

NTU setting up \$30m institute to tackle health issues

Structural biology hub to house 70 researchers

By KASH CHEONG

A \$30 MILLION institute will be set up to tackle pressing health issues, such as fighting cancer and overcoming antibiotic resistance.

Nanyang Technological University president Bertil Andersson yesterday announced the creation of the NTU Institute of Structural Biology (NISB), which will gather 70 researchers from NTU and the Agency for Science, Technology and Research's (A*Star) Institute of Cellular and Molecular Biology to find cures for diseases.

"Structural biology allows the chemistry of life to be understood in great detail," Prof Andersson said. "Using cutting-edge imaging equipment, protein molecules can be magnified up to 10 million times and rendered in 3D.

"These 3D images of proteins at an atomic level hold the key in resolving some of the world's pressing health problems such as ageing and cancer."

He was speaking at the opening of a special lecture at NTU's School of Biological Sciences, where overseas guest and chemistry Nobel laureate Venkatraman Ramakrishnan spoke about drug discovery throughout history.

Structural biology helps researchers understand how certain diseases work at the most basic level, so drugs and vaccines can be developed to fight them, the new institute's director, Professor Daniela Rhodes, said.

The NISB will be housed at the



Prof Daniela Rhodes, who will head the NTU Institute of Structural Biology, hopes the centre will break down barriers. PHOTO: NANYANG TECHNOLOGICAL UNIVERSITY

Lee Kong Chian School of Medicine's seven-storey experimental medicine building, which should be ready by July.

Prof Rhodes hopes that NISB will "break down barriers" by bringing researchers from across the island under one roof.

By encouraging collaboration across scientific fields, she hopes that the new centre will enable researchers to combine their expertise and look at one problem from different angles.

This could lead to greater insight and possibly the quicker discovery of cures.

The new institute has already garnered \$24 million in research grants.

To be fully operational in the first quarter of next year, it will house state-of-the-art equipment such as an advanced microscope which allows high-resolution 3D imaging molecules half a million times smaller than a grain of rice.

"Science these days is no longer a solo affair. It requires a multi-disciplinary approach," Prof Rhodes added. "Hopefully, the new institute helps to give us that."

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