Singapore's Global University

NUS ANNUAL REPORT 2005





CONTENTS

VISION & MISSION STATEMENTS	2
INTRODUCTION	3
CHAIRMAN'S MESSAGE	4
PRESIDENT'S MESSAGE	8
NATIONAL UNIVERSITY OF SINGAPORE COUNCIL	12
STANDING TALL IN WORLDWIDE RANKINGS	14
BUILDING A GLOBAL BRAND	16
GLOBALISING AT 100	18
FORGING GLOBAL LINKS	20
CALENDAR OF EVENTS	24
EDUCATION: Review	30
RESEARCH: Review	50
ENTREPRENEURSHIP: Review - Entering Worldwide Markets	54
TAKING OWNERSHIP OF A GLOBAL UNIVERSITY	62
FACULTY AND STUDENT ACHIEVEMENTS	66
INTERNATIONAL VISITORS	74
MAKING FIRST STRIKES	76
LOOKING AHEAD	77
EINANCIAL STATEMENTS	70

VISION

Towards a Global Knowledge Enterprise

building synergies between education, research and entrepreneurship

MISSION

Advance knowledge and foster innovation, educate students and nurture talent, in service of country and society

INTRODUCTION

The Atlantic salmon is no whale or shark in terms of size. Yet it leaves the sheltered inland waters of its birthplace to seek out the wide open ocean, undaunted by uncertainties and challenges the ocean poses. It braves the perils of the unknown, knowing that for every year spent in the abundance of the ocean's waters, it will double its size.

NUS students, nurtured in the culture and buzz of a global university, stride out with the same robustness and enterprising spirit to meet the challenges and seize the opportunities of the working world. In navigating the unchartered waters, they will build their own peaks of excellence and contribute to both national and international communities.

CHAIRMAN'S MESSAGE

IT WAS WITH A MIXTURE OF HONOUR AND HUMILITY that I accepted the chairmanship of the NUS Council in August 2004. In my first months as Council Chairman, I have had many opportunities to meet with faculty members, staff and students and to be part of many NUS activities. It has been a stimulating and enjoyable experience. The NUS community is a very rich and diverse one, full of passionate and talented individuals and groups working within a vibrant academic environment.

The previous Council had laid the foundations for proper governance of the University through a committee structure that provided guidance to University management in the execution of policies. The challenge facing the present Council is to build on these foundations, ensure long-term strategic directions are well mapped out, and guide management in its efforts to establish NUS as a leading global university excelling in teaching, research and service to the nation and society.

The Council has placed priority on ensuring that NUS is well-placed to take advantage of the opportunities that will open up with the implementation of the Government's decision to corporatise the local universities and grant them full operational autonomy. In particular, the Council had initiated a university-wide strategy review to ensure that NUS' strategic intent and policies remain relevant, build on the opportunities presented by the changing environment and meet the rising aspirations of the various stakeholders.

The Council's committee structure has been refined to meet new priorities. Two new sub-committees under the Executive Committee (ExCo) were formed, namely the Entrepreneurship Committee and the NUS Fund Management Committee. The Entrepreneurship Committee oversees the governance of the NUS Enterprise cluster and formulates policies and strategic directions to promote the spirit of enterprise within the University and the effective management of Intellectual Property (IP). The NUS Fund Management Committee oversees the administration of the NUS Fund to which all donations are credited and ensures compliance with guidelines and rules set by the Inland Revenue Authority of Singapore (IRAS) for tax exemption of donations.





CHAIRMAN'S MESSAGE (cont'd)

The Establishment Committee has worked with management to ensure that our human resource policies allow us to attract, nurture and retain excellent faculty members and staff. At the same time, the Campus Planning and Development Committee scrutinised a number of major building and infrastructural development projects, which would enhance our physical infrastructure to enable us to be more competitive. In 2004, renovation works at the Heng Mui Keng Complex for the Lee Kuan Yew School of Public Policy were completed. Other major projects included addition and alteration works to laboratories to comply with latest international safety standards, renovation of facilities for the Office of Life Sciences to promote multi-disciplinary research and collaborations, and the development of a Cultural Hub including the Yong Siew Toh Conservatory of Music. For 2005, the major projects being evaluated include relocation of the Faculty of Law and various research institutes to Bukit Timah Campus.

The Investment Committee reviewed the investment processes and has recommended the setting up of an Investment Office in NUS. The Committee also adopted an Investment Charter that sets out a governance structure for University investments. To improve returns on non-endowed university funds, the Committee approved a scheme where faculties/departments could opt to invest such funds under the same Global Investment Strategy as endowed funds. The annualised net return after fees since inception on the funds under management by the Investment Committee has exceeded the benchmark for the portfolio.

The Audit Committee had a very active year. A quality assurance review of the internal audit function has led to the restructuring of the roles and responsibilities of the Internal Audit Unit to better serve the needs of Council and management. The Audit Charter was formalised as a mandate to allow Internal Audit to carry out its work objectively and independently. The Audit Committee also commissioned an Enterprise Risk Management review to help management in identifying and mitigating organisational risks to further strengthen the governance structure.

CHAIRMAN'S MESSAGE (cont'd)

The year ahead will be an especially challenging one as NUS prepares for corporatisation

and the increased competition in the higher education sector. The strategy review

will be completed soon and this will provide a broad blueprint to guide management

and the NUS community in the coming years. Council will work with management to

introduce a comprehensive accountability and quality assurance framework that will guide

management in its activities. Council will also play a bigger role in fund raising, to help

management build the resources needed for NUS to compete internationally. Council

also shares management's goal to build effective systems and foster an organisational

culture that will enable the University to be even more nimble in a fast-changing dynamic

global environment.

The Council shares the pride of the entire NUS community that as the University celebrates

its centennial, it has received international recognition as being among the top 20

universities in the world. Council will work with management and other stakeholders in

building on this and realising its vision of being a global knowledge enterprise comparable

to the leading universities of the world.

Lastly, I would like to thank my fellow Council members for their valuable support,

commitment and dedication, the management and staff for their co-operation and

diligence, the alumni and benefactors for their support and contributions in making the

past year a highly successful one.

WONG NGIT LIONG

CHAIRMAN, NUS COUNCIL

PRESIDENT'S MESSAGE

IT HAS BEEN AN EXHILARATING YEAR for NUS. Having embarked on a journey towards a global university embracing an entrepreneurial dimension, our collective accomplishments over the year indicate that we are making significant progress.

That NUS' standing as a university is held in high regard by the global knowledge community was affirmed by the ranking of the world's best universities conducted by *The Times* of London in 2004. We can take pride that NUS was placed among the top 20 universities worldwide, ahead of many renowned universities, as well as achieved high ranking in specific disciplines. NUS' strong global reputation also makes it a first-choice university among Singapore's junior college students, as revealed in a survey by national newspaper *The Straits Times*.

Being ranked with the best is great encouragement in our efforts to be a leading university in the global arena and a confluence of Singaporean and global talents, both faculty and students. Recognising that faculty are key to our endeavour to build a global university, NUS' ability to recruit and retain faculty has been enhanced by adopting global best practices in promotion and tenure, in particular extending tenure to age 65. To attract the best students, NUS has also made efforts to develop topnotch differentiated programmes, provide first-rate global educational opportunities and foster a student-centred environment.

2005 is also the year when NUS celebrates 100 years of a proud heritage and a sustained record of accomplishments. Our Centennial Celebrations, a year-long series of 100 events, got off to a resounding start with the NUS Everest Expedition team's successful summit of the world's highest peak. Our global team, reflecting the diversity of the NUS community of students, staff and alumni from Singapore and around the world, unfurled the NUS flag at the summit and put our University on top of the world.





PRESIDENT'S MESSAGE (cont'd)

The Everest team's achievement amply demonstrated that with NUS, no dream is too high in the guest for excellence.

The Centennial Celebrations were given a touch of distinction with the hosting of the first-ever joint Presidents Roundtable of the Association of American Universities (AAU) and APRU as well as of the APRU 9th Annual Presidents Meeting at NUS. The AAU-APRU Presidents Roundtable was the largest gathering of university presidents from the Americas and Pacific Rim in Singapore. These milestone events marked a promising start for AAU and APRU in building a 10,000-mile bridge across the Pacific, linking member universities through collaborative initiatives and programmes. Clearly, NUS' leadership of APRU continues to enable NUS and Singapore to lead and facilitate major discussions with important stakeholders on the future of higher education, research and enterprise in the Pacific Rim.

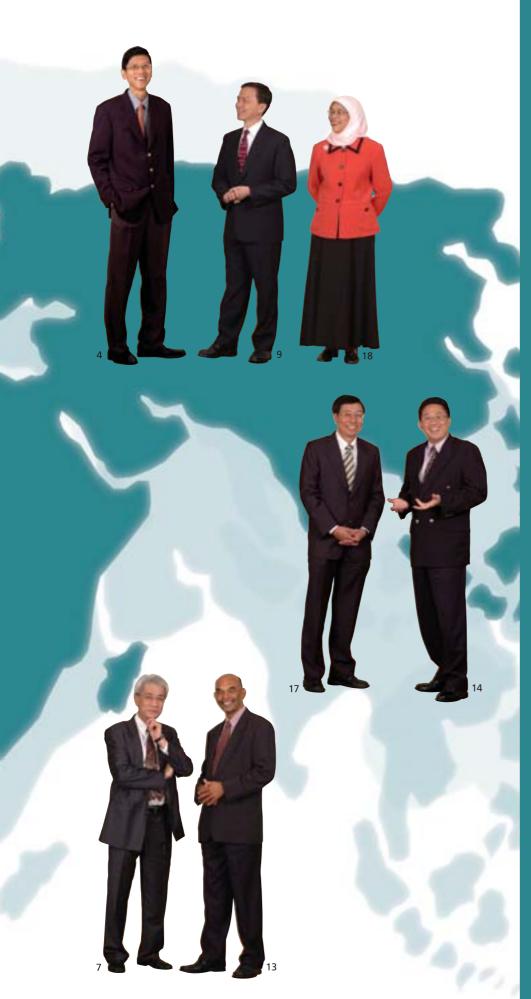
In this Centennial year, NUS stands on the threshold of becoming an autonomous university. The move towards greater autonomy will give NUS greater flexibility in charting its own strategic directions in the pursuit of global excellence in research, education and service. Critical for the success of NUS as an autonomous university will be a sense of identification and ownership among our stakeholders – students, alumni, faculty and staff – embracing a "no walls" organisational culture. NUS will continue striving to build a community characterised by intellectual vibrancy, passion for knowledge, and service to country and society.

The progress achieved by NUS on many fronts has been made possible through the hard work and contributions of countless people among our community and beyond. I would like to commend and thank everyone for all the support and efforts that have gone into building up NUS' standing, both locally and globally.

Amidst an increasingly competitive global landscape, our NUS community must persevere in pursuing our passions to reach new peaks of excellence. Let us move forward together towards becoming truly distinguished in the global arena while remaining rooted in Singapore – in short, Singapore's homegrown global university.

PROFESSOR SHIH CHOON FONG
PRESIDENT, NUS





NATIONAL UNIVERSITY OF SINGAPORE COUNCIL

MR WONG NGIT LIONG
 CHAIRMAN, NUS COUNCIL
 Executive Chairman
 Venture Corporation Ltd

MR WONG AH LONG
 DEPUTY CHAIRMAN, NUS COUNCIL
 Chief Executive Officer
 Pacific Star Investment & Development Pte Ltd

3. PROFESSOR SHIH CHOON FONG President National University of Singapore

4. PROFESSOR TAN CHORH CHUAN
Deputy President and Provost
National University of Singapore

5. **MS CHANG HWEE NEE**Deputy Secretary (Policy)
Ministry of Education

6. MR CHEONG YIP SENG
Editor-in-Chief
(English/Malay Newspapers Division)
Singapore Press Holdings Ltd

7. MR EDWARD D'SILVA Executive Director SAA Architects Pte Ltd

8. MR WINSTON HODGE Principal Raffles Junior College

9. MR HSIEH FU HUA Chief Executive Officer Singapore Exchange Ltd

10. MR LEE TZU-YANG
Country Chairman
Shell Companies in Singapore

11. MR JAMES LOH SINN YUK Managing Director JL Capital Pte Ltd

12. **MS OLIVIA LUM**Group CEO and President
Hyflux Ltd

13. MR CHANDRA MOHAN K NAIR Partner Tan Rajah & Cheah

14. **LG NG YAT CHUNG**Chief of Defence Force
Ministry of Defence

PROFESSOR MARTHA PIPER
 President
 University of British Columbia

16. PROFESSOR SAW SWEE HOCK
Professorial Fellow
Institute of Southeast Asian Studies

17. MR TAN YONG SOON
Permanent Secretary
Ministry of the Environment & Water Resources

18. MDM HALIMAH BTE YACOB Assistant Secretary-General National Trades Union Congress

NUS acknowledges **Dr Steven Baxter's** contributions as council member until 30 April 2005.

STANDING TALL IN WORLDWIDE RANKINGS

The year in review was a milestone one for NUS, marked by acknowledgement from its international peers that it is a major league player. The strongest endorsement came from the Times Higher Education Supplement World University Rankings. The results of this survey are culled from the nominations of academics in 88 countries who were asked to identify the best universities in their fields of expertise. Their votes clearly spell the high regard with which the University is held for overall and discipline-specific excellence.

Here is how NUS measures up against others:



IN COMPUTING SCIENCE

(publication output)

- Institute of Scientific Information
Essential Science Indicators 05

IN ENGINEERING

(publication output)

- Institute of Scientific Information
Essential Science Indicators 05

IN SOCIAL SCIENCES

amongst world's top 100 faculties

- Times Higher Education Supplement, Feb 05



The Logistics Institute - Asia Pacific (for the third consecutive year)
- 2005 Asian Freight & Supply Chain Awards, Hong Kong

No.1 MBA PROGRAMME

in South-east Asia - Asia Inc, Sep 04

17 th IN ARTS & HUMANITIES

amongst world's top 50 faculties
- Times Higher Education Supplement, Feb 05

18 th

amongst TOP 200 UNIVERSITIES

in the world

- Times Higher Education Supplement, Nov 04

25th IN BIOMEDICINE

amongst world's top 100 faculties

- Times Higher Education Supplement, Mar 05

35th IN SCIENCE

amongst world's top 100 faculties
- Times Higher Education Supplement, Dec 04

BUILDING A GLOBAL BRAND

NUS continued in the year to build up equity as a global brand. Faculty and students through their efforts and achievements on the international stage were the University's best brand ambassadors. The University's leadership role in international consortia also raised its visibility as a quality brand. Listed here are some developments that raised NUS' profile in the year.

Living the brand promise. NUS' promise to deliver a distinctive learning experience with global and entrepreneurial dimensions is lived out by its students. Thirdyear engineering student, Peh Ruey Feng, filed over 10 US joint patents, relating to medical devices, while working as an intern at NUS College in Silicon Valley.

consortia. NUS President Professor Shih Choon Fong was re-elected to head APRU (Association of Pacific Identification by the Karolinska Institutet (Sweden) of NUS as its venue of choice for its first year period. overseas office.

Rim Universities) for a second two-Hosting major conferences.

Leadership in international

NUS played host to the AAU -APRÜ (Association of American Universities-Association of Pacific Rim Universities) Presidents Roundtable and the APRU 9th

knowledge affirm the University's standing as a centre of intellectual creativity. Associate Professor Hong Yunhan's (Faculty of Science) breakthrough as the first to cultivate test-tube sperm was reported in more than 100 newspapers worldwide. An article co-authored by NUS researchers and published in Biomaterials Vol 23, İssue 4, February 2002 has been identified by Thomson ISI to be one of the most cited papers in

materials science research.

Appointment of internationallyrenowned specialists as faculty. Dr R Sanders Williams, Dean of Medicine, Duke University, will concurrently be Dean of NUS Graduate Medical School. Professor Christopher Earley, formerly department chair of the Organisation Behaviour Group at London Business School, is the dean of the School of Business.

Annual Presidents Meeting as part of its centennial celebrations. Walking the talk. NUS researchers in pushing the frontiers of

Membership in the big league. NUS' Department of Chemical & Biomolecular Engineering is the first foreign member to be admitted to the (US) Council for Chemical Research, Washington DC.

The success of NUS' partnership in the Singapore-MIT Alliance (SMA). The graduate education and research collaboration between Massachusetts Institute of Technology (MIT), NUS and Nanyang Technological University was extended into a second phase that covers the award of dual degrees as well as life sciences programmes.

BUILDING A GLOBAL BRAND



Delegates attending the AAU-APRU Presidents Roundtable and the APRU 9th Annual Presidents Meeting at NUS

GLOBALISING AT 100

Even as it takes the high road on a global journey, NUS turns 100 in 2005. The judiciousness of age coupled with the drive and verve to face new challenges make for a potent force that will drive the University forward. In the 100 years that NUS has contributed to tertiary education in Singapore, the University has established a time-honoured tradition of excellence. As inheritors of this proud heritage, members of the NUS community have chosen to mark the University's centennial by celebrating the very excellence that defines its spirit.



THE CENTENNIAL EVEREST EXPEDITION

was an undertaking by a NUS team of staff, students and alumni to scale the world's highest peak. When NUS researcher, Lindley Zerbe, unfurled the NUS flag and planted it firmly at the summit of Mount Everest, he symbolised the collective spirit of each and every NUS stakeholder in their daily strive towards attaining their own peaks of excellence. Approaching the 8,848-metre

ascent from Nepal to face the most gruelling of mental and physical demands, team members Lindley, Stefen Chow, Ee Khong Lean, Ernest Quah and Teo Yen Kai displayed the many qualities that define the hallmarks of NUS education – teamwork, mental agility, stamina, passion and an enterprising spirit. The team returned to NUS to participate in the launch of the centennial celebrations.

THE CENTENNIAL CAR is a made-in-NUS single-seat racer fabricated by the University's engineering students. Otherwise known as the FSAE 2005, the 600 cc racer which weighs only 250 kg and powers to 100 kph in four seconds boasts features that are found on high-performance models such as a six-speed gearbox and a dry sump lubrication system. Its student-builders entered it for the 2005 intervarsity FSAE (Formula Society of Automotive Engineers) race held in Pontiac, Michigan, US, making it the only entry from South-east Asia and one from a country that does not have an automotive industry. This makes the racer all the more exceptional.

THE CENTENNIAL CHAIRS were set up to mark the University's milestone birthday. As the most prestigious of NUS endowed professorships, they will attract world-renowned specialists to spearhead educational and research thrusts in their fields of expertise at the University.

THE FACULTY OF MEDICINE MUSEUM is a labour of love by the Faculty to showcase its roots all the way back to 1905 when it started out as The Straits Settlements and Federated Malay States Government Medical School. The 3,200 sq ft museum is a veritable time capsule of NUS' commitment and contribution to 100 years of medical excellence in Singapore. The exhibits on display are divided into seven zones reflecting the multi-faceted dimensions of the Faculty and its predecessor institutions.

THE GLOBAL MERIT SCHOLARSHIP is NUS' centennial gift to the nation. To be funded mainly by private donations, it will be the University's most prestigious scholarship. The unique scholarship is targeted at helping outstanding local students who have demonstrated a keen interest to contribute to the community to realise their potential as

leaders and entrepreneurs. They will enjoy the best of NUS quality education such as participation in NUS Overseas Colleges, the University Scholars Programme as well as a year's overseas study or work stint at one of the University's partner universities.

THE NUS CENTENNIAL ENTREPRENEUR-SHIP AWARDS is a student initiative to celebrate the vitality of NUS as a hotbed of creativity and innovation on turning 100. Organised by the NUS Business Incubation of Global Organisations (NUS BINGO), the awards honour the entrepreneurial achievements of students and alumni at the individual, start-up and international levels.

THE CENTENNIAL NOBEL LAUREATE PUBLIC LECTURES will be held between July 2005 and February 2006 as a definitive salute to excellence. They will be delivered by Professors Steven Chu, 1997 Nobel Laureate in Physics; Carl E Wieman, 2001 Nobel Laureate in Physics; and Roald Hoffmann, 1981 Nobel Laureate in Chemistry.

FORGING GLOBAL LINKS

International networking is a cornerstone of the global university. It is the stimulus behind the buzz and vivacity that defines the global university as a confluence of talents, ideas and exchanges. The cross-boundary tie-ups and collaborations made by NUS in the year pervade every aspect of the University's core competencies.



IN EDUCATION

NUS has tied up with the following partners in the year to leverage on their teaching strengths as well as provide its students with a global perspective:

- with the Indian Institute of Technology Bombay to offer a joint graduate degree programme in advanced engineering materials.
- with Australian National University (ANU) to offer a Joint Bachelor of Philosophy (Honours)/Bachelor of Science (Honours) degree programme in chemistry, physics and mathematics.
- with Novartis Institute for Tropical Diseases, University of Basel and Swiss Tropical Institute to provide a joint masters programme in tropical infectious diseases.
- with East China University of Politics and Law (ECUPL) to jointly teach a Masters of Laws (LLM) in international business law.
- with Karolinska Institutet, Sweden to provide a joint PhD programme in Genetic and Molecular Epidemiology.
- with Massachusetts Institute of Technology (MIT) under the Singapore-MIT Alliance to provide a graduate programme in computation and systems biology.
- with the Swiss-based World Trade Institute to collaborate in teaching and research activities in the field of international economic law.
- with University of Copenhagen, Helsinki University, Budapest University of Technology, Warsaw University of Technology, Zagreb

- University (Croatia), Babes Bolyai University (Romania), Alexandra Iaon Cuza University (Romania) and the Instituto Tecnologico y de Estudios Superiores de Monterrey (Mexico) on student exchanges.
- with Harvard Medical Institute (HMI) to conduct the HMI-NUS Programme for Physician Educators.

FORGING GLOBAL LINKS

IN RESEARCH

International collaborations provide NUS researchers with the critical mass in terms of talent, resources and cross-fertilisation of ideas as the following have done:

- The NUS Silicon Nano Devices Laboratory is working with Jusung Engineering, Korea's largest maker of semiconductor manufacturing equipment, to develop the next-generation semiconductor device technology.
- Assistant Professor Peter Ho and research fellow Chua Lay Lay (Faculty of Science) are collaborating with Sir Richard Friend (Cambridge University), the "father of the plastic electronics revolution", to develop plastics that behave like semiconductors and metals. They have succeeded in coming up with the world's first general working n-type plastic transistor. The technological feat, which was also achieved with input from the Institute of Materials Research and Engineering (Singapore) was published in Nature (March 2005).
- Associate Professor Shazib Pervaiz (Faculty of Medicine) has tied up with researchers at the Karolinska Institutet to successfully investigate why B-cell lymphoma do not respond to chemotherapy. Their findings were published in *Blood* (February 2005).
- Associate Professor Lim Chwee Teck (Faculty of Engineering) and Assistant Professor Kevin Tan (Faculty of Medicine) have linked up with researchers at Massachusetts Institute of Technology to examine how parasites from the female Anopheles mosquitoes stiffen red blood cells. Their paper on elasticity changes in red blood cells as the parasite matures within them won a Ribbon Award at the 2004

Materials Research Society, Fall Meeting in Boston, US.

- Associate Professor Jochen Wirtz (School of Business) collaborated with Associate Professor Loizos Heracleous (Oxford University) on an article titled *Biometrics Meets Services* which was published in the *Harvard Business Review* (HBR) under *Breakthrough Ideas for 2005*. The article is the first from the School to make it into the HBR.
- Assistant Professor Xia Yingcun (Faculty of Science) researching with peers at Cambridge University has developed a novel gravity model in the study of metapopulation dynamics of measles. Their work was featured in *The American Naturalist* (August 2004).
- Associate Professor Vincent Chow (Faculty of Medicine) working with researchers from the International Centre for Genetic Engineering and Biotechnology, India, has discovered that a protein in the SARS virus which causes host cells to commit suicide could point the way towards fighting the disease. Their findings were published in the *Biochemical Journal* (August 2004).

IN ENTREPRENEURSHIP

Cross-country tie-ups have enabled budding entrepreneurs in the NUS community to learn and work in some of the world's thriving entrepreneurial centres:

- NUS Overseas Colleges tied up with Swedish Royal Institute of Technology (KTH), Stockholm, to set up the first NUS Overseas College in Europe. The partnership enables students attending NUS College in Stockholm (NCST) to attend part-time courses in engineering, science and entrepreneurship at KTH and the Stockholm School of Entrepreneurship (SSES) while working full-time in high-technology firms in the Kista Science Park.
- NUS Start-up@Singapore Business Plan Competition and Forums will join CU Entrepreneurs (Cambridge University) and CORE (Columbia Organisation of Rising Entrepreneurs) to be one of the seven founding members of Global Entrepreneurship Forum.

The internationalism of NUS as a global university was evident in the year's activities. In substance, tone and spirit, NUS acted truly global, by pushing its boundaries of excellence and in being outward and forward-looking.

JULY - SEPTEMBER

The NUS Nanoscience and Nanotechnology Initiative (NUSNNI) was launched with high visibility to signal the importance the University attaches to this nascent discipline considered by many to be the next big wave in science. The launch was marked by the convening of the first international Nanoengineering and Nanoscience Congress by the University as well as the inaugural award of the NUSNNI Research Achievement Award. Since 2002, six patents on nanotechnology have been filed by NUS researchers and 22 nano laboratories established on campus.



Singapore night out: U21 summer school students at Clarke Quay

The first summer school and symposium of Universitas 21 (U21), an international network of 17 universities, was held at NUS. The University, which is a founder member of the network, hosted faculty and students from 14 universities at a summer school that defines U21's continuing effort to encourage global learning. Speakers from the UK, US, Canada,

New Zealand, Australia and Singapore shared best practices in university technology commercialisation at a two-day symposium that brought the summer school to a close.



Mr Tharman Shanmugaratnam at KR Ministerial Forum '04

Education Minister Mr Tharman Shanmugaratnam was the year's keynote speaker at the Kent Ridge Ministerial Forum. The Minister highlighted NUS' efforts in experiential learning in the global arena and urged students to develop originality of thought and an adversity quotient. The Forum is an annual event organised by the NUS Students' Political Association for prominent political figures to share their insights with students and staff of Singapore's tertiary institutions.



Dr Tony Tan with NCSV students

Deputy Prime Minister Dr Tony Tan paid a visit to NUS College in Silicon Valley (NCSV). He took the opportunity to engage the undergraduates on their experiences working as full-time interns in high-tech start-ups at the San Francisco Bay area and studying part-time technopreneurial courses at Stanford, NUS' partner university in the programme. A pleased Dr Tan said at the end of his visit that he had no doubt the NCSV experience would enrich the students' education as reports received from attachment companies and students alike have been very positive.



Central Library puts on a new face

The newly-refurbished NUS Central Library welcomed members of the University community to a new library experience that is both aesthetically-pleasing and user-friendly. Decorated in warm hues, the physical revamp added several enhancements such

as theatrettes, student discussion rooms and a light refreshment corner. The new-age contemporary look was complemented by a range of state-of-the-art digital resources such as an InfoCommons area, a multimedia room, and a smart classroom.

OCTOBER - DECEMBER



Time out at Munchie Monkey

In true entrepreneurial spirit, NUS Students' Union (NUSSU) embarked on their first business venture with the set up of a food and beverage outlet at Yusof Ishak House, the hub of student life on campus. Called *Munchie Monkey*, the café is a joint venture with food operator, *Spageddies*, and is the first student-managed food outlet in Singapore's tertiary institutions. Earnings from the outlet are channelled towards funding student activities.



MOU Signing: NUS & NTNU

His Majesty, King Harald V of Norway, witnessed the signing of a Memorandum of Understanding (MOU) between NUS President Professor Shih Choon Fong and the Rector of the Norwegian University of Science and Technology (NTNU), Professor Eivind Hiis Hauge. The new agreement charts the next phase of the two universities' collaboration in areas such as maritime and offshore technology in oil and gas, energy, logistics, materials engineering, geohazards and nanotechnology.



MOU Signing - TLI-AP and Georgia Tech

NUS and the Georgia Institute of Technology (Georgia Tech) signed an MOU to kick off the second phase of their collaboration in The Logistics Institute-Asia Pacific (TLI-AP). The new five-year partnership will see the development of an even closer-knit relationship between the two universities as together they foster more

industry-relevant education and research in areas such as Radio Frequency Identification.

NUS entered into a new Maritime and Port Research Programme when it signed an MOU with the Maritime and Port Authority of Singapore. The new agreement sets out the framework for the establishment of research-based Maritime Technology Professorships, a maritime industrial attachment programme for NUS students and joint research initiatives.



Celebrating Prof Shih's entry into NAE

NUS President Professor Shih Choon Fong was formally received into the prestigious US National Academy of Engineering (NAE) as the only Singaporean among its 168 foreign associates. In welcoming Prof Shih to the august body, the citation noted his achievements in the "development of innovative computational methods in non-linear fracture mechanics and for international leadership in engineering". Prof Shih's membership also makes him the first Singaporean to be a member of the US National Academies, which is made up of the National Academy of Sciences, the Institute of Medicine, the National Research Council and the NAE.

JANUARY - MARCH



A Special Conferment Ceremony for the Sultan

The Sultan of Brunei, His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah, received an honorary Doctor of Laws degree from NUS at a ceremony presided by President S R Nathan, the University's Chancellor. The degree was conferred on the Sultan for his achievements in leading his country and fostering close ties between Singapore and Brunei. The occasion opens a new chapter for NUS as it explores possible areas of collaboration with Brunei's national university, Universiti Brunei Darussalam.



NUS High students attending their first lecture

NUS High School of Mathematics & Science opened its doors to welcome its first cohort

with a juxtaposition of the conventional and the extraordinary. Aside from the usual energetic and auspicious lion-dance, an illuminating lecture on the "nanoworld" gave the inaugural enrolment of 231 students a preview to the exciting journey of discovery that awaits them.

NUS celebrated its first Enterprise Day with a tri-nation oratorical contest participated by teams of students/alumni from NUS Colleges in Silicon Valley, Bio Valley and Shanghai as well as a local home team. The debate on Which Region Will Pivot the Global High Tech Economy in 2010 was transmitted live via video-conferencing to a global audience in the US, China and Singapore. The winner's trophy went to NUS College in Silicon Valley.



President S R Nathan (front row fourth from right) at the opening of Sheares Hall

Sheares Hall, at its new premises at Heng Mui Keng Terrace, enjoyed the honour of being officially opened by one of its former residents, NUS Chancellor President S R Nathan. Like many of the new residential halls, the new Sheares Hall was designed to provide residents with an integrated living and learning experience in which they have optimum social spaces to interact and engage each other. The complex houses 504 single rooms as well as a comprehensive range of common facilities.



The Alumni Terrace

An alumnus-headed architectural firm, Architects Vista, submitted the best design for the new Alumni Complex and won the bid to complete it by 2007. The Complex, occupying some 25,000 sq metres of land, will include a new Alumni House and an upgraded Kent Ridge Guild House. The winning design with its courtyard concept was judged to have best captured the spirit and concept envisioned for the dedicated alumni building.

APRIL - JUNE



MM Lee Kuan Yew doing the honours

Minister Mentor, Mr Lee Kuan Yew, opened the first academic institution which he graciously consented to be named after him. The Lee Kuan Yew School of Public Policy at NUS is the first English-language school of public policy in the region with an international orientation. It aims

to be a global reference point in public policy. The institute marked the event with a ground-breaking conference that was co-sponsored by The Asia Society (New York) and the Brookings Institution. Called *Managing Globalisations:* Lessons from China and India, it brought together top scholars from China and India to debate the challenges and opportunities of globalisation.

NUS signed an agreement with Duke University to establish its second medical school, the NUS Graduate Medical School (GMS). To be located at Outram, GMS will offer graduate-entry medical programmes based largely on Duke's curriculum which is renowned for its rigorous and innovative medical education with a distinctive focus on research. Top faculty from Duke University will be seconded to GMS to teach and conduct research that is relevant to the Singapore Biomedical Sciences Initiative.

The first batch of students from the Yong Siew Toh Conservatory of Music left for Baltimore to participate in a three-week fellowship programme at the Peabody Institute of Johns Hopkins University. The cross-campus stint is part of the collaboration between the two conservatories. The six NUS students performed with the Peabody Symphony Orchestra and received coaching from the Peabody faculty.



NUS' new administrative headquarters

The offices of the University's central administration moved to its new headquarters

at the new University Hall, situated at Lower Kent Ridge Road. The new Hall stands out as a beacon with its landmark circular glass tower that commands a 360-degree vista of the campus. A glass link-bridge connects the building's two blocks named the Lee Kong Chian and Tan Chin Tuan Wings, after two of the University's most loyal and generous supporters. An imposing atrium and a landscaped courtyard create an ambience that is both dignified and welcoming at the same time.



The new NUS flag (right) being raised for the first time

NUS kick-started its year-long centennial celebrations at the new University Hall. The ceremony was marked by several significant milestones. They included the unveiling of a new campus landmark, the NUS Centennial Sculpture; the first raising of the University's new flag and the premiere of the University's song. The presence of the NUS Centennial Everest Expedition Team and marathon athlete Dr William Tan, back home from accomplishing their extraordinary feats to celebrate the University's centenary, brought a special meaning to the day's event.

EDUCATION



NUS broad-based education makes for a well-rounded student

Review

NUS topped the scale as the university of choice of local junior college students in a survey conducted by the *Straits Times* (October 2004). The University received close to 33,000 applications for entry in the academic year under review. About 27 per cent were from international students who opted for a quality university education at NUS.

Changes made by NUS in recent years to attract key talents by offering an unique educational experience gathered momentum as the University prepares for its changeover to become a corporatised, autonomous body in 2006 when it will be empowered to build its own areas of strength to achieve peaks of excellence.

The year's new cohort was the first to be admitted on a new admission policy designed to

attract a wider spread of talent and diversity that will lead to a richer and more vibrant student body. A more qualitative and holistic evaluation, covering interests and achievements outside academic work, was applied in processing applications to better match students' talents and passions with learning.

KEY CHANGES

Starting out with the making of dual offers to successful applicants under the new admission policy, the University announced in the year plans to introduce five-year double degree programmes from July 2005 onwards. Kicking off this revolutionary change in the curriculum will be a double honours degree programme in economics and law leading to a Bachelor of

Social Sciences (Honours) as well as a Bachelor of Laws (Honours). A double degree programme in physics and materials science and another in business administration and law are also on the drawing board.

In its continuous effort to raise the quality of its curriculum content, the University is cognisant of its commitment not only to provide students with a robust well-rounded education but also one that is relevant and responsive to market forces in the real world. It is with this in mind that the Information and Communications Management Programme at the Faculty of Arts & Social Sciences was revamped to become the Communications and New Media Programme to produce communications professionals skilled in the new media and able to facilitate Singapore's vision of becoming a vibrant global media city.

Similarly, the Department of Materials Science was brought up to date with a name change to the Department of Materials Science and Engineering to better reflect its expansion of educational and research thrusts to include the engineering components of advanced materials.

NEW PROGRAMMES

Multi-disciplinary courses continued to be a strong suit in the University's course offering. This is borne out by the School of Business with its line-up of graduate programmes designed to broaden intellectual horizons and enhance critical thinking. They include the inclusion of an inter-disciplinary component in its MBA programmes such as a Master of Business Administration with Specialisation in Real Estate and a Master of Business Administration

with Specialisation in Healthcare. A five-year Co-Terminal Master of Science (Management) Programme will enable suitable candidates from other faculties to graduate with both a bachelor's degree and a Master of Science in management.

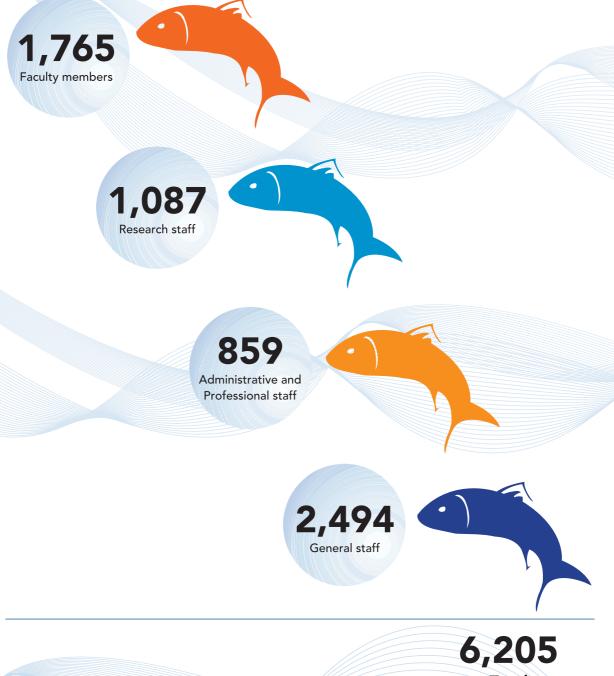
NUS demonstrated once again in the year its translation of teaching excellence into innovative learning programmes. Preparations were put in place to introduce in the next academic year a Master of Science in financial engineering – the first graduate degree course to be offered entirely via distance learning to students outside of Singapore by a local academic institution.

NUS' benchmark of excellence as a provider of quality education was raised in the year with the coming on stream of two flagship schools. The Lee Kuan Yew School of Public Policy (LKYSPP) will build on the University's existing public policy programme with the Kennedy School of Government (Harvard University) and spearhead its present offering of master's degree programmes in public policy and public management. It will also conduct high-impact executive programmes for top government officials in the region.

The NUS Graduate Medical School at Outram campus, a collaboration with Duke University, will make its mark with its niche offering of a four-year graduate programme to train doctors who will specialise in biomedical science research. In a move to align itself to the ethos and culture of Duke's medical education, the Faculty of Medicine implemented in the year a Differentiated Track for Clinical Staff.

PLANNING AHEAD

In its evolvement to become a global university anchored on a dynamic learning environment that is full of buzz, NUS continues to be mindful of the need to attract the talented, the passionate and the motivated. The University spelt out in the year its admission criteria for 2008 in line with a new A-level curriculum that will be introduced in the local junior colleges in 2006. NUS will continue to use a University Score in its evaluation of applicants as well as give due consideration to their strengths and talents in both academic and non-academic fields, independent of their examination results.



Total

33

DISTRIBUTION OF FACULTY MEMBERS

BY APPOINTMENT AS AT END OF JUNE 2005

Faculty/School/ Department	Professor	Associate Professor	Assistant Professor	Senior Lecturer	Lecturer	Teaching Assistant*	Others#	Total
Arts & Social Sciences	15	95	117	17	20	51	26	341
Business	8	54	37	6	7	4	6	122
Computing	10	28	36	8	9	38	5	134
Dentistry	1	12	8	1	0	0	2	24
Design & Environment	3	27	23	8	2	6	9	78
Engineering	53	144	80	4	1	9	33	324
Law	9	34	9	0	0	0	11	63
Lee Kuan Yew School of Public Policy	1	1	6	1	0	0	3	12
Medicine	36	94	88	2	0	10	37	267
Science	32	110	63	10	9	32	26	282
University Scholars Programme	0	0	7	1	0	0	3	11
Yong Siew Toh Conservatory of Music	0	1	7	2	0	0	4	14
Non-Faculty Based Departments	0	0	0	3	35	1	54	93
Total	168	600	481	63	83	151	219	1,765

^{*} Including Senior Tutor and Instructor.

[#] Including part-time and visiting staff.

35

DISTRIBUTION OF FACULTY MEMBERS

BY NATIONALITY AS AT END OF JUNE 2005

Faculty/School/Department	S'pore	M'sia	India	PRC	Other Asian Countries	UK	USA/ Canada	Aust/NZ	Others	Total
Arts & Social Sciences	138	18	14	14	60	19	41	19	18	341
Business	66	8	7	7	16	1	12	2	3	122
Computing	65	12	13	14	10	0	6	5	9	134
Dentistry	17	1	1	1	3	0	0	1	0	24
Design & Environment	44	11	1	4	6	2	5	0	5	78
Engineering	150	41	27	27	28	7	20	9	15	324
Law	37	9	1	2	2	3	5	3	1	63
Lee Kuan Yew School of Public Policy	2	0	2	2	0	0	2	3	1	12
Medicine	150	44	10	9	8	16	10	9	11	267
Science	122	32	15	34	11	12	23	14	19	282
University Scholars Programme	3	0	1	1	0	1	5	0	0	11
Yong Siew Toh Conservatory of Music	5	1	0	1	1	0	5	0	1	14
Non-Faculty Based Departments	50	14	7	5	6	5	4	1	1	93
Total	849	191	99	121	151	66	138	66	84	1,765

36

DISTRIBUTION OF RESEARCH STAFF

BY NATIONALITY AS AT END OF JUNE 2005

Faculty/School/Department/ Research Institute/Centre	S'pore	M'sia	India	PRC	Other Asian Countries	UK	USA/ Canada	Aust/NZ	Others	Total
Arts & Social Sciences	4	0	3	1	1	1	1	1	0	12
Business	1	0	1	2	0	0	0	0	0	4
Computing	3	1	1	32	6	0	0	0	1	44
Dentistry	1	0	0	3	0	0	0	0	0	4
Design & Environment	5	0	1	6	1	0	0	0	0	13
Engineering	37	23	20	129	25	0	1	2	3	240
Law	0	0	0	0	0	0	0	0	0	0
Lee Kuan Yew School of Public Policy	3	0	1	0	0	0	0	0	0	4
Medicine	95	39	28	81	20	6	3	7	5	284
Science	23	18	27	97	5	1	3	1	13	188
University Scholars Programme	0	0	0	0	0	0	0	0	0	0
Yong Siew Toh Conservatory of Music	0	0	0	0	0	0	0	0	0	0
Non-Faculty Based Departments	2	1	3	13	0	0	0	0	2	21
Specialty Research Inst/Ctrs	58	16	27	97	20	10	15	10	20	273
Total	232	98	112	461	78	18	23	21	44	1,087

NUS STUDENT POPULATION



NUS GRADUATE STUDENT POPULATION



^{*} Including graduate diploma students

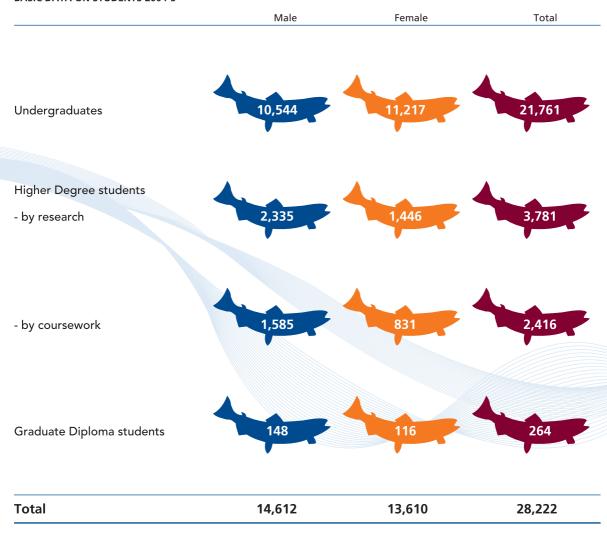
STUDENT EXCHANGE IN NUS



EDUCATION

ENROLMENT STATISTICS

BASIC DATA ON STUDENTS 2004-5



38

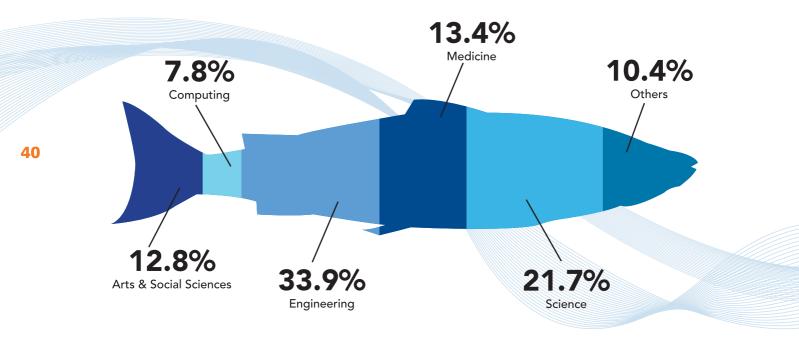
ENROLMENT STATISTICS (cont'd)

UNDERGRADUATE ENROLMENT BY FACULTY (AS AT 7 FEBRUARY 200	05)		
Faculty/School	Male	Female	Total
Arts & Social Sciences	1,472	3,497	4,969
Business	381	696	1,077
Computing	1,230	473	1,703
Dentistry	76	61	137
Design & Environment	596	931	1,527
Engineering	4,296	1,675	5,971
Law	312	501	813
Medicine	681	459	1,140
Science	1,446	2,864	4,310
Yong Siew Toh Conservatory of Music	54	60	114
Total	10,544	11,217	21,761

EDUCATION

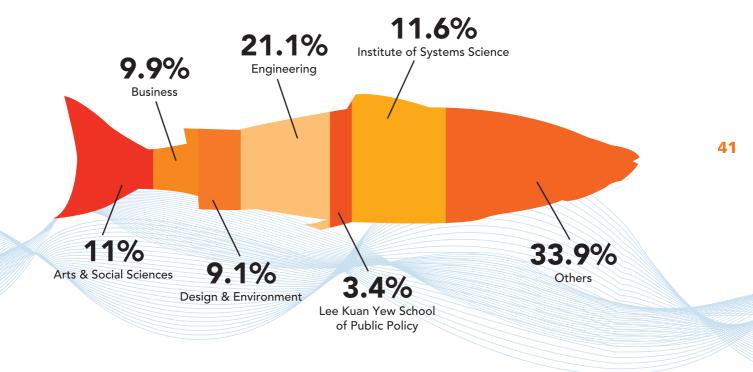
ENROLMENT STATISTICS (cont'd)

PERCENTAGE BREAKDOWN OF GRADUATE STUDENT ENROLMENT BY RESEARCH



ENROLMENT STATISTICS (cont'd)

PERCENTAGE BREAKDOWN OF GRADUATE STUDENT ENROLMENT BY COURSEWORK



42

ENROLMENT STATISTICS (cont'd)

GRADUATE STUDENT ENROLMENT 2004-5 BY COURSEWORK & DISSERTATION (AS AT 7 FEBRUARY 2005)							
Faculty/Institute/School	Male	Female	Total				
Arts & Social Sciences	90	205	295				
Business	201	63	264				
Computing	55	35	90				
Dentistry	16	13	29				
Design & Environment	147	98	245				
Engineering	402	163	565				
Law	64	89	153				
Lee Kuan Yew School of Public Policy	52	40	92				
Medicine	115	70	185				
Science	110	53	163				
Design Technology Institute	79	8	87				
Institute of Systems Science	251	61	312				
Regional Language Centre	4	18	22				
Singapore-MIT Alliance	26	19	45				
Temasek Defence Systems Institute	97	5	102				
The Logistics Institute - Asia Pacific	24	7	31				
Total	1,733	947	2,680				

ENROLMENT STATISTICS (cont'd)

GRADUATE STUDENT ENROLMENT 2004-5 BY RESEARCH (AS AT 7	FEBRUARY 2005)		
Faculty/Institute/School	Male	Female	Total
Arts & Social Sciences	220	264	484
Business	24	56	80
Computing	218	75	293
Dentistry	13	13	26
Design & Environment	62	46	108
Engineering	968	314	1,282
Law	18	14	32
Medicine	257	250	507
Science	457	363	820
Institute of Molecular & Cell Biology	1	1	2
Laboratories for Information Technology	1	0	1
National University Medical Institutes	1	2	3
NUS Graduate School for Integrative Sciences & Engineering	49	32	81
Singapore-MIT Alliance	46	16	62
Total	2,335	1,446	3,781

GRADUATION STATISTICS

### B.A. 181 668 849 B.A. (Honours) 58 116 174 B.Soc.Sci. (Honours) 116 251 367 B.Soc.Sci. (Honours) 116 251 367 B.B.A. (Honours) 116 251 367 B.B.A. (Honours) 155 1,035 1,390 B.B.A. (Honours) 25 34 59 B.B.A. (Honours) 25 34 59 B.B.A. (Honours) 105 198 303 B.B.A. (Honours) 152 64 216 B.Comp. (Honours) 152 64 216 B.Comp. (Computer Engineering) 42 24 666 B.Comp. (Computer Engineering) 42 24 666 B.Comp. (Computer Engineering) 362 201 563 B.B.A. (Industrial Design) 11 11 12 B.B.A. (Industrial Design) 11 11 12 B.Sc. (Bail Birgh) 33 51 84 B.B.Comp. (Real Estate) 34 214 338 B.B.G. (Cenerical) 105 98 203 B.Eng. (Chemical) 105 98 203 B.Eng. (Computer) 95 15 110 B.Eng. (Chemical) 373 129 502 B.Eng. (Mechanical) 302 35 387 B.Eng. (Mechanical) 303 304 B.Eng. (Mechanical) 304 44 B.Eng. (Mechanical) 304 44 B.Eng. (Environmental) 304 44 B.Eng. (Mechanical) 307 307 B.Eng. (Mechanical) 308 309 B.Eng. (Mechanical) 309 309 B.Eng. (Mechanical) 300 300 B.	FIRST DEGREE GRADUATES 200)4-5			
B.A. (Honours) 58 116 174 175 165 165 165 165 165 165 165 165 165 16	Faculty	Full-time Degree	Male	Female	Total
B.Soc.Sci. (Honours) 116 251 367 367 368 369	Arts & Social Sciences	B.A.	181	668	849
Sub-Total 355 1,035 1,390 usiness B.B.A. 80 164 244 usiness B.B.A. (Honours) 25 34 59 sub-Total 105 198 303 computing B.Comp. (Honours) 152 64 216 B.Comp. (Computer Engineering) 42 24 66 sub-Total 362 201 563 sub-Total 22 12 34 sesign & Environment B.A. (Architecture) 38 46 84 essign & Environment B.A. (Industrial Design) 11 11 22 34 sub-Total B.S.c. (Real Estate) 42 106 148 33 51 84 sub-Total B.Eng. (Chemical) 105 98 203 38 46 98 sub-Total B.Eng. (Chemical) 105 98 203 143 34 44 34 38 39 36 203 38		B.A. (Honours)	58	116	174
susiness B.B.A. 80 164 244 B.B.A. (Honours) 25 34 59 sub-Total 105 198 303 computing B.Comp. (Honours) 152 64 216 B.Comp. (Computer Engineering) 42 24 66 sub-Total 362 201 563 sentistry B.D.S. 22 12 34 seign & Environment B.A. (Architecture) 38 46 84 seign & Environment B.A. (Industrial Design) 11 11 22 12 34 sub-Total B.Sc. (Real Estate) 38 46 84 sub-Total B.Sc. (Real Estate) 42 106 148 sub-Total 124 214 338 sugineering B.Eng. (Chemical) 105 98 203 B.Eng. (Computer) 95 15 110 B.Eng. (Industrial & Systems Engineering) 27 12 39 sub-Total 10 34 44 B.Eng. (Mechanical) 302		B.Soc.Sci. (Honours)	116	251	367
B.B.A. (Honours) 25 34 59 303 309	Sub-Total		355	1,035	1,390
Sub-Total 105 198 303 computing B. Comp. 168 113 281 B. Comp. (Honours) 152 64 216 B. Comp. (Computer Engineering) 42 24 66 Sub-Total 362 201 563 sentistry B.D.S. 22 12 34 sesign & Environment B.A. (Architecture) 38 46 84 essign & Environment B.A. (Industrial Design) 11 11 22 34 essign & Environment B.S.c. (Building) 33 51 84 84 sub-Total 124 214 338 11 14 22 12 34 14 338 14 14 34 14 34 14 34 34 14 34 34 34 34 34 34 34 34 34 33 31 31 31 31 31 31 31 31 31 <td< td=""><td>Business</td><td>B.B.A.</td><td>80</td><td>164</td><td>244</td></td<>	Business	B.B.A.	80	164	244
B.Comp. (Honours) 152 64 216 B.Comp. (Computer Engineering) 42 24 66 B.Comp. (Computer Engineering) 42 21 34 B.Comp. (Computer Engineering) 362 201 363 B.Comp. (Computer) 38 46 84 B.A. (Industrial Design) 11 11 22 B.Sc. (Building) 33 51 84 B.Sc. (Real Estate) 42 106 148 B.Eng. (Chemical) 105 98 203 B.Eng. (Chemical) 105 98 203 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 B.Eng. (Mechanical) 302 85 387 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Industrial & Systems Engineering) 302 85 387 B.Eng. (Industrial & Systems Engineering) 302 35 387 B.Eng. (Industrial & Systems Engineering) 302 303 B.Eng. (Industrial & Systems Engineering) 303 304 304 B.Eng. (Industrial & Systems Engineering) 302 303 B.Eng. (Industrial & Systems Engineering) 303 303 B.Eng. (Industrial & Systems Engineering) 304 B.Eng. (Industrial & Systems Engineering) 305 B.Eng. (Industrial & Systems Engineering) 307 B.Eng. (Industrial & Systems Engineering)		B.B.A. (Honours)	25	34	59
B.Comp. (Honours) 152 64 216 B.Comp. (Computer Engineering) 42 24 66 B.Comp. (Computer Engineering) 42 24 66 B.Comp. (Computer Engineering) 42 201 563 B.Comp. (Computer Engineering) 42 201 563 B.Comp. (Computer Engineering) 22 12 34 B.Comp. (Computer Engineering) 38 46 84 B.Comp. (Industrial Design) 11 11 11 22 B.Comp. (Basel Estate) 33 51 84 B.Comp. (Real Estate) 42 106 148 B.Comp. (Chemical) 105 98 203 B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Electrical) 373 129 502 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 B.Eng. (Mechanical) 302 85 387 B.Eng. (Industrial & Systems Engineering) 27 12 186 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Industrial & Systems Engineering) 302 85 387 B.Eng. (Industrial & Systems Engineering) 303 373 373 B.Eng. (Industrial & Systems Engineering) 303 373 373 B.Eng. (Industrial & Systems Engineering) 303 373 373 B.Eng. (Industrial & Systems Engineering) 303 373 B.Eng. (Industrial & Systems Engineering) 303 373 B.Eng. (Industrial & Systems Engineering) 303 373 B.Eng. (Industrial	Sub-Total		105	198	303
B.Comp. (Computer Engineering) 42 24 66 Sub-Total 362 201 563 entistry B.D.S. 22 12 34 Sub-Total 22 12 34 Sub-Total 38 46 84 B.A. (Architecture) 38 46 84 B.A. (Industrial Design) 11 11 22 B.Sc. (Building) 33 51 84 B.Sc. (Real Estate) 42 106 148 Sub-Total 124 214 338 Ingineering B.Eng. (Chemical) 105 98 203 B.Eng. (Computer) 95 15 110 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 Sub-Total 1,044 434 1,478 Sub-Total 1,044 434 1,478 Sub-Total 1,044 434 1,478 Sub-Total 1,044 434 1,478 Sub-Total 1,044 1,478 Sub-Total 1,04	Computing	B.Comp.	168	113	281
Section		B.Comp. (Honours)	152	64	216
entistry B.D.S. 22 12 34 sub-Total 22 12 34 esign & Environment B.A. (Architecture) 38 46 84 B.A. (Industrial Design) 11 11 22 B.Sc. (Building) 33 51 84 B.Sc. (Real Estate) 42 106 148 sub-Total 124 214 338 ngineering B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 sub-Total 62 124 186 sub-Total 7 <td></td> <td>B.Comp. (Computer Engineering)</td> <td>42</td> <td>24</td> <td>66</td>		B.Comp. (Computer Engineering)	42	24	66
Sub-Total 22 12 34 esign & Environment B.A. (Architecture) 38 46 84 B.A. (Industrial Design) 11 11 22 B.Sc. (Building) 33 51 84 B.Sc. (Real Estate) 42 106 148 sub-Total 124 214 338 ngineering B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 sub-Total 1,044 434 1,478 sub-Total 62 124 186 sub-Total 62 124 186 sub-Total 62 124 186 sub-Total 7 38 209 sub-Total <td>Sub-Total</td> <td></td> <td>362</td> <td>201</td> <td>563</td>	Sub-Total		362	201	563
B.A. (Architecture) 38	Dentistry	B.D.S.	22	12	34
B.A. (Industrial Design) 11 11 22 B.Sc. (Building) 33 51 84 B.Sc. (Real Estate) 42 106 148 B.D. (Real Estate) 105 98 203 B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 B.Eng. (Mechanical) 30	Sub-Total		22	12	34
B.Sc. (Building) B.Sc. (Real Estate) B.Sc. (Re	Design & Environment	B.A. (Architecture)	38	46	84
B.Sc. (Real Estate) 42 106 148 iub-Total 124 214 338 ingineering B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Electrical) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 iub-Total 10.04 434 1.478 aw LL.B. 62 124 186 dedicine M.B.,B.S. 123 86 209 iub-Total 123 86 209 iub-Total 124 559 iub-Total 125 8.Sc. (Honours) 117 185 302		B.A. (Industrial Design)	11	11	22
sub-Total 124 214 338 Ingineering B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 B.Eng. (Mechanical) 302 85 387 B.W LL.B. 62 124 186 B.Eng. (Electrical) 123 86 209 B.Eng. (Mechanical) 123 86 209 </td <td></td> <td>B.Sc. (Building)</td> <td>33</td> <td>51</td> <td>84</td>		B.Sc. (Building)	33	51	84
B.Eng. (Chemical) 105 98 203 B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 B.Eng. (Mechanical) 302 302 302 B.Eng. (Mechanical) 303 302 303 B.Eng. (Mechanical) 303 303 B.Eng. (Mechanical) 30		B.Sc. (Real Estate)	42	106	148
B.Eng. (Civil) 132 61 193 B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 B.Eng. (Mechanica	Sub-Total		124	214	338
B.Eng. (Computer) 95 15 110 B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 Sub-Total 1,044 434 1,478 aw LL.B. 62 124 186 Sub-Total 62 124 186 Selectione M.B.,B.S. 123 86 209 Sub-Total 124 559 B.Sc. (Honours) 117 185 302	Engineering	B.Eng. (Chemical)	105	98	203
B.Eng. (Electrical) 373 129 502 B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 Bub-Total 1,044 434 1,478 Bub-Total 1,044 434 1,478 Bub-Total 1,044 434 186 Bub-Total 1,044 186 Bub-		B.Eng. (Civil)	132	61	193
B.Eng. (Environmental) 10 34 44 B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 Sub-Total 1,044 434 1,478 aw LL.B. 62 124 186 Sub-Total 6. 124 186 Sub-Total 7. 123 86 209 Sub-Total 8.Sc. 175 384 559 B.Sc. (Honours) 117 185 302		B.Eng. (Computer)	95	15	110
B.Eng. (Industrial & Systems Engineering) 27 12 39 B.Eng. (Mechanical) 302 85 387 Bub-Total 1,044 434 1,478 Bub-Total 62 124 186 Bub-Total 62 124 186 Bub-Total 762 124 186 Bub-Total 762 124 186 Bub-Total 763 86 209 Bub-Total 763 86 209 Bub-Total 765 8.Sc. 175 384 559 B.Sc. (Honours) 117 185 302		B.Eng. (Electrical)	373	129	502
B.Eng. (Mechanical) 302 85 387 Sub-Total 1,044 434 1,478 aw LL.B. 62 124 186 Sub-Total 62 124 186 dedicine M.B.,B.S. 123 86 209 sub-Total 123 86 209 cience B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302		B.Eng. (Environmental)	10	34	44
Sub-Total 1,044 434 1,478 aw LL.B. 62 124 186 sub-Total 62 124 186 dedicine M.B.,B.S. 123 86 209 sub-Total 123 86 209 cience B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302		B.Eng. (Industrial & Systems Engineering)	27	12	39
Faw LL.B. 62 124 186 Sub-Total 62 124 186 Idedicine M.B.,B.S. 123 86 209 Sub-Total 123 86 209 cience B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302		B.Eng. (Mechanical)	302	85	387
Sub-Total 62 124 186 dedicine M.B.,B.S. 123 86 209 Sub-Total 123 86 209 cience B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302	Sub-Total		1,044	434	1,478
Idedicine M.B.,B.S. 123 86 209 Sub-Total 123 86 209 cience B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302	Law	LL.B.	62	124	186
Sub-Total 123 86 209 cience B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302	Sub-Total		62	124	186
Exercise B.Sc. 175 384 559 B.Sc. (Honours) 117 185 302	Medicine	M.B.,B.S.	123	86	209
B.Sc. (Honours) 117 185 302	Sub-Total		123	86	209
	Science	B.Sc.	175	384	559
B.Appl.Sci. 11 63 74		B.Sc. (Honours)	117	185	302
		B.Appl.Sci.	11	63	74

FIRST DEGREE GRADUAT	ES 2004-5			
Faculty	Full-time Degree	Male	Female	Total
	B.Appl.Sci. (Honours)	13	30	43
	B.Sc. (Pharmacy)	1	1	2
	B.Sc. (Pharmacy)(Honours)	15	69	84
Sub-Total		332	732	1,064
Total		2,529	3,036	5,565

Faculty	Part-time Degree	Male	Female	Total
Design & Environment	B.Bldg. (Construction Management & Econs)	15	4	19
	B.Real Estate (Property Management)	10	13	23
	B.Real Estate (Valuation)	3	12	15
Sub-Total		28	29	57
Engineering	B.Tech. (Chemical Engineering)	22	7	29
	B.Tech. (Electronics Engineering)	60	12	72
	B.Tech. (Mechanical Engineering)	47	2	49
	B.Tech. (Manufacturing Engineering)	8	0	8
Sub-Total		137	21	158
Total		165	50	215
Grand-Total		2,694	3,086	5,780

Note: 1. Figures exclude special term graduates 2. Figures are correct as at 1 July 2005

EDUCATION

GRADUATION STATISTICS (cont'd)

HIGHER DEGREE & GRADUATE	DIPLOMA GRADUATES 2004-5			
Faculty/Institute/School	Degree/Diploma	Male	Female	Total
Arts & Social Sciences	Grad.Dip.English Studies	1	5	6
	Grad.Dip.Social Work	15	36	51
	M.A.	19	25	44
	M.A. (Chinese Studies)	5	22	27
	M.A. (English Studies)	5	36	41
	M.A. (Language Studies)	0	1	1
	M.A. (Literary Studies)	0	1	1
	M.A. (Southeast Asian Studies)	8	10	18
	M.Soc.Sci.	23	18	41
	M.Soc.Sci. (Applied Economics)	9	17	26
	M.Soc.Sci. (Applied Psychology)	0	4	4
	M.Soc.Sci. (Applied Sociology)	2	14	16
	M.Soc.Sci. (Economics)	4	8	12
	M.Soc.Sci. (International Studies)	10	8	18
	M.Soc.Sci. (Social Work)	0	10	10
	Ph.D.	8	12	20
Sub-Total		109	227	336
Business	Asia-Pacific Executive MBA (conducted in Chinese)	26	4	30
	International M.B.A.	13	5	18
	M.B.A.	59	33	92
	M.B.A. (for Senior Executives)	10	4	14
	M.Sc. (Management)	6	17	23
	M.Sc. (Management of Technology)	1	0	1
	Ph.D.	2	2	4
Sub-Total		117	65	182
Computing	M.Comp.	65	28	93
	M.Sc.	61	27	88
	Ph.D.	22	4	26
Sub-Total		148	59	207
Dentistry	M.D.S. (Endodontics)	3	0	3
	M.D.S. (Oral & Maxillofacial Surgery)	3	0	3
	M.D.S. (Orthodontics)	0	3	3
	M.D.S. (Periodontology)	1	1	2
	M.D.S. (Prosthodontics)	1	0	1
	M.Sc.	3	2	5
	Ph.D.	1	0	1
Sub-Total		12	6	18

46

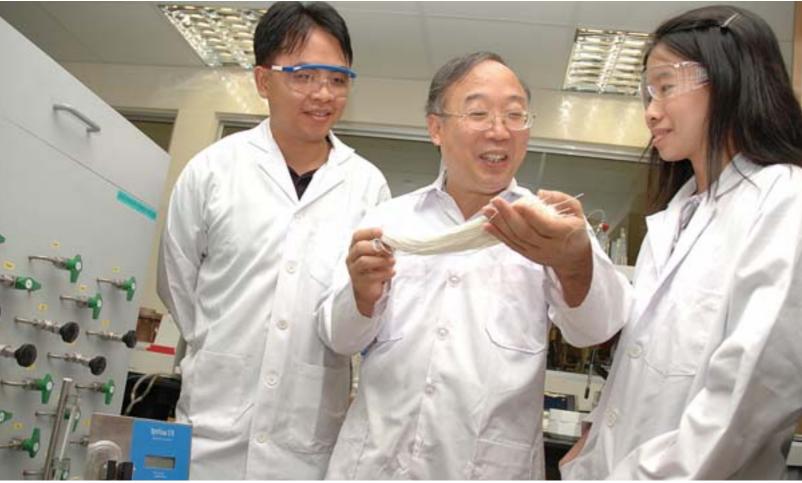
Faculty/Institute/School	Degree/Diploma	Male	Female	Total
Design and Environment	M.A. (Architecture)	4	5	9
	M.A. (Urban Design)	9	5	14
	M.Arch.	22	23	45
	M.Sc. (Building)	3	2	5
	M.Sc. (Building Science)	33	8	41
	M.Sc. (Environmental Management)	9	10	19
	M.Sc. (Estate Management)	11	4	15
	M.Sc. (Project Management)	17	12	29
	M.Sc. (Real Estate)	8	8	16
	Ph.D.	4	1	5
Sub-Total		120	78	198
Engineering	Grad.Dip.Aviation Management	1	3	4
	Grad.Dip.Environmental Engineering	0	1	1
	M.Eng.	231	101	332
	M.Sc. (Chemical Engineering)	23	10	33
	M.Sc. (Civil Engineering)	34	8	42
	M.Sc. (Electrical Engineering)	71	14	85
	M.Sc. (Environmental Engineering)	22	19	41
	M.Sc. (Industrial & Systems Engineering)	87	35	122
	M.Sc. (Materials Science & Engineering)	24	8	32
	M.Sc. (Mechanical Engineering)	58	2	60
	M.Sc. (Mechatronics)	20	3	23
	M.Sc. (Safety, Health & Environmental Technology)	9	8	17
	M.Sc. (Transportation Systems & Management)	6	6	12
	NUS-TU/E Joint Ph.D.	1	0	1
	NUS-UIUC M.Sc. (Chem.Eng.)	5	3	8
	Ph.D.	76	16	92
Sub-Total		668	237	905
Law	Grad.Dip.Sing.Law	34	39	73
	LL.M.	8	6	14
	LL.M. (Chinese Law)	8	4	12
	LL.M. (Corporate & Financial Services Law)	5	19	24
	LL.M. (Intellectual Property & Technology Law)	7	9	16
	LL.M. (International & Comparative Law)	3	4	7
	Ph.D.	0	1	1
Sub-Total		65	82	147
Lee Kuan Yew School of Public Policy	Grad.Dip.Public Policy	1	0	1
	Master in Public Management	9	7	16
	Master in Public Policy	10	13	23
Sub-Total		20	20	40

HIGHER DEGREE & GRADUATE	DIPLOMA GRADUATES 2004-5			
Faculty/Institute/School	Degree/Diploma	Male	Female	Total
Medicine	Grad.Dip.Family Medicine	29	21	50
	Grad.Dip.Family Practice Dermatology	24	14	38
	Grad.Dip.Occup.Medicine	12	4	16
	Grad.Dip.Psychotherapy	7	4	11
	M.D.	3	0	3
	M.Med. (Anaesthesiology)	5	4	9
	M.Med. (Diagnostic Radiology)	3	2	5
	M.Med. (Emergency Medicine)	4	1	5
	M.Med. (Family Medicine)	10	9	19
	M.Med. (Internal Medicine)	11	5	16
	M.Med. (Obstetrics & Gynaecology)	2	1	3
	M.Med. (Occupational Medicine)	4	4	8
	M.Med. (Ophthalmology)	12	9	21
	M.Med. (Orthopaedic Surgery)	10	1	11
	M.Med. (Otorhinolaryngology)	2	1	3
	M.Med. (Paediatric Medicine)	2	1	3
	M.Med. (Psychiatry)	5	2	7
	M.Med. (Public Health)	10	4	14
	M.Med. (Surgery)	19	2	21
	M.Nursing	0	1	1
	M.Sc.	18	25	43
	M.Sc. (Clinical Science)	2	4	6
	M.Sc. Bioinformatics	22	6	28
	Ph.D.	27	14	41
Sub-Total		243	139	382
Science	Grad.Dip.Analytical Chemistry	7	6	13
	Grad.Dip.Math	2	0	2
	Joint M.Sc in Industrial Chemistry	10	4	14
	M.Pharm. (Clinical Pharmacy)	1	0	1
	M.Sc.	68	50	118
	M.Sc. (Applied Physics)	3	0	3
	M.Sc. (Financial Engineering)	25	7	32
	M.Sc. (Mathematics)	3	2	5
	M.Sc. (Pharmacy)	0	3	3
	M.Sc. (Physics)	3	1	4
	M.Sc (Statistics)	6	2	8
	M.Sc IFM-FIN Math & Risk Control	4	2	6
	Ph.D.	50	23	73
Sub-Total		182	100	282

HIGHER DEGREE & GRADUATE DIPLOMA GRADUATES 2004-5					
Faculty/Institute/School	Degree/Diploma	Male	Female	Total	
Design Technology Institute	MTD (Embedded Systems)	22	3	25	
	MTD (Mechatronics)	12	1	13	
	MTD (Rapid Product Development)	9	2	11	
Sub-Total		43	6	49	
Institute of Materials Research and Engineering	Ph.D.	1	0	1	
Sub-Total		1	0	1	
Institute of Molecular & Cell Biology	Ph.D.	3	5	8	
Sub-Total		3	5	8	
Institute of Systems Science	Grad.Dip. Systems Analysis	18	23	41	
	M.Tech. (Knowledge Engineering)	31	3	34	
	M.Tech. (Software Engineering)	65	23	88	
Sub-Total		114	49	163	
Laboratories for Information Technology	M.Sc.	1	0	1	
	Ph.D.	1	1	2	
Sub-Total		2	1	3	
National University Medical Institutes	M.Sc	1	0	1	
	Ph.D.	1	2	3	
Sub-Total		2	2	4	
Regional Language Centre	M.A. (Applied Linguistics)	0	5	5	
Sub-Total		0	5	5	
Singapore-MIT Alliance	M.Eng. (SMA)	3	2	5	
	S.M. (Computer Science)	9	8	17	
	S.M. (Molecular Engineering of Biological & Chemical Systems)	16	11	27	
	S.M. (High Performance Computation for Engineered Systems)	1	1	2	
	Ph.D.	2	2	4	
Sub-Total		31	24	55	
Temasek Defence Systems Institute	Grad.Dip. (Defence Technology & Systems)	43	2	45	
	M.Sc. (D.T.S.)	27	2	29	
Sub-Total		70	4	74	
The Logistics Institute - Asia Pacific	M.Sc. (Logistics & Supply Chain Mgt.)	16	4	20	
Sub-Total		16	4	20	
Total		1,966	1,113	3,079	

Note: The figures are based on degrees conferred between 1 July 2004 and 30 June 2005.

RESEARCH



Venue: The Advanced Membrane Laboratory

Review

NUS' research thrust continued to be strong and vibrant as the university community remained strongly committed to the University's vision of building synergies between the creation, imparting and application of knowledge.

Faculties continued to strive for research excellence, engaging close to 2,000 projects of which a third were new projects. The total number is an increase of about 10 per cent over the same period last year.

The output both in volume and quality was high resulting in the publication of more than 3,100 research papers in international, regional and local journals, and over 2,000 international conference papers.

The quality of NUS research continued to receive strong financial support. The Ministry of Education, Ministry of Health, Agency for Science, Technology & Research (A*STAR), and public and private agencies remained the

University's main sources of research funding. In financial year 2004 (ending 31 March 2005) these agencies provided more than \$157 million in research funds.

RESEARCH ACTIVITIES

Research focus continued to be at the cutting edge in areas as diverse as nanotechnology, biomedicine, bioengineering and biomicroelectromechanical systems. Many of the projects conducted were strategic, aligned to the nation's economic growth as well as the University's standing in international academia. Multi-disciplinary research leveraging on the strengths of the University as a comprehensive university remained one of the University's major research strengths.

The NUS research community was an active hub where the best and brightest minds of the day came to share with each other the latest updates in technological inventions and breakthroughs. Bold initiatives at the frontiers of knowledge were taken such as hosting the inaugural International Congress on Complementary and Alternative Medicines. The year saw a full calendar of conferences and symposiums held on campus where guest speakers like Professor D F Williams, world-renowned biomaterials scientist (University of Liverpool) and Editor-in-Chief of *Biomaterials*, took centre stage.

RESEARCH TIES

NUS continued to forge strategic ties with international and local partners. In the course of the year, the University signed over 110 collaborative agreements with industry, other institutions of higher learning and public agencies within and outside Singapore. Joint appointments with national research institutes under the A*STAR umbrella, leveraging on the

close teaching research nexus between the two sectors, continued to be the main platform for the University to gather the intellectual mass, shared resources and exchange network critical for conducting quality research.

Ties with industry in R&D were strong and active as in previous years. The Advanced Membrane Science and Technology Programme (Faculty of Engineering) partnered a number of global and local industry leaders in chemicals, materials and bio-pharmaceuticals to initiate joint R&D in the development of new membranes for gas/liquid/bio-pharmaceuticals separations. They included Hyflux (Singapore), Universal Oil Products (US), Merck (US), Bask (Germany) and Mitsui (Japan). These industry-sponsored projects will contribute to the positioning of Singapore as an advanced membrane technology enterprise hub in the region.

NEW RESEARCH THRUSTS

The University continued to expand its research portfolio during the period under review. The Faculty of Science embarked on cross-faculty initiatives in medicinal chemistry, bioimaging, computational biology and bioinformatics, biophysics, polymer and molecular electronics.

The School of Computing established several multi-disciplinary research projects on sensors and networks with the Faculty of Engineering under the umbrella of the InfoComm and Info Tech Initiative in the year.

The Office of Life Sciences launched the Immunology Programme which is headed by Professor David Michael Kemeny, who was previously Head of the Department of Immunology, King's College Hospital School of Medicine, London, UK. Besides focusing on the immunological defence mechanisms of the human body to pathogens, the programme will also conduct research on asthma and other pulmonary diseases.

RESEARCH

RESEARCH FACILITIES

New research facilities were added in the year to focus on excellence in niche areas of research. They included the Centre for Health Services Research at the Faculty of Medicine and the Singapore Centre for Applied and Policy Economics (SCAPE) at the Faculty of Arts & Social Sciences.

The IBM-NUS On Demand Supply Chain Solutions Centre and the Centre for Offshore Research and Engineering (with the Economic Development Board) are examples of the University's close ties with the private and public sectors to conduct R&D that are strategic to Singapore's economic positioning.

At the Faculty of Engineering, a Biomolecular Research Cluster was formed with a tie-up with the Bioprocessing Technology Institute. The collaboration charts a road map for day-to-day interactions between both partners on research focusing on protein crystallisation and mammalian cell cultures.

IMPACTING INTERNATIONAL PEERS

NUS discoveries and inventions enjoy worldwide visibility when they are highlighted in publications or at international conferences regarded by their peers as standards for discipline-specific excellence. NUS researchers have in the past few years been making their mark, steadily but surely, on both platforms. The following are some of their work which have caught the attention and imagination of the international academe in the review period:

- discovery by Professor Philip Moore and Associate Professor Madhav Bhatia (Faculty of Medicine) that switching off the production of hydrogen sulphide gas during digestion can reverse severe damage caused by acute pancreatitis was published in the online *Journal* of the Federation of American Societies for Experimental Biology (January 2005).
- a boosting of the speed performance of nanoscale transistors by the Silicon Nano Devices Laboratory was recognised by the 2004 International Electron Devices Meeting as a major development in the technology of next-generation semiconductors.
- in-situ observations and direct imaging of a 2D nucleation process of charged colloidal particles by Associate Professor Liu Xiang Yang (Faculty of Science) was published in Nature (June 2004)
- a paper authored by Associate Professor Chen Yu Zong (Faculty of Science) titled Therapeutic Targets: Progress of Their Exploration and Investigation of their Characteristics was accepted for publication by Pharmacological Reviews.
- an outstanding number of 16 papers from the Department of Physics covering research by the Quantum Information Group, the Nonlinear Dynamics Group and the Centre for

- Ion Beam Applications was published in the *Physical Review Letters* during the review year.
- research by Associate Professor Chen Song Xi (Faculty of Science) on methodologies for mapping quantitative trait loci and disease genes was accepted for publication in three journals Biometrics, Biometrical Journal and Statistica Sinica.
- report by the bioinformatics group (School of Computing) on their design of a novel structure to facilitate efficient processing of sequence alignment that outperforms the Basic Local Alignment Search Tool (BLAST) in efficiency and effectiveness was awarded the Best Paper at the 10th International Conference on Database Systems for Advanced Applications (DASFAA'05).
- a new organisation scheme developed by Associate Professor Zeng Hua Chun (Faculty of Engineering) to self generate curved architecture from building blocks formed in situ that relies primarily on geometric constraints and is chemically-driven was published in the *Journal of the American Chemical Society* (July 2004).

ENTREPRENEURSHIP



Venue: Mixed Reality Laboratory where interactive-cum-tactile story blocks were created

Review

The global knowledge enterprise was conceived to make NUS education and research more real-world relevant by enhancing them with global and entrepreneurial dimensions. The increasing robustness of the University's entrepreneurial dimension has contributed to NUS' growing

reputation as a hotbed of innovation and technological development. All indicators continued to point to a university community committed and energised by the prospects of turning ideas into applications.

EDUCATING ENTERPRISE

The enrolment of entrepreneurship-related courses offered by NUS Entrepreneurship Centre increased from 1,100 to 1,200 over the last academic year. The NUS Overseas Colleges programme set up to provide undergraduates with windows of opportunity to immerse in the working culture of some of the world's most dynamic entrepreneurial centres, was on track in its plan to launch a college per year over a five-year period. The fourth college, NUS College in Stockholm, opened in the review year.

RESEARCHING ENTERPRISE

In its drive to promote an entrepreneurial climate, the NUS Entrepreneurship Centre has built an international reputation for its research in entrepreneurship. In the review period, 14 papers were accepted for publication in a number of journals and for presentation at international conferences. At the same time, the Centre participated in the Stanford University co-ordinated project on Regions of Innovation and Entrepreneurship (SPRIE) and a World Bank-funded project on Innovative Cities in East Asia.

ACTING ON ENTERPRISE

The pro-enterprise climate in NUS is well reflected at NUS Business Incubator where 12 of the existing 19 tenants were new start-ups that emerged in the year. Four were viable enough to cut away from the University's apron strings and graduate from the incubator as standalones.

Since 1989, 83 start-ups and spin-offs have been spawned from ideas generated at NUS. Together they have raised \$176.8 million on their own and with the University's help. In the process, they have served as engines of growth making available hundreds of jobs. The commercial viability of several of these companies continued to attract investors. In the year under review, Lynk Biotechnologies Pte Ltd secured an investment of about \$2.5 million from WhiteRock Associates to further develop a new product line catering to arthritis, joint and muscle stress. Innvo System Pte Ltd, specialising in embedded software development, attracted an investment of \$14 million from Walden International.

Besides business incubation, NUS' proactive nurturing also includes the provision of seed funding for start-ups with feasible business plans. In the review year, two high-tech start-ups, Avant Werx Pte Ltd and ThirdSight Pte Ltd, received seed capital of up to \$300,000 from NUS Venture Support Fund (NVSF1) to fund their business development. Avant Werx Pte Ltd, which specialises in the creation of information management products, has already secured a three-year sales order amounting to \$6.5 million from IT products distributor, Digiland.

The NUS Student Enterprise Programme, fuelled by funds from the government's Entrepreneurial Talent Development Fund to help students in the early stages of their business plans to start up, has funded 10 companies in the nine months since it first received the government's endowment. The new ventures highlight the versatility of our students' creativity as their business activities range from mobile and wireless technology to consumer robotic manufacturing.

The growth of NUS' entrepreneurial dimension can be traced in tandem with the coming of age of Start-Up@Singapore. The national business

ENTREPRENEURSHIP

plan competition was driven by NUS as one of the University's first major initiatives to generate an entrepreneurial outlook. After five years and with six competitions to its credit, the event is now a business launch pad which attracts the partnership of more than 40 business and industry organisations and has spawned more than 40 start-up companies.

The competition's growth and maturity were rationalised in the year with the onset of the Start-Up@Singapore Enterprise Launcher, targeted to bring together its 2,500-strong past participants through follow-up programmes such as investment forums and mentoring tie-ups.

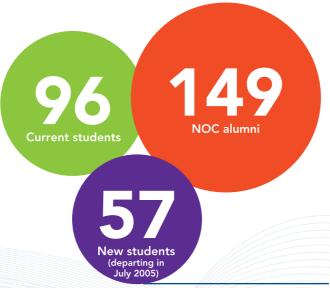
57

EDUCATING ENTERPRISE

No. of students attending NUS Overseas Colleges (NOC) during Academic year 2004-2005

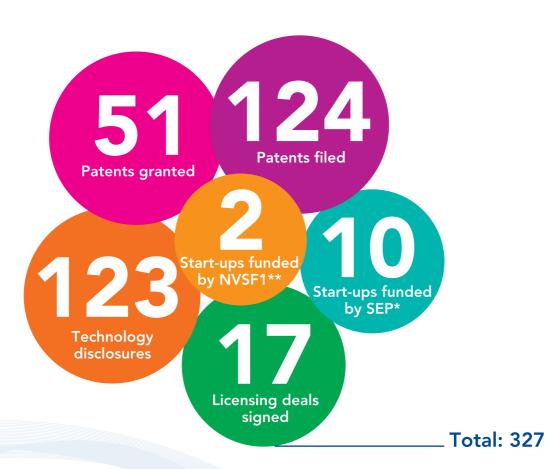


Breakdown of students who have attended NUS Overseas Colleges (NOC) since January 2002



Total: 302

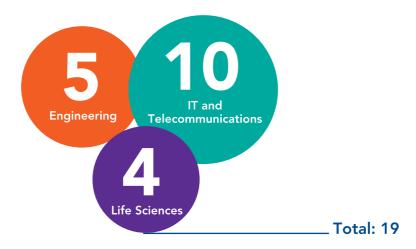
Breakdown of NUS' Entrepreneurial Initiatives (1July 2004 to 30 April 2005)



- * Student Enterprise Programme
- ** NUS Venture Support Fund 1

58

Composition of Start-ups in NUS Business Incubator (2004)



Consultancy Projects undertaken by NUS Community



ENTERING WORLDWIDE MARKETS

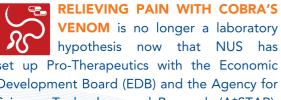
The real-world application of NUS research has seen the University's innovations and technological developments realise their commercial potential. momentum has stepped up with the strong support given by the University to nurture and promote an entrepreneurial outlook and culture amongst students, faculty and alumni. Below are some of the many research breakthroughs whose market potential were tapped in the year to make a difference to the lives of the global community in a multitude of ways.



BRINGING MAGIC TO LEARNING

is what graduate student Steven Zhou Zhiying (Faculty of Engineering) and

Associate Professor Adrian David Cheok have done with their new interactive-cum-tactile story blocks based on mixed reality technology. The magic story cubes which clinched the second prize at the 2004 International Idea to Product Competition have spun off a start-up, MXR Cubes Pte Ltd, to bring a new learning dimension to school-going children.



RELIEVING PAIN WITH COBRA'S VENOM is no longer a laboratory

set up Pro-Therapeutics with the Economic Development Board (EDB) and the Agency for Science, Technology and Research (A*STAR). Pro-Therapeutics holds the rights to a technique developed by Professor Manjunatha Kini (Faculty of Science) and Dr Herbert Evans (Medical College of Virginia) to swiftly locate the protein segment of the cobra's venom from the toxic part. Pro-Therapeutics will re-engineer the proteins to generate small peptides which can be taken orally, are non-addictive and several thousand times more potent than morphine.



TACKLING BACTERIA THE ECO-FRIENDLY WAY will soon be realised with the University awarding

to an American biotech company an exclusive worldwide licence to use and further develop a technology on how to genetically engineer the protein sequence in the enzyme that initiates the blood clotting reaction in the horseshoe crab. BioDech Inc will use the technology developed by Professor Ding Jeak Ling (Faculty of Science) and Associate Professor Ho Bow (Faculty of Medicine) to market a guick, userfriendly sterility test for medical equipment.



MOBILE MAKING AVAILABLE SCANNING ELECTRON MICRO-SCOPES (SEM) that are affordable

is the combined effort of Associate Professor Anjam Khursheed (Faculty of Engineering), research engineer Nelliyan Karuppiah and Czech firm, Delong Instruments. Together, they have created a new market for SEMs by developing a new model that is more compact, cheaper and can be installed on trolleys to make them highly portable. Distributors from Taiwan, South Korea and the US have shown a healthy interest in the product.



PLUGGING RIGHT holes in the skull left by surgery is something patients can look forward to thanks to a multi-

disciplinary collaboration of researchers from NUS, National University Hospital (NUH) and Temasek Polytechnic. Made from biodegradable plastic, the new plug integrates biomaterials, medical imaging and advanced manufacturing to produce an innovative porous material that promotes healthy host tissue growth. The innovation which took the gold at the 7th Asian Innovation Awards has spun-off a company, Osteopore International Pte Ltd, to bring it to the market place.



BREATHING BETTER QUALITY AIR

can be enjoyed in air-conditioned buildings now that Associate Professors

Chandra Sekhar, Tham Kwok Wai and David Cheong (School of Design & Environment) have set up Enhanced Air Quality Pte Ltd to make commercially viable NUS' patented technology, the Single-Coil Twin Fan System. This is an air-conditioning and air distribution system that responds dynamically to varying needs in the occupied zones of a building. The system won The Enterprise Challenge (TEC) Innovator 2004 Award.

TAKING OWNERSHIP OF A GLOBAL UNIVERSITY

The University's integrated community of students, faculty and staff make up the spirit that drove NUS to where it is today, a global university with a 100-year-old proud heritage. Many continue to engage with their alma mater long after they have left the University's portals. Their contributions and commitment, together with those of the University's friends and well-wishers, will fuel the next lap of NUS' growth. Below are some examples of those who have in the year taken the lead in investing in the University's future and in tertiary education in Singapore.



Dr William Tan, an alumnus, completed 10 marathons on seven continents in 70 days on his wheelchair to raise \$1.5 million for a Professorship in Paediatric Oncology at the University. In the process, he became the first

person to undertake a wheelchair push in Antarctica as well as beat the existing Guinness World Record held by an able-bodied man.

TAKING OWNERSHIP OF A GLOBAL UNIVERSITY

The Class of '72 in a celebratory bash at Bukit Timah campus raised over \$400,000 from the event. Matched by a dollar-for-dollar top-up from the government, their contributions were sufficient to set up an endowment fund for 35 bursaries.

Intangible ties that cement stakeholders to the University continued to be strong with the community participating actively in events that form part of the University's calendar year. The year's Rag and Flag Day was a success involving more than 5,500 freshmen and halls continued to build up strong feelings of esprit de corps with hall-specific traditions.

The Lee Foundation made its largest donation to the University in the year with a \$30 million gift. The funds will go towards the set up of the Alice Lee Centre for Nursing Studies which will offer a three-year nursing degree programme, the Lee Kong Chian Scholarships to attract local and global talents to NUS, and two Lee Kong Chian Centennial Professorships.

Professor Saw Swee Hock, a member of the University's Council and former NUS Professor of Statistics, donated \$2.6 million to the Faculty of Medicine to endow the Saw Swee Hock Centennial Professorship in Medical Sciences.

The Yong Loo Lin Trust made the largest single gift by a private donor to a Singapore tertiary institution with a donation of \$100 million to the Faculty of Medicine. The gift, compounded by the government's dollar-for-dollar matching, will make up a \$200-million fund which will give the Faculty the resources to take a quantum leap from being a leading medical school in Asia to one that is comparable with the best in the world. The Faculty has chosen to rename itself the Yong Loo Lin School of Medicine in recognition of its donor's visionary beneficence.

TAKING OWNERSHIP OF A GLOBAL UNIVERSITY

BENEFACTIONS

To help NUS realise its aspiration of becoming a global knowledge enterprise, the University has received the support and goodwill of many friends and well-wishers. Total donations received for financial year 2004-2005 amounted to more than \$59 million. The following list sets out donations of \$25,000 or more received by the University during the same period. The University records its thanks to all donors.

NAME OF DONOR	AMOUNT RECEIVED \$
Government of Singapore	25,000,000.00
Lee Foundation, Singapore	5,213,185.00
Singapore Totalisator Board	5,000,000.00
The Courage Fund	3,030,000.00
Lee Foundation, States of Malaya	2,972,100.00
The Shaw Foundation Pte	2,342,000.00
Chen Su Lan Trust	1,665,000.00
Glaxo Wellcome Manufacturing Pte Ltd	1,000,000.00
Yong Loo Lin Holdings Pte Ltd	1,000,000.00
Saw Swee Hock (Prof)	819,000.00
Cheng Siok Hwa (Dr)	800,000.00
The Wellcome Trust	606,918.45
Lien Foundation	500,000.00
Osim International Ltd	500,000.00
Development Bank of Singapore Ltd	382,227.37
Keppel Corporation Ltd	320,000.00
Singapore Pools Pte Ltd	311,000.00
Singapore Airlines Ltd	275,000.00
Oversea-Chinese Banking Corporation Ltd	206,230.00
Singapore Press Holdings Ltd	205,000.00
NTUC FairPrice Co-operative Ltd	202,000.00
RSP Architects Planners & Engineers (Pte) Ltd	200,500.00
Canon Singapore Pte Ltd	200,000.00
ComfortDelgro Corporation Ltd	200,000.00
Fraser & Neave (S) Pte Ltd	200,000.00
Goh Thiam Poh, Tommie	200,000.00
Jardine Cycle & Carriage Ltd	200,000.00
MediaCorp Pte Ltd	200,000.00
Neptune Orient Lines Ltd	200,000.00
Oei Hong Leong	200,000.00
PSA Corporation Ltd	200,000.00
Reef Holdings Pte Ltd	200,000.00
Sat Pal Khattar	200,000.00

TAKING OWNERSHIP OF A GLOBAL UNIVERSITY - Benefactions

Sim Chye Hock, Ron	200,000.00
Tanjong Properties Pte Ltd	200,000.00
Tee Yih Jia Food Manufacturing Pte Ltd	200,000.00
Standard Chartered Bank	181,209.46
CapitaLand Ltd	145,250.00
Singapore Technologies Pte Ltd	130,000.00
Andy Chua	120,200.00
Singapore Technologies Engineering Ltd	115,000.00
ExxonMobil Asia Pacific Pte Ltd	110,100.00
Lee Seng Tee (Dr)	100,000.00
SembCorp Industries Ltd	100,000.00
People's Action Party	84,300.00
Kuok (Singapore) Ltd	80,000.00
Peh Chin Hua	80,000.00
Singapore Rubber Millers Association	60,000.00
Children's Cancer Foundation	59,210.62
Merck Sharp & Dohme (S) Ltd	58,054.50
Astrazeneca Singapore Pte Ltd	56,000.00
National University Hospital (S) Pte Ltd	55,240.00
Pfizer Asia Pacific Pte Ltd	52,000.00
The Australian National University	51,960.00
Saw Seang Mei (Dr)	50,300.00
Chan Tat Keong (Dr)	50,000.00
Editions Didier Millet	50,000.00
Lim Hui Mien, Sharon	50,000.00
Saw Seang Kuan	50,000.00
Saw Seang Pin	50,000.00
Tan Beng Hee, Reginald (Assoc Prof)	50,000.00
Tech Semiconductor Singapore Pte Ltd	50,000.00
Orchard Maritime Services Pte Ltd	48,285.00
SembCorp Logistics Ltd	48,000.00
Singapore Telecommunications Ltd	45,000.00
Allgreen Properties Ltd	40,000.00
Kuok Oils & Grains Pte Ltd	40,000.00
Kwan Im Thong Hood Cho Temple	40,000.00
Shangri-La Hotel Ltd	40,000.00
Singapore Precision Industries 2000 Pte Ltd	40,000.00
SNP Corporation Ltd	40,000.00
O.B. Singapore Operations Pte Ltd	35,000.00
Press Foundation of Singapore	33,000.00
Professional Engineers Board, Singapore	31,689.17
Lim Su Min	30,000.00
Tata Consultancy Services Asia Pacific Pte Ltd	30,000.00
Tan & Koh Consultants Pte Ltd	25,879.96
Prima Ltd	25,000.00

FACULTY AND STUDENT ACHIEVEMENTS

INTERNATIONAL AWARDS AND ACCOLADES

NUS faculty members who helped raise the global profile of the University with the international recognition they received in the year included the following:

Professor CHEN, LOUIS (Faculty of Science) was appointed president of the Institute of Mathematical Statistics, US.

Professor HALLIWELL, BARRY (NUS Graduate School & Faculty of Medicine) was elected member of the World Health Organisation Expert Panel to recommend levels of intake for nutrients and related substances.

Associate Professor KENG SIONG BENG (Faculty of Dentistry) was elected president of the Southeast Asia Association for Dental Education.

Associate Professor LEE CHEUK YIN (Faculty of Arts & Social Sciences) was appointed member of the International Confucian Association Board.

A team comprising Professor LEE TONG HENG, Associate Professor TAN KOK KIONG, TAN CHEE SIONG (Faculty of Engineering) and PhD engineering student TANG KOK ZUEA won the best paper prize at the ASEAN Virtual Instrumentation Applications Contest 2004 for an automated cell electro-activation system.

Professor MOORE, PHILIP KEITH (Faculty of Medicine) was the first NUS staff member to be made a fellow of the British Pharmacological Society.

Dr SALTO-TELLEZ, MANUEL (Faculty of Medicine) received the 2004 World Scientific Forum International Award from the International Research Promotion Council, India, for contributions to the field of onco-cytology.

Associate Professor SAVAGE, VICTOR (Faculty of Arts & Social Sciences) was re-elected president of the Commonwealth Geographical Bureau, UK.

Associate Professor TAN, WILLIE (School of Design & Environment) was elected the first rotational chairman of the International Project Management Education Union.

Professor TAN CHENG HAN (Faculty of Law) was appointed a Young Global Leader by the World Economic Forum.

Associate Professor TAN NGOH TIONG (Faculty of Arts & Social Sciences) was elected co-chairman of the Commonwealth Organisation for Social Work, UK.

Assistant Professor VADAKEPPAT, PRAHLAD (Faculty of Engineering) led a team from NUS to win the second place in the Humanoid category at the Robot World Cup in South Korea, which was organised by the Federation of International Robot-soccer Association (FIRA).

FACULTY AND STUDENT ACHIEVEMENTS

SERVICE TO COMMUNITY AND COUNTRY

The following NUS staff were some of the many who contributed to all areas of national life serving on national boards and agencies in the review year:

Associate Professor ANH TUAN NUYEN (Faculty of Arts & Social Sciences) was appointed to the Bioethics Advisory Committee.

Associate Professor CHAN WING CHEONG (Faculty of Law) was re-appointed member of the Elder Protection Team, Ministry of Community Development, Youth and Sports.

Associate Professor CHAN CHUEN FYE (School of Design & Environment) was reappointed Deputy President of the Strata Title Boards.

Professor HENG CHYE KIANG (School of Design & Environment) served as chairman of the Design Advisory Committee, Urban Renewal Authority.

Assistant Professor LIM SUN SUN (Faculty of Arts & Social Sciences) was appointed member of the National Internet Advisory Committee.

Associate Professor LIM SWEE HUAT, WALTER (Faculty of Arts & Social Sciences) served as member of the 'A' Level Syllabus Review Committee, Ministry of Education.

Professor LYE LIN HENG (Faculty of Law) served as member of the Committee on International Environmental Relations, Ministry of Environment and Water Resources.

Associate Professor MAK YUEN TEEN (School of Business) was reappointed member of the Council on Corporate Disclosure and Governance, Ministry of Finance.

Dr MUHAMMAD FAISHAL (School of Design & Environment) was appointed member of the Committee on Strengthening Racial Harmony in Schools, Ministry of Education.

Associate Professor PAKIR, ANNE (Faculty of Arts & Social Sciences) served as executive member of the Films Appeal Committee, Media Development Authority; and committee member, Broadcasting Appeals Advisory Committee, Ministry of Information, Communications and the Arts.

Associate Professor PHUA, STEPHEN (Faculty of Law) was appointed member of the Tax Advisory Group, Ministry of Finance.

Assistant Professor WEE, VALERIE (Faculty of Arts & Social Sciences) served as a member of the Arts Appeal Advisory Committee, Media Development Authority.

Associate Professor WEE HOCK ANN, LIONEL

(Faculty of Arts & Social Sciences) served as a committee member of the Speak Good English Movement, Ministry of Information, Communications and the Arts.

Assistant Professor WONG YUNN CHII (School of Design & Environment) sat as a member on the Singapore History Museum Board.

SERVICE TO COMMUNITY AND COUNTRY - SECONDMENT

The following faculty members were on secondment during the academic year, serving the country in different capacities:

Associate Professor BALAKRISHNAN, VIVIAN (Faculty of Medicine) – as Minister for Community Development, Youth & Sports and Senior Minister of State, Ministry of Trade & Industry.

Professor CHAN HENG CHEE (Faculty of Arts & Social Sciences) – as Singapore's Ambassador to the United States of America.

Professor CHONG TOW CHONG (Faculty of Engineering) – as Executive Director, Data Storage Institute and Executive Director, Science & Engineering Research Council, Agency for Science, Technology & Research (A*STAR).

Associate Professor HO PENG KEE (Faculty of Law) – as Senior Minister of State, Ministry of Home Affairs and Senior Minister of State, Ministry of Law.

Associate Professor YAACOB IBRAHIM (Faculty of Engineering) – as Minister for the Environment & Water Resources and Ministerin-charge of Muslim Affairs.

Professor SHANMUGAM JAYAKUMAR (Faculty of Law) – as Deputy Prime Minister and Minister for Law.

Professor KOH THONG BEE, TOMMY (Faculty of Law) – as Ambassador-at-Large, Ministry of Foreign Affairs.

Professor LAM KHIN YONG (Faculty of Engineering) – as Executive Director, A*STAR Graduate Academy.

Associate Professor LEE HEOW PUEH (Faculty of Engineering) – as Acting Executive Director, Institute of High Performance Computing.

Associate Professor LIM KHIANG WEE (Faculty of Engineering) – as Director, Science & Engineering Research Council, A*STAR and Executive Director, SIMTech.

Professor LIU TAK BUN, EDISON (Faculty of Medicine) – as Executive Director, Genome Institute of Singapore.

Professor LOW TECK SENG (Faculty of Engineering) – as Principal/CEO, Republic Polytechnic.

Dr MOHAMAD MALIKI BIN OSMAN (Faculty of Arts & Social Sciences) – as Parliamentary Secretary, Ministry of Health and Ministry of Community Development, Youth & Sports.

Associate Professor REN EE CHEE (Faculty of Medicine) – as Deputy Director, Genome Institute of Singapore.

Professor SATKUNANANTHAM KANDIAH

(Faculty of Medicine) – as Director of Medical Services, Ministry of Health.

Associate Professor TAN, MILTON (School of Design & Environment) – as Project Director, National Arts Council.

Professor WONG WAI CHOONG, LAWRENCE

(Faculty of Engineering) – as Executive Director, Institute for Infocomm Research.

Professor WOON CHEONG MING, WALTER

(Faculty of Law) – as Singapore's Ambassador to Belgium.

Professor YAP GEK SIM, MIRANDA (Faculty of Engineering) – as Executive Director, Bioprocessing Technology Institute.

FACULTY AND STUDENT ACHIEVEMENTS

STUDENT ACHIEVEMENTS

NUS students who raised the University's banner of excellence around the world included the following:

PhD engineering student **DENG HENG** garnered the Best Presentation Award at the 30th Annual Conference of the IEEE Industrial Electronics Society, South Korea.

Law undergraduates **GITTA JUWITA** and **CHNG, MELANIE** won the 2004 Asia Cup International Law Moot Court Competition, Japan.

Business undergraduates HUSTON, KIMBERLEY; TAN TOH KEN; CHONG, CELESTE and TENG PEI YUN won the 2005 Copenhagen Business School Case Competition, Denmark.

Graduate student LAW, RANDALL won the Silver in the Young Inventors Awards 2004 which recognises research and innovation among tertiary students in the Asia Pacific. The award was accorded to him on the merits of his development of a laser technique that can fabricate extremely small patterns of 20 nanometres in size on polymer materials.

Arts and social sciences undergraduate **LEE MING-AN**, **BENJAMIN** clinched the first prize at the *2nd ASEAN Young Speakers'* Forum, Thailand.

Industrial design undergraduate **LEETZE MING** won second prize in the Professional Category of *Intermot Designpreis* design competition, Germany.

PhD real estate student **LIU XUAN** was awarded the first dissertation/thesis fellowship of the Lincoln Institute of Land Policy's China Programme.

Business students PUA CU, BRIAN MATHEW; NG KIM YONG; TAN DUN LIN, CHRISTABEL and TAN WEI JIAN, RAYMOND emerged runners-up at the second Citigroup International Case Competition held in Hong Kong.

PhD materials science student **SUDESH WIJESHINGHE** was amongst 20 students worldwide who received a travel grant to do a student poster presentation at the *National Association of Corrosion Engineers (NACE)* 2004 Conference, New Orleans, US.

Music undergraduate **TRAN THI TAM NGOC** won third prize at the inaugural *ASEAN International Chopin Piano Competition*, Malaysia.

PhD engineering student **YU HONGYU** was presented a Graduate Student Fellowship by the US-based Institute of Electrical and Electronics Engineers (IEEE) Electron Devices Society for academic excellence and contributions to advanced gate stack research.

FACULTY AND STUDENT ACHIEVEMENTS

NATIONAL DAY AWARDS 2004

For service to country, the following faculty and staff members were honoured by the nation on National Day:

PUBLIC SERVICE STAR

Associate Professor GOH LEE GAN Faculty of Medicine

PUBLIC ADMINISTRATION MEDAL, GOLD

Professor TAN CHORH CHUAN

Deputy President & Provost and Faculty Member, Faculty of Medicine

PUBLIC ADMINISTRATION MEDAL, SILVER

Professor CHEW CHONG LIN

Faculty of Dentistry

Professor CHONG TOW CHONG

Faculty of Engineering

PUBLIC ADMINISTRATION MEDAL, BRONZE

Miss NG SUAN ENG

Deputy Director, Student Services Office of Student Affairs

COMMENDATION MEDAL

Mrs NG HUE BOEY

Senior Manager Office of Human Resources

Mr TAN BENG KEONG, ANDREW

Senior Manager (Campus Services) Office of Estate & Development

COMMENDATION MEDAL (MILITARY)

Associate Professor YU SHI MING

Vice-Dean, School of Design & Environment

PUBLIC SERVICE MEDAL

Professor ONG CHOON NAM

Faculty of Medicine

Professor WANG GUNGWU

Director, East Asian Institute

Professor YONG KWET YEW

Vice-President (Campus Infrastructure) and Faculty Member, Faculty of Engineering

EFFICIENCY MEDAL

Mr LEONG WAI KIN

Principal Laboratory Officer School of Computing

Miss YEO CHWEE KIM

Management Support Officer Faculty of Arts & Social Sciences

LONG SERVICE MEDAL

Miss ANG, LILY

Management Support Officer Registrar's Office

Mrs CHEE AI LIAN, IRENE

Management Support Officer Faculty of Arts & Social Sciences

Mr CHIA SAI HOCK

Technical Support Officer
Office of Estate & Development

Mr CHIA SENG CHUAN

Technical Support Officer
Office of Estate & Development

Mr ABDUL JALIL BIN DIN

Laboratory Officer Faculty of Engineering

Miss HO AH LIN

Management Support Officer Faculty of Arts & Social Sciences

Mrs KOH AH SUAN

Management Support Officer
Office of Estate & Development

Mr JOHARI BIN KHAMIS

Laboratory Officer Faculty of Engineering

Mr LIM BUN SIANG

Senior Laboratory Officer Faculty of Science

Mr LIM TECK SENG

Senior Laboratory Officer Faculty of Science

Mr MALAYAMANAR PACKIAM

Technical Support Officer
Office of Estate & Development

Mr MOHERI BIN MAT AMIN

Operations Support Officer Office of Estate & Development

Mrs MATHEWS NEE NG, HELEN

Technical Support Officer Computer Centre

Mr MUKAYA, CHANDRA

Laboratory Officer
Faculty of Engineering

Mrs ONG SIAW KHIAW NEE WONG

Management Support Officer Faculty of Science

Mr SUPAID BIN RAKISAN

Technical Support Officer
Office of Estate & Development

Mr ARIP BIN SARPIN

Technical Support Officer
Office of Estate & Development

Mrs SEO PECK KIAW NEE TAN, ELSIE

Technical Support Officer Computer Centre

Mr SURADI BIN SUKRI

Laboratory Officer Faculty of Science

Mdm TAN AI NGAN

Estate Maintenance Officer
Office of Estate & Development

Mr TAN KOK YONG

Technical Support Officer
Office of Estate & Development

Mr TEO KING HOCK

Senior Laboratory Officer Faculty of Engineering

Mr WU TONG MENG

Principal Laboratory Officer Faculty of Science

FACULTY AND STUDENT ACHIEVEMENTS

NATIONAL AWARDS

NATIONAL SCIENCE AND TECHNOLOGY AWARDS 2004

A NUS faculty member was among the recipients of Singapore's highest honour for contributions to advancing the nation's science and technological frontiers. His achievement is in keeping with the strategic build-up of NUS research strengths to support the nation's development.

Dr NG HUCK HUI (Faculty of Science) received the Young Scientist Award for his research on gene regulation.

SINGAPORE YOUTH AWARDS 2004

Two faculty members were accorded the nation's highest accolade to promising leaders whose achievements and contributions to society are an inspiration to others. They are:

Assistant Professor CHEW FOOK TIM (Faculty of Science)

Assistant Professor ONG SOH KHIM (Faculty of Engineering)

UNIVERSITY AWARDS 2005

The University Awards are given by NUS in recognition of the singular achievements of faculty in education, research and service. In upholding the University's mission, the following award recipients have contributed towards NUS' development as a global knowledge enterprise.

OUTSTANDING EDUCATOR AWARD

Assistant Professor CHAN WAI MENG (Faculty of Arts & Social Sciences)

Associate Professor CHENG LI (Faculty of Engineering)

Professor IP YUEN KWONG, ALEX (Faculty of Science)

Associate Professor SINGH, KULWANT (School of Business)

YOUNG RESEARCHER/OUTSTANDING RESEARCHER*AWARD

Assistant Professor
OOI THIAN LEONG, JOSEPH
(School of Design & Environment)

Associate Professor TEO, EDWARD (Faculty of Science)

Assistant Professor YAO SHAO QIN (Faculty of Science)

Associate Professor HONG YUNHAN* (Faculty of Science)

Associate Professors CLEMENT, MARIE-VERONIQUE* and PERVAIZ, SHAZIB* (Faculty of Medicine) (Team Award)

OUTSTANDING SERVICE AWARD

Professor WANG GUNGWU (East Asian Institute)

Professor ROBERT BOUCHER

Vice-Chancellor

University of Sheffield **United Kingdom**

Professor LAJOS BENSENYI

University of Miskolc Republic of Hungary

Professor CAROL T CHRIST

President

Smith College United States of America

Dr VICTOR DZAU

Chancellor for Health Affairs and President & **CEO** of Duke University Health System

Duke University

United States of America

Professor CHRISTOPHER EDWARDS

Vice-Chancellor

University of Newcastle **United Kingdom**

Professor PETER ENGLERT

Chancellor

University of Hawaii at Manoa United States of America

Dr RICHARD HERMAN

Interim Chancellor

University of Illinois at Urbana-Champaign United States of America

Dr OLEKSANDR HORIN

Ambassador Extraordinary and

Plenipotentiary

Embassy of Ukraine

Singapore

Mr ABUBAKAR IBRAHIM

Chairman

Education Committee of the Senate Federal Republic of Nigeria

Professor KHUNYING SUCHADA KIRANANDANA

President

Chulalongkorn University

Thailand

Dr LEE, JAE KYOO

President

Daegu University

South Korea

Mr DENIS MAUGARS

President

Office of National D'Etudes Et De Recherches

Aerospatiales (ONERA)

France

Dr KAROLY MOLNAR

Rector

Budapest University of Technology and

Economics (BUTE)

Republic of Hungary

74

Mr GUILLERMO MARTINEZ MORA

Secretary of Education

State of Jalisco

Mexico

Dr CHARLES MURIGANDE

Minister of Foreign Affairs

Rwanda

Professor KAZUO OIKE

President

Kyoto University

Japan

Professor ALAN ROBSON

Vice-Chancellor

University of Western Australia

Australia

Professor CHRISTIAN SERGHERAERT

President

Lille 2 University

France

Associate Professor PAVICH TONGROACH

Secretary General for Commission

of Higher Education

Chairman of ASEAN University Network

(AUN) Board of Trustees

Thailand

Professor WANG SHENGHONG

President

Fudan University

People's Republic of China

Professor HARRIET WALLBERG-HENRIKSSON

President

Karolinska Institutet

Sweden

Dr HASHIM BIN ABDULLAH BIN HASHIM AL-YAMANI

Minister of Commerce and Industry

Kingdom of Saudi Arabia

Professor MICHAEL ZGUROVSKY

Rector

National Technical University of Ukraine, Kiev

Polytechnic Institute

Ukraine

Professor ZHANG JUNSHENG

Chancellor

Zhejiang University

People's Republic of China

Professor ZHAO QINPING

Vice Minister of Education

People's Republic of China

MAKING FIRST STRIKES

In challenging themselves to give of their best, NUS stakeholders have set new records as pioneers and front runners, in both the local and international arenas.

- Associate Professor Ganesan Adaikan (Faculty of Medicine) was officially conferred at the 11th World Congress of the International Society for Sexual Medicine as its 8th and first Asian President.
- An inter-disciplinary team of NUS researchers from the Faculty of Engineering attained a world first in the fight against malaria with the development of an automated system of counting infected red blood cells that is more accurate and efficient.
- Lee Keng Leong (School of Business) made his mark as the winner of the first undergraduate student paper competition organised by the Council of Logistics Management (CLM), Philadelphia, US.
- NUS was the only non-American university to be honoured at the 2004 Society of American Registered Architects (SARA) Student Design Awards when its architectural students received awards for Special Recognition.
- NUS participated for the first time at the prestigious Saint-Etienne International Design Biennial 2004 with the display of designs by three students from the School of Design & Environment.
- NUS was chosen by Stanford University and the University of California to be the venue for the inaugural Roundtable on Entrepreneurship Education.

- NUS researchers headed by Principal Investigator, Associate Professor Mary Ng Mah-Lee (Faculty of Medicine), are the first in the world to identify the receptor protein which facilitates entry of the West Nile Virus, causing infections in human. Their findings have significant implications for antiviral drugs.
- NUS undergraduates proved their mettle when they became the first Singaporeans to win the Lee Kuan Yew Global Business Plan Competition by taking the top two prizes at the competition's 2004 event.
- Associate Professor John R Potter led a team of research engineers at the Tropical Marine Science Institute to win the Defence Technology Prize Team Award (R & D) for their development of the world's first broadband digital ambient noise imaging camera.
- Teo Yen Kai, a second-year mechanical engineering student and member of the NUS Centennial Everest Expedition Team, made history as the first Singaporean to reach the peak of Mount Everest.
- The Tera-Scale Campus Grid (TCG@NUS) is the first tera-scale, virtual computing platform with more than two teraflops per second in the region. It is expected to extend the boundaries of NUS researchers in a wide range of cutting-edge research by enabling them to simulate synthetic environments, run complex models and perform sophisticated calculations.

As NUS moves forward towards its second centenary, its faces new and greater challenges. The University is optimistic that with the promise of the future as outlined below, the best lies ahead.

- A Disaster Recovery Centre will be in full operation from December 2005 onwards to ensure critical IT services will continue to function in all contingencies, with minimum service disruption.
- The Faculty of Law and various research institutes will relocate to Bukit Timah when Singapore Management University vacates the 11-hectare campus. The site is close to the heart of NUS as its links with the University date back to 1928 when Raffles College, one of the University's predecessor institutions, was founded.
- Several of the Office of Life Sciences' research programmes will be relocating to its new facility in 2006. The building will provide a vibrant platform for interdisciplinary research by fostering integrative research amongst its 450 occupants.
- In 2006, NUS will be corporatised into a not-for-profit entity. The new status will give the University greater autonomy to be flexible and create a unique educational experience that will enable it to compete more effectively in the global university landscape.
- NUS will play a key role in the Asia Pacific World Institute, an initiative for advanced studies of the Association of Pacific Rim Universities (APRU).

- NUS will participate in a global university partnership with seven leading research universities from Asia, Australia, Europe and the US. The partnership will pave the way for a "global university town" at the University where opportunities will be provided for research and education that transcend continents.
- NUS will engage in a full year of dedicated events from 25 June 2005 to May 2006 to celebrate its centennial. The University traced its roots to the founding of The Straits Settlements and Federated Malay States Government Medical School in 1905.
- NUS will host the 2006 international CASE conference as part of its centennial celebrations. The event will focus on alumni relations, communications and philanthropy. CASE (Council for Advancement and Support of Education) is a US-based global organisation for educational institutions.

NATIONAL UNIVERSITY OF SINGAPORE

(Established under the National University of Singapore Act. Chapter 204)

FINANCIAL STATEMENTS

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

Auditors' Report	80
BALANCE SHEET	81
INCOME AND EXPENDITURE STATEMENT	82
STATEMENT OF CHANGES IN FUNDS AND RESERVES	83
CASH FLOW STATEMENT	84
Notes to the Financial Statements	85 – 10

AUDITORS' REPORT TO THE COUNCIL OF THE NATIONAL UNIVERSITY OF SINGAPORE

We have audited the accompanying financial statements of the National University of Singapore ("University") for the financial year ended 31 March 2005 set out on pages 81 to 102. These financial statements are the responsibility of the University's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Singapore Standards on Auditing. Those Standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion,

- (a) the financial statements are properly drawn up in accordance with the provisions of the National University of Singapore Act (the "Act"), Cap. 204 and Singapore Financial Reporting Standards so as to give a true and fair view of the state of affairs of the University as at 31 March 2005 and the results, changes in funds and reserves, and cash flows of the University for the financial year then ended; and
- (b) the accounting and other records required by the Act to be kept by the University have been properly kept in accordance with the provisions of the Act, including records of all assets of the University whether purchased, donated or otherwise.

During the course of our audit, nothing came to our notice that caused us to believe that the receipt, expenditure and investment of monies and the acquisition and disposal of assets by the University during the financial year have not been in accordance with the provisions of the Act.

Deloitte & Touche

Certified Public Accountants

BALANCE SHEET AS AT 31 MARCH 2005

		2004/2005	2003/2004
	Note	S\$'000	S\$'000
ACCUMULATED SURPLUS			
General Funds		481,976	420,282
Restricted Funds	3	708,820	597,127
		1,190,796	1,017,409
ENDOWMENT FUNDS	4	978,356	935,488
CAPITAL PRESERVATION ACCOUNT	4	55,089	55,089
INVESTMENT REVALUATION RESERVE		14,694	14,704
		2,238,935	2,022,690
NON-CURRENT ASSETS			
Subsidiary companies	5		
Associated company	6	80,450	89,898
Fixed assets	7	1,413,536	1,360,697
Investments	8	397,773	398,031
	9	17,010	17,020
Investment properties Student loans (repayable after 12 months)	10	166,120	167,079
	10		107,079
Long-term loan to subsidiary company	11	350	
		2,075,239	2,032,825
CURRENT ASSETS			
Student loans (repayable within 12 months)	10	48,535	42,342
Debtors	12	124,703	87,866
Consumable stores		214	184
Deposits and prepayments	13	8,345	9,831
Amount owing by subsidiary company	11	193	49
Amount owing by associated company	11	1,000	1,000
Investments	8	752,156	648,011
Fixed deposits	14	935,657	828,995
Cash		48,293	153,656
		1,919,096	1,771,934
TOTAL ASSETS		3,994,335	3,804,759
CURRENT LIABILITIES			
Creditors and accrued expenses	15	154,962	198,992
Grants received in advance		92,962	120,412
Amount owing to subsidiary company	11	926	-
Long-term loan (repayable within 12 months)	16	821	1,151
		249,671	320,555
NON-CURRENT LIABILITIES			
Deferred capital grants	17	1,304,601	1,263,972
Advances from government for student loans	18	200,519	196,256
Long-term loan (repayable after 12 months)	16	609	1,286
		1,505,729	1,461,514
TOTAL LIABILITIES		1,755,400	1,782,069
NET ASSETS		2,238,935	2,022,690

The accompanying notes form an integral part of these financial statements.

Prof Shih Choon Fong

President 26 July 2005 Ajith Prasad Director of Finance 26 July 2005

INCOME AND EXPENDITURE STATEMENTFOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

	Note	GENERA 2004/2005 S\$'000	L FUNDS 2003/2004 S\$'000	RESTRICTE 2004/2005 S\$'000	D FUNDS 2003/2004 S\$'000	TO1 2004/2005 S\$'000	TAL 2003/2004 S\$'000
OPERATING INCOME							
Tuition and other fees		161,080	160,730	13,532	10,310	174,612	171,040
Other income	19	19,997	20,077	132,248	103,186	152,245	123,263
		181,077	180,807	145,780	113,496	326,857	294,303
OPERATING EXPENDITURE							
Expenditure on manpower	20	496,539	531,069	18,382	17,073	514,921	548,142
Depreciation	7	148,258	161,367	3,112	3,310	151,370	164,677
Other operating expenditure		331,939	346,760	66,020	53,073	397,959	399,833
		976,736	1,039,196	87,514	73,456	1,064,250	1,112,652
Operating (Deficit)/Surplus		(795,659)	(858,389)	58,266	40,040	(737,393)	(818,349)
Investment income	21	14,059	7,700	56,162	65,020	70,221	72,720
(Deficit)/Surplus before Grants	22	(781,600)	(850,689)	114,428	105,060	(667,172)	(745,629)
GRANTS							
Operating Grants :							
Government	23a	607,830	618,383	_	_	607,830	618,383
Agency for Science, Technology & Research		53,048	65,812	_	_	53,048	65,812
Others	23c	39,952	49,714	_	1,349	39,952	51,063
Deferred Capital Grants amortised	17	142,464	155,974	1,069	1,056	143,533	157,030
·		843,294	889,883	1,069	2,405	844,363	892,288
SURPLUS FOR THE YEAR		61,694	39,194	115,497	107,465	177,191	146,659

The accompanying notes form an integral part of these financial statements.

STATEMENT OF CHANGES IN FUNDS AND RESERVES

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

		Funds	Restricted Funds	ENDOWMENT FUNDS S\$'000		RESERVE	TOTAL
	Note	S\$'000	S\$'000	5\$ 000	S\$'000	S\$'000	S\$'000
Balance at 1 April 2004		420,282	597,127	935,488	55,089	14,704	2,022,690
Loss on revaluation of							
investment properties	9	-	-	-	-	(10)	(10)
Grants accrued		-	-	32,000	-	-	32,000
Donations received		-	-	10,782	-	-	10,782
Net gains and losses not recognised in income statement		-	-	42,782	-	(10)	42,772
Surplus for the year		61,694	115,497	-	-	-	177,191
Total recognised gains and losses							
for the financial year		61,694	115,497	42,782	_	(10)	219,963
Transfer to Deferred Capital Grants	17	-	(2,752)	_	-	-	(2,752)
Transfer to Endowment Funds		-	(86)	86	-	-	_
Transfer to Capital Preservation Acco	unt	-	_	-	-	-	_
Funds transferred	25	-	(966)	-	-	-	(966)
Balance at 31 March 2005		481,976	708,820	978,356	55,089	14,694	2,238,935
Balance at 1 April 2003		381,117	512,555	857,779	42,993	15,194	1,809,638
Loss on revaluation of							
investment properties	9	-	-	-	-	(490)	(490)
Grants received/accrued		-	-	41,447	-	-	41,447
Donations received		-	-	36,272	-	-	36,272
Net gains and losses not recognised						(400)	
in income statement		-	407.465	77,719	-	(490)	77,229
Surplus for the year		39,194	107,465				146,659
Total recognised gains and losses							
for the financial year		39,194	107,465	77,719	-	(490)	223,888
Transfer to Deferred Capital Grants	17	(29)	(1,372)	-	-	-	(1,401)
Transfer from Endowment Funds		-	10	(10)	-	-	-
Transfer to Capital Preservation Acco	ount	-	(12,096)	-	12,096	-	-
Funds transferred		-	(9,435)	-	-	-	(9,435)
Balance at 31 March 2004		420,282	597,127	935,488	55,089	14,704	2,022,690

The accompanying notes form an integral part of these financial statements.

CASH FLOW STATEMENTFOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

	2004/2005	2003/2004
	S\$'000	S\$'000
Cash flows from analysting activities		
Cash flows from operating activities: Deficit before Grants	(667,172)	(745,629)
Deficit before drains	(667,172)	(745,629)
Adjustments for:		
Depreciation of property, plant and equipment	151,370	164,677
Net investment income	(70,221)	(72,720)
Loss on disposal of property, plant and equipment	915	953
Rental income from investment properties	(149)	(125)
Deficit before working capital changes	(585,257)	(652,844)
Change in operating assets and liabilities:		
Decrease (increase) in debtors, consumable stores, deposits and prepayments	11,648	(1,811)
Decrease (increase) in amount owing by subsidiary company	(144)	100
Increase in amount owing to subsidiary	926	_
Increase (decrease) in creditors and accrued expenses	(61,091)	1,695
Cash used in operations	(633,918)	(652,860)
Agency for Science, Technology & Research grants received, net of refund	52,515	38,497
Other grants received, net of refund	57,420	49,277
Donations received for endowment funds	10,782	36,272
Student loans granted	(52,248)	(53,517)
Student loans repaid	47,000	48,153
Cash transferred to Association of Pacific Rim Universities/research institutes (note 25)	(966)	(29,154)
Net cash outflow from operating activities	(519,415)	(563,332)
Cash flows from investing activities:		
Payments for purchase of property, plant and equipment	(203,752)	(168,023)
Proceeds from disposal of property, plant and equipment	190	87
Net purchase of investments	(78,782)	(84,129)
Investment in fixed deposits	(106,662)	53,768
Interest and dividend received	53,894	43,129
Income received from rental of investment properties	149	125
Long-term loan to subsidiary (granted)/repaid	(250)	400
Other long-term loan repaid	, ,	48
Net cash outflow from investing activities	(335,213)	(154,595)
Cash flows from financing activities:		
Government grants received, net of refund	745,995	756,574
Government grants received for endowment funds	-	37,547
Student loan funds received from government	4,277	4,279
Student loan funds returned to government	,,,,,,	(12,167)
Long-term loan repaid	(1,007)	(1,027)
Net cash inflow from financing activities	749,265	785,206
Net increase in cash	(105,363)	67,279
Cash at the beginning of the year	153,656	86,377
Cash at the and of the year	49.202	452.050
Cash at the end of the year	48,293	153,656

The accompanying notes form an integral part of these financial statements.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

1 GENERAL

The University, established by the National University of Singapore Act (Chapter 204), is domiciled in Singapore. The address of the University's registered office and place of business is 21 Lower Kent Ridge Road, Singapore 119077. The financial statements are expressed in Singapore dollars.

The University is principally engaged in the advancement and dissemination of knowledge, and the promotion of research and scholarship.

The financial statements of the University for the year ended 31 March 2005 were authorised for issue by the Council on 26 July 2005.

2 SIGNIFICANT ACCOUNTING POLICIES

a) Basis of accounting

The financial statements are prepared in accordance with the historical cost convention modified to include the revaluation of certain properties and are drawn up in accordance with the provisions of the Singapore Financial Reporting Standards.

b) Financial assets

The University's principal financial assets are cash and cash equivalents, fixed deposits, student loans, debtors, deposits and prepayments and investments. Student loans, debtors, deposits and prepayments are stated at their nominal values as reduced by appropriate allowances for estimated irrecoverable amounts. Investments are accounted for on the basis described in the following paragraphs.

c) Financial liabilities

Financial liabilities are classified according to the substance of the contractual arrangements entered into. Significant financial liabilities are creditors, accrued expenses, grants received in advance and deferred capital grants which are stated at their nominal values.

d) Foreign currency transactions

Transactions in foreign currencies are recorded using the rates ruling at the dates of the transactions. At each balance sheet date, recorded monetary balances and balances carried at fair value that are denominated in foreign currencies are reported at the rates ruling at the balance sheet date. All realised and unrealised exchange adjustment surplus and deficit are dealt with in the Income and Expenditure Statement.

e) Derivative transactions

Derivative transactions such as forward foreign exchange contracts, interest rate swaps and total return swap designated for hedging purposes on a total portfolio basis are valued on a basis consistent with assets and liabilities which are the subject of the hedge. Profit and losses on these transactions are recognised on a basis consistent with the transactions they apply.

Any derivative transactions which are entered for non-hedging purposes and are outstanding at year end will be revalued at balance sheet date with such unrealised gain or loss on non-hedging derivatives taken to the Income and Expenditure Statement.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

f) Basis of recognising income

Tuition and other fees for the academic year and all other income are recognised on an accrual basis.

Donations are recognised in the financial year they are received.

Interest income is accrued on a time proportionate basis, by reference to the principal outstanding and at the interest rate applicable, on an effective yield basis.

Dividend income from investments is recognised when the right to receive payment has been established.

g) Grants

Government grants and contributions from other organisations for the purchase of fixed assets or to finance capital projects are taken to the Grants Received In Advance in the first instance. They are taken to the Deferred Capital Grants account upon utilisation of the grants for the purchase of assets which are capitalised, or to the Statement of Income and Expenditure for purchases of assets which are expensed off. Donated assets at valuation are taken to the Deferred Capital Grants account in the year they are received.

Deferred capital grants are recognised in the Income and Expenditure Statement over the periods necessary to match the depreciation of the assets purchased with the related grants. Upon the disposal of the fixed assets, the balance of the related deferred capital grants is recognised in the Income and Expenditure Statement to match the net book value of fixed assets disposed of.

Government and other grants in respect of the current year's operating expenses are recognised as income in the same year. Such grants which are received but not utilised are included in the Grants Received In Advance account.

Grants are accounted for on the accrual basis.

h) Capital preservation

The Capital Preservation Account is to preserve the value of the capital of National University of Singapore Endowment Fund as stipulated in NUS Statute 15. The amount transferred to the Capital Preservation Account for the financial year is determined based on the change in Consumer Price Index ("index") as at each financial year end, and is transferred from the year's surplus. In the year of a net deficit, the required transfer is made in the future year(s) when adequate surplus is available to meet the required amount. No adjustment is made where there is a decrease in the index.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

i) Funds

Income and expenditure are generally accounted for under the General Funds in the Statement of Income and Expenditure. The income and expenditure relating to funds that are set up for specific purposes are accounted for under Restricted Funds in the Statement of Income and Expenditure as detailed below.

The following funds termed as "Restricted Funds" are set up and disclosed separately from the University's General Funds:

- (i) funds created from donations from external sources for specific purposes; and
- (ii) funds maintained separately to account for the self-financing activities carried out by the University. Income and expenditure relating to these funds are accounted for directly in the funds to which they relate.

The operating results of both the General Funds and Restricted Funds (as described in (i) and (ii) above) maintained by the University are included in the Income and Expenditure Statement of the University.

Government grants and donations from external sources, to set up or augment the capital of the endowment funds, are taken directly to these funds. Income and expenditure of endowment funds are taken directly to the Restricted Funds.

Assets and liabilities of all funds are pooled in the Balance Sheet.

j) Cash and cash equivalents

For the purpose of the cash flow statement, cash and cash equivalents comprise cash on hand and bank balances.

k) Student loans and debtors

Student loans and debtors are carried at nominal values as reduced by appropriate allowances for doubtful debts based on a review of all outstanding amounts as at the year end. Bad debts are written off during the financial year in which they are identified.

l) Investments

Quoted and unquoted investments, including the investment in subsidiaries and associated companies, that are intended to be held for the long term, are stated in the financial statements at cost less any impairment in net recoverable value.

Short-term investments are stated at the lower of cost and market value determined on a portfolio basis.

Profits or losses on disposal of investments are taken to the Income and Expenditure Statement.

Subsidiaries are enterprises controlled by the University. Control is achieved when the University has the power to govern the financial and operating policies of an investee enterprise so as to obtain benefits from its activities. Associates are entities over which the University exercises significant influence, through participation in the financial and operating decisions of the investee.

The results of the subsidiaries and associated company have not been consolidated with the University's financial statements as they are not material.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

m) Investment properties

Investment properties are held on a long term basis for investment potential and income. Investments are stated at annual valuation on an open market value for existing use basis. The surplus or deficit on revaluation is taken to the investment revaluation reserve except when the total of the reserve relating to investment properties is not sufficient to cover a deficit, in which case the amount by which the deficit exceeds the amount in the asset revaluation reserve is charged to the Income and Expenditure Statement. The investment revaluation reserve is released to the Income and Expenditure Statement as and when the related revalued property is sold.

n) Fixed assets and depreciation

Fixed assets are carried at cost less accumulated depreciation and any impairment loss where the recoverable amount of the asset is estimated to be lower than its carrying amount.

Capital work-in-progress consists of construction costs and related expenses incurred during the period of construction.

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in the Income and Expenditure Statement.

Depreciation is charged so as to write off the cost of fixed assets over the period of leases or their estimated useful lives as follows:

	No. of Years
Leasehold land	30 to 90
Buildings	30
Leasehold improvements	10
Equipment, furniture and fittings	3 to 10

Depreciation is not provided for capital work-in-progress. Equipment, furniture and fittings costing less than S\$1,000 each and library books are charged to the Income and Expenditure Statement in the year of purchase.

o) Impairment of assets

At each balance sheet date, the University reviews the carrying amounts of its assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. Impairment losses are recognised as an expense immediately.

p) Provisions

Provisions are recognised when the University has a present obligation as a result of past event where it is probable that the obligation will result in an outflow of economic benefits that can be reasonably estimated.

q) Retirement benefit costs

The University, apart from legally required social security schemes, operates defined contribution plans. Payments to defined contribution retirement benefit plans (including state-managed retirement benefit schemes, such as the Singapore Central Provident Fund), are charged as an expense when incurred.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

r) Employee Leave Entitlement

Employee entitlements to annual leave are recognised when they accrue to employees. A provision is made for the estimated liability for annual leave as a result of services rendered by employees up to the balance sheet date.

s) Financial risk management

The University invests in a variety of market instruments such as bonds and quoted/unquoted equities under its investment strategy. This exposes the University to a variety of financial risks, including the effects of changes in debt and equity market prices, foreign exchange rates and interest rates. The investment mandate seeks to minimise potential adverse effects from these exposures and is carried out in accordance with the policies agreed by the University's Investment Committee, with the advice from its Investment Consultant.

(i) Foreign exchange risk

Some of the University's transactions and investments are conducted in various foreign currencies, including United States dollars, The Euro, Japanese Yen and Sterling Pounds, and therefore is exposed to foreign exchange risk. Where appropriate, the University uses forward contracts to hedge its exposure to foreign currency risk in the local reporting currency.

(ii) Interest rate risk

The University's surplus and operating cash flows are mainly invested in fixed rate instruments and hence are substantially independent of changes in market interest rates. The University monitors interest rates regularly to ensure excess funds are invested at competitive rates.

(iii) Credit risk

The University has no significant concentrations of credit risk. Measures are in place to ensure that loans or debts are collected on a timely basis.

Cash and fixed deposits are held with creditworthy financial institutions.

(iv) Liquidity risk

The University maintains sufficient cash and cash equivalents, and internally generated cash flows to finance their activities.

(v) Fair Value of Financial Assets and Financial Liabilities

Except for derivative financial instruments as disclosed in Note 8, the carrying values of cash and cash equivalents, and other receivables and payables, and accrued operating expenses approximate their respective fair values due to the relatively short-term maturity of these financial instruments.

Other than the fair value of investments, student loans and long-term loan payable as detailed in the respective notes to the financial statements, the carrying amounts of the other financial assets and financial liabilities approximate their fair values.

It is not practicable within the constraint of cost to reliably determine the fair value of amounts receivable and payable to related parties as these balances have no fixed repayment terms.

It is not practicable within the constraint of cost to reliably determine the fair value of unquoted equity securities. These instruments are shown at cost subject to impairment in value.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

3 ACCUMULATED SURPLUS

Restricted Funds include \$\$419,124,000 (2003/2004: \$\$346,890,000) accumulated surplus under the NUS Fund.

4 NUS FUND

On 1 April 2003, NUS Fund was registered as a specific member of the Education Central Fund of Ministry of Education, which has been designated as an institution of a public character under Section 37(2) of the Income Tax Act. The University and NUS Fund have become two separate charities and donations received by the University are channelled to the NUS Fund. The financial position of the NUS Fund has to be disclosed separately in compliance with the requirements imposed by Inland Revenue Authority of Singapore and is shown below. The NUS Fund comprises the accumulated surplus (included in Restricted Funds), Endowment Funds and Capital Preservation Account.

Total donations received by NUS Fund amounted to \$\$59,541,000 (2003/2004: \$\$69,367,000).

The operating rules for the NUS Fund have been complied with and funds raised have been used for approved purposes.

NUS Fund Position

		2004/2005	2003/2004
	Note	S\$'000	S\$'000
Accumulated Surplus	3	419,124	346,890
Endowment Funds		978,356	935,488
Capital Preservation Account		55,089	55,089
		1,452,569	1,337,467

Represented by:

Creditors

Net Assets

Accrued expenses

Total Assets	1,515,529	1,402,692
	1,133,047	339,113
	1,135,847	959,113
Cash	10,293	14,542
Fixed deposits	325,422	268,524
Investments	752,156	648,011
Amount owing by associated company	1,000	1,000
Debtors	46,976	27,036
Current Assets		
	379,682	443,579
Student loans	19,014	18,817
Investments	266,138	323,119
Fixed assets	14,080	11,745
Associated company	80,450	89,898

Total Liabilities	62,960	65,225
Deferred capital grants	14,080	11,745
Non-Current Liabilities		
	48,880	53,480

47,999

1,452,569

881

52,001

1,479

1,337,467

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

4 NUS FUND (cont'd)

Movements in NUS Fund

	2004/2005	2003/2004
	\$\$'000	S\$'000
Balance as at 1 April	1,337,467	1,187,090
Movements in Accumulated Surplus:		
Grants received	-	8
Donations received	48,759	33,106
Investment income	47,308	59,171
Other operating income	2,767	2,449
Expenditure on manpower	(2,621)	(873)
Depreciation	(1,331)	(1,679)
Other operating expenditure	(22,654)	(19,529)
Amount transferred from Endowment Funds	6	15
Transfer to Capital Preservation Account	_	(12,096)
	72,234	60,572
Movements in Endowment Funds:		
Grants received/accrued	32,000	41,447
Donations received	10,782	36,272
Amount transferred from/(to) Accumulated Surplus	(86)	(10)
	42,868	77,709
Movements in Capital Preservation Account:		
Provision for Capital Preservation for the year	-	12,096
Balance as at 31 March	1,452,569	1,337,467

5 SUBSIDIARY COMPANIES

2004/2005	2003/2004
\$\$'000	S\$'000
100	100
(100)	(100)
-	-
100	100
	\$\$'000 100 (100) -

NOTES TO THE FINANCIAL STATEMENTSFOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

5 SUBSIDIARY COMPANIES (cont'd)

Country of Incorporation	Activities	Country of Business	Equity	Percentage of Equity Held 2004/2005 2003/2004		t of tment 2003/2004
Singapore University Press (Pte) Ltd (Singapore)	Publishers	Singapore	100%	100%	S\$ 100,001	100,001
NUS Technology Holdings Pte Ltd (Singapore)	To carry out research and development, to own and exploit all forms of intellectual property interests and to engage in the acquisition, dissemination and transfer of technologies	Singapore	100%	100%	2	2
Centre for Testing & Assessment Pte Ltd (Singapore)	Providing and administering test and assessment programmes as well as to conduct research and development of such programmes for individuals, educational institutions, corporate and other organisations	Singapore	100%	100%	2	2
NUS High School of Mathematics and Science	Promote and undertake the advancement of education, with particular emphasis on mathematics and science at secondary and junior college levels and to participate in schemes established to promote research, development and education, in particular in relation to mathematics and science and to a high school for that purpose.	Singapore	#	-	#	-
NUS America, Inc (United States of America)	This is a nonprofit public benefit corporation organised under the Nonprofit Public Corporation Law for public and charitable purposes. It performs the functions of or to carry out the purposes of the National University of Singapore. # These corporations do not have share capitals. NUS High School of Mathematics and Science is limited by	United State of America	es #	#	#	#
	guarantee				100,005	100,005

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

5 SUBSIDIARY COMPANIES (cont'd)

As at 31 March 2005, the investments in subsidiaries held through NUS Technology Holdings Pte Ltd, a wholly owned subsidiary of the University, are as follows:

Name of Company/ Country of Incorporation	Principal Activities	Country of Business	Percentage of Equity Held			t of tment
			2004/2005	2003/2004	2004/2005	2003/2004
					S\$	S\$
Wizlearn Pte Ltd ^a (Singapore)	Provide computer software services and develop computer software programs relating to electronic learning, publishing and management services	Singapore	78%	78%	500,000	500,000
NUS Ventures Pte Ltd ^b (Singapore)	Distributor of new telecommunication technologies via direct selling and licensing	Singapore	100%	100%	100,000	100,000
Bioinformatics Technology Group Pte Ltd ^c (Singapore)	IT development, IT services, research and experimental development on technology.	Singapore	100%	100%	500,000	500,000
					1,100,000	1,100,000

a. The financial year end of the subsidiary is 30 June

The results of the above subsidiaries have not been consolidated as they are not material to the University's financial statements.

b. The financial year end of the subsidiary is 31 March

c. The financial year end of the subsidiary is 31 July

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

6 ASSOCIATED COMPANY

	2004/2005	2003/2004
	S\$'000	S\$'000
Unquoted equity shares at cost	89,898	89,898
Impairment loss	(9,448)	<u>-</u>
	80,450	89,898

Name of Company/ Country of Incorporation	Principal Activities	Country of Business	Percent Equity	_
			2004/2005	2003/2004
Savu Investments Ltd (Singapore)	Property development and investment	Singapore	50%	50%

The results of the associated company have not been consolidated as the University does not prepare consolidated accounts. Had equity accounting been adopted for the investment in the associated company, the share of profits and revaluation losses of the associated company for the financial year ended 31 March 2005 is \$\$2,316,000 (2003/2004: \$\$3,950,000) and \$\$13,762,000 (2003/2004:\$\$3,606,000) respectively and the equity accounted interest in the associated company incorporating the equity accounted results based on unaudited management accounts for the financial year ended 31 March 2005 and 31 March 2004 are set out below:

	2004/2005	2003/2004
	S\$'000	S\$'000
Cost of investment	89,898	89,898
Share of asset revaluation reserve	(26,212)	(12,449)
Share of retained earnings	18,106	15,789
Capitalised expenses written off	(1,342)	-
	80,450	93,238

7 FIXED ASSETS

			Equipment,	Capital	
Land	Building	Improvement			Total
S\$'000	S\$'000	S\$'000	S\$'000	S\$'000	S\$'000
65,870	1,380,400	149,515	794,854	84,992	2,475,631
31	3,162	1,251	68,571	132,299	205,314
-	(1,810)	(1,132)	4,265	(1,323)	-
-	(489)	-	(23,915)	-	(24,404)
65,901	1,381,263	149,634	843,775	215,968	2,656,541
10,776	560,987	29,689	513,482	-	1,114,934
1,067	45,952	15,379	88,972	-	151,370
-	(191)	(360)	551	-	-
-	(371)	-	(22,928)	-	(23,299)
11,843	606,377	44,708	580,077	-	1,243,005
1,067	45,849	15,384	102,377	-	164,677
54,058	774,886	104,926	263,698	215,968	1,413,536
55,094	819,413	119,826	281,372	84,992	1,360,697
	65,870 31 	Land Building \$\$'000 \$\$'000 65,870 1,380,400 31 3,162 - (1,810) - (489) 65,901 1,381,263 10,776 560,987 1,067 45,952 - (191) - (371) 11,843 606,377 1,067 45,849	Land Building Improvement \$\$'000 \$\$'000 \$\$'000 65,870 1,380,400 149,515 31 3,162 1,251 - (1,810) (1,132) - (489) - 65,901 1,381,263 149,634 10,776 560,987 29,689 1,067 45,952 15,379 - (191) (360) - (371) - 11,843 606,377 44,708 1,067 45,849 15,384 54,058 774,886 104,926	Leasehold Land Building Improvement Improvement Furniture & Fittings \$\$'000 \$\$'000 \$\$'000 \$\$'000 65,870 1,380,400 149,515 794,854 31 3,162 1,251 68,571 - (1,810) (1,132) 4,265 - (489) - (23,915) 65,901 1,381,263 149,634 843,775 10,776 560,987 29,689 513,482 1,067 45,952 15,379 88,972 - (191) (360) 551 - (371) - (22,928) 11,843 606,377 44,708 580,077 1,067 45,849 15,384 102,377 54,058 774,886 104,926 263,698	Leasehold Land Building Building Improvement Furniture & Fittings Progress Work-in Progress S\$'000 S\$'000 S\$'000 S\$'000 S\$'000 65,870 1,380,400 149,515 794,854 84,992 31 3,162 1,251 68,571 132,299 - (1,810) (1,132) 4,265 (1,323) - (489) - (23,915) - 65,901 1,381,263 149,634 843,775 215,968 10,776 560,987 29,689 513,482 - 1,067 45,952 15,379 88,972 - - (191) (360) 551 - - (371) - (22,928) - 11,843 606,377 44,708 580,077 - 1,067 45,849 15,384 102,377 - 54,058 774,886 104,926 263,698 215,968

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

8 INVESTMENTS

(a) Long-term investments

	2	2004/2005 S\$'000		2003/2004 S\$'000	
Quoted investments	At cost	At market value	At cost	At market value	
Government bonds	176,048	178,725	137,113	143,528	
Equity shares in corporations	66,410	173,051	73,543	168,757	
Bonds/loan stocks in corporations	94,726	97,493	91,645	96,476	
	337,184	449,269	302,301	408,761	
Unquoted investments	At cost	At fair value	At cost	At fair value	
Equity shares in corporations	39,367	31,727	17,677	10,117	
Bonds/loan stocks in corporations	21,222	18,754	28,053	28,366	
Bonds issued by associated company	-	-	50,000	47,500	
	60,589	50,481	95,730	85,983	
Total long-term investments	397,773	499,750	398,031	494,744	

The weighted average effective interest rate of government bonds and bonds/loan stocks in corporations/associated company at the balance sheet date was 3.70% (2003/2004: 4.45%). The fair value of unquoted long-term investments is mainly based on fair values provided by third parties.

(b) Short-term investments

	20	004/2005 S\$'000		2003/2004 S\$'000		
Quoted investments	At cost	At market value	At cost	At market value		
Government bonds	128,294	137,758	132,842	142,796		
Equity shares in corporations	309,900	355,215	289,928	322,690		
Bonds/loan stocks in corporations	94,295	98,152	78,716	81,860		
	532,489	591,125	501,486	547,346		
Unquoted investments	At cost	At fair value	At cost	At fair value		
Government bonds	35,833	35,594	17,134	16,684		
Equity shares in corporations	-	-	715	723		
Bonds/loan stocks in corporations	133,834	138,266	128,676	132,152		
Bonds issued by associated company	50,000	50,445	-	_		
	219,667	224,305	146,525	149,559		
Total short-term investments	752,156	815,430	648,011	696,905		

The weighted average effective interest rate of government bonds and bonds/loan stocks in corporations/associated company at the balance sheet date was 3.96% (2003/2004: 3.71%). The fair value of unquoted short-term investments is based on fair values provided by the third party custodian bank.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

8 INVESTMENTS (cont'd)

(c) Movements in Market/Fair Value of Investments (For Information Only)

	2004/2005	2003/2004
	S\$'000	S\$'000
Long-term investments		
Market/fair value at the beginning of the year	494,744	300,444
Increase due to net purchases	49,742	155,048
Decrease due to transfers	(47,500)	-
Realised gain on sale of investments	(9,006)	(1,812)
Gain arising from changes in market/fair values	11,770	41,064
Market/fair value at the end of the year	499,750	494,744
Short-term investments		
Market/fair value at the beginning of the year	696,905	689,992
Increase/(decrease) due to net purchases/(disposals)	54,144	(57,710)
Increase due to transfers	47,500	-
Realised gain on sale of investments	(12,204)	(28,093)
Gain arising from changes in market/fair values	29,085	92,716
Market/fair value at the end of the year	815,430	696,905
Total		
Market/fair value at the beginning of the year	1,191,649	990,436
Increase due to net purchases	103,886	97,338
Increase/(decrease) due to transfers	-	-
Realised gain on sale of investments	(21,210)	(29,905)
Gain arising from changes in market/fair values	40,855	133,780
Market/fair value at the end of the year	1,315,180	1,191,649

(d) Forward Foreign Exchange Contracts and Interest Rate Swaps

Forward foreign exchange contracts, interest rate and total return swaps are entered into for hedging purposes to manage exposure to fluctuations in the foreign currency exchange rates and interest rates respectively.

At 31 March 2005, the settlement dates on open forward contracts, interest rate and total return swaps are ranged from between one month to greater than a year.

At 31 March 2005, the contractual/notional amount of outstanding forward foreign exchange contracts, interest rate and total return swaps are as follows:

	2004/2005	2003/2004
	S\$'000	S\$'000
Contractual/Notional amount		
Forward foreign exchange contracts	1,017,734	804,436
Interest rate swaps	201,384	175,525
Total return swaps	825	-

Net fair value of forward foreign exchange contracts and interest rate swaps

At 31 March 2005, the net fair values of outstanding forward foreign exchange contracts, interest rate and total return swaps are as follows:

	2004/2005		2003/2004	
	S\$'000 Favourable	S\$'000 Unfavourable	S\$'000 Favourable	S\$'000 Unfavourable
Forward foreign exchange contracts	4,751	(7,851)	9,600	(3,826)
Interest rate swaps	1,769	(1,653)	1,221	(4,728)
	6,520	(9,504)	10,821	(8,554)

The fair values of forward foreign exchange contracts, interest rate and total return swaps have been calculated using rates quoted by the University's master custodian to terminate the contracts at the balance sheet date.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

9 INVESTMENT PROPERTIES

	2004/2005	2003/2004
	S\$'000	S\$'000
Balance as at 1 April	17,020	17,510
Deficit on revaluation	(10)	(490)
Balance as at 31 March	17,010	17,020

The revaluation at the balance sheet date was based on estimated market values based on their existing use, contained in a valuation report dated 22 July 2005 (2003/2004: 1 April 2004) made by a firm of professional valuers, Jones Lang LaSalle Property Consultants Pte Ltd (2003/2004: by an employee of the University, Associate Professor Lim Lan Yuan who is a licensed appraiser). The deficit on revaluation of \$\$10,000 (2003/2004: \$\$490,000) was offset against the investment revaluation reserve account.

10 STUDENT LOANS

	2004/2005	2003/2004
	S\$'000	S\$'000
Student tuition fee loans (a)	162,665	160,630
Study loans (a)	33,791	29,425
Notebook computer loans (b)	16,957	18,410
Other student loans (c)	1,242	956
	214,655	209,421
Represented by:		
Amount repayable within 12 months - current assets	48,535	42,342
Amount repayable after 12 months - non current assets	166,120	167,079
	214,655	209,421

- (a) The student tuition fee and study loans are repayable with interest at 4.750% (2003/2004: 4.750%) per annum by monthly instalments, over periods up to 20 years.
- (b) The interest-free notebook computer loans to students are repayable by monthly instalments, over periods up to 2.5 years.
- (c) The other student loans are interest-free and repayable by monthly instalments, over periods up to 5 years.

Secured Assets

The student loans are unsecured.

Fair values

Student tuition fee loans and study loans are disbursed from advances from the government. The carrying amount of student loans approximates its fair value.

The fair values of the notebook computer loans and other student loans are \$\$16,154,000 (2003/2004: \$\$17,801,000) and \$\$1,178,000 (2003/2004: \$\$928,000) respectively. The fair values are calculated based on discounted cash flows using a discount rate that approximates the relevant market rate which the management expects to be available to the University at balance sheet date.

11 LONG-TERM LOAN TO SUBSIDIARY COMPANY AND AMOUNTS OWING BY/TO SUBSIDIARY/ASSOCIATED COMPANY
The long-term loan to subsidiary company is unsecured, interest-free and has no fixed term of repayment. The fair value
of this loan cannot be reliably determined.

The amounts owing by/to subsidiary/associated company are unsecured, interest-free and repayable upon demand.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

12 DEBTORS

	2004/2005	2003/2004
	S\$'000	S\$'000
Grants receivable	84,753	30,282
Trade debtors	17,607	21,228
Interest receivable	9,768	9,098
Receivables from sale of investments	2,895	14,055
Others	9,680	13,203
	124,703	87,866

13 DEPOSITS AND PREPAYMENTS

	2004/2005	2003/2004
	S\$'000	S\$'000
Deposits paid	379	336
Prepayments for fixed assets	1,177	3,812
Other prepayments	6,789	5,683
	8,345	9,831

14 FIXED DEPOSITS

The effective interest rates of fixed deposits at the balance sheet date are 0.875% to 2.13% (2003/2004: 0.350% to 1.070%).

15 CREDITORS AND ACCRUED EXPENSES

	2004/2005	2003/2004
	S\$'000	S\$'000
Creditors	56,055	80,719
Accrued expenses	97,034	115,239
Deposits received	1,873	3,034
	154,962	198,992

16 LONG-TERM LOAN

The unsecured interest-free loan was provided by the Agency for Science, Technology & Research to finance the construction of a building extension. It is repayable from the rental income derived from the leasing of the extension.

	2004/2005	2003/2004
	S\$'000	S\$'000
Amount repayable within 12 months	821	1,151
Amount repayable after 12 months	609	1,286
	1,430	2,437

The fair value is calculated based on discounted cash flows using a discount rate that approximates the borrowing rate which the management expects to be available to the University at balance sheet date. The fair value of the long-term loan is \$\$1,371,000 (2003/2004: \$\$2,326,000).

The maturity of the amount repayable after 12 months is as follows:

	2004/2005	2003/2004
	S\$'000	S\$'000
Between 1 and 2 years	609	1,286
Between 2 and 5 years	-	-
	609	1,286

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

17 DEFERRED CAPITAL GRANTS

	2004/2005	2003/2004
	S\$'000	S\$'000
Government and Agency for Science, Technology & Research		
Balance as at 1 April	1,111,522	1,139,703
Capital grants utilised during the year	138,302	101,706
Amount transferred from operating grants (Note 23)	39,743	44,332
Amount reclassified from Deferred Capital Grants - Others	36	-
Amount reclassified from self-financing funds	40	-
Amount reclassified from Accumulated Surplus	72	519
	1,289,715	1,286,260
Deferred capital grants amortised	(130,167)	(142,668)
Deferred capital grants transferred to research institutes	-	(32,070)
Balance as at 31 March	1,159,548	1,111,522
Others		
Balance as at 1 April	152,450	162,922
Capital grants utilised during the year and donated assets	574	1,166
Amount transferred from operating grants (Note 23)	1,804	2,322
Amount transferred from Accumulated Surplus	3,635	1,401
Amount reclassified to Deferred Capital Grant - Government	(36)	-
Amount reclassified to self-financing funds	(8)	-
	158,419	167,811
Deferred capital grants amortised	(13,366)	(14,362)
Deferred capital grants transferred to research institutes	-	(999)
Balance as at 31 March	145,053	152,450
Total Deferred Capital Grants balance as at 31 March	1,304,601	1,263,972

18 ADVANCES FROM THE GOVERNMENT FOR STUDENT LOANS

	2004/2005	2003/2004
	S\$'000	S\$'000
Balance as at 1 April	196,256	204,175
Advances received from government during the year	4,277	4,279
	200,533	208,454
Advances repaid to government during the year	-	(12,167)
Miscellaneous expenditure	(14)	(31)
	(14)	(12,198)
Balance as at 31 March	200,519	196,256
Represented by:		
Student tuition fee loans	162,665	160,630
Study loans	33,791	29,425
Pooled investments, fixed deposits and bank balances	4,063	6,201
	200,519	196,256

The advances from the government are for the purpose of extending loans to students mainly to assist them in paying their tuition fees.

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

19 OTHER INCOME

	2004/2005	2003/2004
	S\$'000	S\$'000
Courses and conference fees	16,137	12,743
Clinical fees/consultancy fees	15,128	9,731
Donations	48,759	33,106
Rental income and student hostel residential fees	27,964	24,232
Others	44,257	43,451
	152,245	123,263

Rental income includes \$\$149,000 (2003/2004: \$\$125,000) from investment properties. Others include \$\$18,662,000 (2003/2004: \$\$16,116,000) for interfund transactions between the General Funds and Restricted Funds; the corresponding interfund transactions for expenditure are included in Other Operating Expenditure.

20 EXPENDITURE ON MANPOWER

	2004/2005	2003/2004
	S\$'000	S\$'000
Wages and salaries	474,226	474,476
Employer's contribution to Provident Funds	33,531	40,062
Other staff benefits	7,164	33,604
	514,921	548,142
Number of persons employed as at the end of the financial year:		
Full time	6,463	6,516
Part time	4,191	3,678
	10,654	10,194

21 INVESTMENT INCOME

	2004/2005	2003/2004
	S\$'000	S\$'000
Interest income:		
Government bonds	13,422	10,270
Bonds/loan stocks in corporations/associated company	12,733	12,394
Fixed deposits and bank current accounts	9,010	6,168
	35,165	28,832
2000		
Dividend income:	40.404	44.404
Quoted equity shares	18,494	14,184
Unquoted equity shares	905	261
	19,399	14,445
Net profit on sale of investments	21,210	29,905
Net foreign currency exchange adjustment loss	3,895	(16,697)
Reversal of impairment loss on investments	-	16,235
Impairment loss on Savu Investments Ltd	(9,448)	-
	70,221	72,720

101

NOTES TO THE FINANCIAL STATEMENTS

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

22 (DEFICIT)/SURPLUS BEFORE GRANTS

This is arrived at after charging:

	2004/2005	2003/2004
	S\$'000	S\$'000
Bad and doubtful debts	190	350
Rental expenses	1,944	1,328
Loss on disposal of fixed assets	915	953

23 OPERATING GRANTS

(a) Operating Grants (Government)

	2004/2005	2003/2004
	S\$'000	S\$'000
Operating grants utilised during the year	636,495	650,468
Amount transferred to deferred capital grants	(28,665)	(32,085)
	607,830	618,383

(b) Operating Grants (Agency for Science, Technology & Research)

	2004/2005	2003/2004
	\$\$'000	S\$'000
Operating grants utilised during the year	64,126	78,059
Amount transferred to deferred capital grants	(11,078)	(12,247)
	53,048	65,812

(c) Operating Grants (Others)

	2004/2005	2003/2004
	S\$'000	S\$'000
Operating grants utilised during the year	41,756	53,385
Amount transferred to deferred capital grants	(1,804)	(2,322
	39,952	51,06

FOR THE FINANCIAL YEAR ENDED 31 MARCH 2005

24 CAPITAL COMMITMENTS

Commitments by the University in respect of equipment and expansion of the facilities, not provided for in the financial statements, are as follows:

	2004/2005	2003/2004
	S\$'000	S\$'000
Authorised and contracted for	192,869	199,953
Authorised but not yet contracted for	293,670	455,522
·	486,539	655,475

25 REGISTRATION OF DEPARTMENT AS A SOCIETY

On 11 February 2004, The Association of Pacific Rim Universities (APRU) which was previously part of the University was registered as a society under the Societies Act.

Accordingly, the account balances of the above department were transferred to The Association of Pacific Rim Universities. The impact on the financial statements of the University for the financial year ending 31 March 2005 is to reduce assets by \$\$966,000 and other fund balances by \$\$966,000. A breakdown of the assets and other fund balances transferred is as follows:

	2004/2005	2003/2004
	S\$'000	S\$'000
Assets		
Cash	966	
Other fund balances		
Restricted Funds	966	

26 PRIOR YEAR'S RECLASSIFICATIONS

Certain reclassifications have been made to the prior year's financial statements as follows:

- (a) the University has previously classified Deferred Capital Grants under Equity. They are now classified under Non-Current Liabilities. The reclassification is made in furtherance to the requirements laid down in Finance Circular Minute No. M4/2005 dated 11 February 2005 issued by the Ministry of Finance;
- (b) the University has previously classified advances from the government for student loans under Equity. They are now classified under Non-Current Liabilities. The reclassification is made to better reflect the underlying nature of these advances; and
- (c) the University has reclassified those external grants which were previously under Restricted Funds to General Funds. The reclassification is made to better reflect the underlying nature of these grants.

As a result, these items have been amended on the face of the Balance Sheet and Income and Expenditure Statement. Comparative figures have been adjusted to conform with current year's presentation.

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