$48m cutting-edge fund set up for graduate scholars

Money will go towards research at the Singapore-MIT centre

BY JUDITH TAN & AMRESH GUNASINGHAM

ABOUT 100 scholars from two local universities will get $48 million to put their minds to scientific breakthroughs at the Singapore-MIT Alliance for Research and Technology (Smart).

The new government fund will pay for full-time scholarships over the next five years at the centre, the first by the American university outside the United States.

It is on top of the $1 billion given in 2006 to set up research centres and fill them with top research minds over the next five years.

The funding will boost the research efforts of the National University of Singapore (NUS) and Nanyang Technological University (NTU), and ensure a steady supply of PhD students for Smart, Education Minister Ng Eng Hen said at a symposium yesterday where he announced the new funding.

Last night, at the Singapore-MIT Alliance’s (SMA) 10th anniversary dinner, Prime Minister Lee Hsien Loong said the programme would attract young research talent locally and across the region to “work with Smart researchers to discover the next breakthrough idea”.

He also told the gathering of SMA alumni, academics and guests about the importance of taking a long-term view and focusing on fundamentals despite the current gloomy economic outlook.

“In good times or bad, we have continued to enhance our infrastructure, attract talent and invest in education, and increasingly in recent years, in research and development.”

“Even now in the midst of crisis, we will persevere with measures to strengthen our resilience and competitiveness and prepare for opportunities that are still there, especially for the watchful and well-prepared. In this way, we can emerge from this crisis stronger than before, and bring growth and progress to Singapore.”

The alliance itself is a lesson in the importance of focusing on the future during an economic contraction, he noted.

“The SMA itself was born during an earlier crisis. When we conceived the SMA in 1997 and 1998 the Asian financial crisis was sweeping through Asia,” PM Lee said. “But despite the uncertainties, we pressed on to set up the SMA.”

It was a bold experiment to bolster engineering education and research collaboration. It allowed students unlimited access to the faculty expertise and research facilities of three institutions.

To date, the alliance has graduated 780 students who are sought after in industry, research and academia, PM Lee added.

SMA co-director Hardy Chan told The Straits Times that funds would be distributed to scholarships in five research programmes at the centre, a key programme of the alliance.

The three now active are infectious diseases, environmental sensing and modelling, and microfluidics – the study of fluids at microscopic levels.

Collaborative research in the alliance between the NUS, NTI and the Massachusetts Institute of Technology has shown promising results in the areas of drug development. One of these is a project between Associate Professor Too Heng-Phon of NUS and MIT Professor Gregory Stephanopoulos. It was commended by Dr Ng in his speech at SMA’s 10th anniversary symposium.

The team uses a process known as metabolic engineering to alter the genetic makeup of cells used to develop drugs for cancer treatment, such as Taxol – now too costly to produce commercially since it is extracted from the bark of scarce Pacific yew trees.

Its role as connector between academy and industry is where the centre serves its vital purpose, MIT president Susan Hockfield told The Straits Times.

“It is this connection that almost every city in the world strives to make stronger – maintaining the academic qualities of their institutions, while being able to reach into the industry,” she said.

Last night, PM Lee also paid tribute to former deputy prime minister Tony Tan, who mooted the idea of the alliance, along with MIT Professor Robert Brown.

Dr Tan was “instrumental in building the international linkages which enabled our broad collaboration with MIT and seeing through the development of SMA”, PM Lee said.

In his remarks at the symposium, Dr Tan, who chairs the National Research Foundation, said the search for new frontiers of growth would require greater risk-taking and new partnerships being forged.

“This collaboration between our leading institutions to nurture talent in the science and technology sector is a clear illustration of such a partnership,” he said.

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