Inspiring students to help ease shortage of researchers

by Tan Hui Leng

THere are two ways to recruit yourself—a genius if you’re a biotech lab: Genetically engineer one, or inspire the career dreams of the country’s young and brightest.

Up till now, the temporary solution for Singapore’s talent-short life sciences industry has been to pay for foreigners to fill the larger share of white coats in local research labs. But a new dream-splicing programme by the Institute of Bioengineering and Nanotechnology (IBN) hopes to get students gunning for a career in the life sciences from as young as 13.

The IBN Youth Research Programme sees secondary school and junior college students spending their school holidays doing research at the institute. So far, eight students have started work on projects.

“We need to get them excited about research when they’re very young,” said the woman behind the big push, IBN’s executive director Professor Jackie Ying.

“If not, they’ll be less willing to carve out a career in research when they grow older, because research is a very high risk type of job.”

At the moment, foreign researchers in the field outnumber locals seven to three. The hope is to balance that ratio, at 50:50, in 10 years’ time.

Among the incentives being offered are scholarships by the Agency of Science, Technology and Research (A-star).

The Taiwan-born Prof Ying grew up studying at Singapore’s Raffles Girls’ School, before moving to the US. Her alma mater—along with Raffles Junior College, Raffles Institution, Hwa Chong Junior College and Chinese High School—have been identified for IBN’s programme.

Earning her PhD from Princeton at the age of 25, Prof Ying went on, at age 34, to become one of the youngest full professors at the Massachusetts Institute of Technology (MIT).

Now 37, Prof Ying points out that at MIT, more than 90 per cent of undergraduates each year end up doing research. But in Singapore, she puts it is the dream of Professor Jackie Ying, executive director of the Institute of Bioengineering and Nanotechnology, to fire the research dreams of teenagers.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.

Catch them young

Movers & Shakers

University of South Australia

“One of Australia’s Best Universities”

Experience. The Difference.

International MBA - 5th Intake

• Top 5 distance MBA in Asia (AsiaWeek)
• One of most up-to-date and innovative MBAs
• Preview by Prof Laubie on Wed, 1 Oct ‘03 at 7.00 p.m.

MBA in Chinese - 5th Intake

• 12 courses; completion in 18 months
• More than 700 graduates in Asia
• Preview by Prof Laubie on Thu, 2 Oct ‘03 at 7.00 p.m.

PhD in Business & Management - 5th Intake

• Most successful doctoral program in the region with largest number of graduates
• Preview on Thursday, 16 October 2003 at 7.00 p.m.

Bachelor of Business Admin (BBA) - 5th Intake

• 50% taught by university faculty
• 35 months; For Poly Diploma or equivalent
• Preview on Wednesday, 15 October 2003 at 7.00 p.m.

BA in Communication & Media Mgmt - 5th Intake

• Highly regarded by Media Industry professionals and government organisations
• Preview on Tuesday, 30 September 2003 at 7.00 p.m.

Marketing & Management

Lean, agile and effective — that’s where A*Star’s Bioengineering and Nanotechnology Institute (IBN) expects to be in five years. IBN is the first in the world to merge research in the fields of biotechnology and nanotechnology.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.

— TODAY photo by Wong Khoi Chong the figure at only one to two per cent.

“It’s not so much that people weren’t interested in research but the career path was not clearly defined.”

“If you had gone for PhD studies 12 years ago, you would have become a professor at a university. There weren’t a lot of R&D set-ups that you could go to to lead a research team.”

That’s changed now, going by plans for the IBN’s future. Prof Ying is looking to expand her team of 85 to 250 by 2006. Since last year, institute staff have published 38 papers and applied for eight patents. The institute is one of the first in the world to merge research in the fields of biotechnology and nanotechnology.