Biomedical Sciences of Academia Sinica in Taipei. He returned from the United States six years ago to head the institute. But, like many other senior returnees, he initially held joint appointments in both countries. It was only about a year ago that he gave up his post at the State University of New York, Stony Brook, and firmly committed himself to Taiwan.

The Institute of Biomedical Sciences has rapidly grown to be the largest of Academia Sinica's 21 institutes with 400 staff and more than 300 researchers. But Wu says "one small green land in the desert is not enough" and his aim with NHRI is to raise the standing of the whole medical research community of Taiwan.

His institute, for example, has had to get involved in the organization of clinical trials throughout Taiwan. But Wu intends to pass that role onto the new NHRI so that his present institute can focus on more basic re-

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search. At present, Wu is wearing 'two hats' as head of the biomedical institute and the preparatory office of NHRI, but he will relinquish one position when NHRI is established.

The NHRI's extramural grant programme has been running for three years and currently provides grants of up to NT\$15 million (US\$0.6 million) to each of 39 'centres of excellence' in universities and hospitals, as well as 25 grants of up to NT\$5 million to individual researchers.

Competition for the grants, which undergo a thorough peer review process that includes referees in the United States, is fierce with only 20 per cent of applicants succeeding compared with the typical success rate of about 80 per cent for traditional Taiwanese grant programmes.

A team of 60 US scientists, led by Shu Chien, professor and director of the Institute of Biomedical Engineering at the University of California, San Diego, visited Taiwan a few months ago to carry out the first external review of the programme. Most of the grant awardees got "really good" reviews and their grants will be extended, says Wu. A further 20 grants will be added this year.

Five research areas of immediate interest to Taiwan will be targeted in the initial phase: ageing research; environmental and occupational disease; mental health; health policy; medical biotechnology; and medical engineering.

Wu's ambitious NHRI plans initially raised suspicions and jealousy among some members of the Taiwanese research community, particularly as he already runs the biggest institute in Academia Sinica. Some directors of other institutions in the Academy question the quality of output of Wu's

institute and they are unhappy with the large outlays he is receiving for his institute and NHRI at a time when the government is squeezing funding for research because of large expenditures for defence and construction.

But Wu claims he now has the full support of the whole medical community of Taiwan. The dean's of all university medical schools, the heads of research hospitals, and Taiwan's medical and pharmaceutical associations are all lobbying for the legislation to establish NHRI. As of December, the legislation had passed one of three steps in the Legislative Yuan, Taiwan's key legislative body.

Wu says Chinese scientists in the United States are already lining up to join the intramural programme. And he says there is a pool of about 5,000 Chinese scientists in the United States that he can tap into when recruiting.

In addition, hundreds of young Taiwanese scientists are returning to Taiwan each year from the United States in search of jobs because prospects for them there look poor with the US government and industry cutting back on basic research, while, in Taiwan, on the other hand, the future looks bright, with many new research organizations like NHRI being established. Academia Sinica, for example, has added seven new institutes over the past decade and its budget has increased tenfold.

This phenomenon is not confined to Taiwan. Chinese scientists, young and old, have begun to stream back to Hong Kong and Singapore as well. And this 'reverse brain drain' will undoubtedly spur rapid development of science in the region provided leaders like Wu can provide the necessary infrastructure for jobs.

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DID YOU KNOW?...

Imanishi-Kari finally gets appeal

For 8 years, Thereza Imanishi-Kari of Tufts University has been living in scientific purgatory because of unresolved charges that she committed fraud in experiments published in 1986. Investigations by the university and the National Institutes of Health absolved her of charges of misconduct. But at a hearing before the US Congress she was all but convicted in an atmosphere that provided neither fair prosecution nor rebuttal.

Now, to Imanishi-Kari's ironic satisfaction, the

US Office of Research Integrity (ORI) has finally issued a formal finding of guilt after an investigation that began in 1989 and ended with the release of the ORI report in December.

What this means is that Imanishi-Kari is at last free to demand a full-scale hearing before a board of appeals whose deliberations are open to the public and allow her attorneys to cross-examine her accusers. Neither has been part of the troublesome proceedings in all these years.

The appeals hearing is not likely to come before summer but it is eagerly awaited. *B.J.C.*

European molecular medicine school opens its doors

The industrial town of Brescia, northern Italy, is home to the first European School of Molecular Medicine. The school, the first of maybe many, has been set up with the financial backing of the Camillo Golgi Foundation — a fund established in 1987 by a group of local industrialists to aid medical research. Courses at the school, which was cofounded by Pier Franco Spano, professor of pharmacology at the University of Brescia, will be open to between 50 and 60 researchers. *D.G.*