Programme to draw women to Stem fields, address talent 'leak'

A study of 738 Singaporeans by the Nanyang Technological University (NTU) has found that just 58 per cent of women who graduate with Stem degrees or diplomas go on to have related careers.

In comparison, 70 per cent of men who hold such qualifications are in related fields of work.

To tackle this "leak" in Stem talent, two female NTU professors are starting a new programme for women to persuade more to pursue Stem – short for science, technology, engineering and mathematics – education and work.

The Promotion of Women in Engineering, Research, and Science (Powers) programme was launched yesterday by President Halimah Yacob at the biennial Women in Engineering, Science

and Technology symposium.

The event was held at the Lee Kong Chian School of Medicine at NTU's Novena campus.

Powers is funded by the Ministry of Education and headed by Associate Professor Sierin Lim, from NTU's School of Chemical and Biomedical engineering, and Associate Professor Kimberly Kline, from the School of Biological Sciences.

They hope to connect women with role models and mentors, conduct local research to address barriers and gaps, and provide education opportunities.

For a start, 20 to 30 incoming female students enrolling in NTU's science and engineering faculties will be matched to female faculty members and seniors in the new academic year from August.

Prof Kline, associate dean (faculty) at NTU's College of Science, said the mentoring scheme, which is at a pilot stage, will take place over a year with monthly meetings.

"We want to have a strong support system to build a sense of belonging for women in the Stem community," she said.

The programme follows a study by NTU clinical psychologist and senior research fellow, Dr Chua Sook Ning, to understand the gender disparity in Stem careers.

The study's key findings were presented yesterday at the symposium. It showed that a proportion of women did not feel they belong in Stem-related fields. This group tended to leave their Stem jobs,



From left: Associate Professor Sierin Lim, Dr Chua Sook Ning and Associate Professor Kimberly Kline at the Women in Engineering, Science and Technology symposium. PHOTO: NTU

compared to men in general and other women who stayed on in the sector.

Prof Lim, NTU's associate dean of global partnerships at its Graduate College, said more research is needed to understand why women do not continue in Stem work and what factors can help retain them.

Prof Kline said: "Society is made up of equal parts men and women, and so we don't want just men making discoveries and innovation for all of society.

"We need men and women speaking to these great challenges that we face right now, helping to come up with the most creative and diverse solutions to the problems."

In her speech, President Halimah said: "Much of what we know of health and medicine has been informed by studies on men. However, scientific research has shown us that diseases can affect men and women differently, and may require different treatments."

She cited engineering as another example. "The first-generation airbags in cars caused serious injuries and even the deaths of women and children, because they were designed for the adult male by predominantly male engineers."

"Having a woman engineer, scientist, or technologist means that more women will lead important discoveries, develop new technology and medicine, which in turn drives our economy, creating jobs and building a better world for everyone," she said.

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