



NEWS RELEASE

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A-LEVEL STUDENTS TURN 'LIFE SCIENTISTS' AT NTU

One hundred and fifty science students, representing all 16 junior colleges and a centralized institute in Singapore, will turn 'life scientists' and compete at the annual JC Challenge, organized by the Nanyang Technological University (NTU).

This year's Challenge begins on 29 November 2004 and revolves around the theme "Life Wonders". It will be jointly organized by NTU's School of Biological Sciences (SBS) and the Health Sciences Authority (HSA). The NTU-JC-HSA Challenge will last three months and end with a closing ceremony at which Dr Su Guaning, President, NTU, will present awards to the winning teams.

Says Prof James P Tam, Dean of SBS, "The NTU-HSA JC Challenge will give A-level participants valuable insights into life sciences, familiarize them with the cutting-edge technologies behind such research, and leave a deep impression of the potential that life sciences research can bring to improving the quality of human life."

Dr Chow Shui Tse, Director, Centre for Forensic Science, HSA, adds, "HSA is privileged to partner NTU in this exciting Challenge. In the HSA, scientific principles, methods and evaluations are rigorously applied in our daily work to reach sound forensic conclusions and authoritative regulatory decisions. HSA experts are happy to share with these budding scientists our experiences in applying science in forensic investigations, food safety development and pharmaceutical regulation. During the Challenge, the students will be able to work on a re-enacted crime scene, and learn to use different types of physical evidence to nab the criminal and to exonerate the innocent. JC students will experience first-hand the wonders of applied science and appreciate the critical role of forensic science in the modern day administration of justice."

The Challenge will kick off with a five-day residential camp at NTU starting 29 November 04. Each team of 8 – 9 students will be advised by an SBS professor, and 20 NTU student counselors, who are also SBS undergraduates.

These disciplines will be covered at the Challenge:

- Structural and Computational Biology
- Chemical Biology and BioTechnology
- Molecular and Cell Biology
- Genetics and Genomics

Other highlights of the programme include:

- Hands-on computer and biological laboratory sessions at SBS' top-notch facilities
- Laboratory visits to the renowned Novartis Institute for Tropical Diseases and Waseda-Olympus Bioscience Research Institute
- Visit to the HSA's forensic laboratories, and analytical testing facilities for food, drugs and radioactivity and talks by HSA's experts in forensic science, forensic pathology, food science, radiation science as well as pharmaceutical science
- Talks and seminars by leading experts in the field of life sciences on topics such as molecular biology, brain research, drug discovery and development, and bioinformatics

Adds Prof Tam, "During the challenge, the A-level students will be exposed to the state-of-the-art equipment available at SBS. The students will then be challenged to think of methods to use these in their innovations. We want the students to go beyond what they thought were possible and let their imagination soar – the sky is their limit."

The challenge won't be all work. Guided by SBS and under the expert advice of HSA's forensic scientists, close to 50 NTU students from the NTU Chapter of Mensa and NTU's School of Communication and Information are putting together a mentally-stimulating CSI-inspired detective game that will call on the A-level students to interpret forensic evidence to solve a "murder". During the residential camp, the students will also enjoy hall activities, such as hall suppers and night jogs, with NTU students.

The A-level students will present their life sciences projects on 18 February 2005, to a panel of judges from NTU and the Ministry of Education.

Says Mr Hew Joon Yeng, a first-year student from Anglo-Chinese Junior College, "I am looking forward to the fun and games, and to staying on the NTU campus, even as I hope to learn more about the structure of SARS virus using the X-ray crystallograph equipment at NTU's School of Biological Sciences. This is a piece of equipment that allows you to study the structure of proteins, including viruses so that we may learn about them and perhaps even discover a cure. I am considering being a virologist one day."

About Nanyang Technological University

Nanyang Technological University was recently ranked by the Times Higher Education Supplement at the 50th place globally and 7th in Asia, in its ranking of the 200 best universities in the world. The campus was originally developed for a Chinese language university, Nanyang University in 1955. In 1981, Nanyang Technological Institute was established on this campus to educate engineers for the rapidly developing Singapore economy. In 1991 Nanyang Technological University was inaugurated.

The university has a strong engineering school ranked among the best in the Commonwealth, a business school with one of the top 100 MBA programs in the world, an internationally acclaimed National Institute of Education, one of the best Schools of Communications and Information in Asia, and a new (2001) School of Biological Sciences playing a leading role in Singapore's Life Sciences initiative. The Institute of Defence and Strategic Studies is an international authority on terrorism. The university is in a major expansion from 16,000 to 22,300 undergraduate students. During this expansion three new schools are being built – the School of Humanities and Social Sciences, the School of Physical and Mathematical Sciences and the School of Art, Design and Media.

A traditional strength of the university is the high employment rate and high remuneration received by its graduates. The university is now in the process of realizing its New Undergraduate Experience initiative with a comprehensive curriculum, wide choices of options for students, vibrant campus life and international experience.

Strong international relationships and collaboration programmes is a hallmark of the university. This includes the Singapore-MIT Alliance, Singapore-Stanford Partnership, Cornell-Nanyang Institute of Hospitality Management, Singapore – University of Washington Alliance in Bioengineering, Global Immersion Programme with Peking University, Tsinghua University, Shanghai Jiaotong University, University of Washington and Georgia Institute of Technology, among many other programmes in US, China, India, Japan and Europe.

About NTU's School of Biological Sciences

The School of Biological Sciences was established in July 2001 to provide students with a high quality university education and training in the life sciences. Graduates from its undergraduate B.Sc.(Honours) course as well as from its graduate research programmes are expected to fill the rapidly increasing demand for a talent pool of high-quality workforce and researchers for the life sciences industry.

The school has already started building its capability in the life sciences through its collaboration with the Singapore General Hospital in the field of biomedical engineering. Besides the liberty to chart new developmental plans outside the organizational structure and constraints of traditional schools of biological sciences and medicine, NTU's technological focus will provide a good basis for developing new technologies and schools in life sciences.

About the Health Sciences Authority

At the Health Sciences Authority (HSA), we apply medical, pharmaceutical and specialised scientific expertise to safeguard public health and safety in Singapore. As one multidisciplinary agency, we serve as the national regulator of all therapeutic products by providing a seamless yet rigorous regulatory process to the healthcare and biomedical sciences industries. We also operate the national blood bank, Bloodbank@HSA, protecting the integrity of the nation's blood supply. As the national reference agency, we exploit specialised scientific, forensic, investigative and analytical capabilities in order to serve the administration of justice and enhance safety in our community. For more details, visit www.hsa.gov.sg
