Taiwanese institute causes upset by degrees

David Cyranoski, Taipei

Taiwan's premier research institute is facing dissent from local universities over its planned involvement in the country's graduate education programme. The universities are concerned that Academia Sinica, which is pushing for a change in the law to allow it to admit graduate students, is muscling in on their territory.

Academia Sinica, which comprises 26 institutes and almost 1,000 researchers in a wide range of disciplines, is aiming to reduce Taiwan's reliance on the United States and Europe to train its young scientists. But Taiwan's universities — currently the only bodies that are able to award degrees — argue that they are best placed to offer balanced postgraduate training.

Some researchers think the universities' real worry is that Academia Sinica's prestige, together with its relatively generous stipends, could eventually deprive them of the country's best young scientific talent. In an effort to assuage this worry, the research institute is pledging to award three-quarters of its doctorate posts to students from outside Taiwan.

Yuan Tseh Lee, president of Academia Sinica, says he wants to create a world-class, international graduate school at the institute. "We want train students to international standards so they can go abroad — and also bring international talent here," he says.

Academia Sinica wants to share the right of Taiwan's universities to award degrees.

Until now, Academia Sinica has run a collaborative programme that admits graduate students to one of Taiwan's premier universities, with which it shares responsibility for their training.

Last autumn, two such programmes took on five students between them. The students each took a first-year course at the academy's Taipei campus, taught in rotation by scientists from the academy and the National Tsing Hua University, based 70 kilometres away in Hsinchu. After the first year, students select an adviser from one of the two institutions. The entire programme is run in English.

This autumn the programme will expand to cover seven subject areas and involve more universities, including the National Taiwan University. The programme's eventual aim is to admit 20 students each year.

But Lee says that the collaborative approach raises administrative problems, and Lawrence Huang, executive secretary of the programme, says that some researchers at Academia Sinica are unhappy that candidates have to sit universities' qualifying examinations, and with the requirement that foreign students study Chinese.

Lee has therefore been lobbying to have the law changed to allow Academia Sinica to award degrees. But the idea has met with hostility from universities. "Lee invited the top university presidents to talk about it," says National Taiwan University president Wei-Jao Chen. "We all said it was a bad idea. Education should include more than research: everyone should have the opportunity for a more general curriculum and interaction with other students." Moreover, he adds, if Academia Sinica runs the programme alone, the universities will lose the chance to work with it and share its resources.

Lee says that such concerns are unfounded, and that collaboration remains important to the institute. Huang agrees: "Our researchers are good at research, but not necessarily at teaching. We have to learn from the universities."

Lee is likely to get his way when the Taiwanese parliament meets this spring, however. Chen is resigned to the idea: "When the law changes we will have to go along with it."

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ACADEMIA SINICA

Scientists call for Canada to boost polar-shelf funding

David Spurgeon, Montreal

Canadian scientists who study the Arctic say that the country's Polar Continental Shelf Project is in danger of failure, threatening research into the environment and ecology of almost half of the nation's territory.

Forty-two scientists from more than a dozen disciplines sent a letter to Prime Minister Jean Chrétien on 6 January calling for Can\$25 million (US\$16.5 million) to be

added to the present "utterly inadequate" funding for northern science. They claim that Arctic research funding in Canada amounts to only 20 Canadian cents per head of population, compared with about Can\$3 in the United States.

"Our international credibility is at stake and our ability to recruit the next generation of Canadian Arctic scientists is rapidly expiring," the scientists wrote.

Arctic researchers from Canada and abroad rely on the polar-shelf project's resources for air and ground support. It is operated by Canada's natural resources department on an annual budget of some Can\$3.5 million — less than half the amount it received a decade ago — and faces sharp increases in its operating costs.

The 45-year-old project "is the backbone of Canadian Arctic science," says David Hik, an ecologist at the University of Alberta. "We don't understand how, at its current budgetary levels, it can continue to support northern science in any meaningful way."

Greg Henry of the University of British

Columbia, who has conducted one of the world's most northerly climate experiments on Ellesmere Island, says he cannot compare his results with those at other Arctic sites because he can't get enough flight time from the polar-shelf project.

Henry says that Canada, which led world research on the effects of pollution in the Arctic, has lost many of its best researchers through government cuts. The scientists' letter says that the success of international agreements relies on Canadian data that the country is struggling to provide.

In September 2000, a national task force called for more federal funding for Arctic research, proposing the establishment of 24 university chairs, 40 graduate scholarships, 40 postdoctoral fellowships and support for 70 strategic research projects.

"Only about 10% of those recommendations have been implemented," says Hik, adding that the letter to the prime minister is only part of a push by scientists to get the government to follow through on the task force's findings.

Left out in the cold: the Polar Continental Shelf Project's budget has halved over ten years.

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