

Entrepreneurship Education: The Role of NUS Entrepreneurship Centre

新加坡国立大学企业中心在
科技创业教育与发展的角色

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National University of Singapore An Overview

新加坡国立大学简介

NUS today 大学一览



A global, research-intensive university

全球化的研究型大学

- ✓ **14 Faculties and Schools across 3 campuses**
3个校园14个院、系
- ✓ **Staff of 7000 (incl. 2000 professors, 1300 researchers)**
7000 员工 (2000 教授, 1300 研究员)
- ✓ **Students (24,000 undergraduates, 9,000 postgraduates)**
24,000 大学生, 9,000 研究生
- ✓ **6 Overseas Colleges**
6 所海外学院
- ✓ **22 Research Institutes and Centres**
22 个研究所和中心
- ✓ **3 of Singapore's 4 Research Centres of Excellence + partnership with NTU in the 5th**
新加坡 4 所卓越研究中心, 还有与 NTU 合作的第五所

Vision 愿景

**A leading global university centred in Asia,
influencing the future**

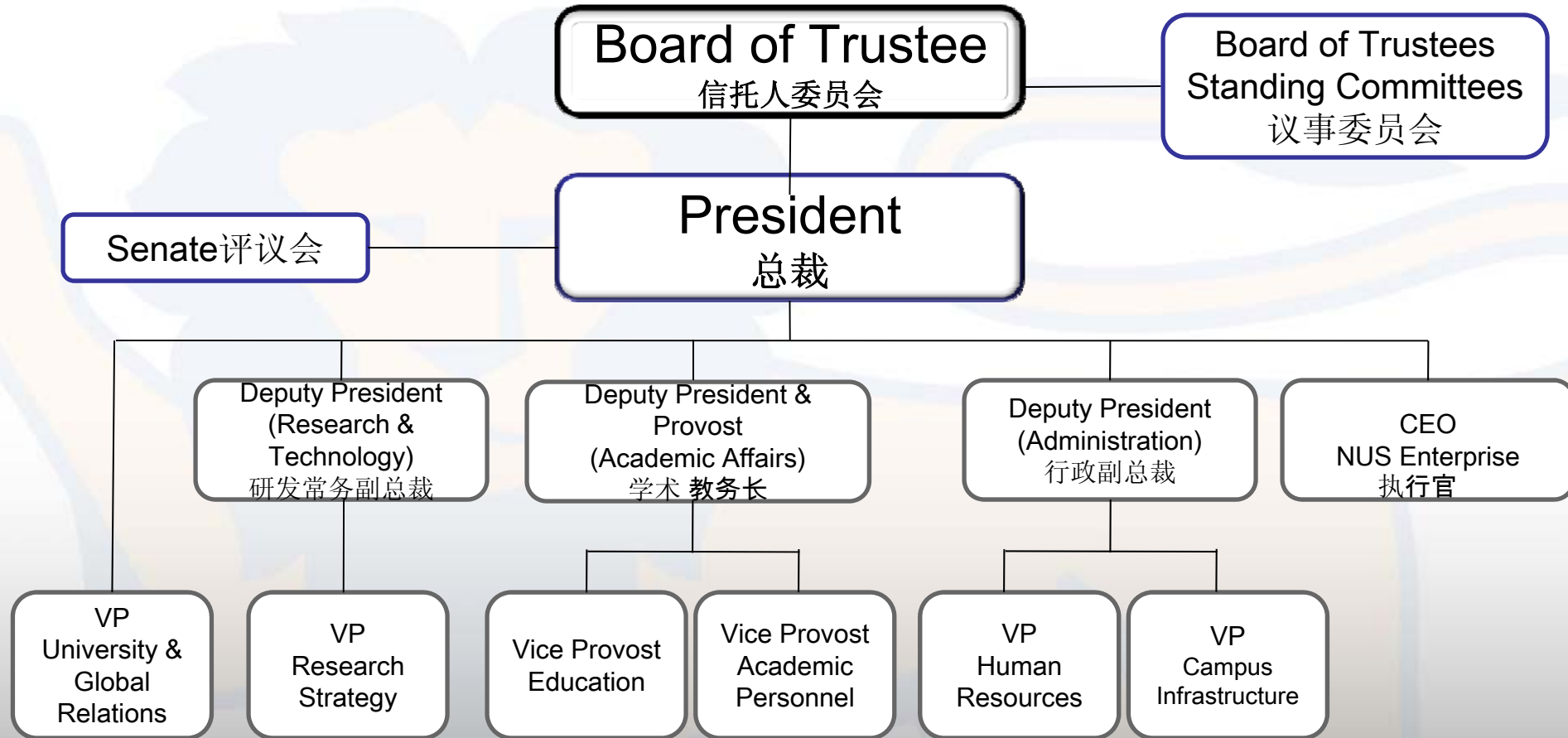
立足亚洲、影响未来的全球顶级大学

Mission 使命

**To transform the way people think and do things
through education, research and service**

通过教育、研究和服务，改变人们思维和行动

NUS Organization Structure 组织结构



大学与全球
关系

研究战略

教育

学术

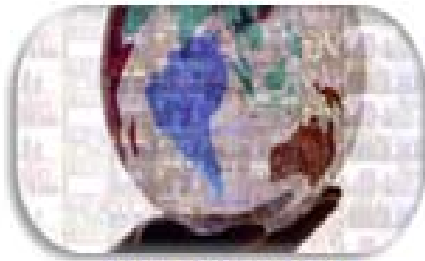
人力资源

校园建设

NUS Enterprise – Goals 目标

1. Embedding entrepreneurial learning as an integral part of NUS' Education 将创业精神融为大学教育的一部份
 - Experiential Entrepreneurial Education
2. Translating NUS' research into innovation and commercialisation impacts 将大学研究为创新及商品化
 - Industry Partnership and Entrepreneurship Support
3. Asia's Think Tank for Enterprise and Innovation 亚洲创新与企业的智库

NUS Enterprise (ETP)



Experiential
Education

体验式创业教育



Industry
Engagement
& Partnerships

行业参与和伙伴
关系



Entrepreneurship
Support

创业扶助

Entrepreneurship Support

创业扶助

NUS Entrepreneurship Centre (NEC)

新加坡国立大学创业中心

NURTURE

Nurturing the Entrepreneurs of Tomorrow

NUS Entrepreneurship Centre (NEC)

is responsible for NUS Enterprise's **drive**
to **provide opportunities** for experiential
learning of entrepreneurship within the NUS community.

Centre 创业中心的主要活动

Experiential Education

Creates and develops entrepreneurship education programmes for the NUS community, to infuse a spirit of enterprise into NUS education.

NEI Ecosystem (Incubators “without walls”)

Provides a wide range of services to nurture startups by NUS researchers, students and alumni, including incubation facilities, seed funding and mentorship

Entrepreneurship Development

Fosters the development of interest in entrepreneurship in NUS and Singapore through a wide range of entrepreneurship development programmes.

Research

Conducts both scholarly as well as applied research on high-tech innovation and entrepreneurship to advance knowledge in technology venturing practice, and to inform and influence public policy on innovation and



Examples of Technology Entrepreneurship Educational Programs in NUS

Technopreneurship Minor Program for Undergraduates

科技创业副修课程

Internship-based Programs (NOC and iLEAD)

企业实习

Extra-Chapter Challenge for PhD Students

博士论文商业化调查

Entrepreneurship/Innovation Practicum

创业与创新实习

StartUp@Singapore Business Plan Competition

年度创业计划大赛

StartUp Incubation & Mentorship

企业孵化友导

Experiential Entrepreneurial Education

体验式创业教育

- **Intensive, immersive internship experience** 深化浸濡，实习经验
- **Achieve a mindset change towards a more entrepreneurial outlook** 创业意识
- **Develop a global outlook and awareness** 全球化思维

NUS Overseas Colleges (NOC) 大学海外学院

innovative Local Enterprise Achiever Development (iLEAD)

创新性本地企业家孵化

Extra Chapter Challenge & Entrepreneurship/Innovation Practicum

博士论文商业化调查 & 创业与创新实习

DISCOVER
DISCOVER
Discovering the Entrepreneur in You

NUS Overseas Colleges (NOC)´s mission
is to provide NUS students with **education** and
experience in **leading entrepreneurial**
and **academic hubs** around the world.

The Catalyst To Your Success

iLEAD
iLEAD
Experiential learning of entrepreneurship through internship at innovative
local enterprises and overseas study mission to Silicon Valley

NUS Overseas Colleges 海外学院

Experiential entrepreneurship education 体验创业教育

immersing NUS students in leading entrepreneurial hubs
around the world 让本校学生在全世界的

创业热点地区浸濡

- ONE year 1年
- Full-time interns in high-tech startup/innovative companies
在高科技或创新公司全职实习
- Learn from the founders and entrepreneurs
向企业家或投资者学习
- Take courses at partner universities
在伙伴大学进修课程



Six NUS Overseas Colleges

NOC in Silicon Valley (2002) 硅谷, 美国

- Courses in Stanford
- Focus on technology startups in Silicon Valley



NOC in Philadelphia (2003) 费城, 美国

- Courses in University of Pennsylvania 宾夕法尼亚大学
- Focus on bio-medical technology



NOC in Shanghai (2004) 上海

- Courses at Fudan University 复旦大学
- Focus on China-related business



NOC in Stockholm (2005) 斯德哥尔摩 瑞典

- Courses at KTH Royal Institute of Technology
- Focus on mobile/IT with European perspective

NOC in India (2008) 印度

- Focus on discovering entrepreneurship in India and experiencing the richness of India's culture



NOC in Beijing (2009) 北京

- Courses at Tsinghua University 清华大学
- Focus on high tech startups in Haidian District



Alumni Network 校友网络



Figures updated as of 2 Nov 09

College	NCSV	NCBV	NCST	NCSH	India	NCBJ	Total	
Alumni	295	168	64	144	21	-	692	824
Students still on the programme	36	30	21	33	2	10	132	
Non-profit initiatives promoting entrepreneurship								12
Active startups by alumni								39
Entrepreneurial awards won by NOC students and alumni								51

iLEAD (2008) 创新性本地企业实习

Study in NUS & 6-month internship in Singapore's knowledge-based enterprises + 2-week overseas study visit

新加坡全职实习 6 月 + 海外访问研究二个星期

Extra Chapter Challenge Programme (2010)

博士论文商业化调查

A competitive fellowship that gives PhD students the opportunity to explore the commercial feasibility of their thesis research findings/discoveries

博士奖学金, 让学生探索博士论文研究发现商业可行性

Entrepreneurship/Innovation Practicum

创业与创新实习

Small grants to students to develop/implement their innovative ideas 小额赠款让学生开发/实施他们的创意

Technopreneurship Minor Program

Six Modules , to be selected from

Finance & Accounting

Management & Organization

Entrepreneurial Marketing

Technological Innovation

New Product Development

New Venture Creation

New Business Development Consulting Practicum

Business Start-Up Case & Analysis

Equivalent Modules offered by Partner Universities

Entrepreneurship Courses in NUS Business School

Undergraduate BBA Program

Compulsory module on Entrepreneurship
(from AY 2011/12)

Electives in Retail Entrepreneurship, Corporate Entrepreneurship, Business Valuation and Private Equity

MBA Program

Electives in Technology Entrepreneurship, Technology Commercialization, Corporate Entrepreneurship, Entrepreneurial Finance, Private Equity, Management of Innovation & Entrepreneurship (Asia-Pac EMBA)

Annual National StartUp Business Plan Competition 年度创业计划大赛



START-UP
@ SINGAPORE

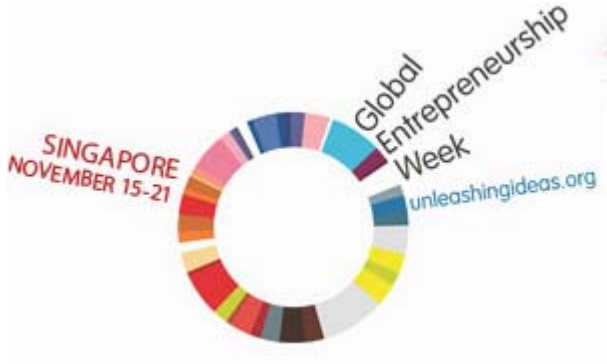
make ideas happen!

- The biggest annual national business plan competition in Singapore since 1999 , open to all teams with at least one Singapore-based participant in Singapore
- Fully student-run since 2007
- Many start-ups have been formed since

Entrepreneurship Outreach Activities of NUS Entrepreneurship Centre 创业发展活动



Student organizations supported by our centre include:



(Our centre is the national co-host for Singapore)



The NUS way 企业孵化计划

NUS Enterprise Incubator (NEI)

新加坡国立大学孵化中心

1. Generation of Pipelines
繁衍途径

NUS Enterprise Innovation & Start-Up Eco-System

大学创新及创业体系

2. Expertise & Management
专业知识和管理

3. Funding & Infrastructure
融资及基础架构

Outputs 成果

- Collaborations (Industry)
- Licenses
- Spin-offs

公司新闻

Biomers – 1st venture to receive investment from NRF early stage VC (Nanostart)

\$20m fund to boost local nanotech sector

Investment comes from German firm's subsidiary and NRF

By Assoc Prof

A \$20 million fund to boost local nanotechnology investment has been announced by the NRF and German firm's subsidiary and NRF.

The fund comes from Maxfield and the NRF, a joint venture of the NRF and German firm's subsidiary.

Maxfield is a subsidiary of a German technology investment firm, which has been established in Singapore in 2008. The fund will be used to invest in local nanotechnology companies, which are expected to be established in the next few years.

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"This represents a significant milestone for Singapore, and it proves that Singapore-based firms can compete on a global scale."

In Singapore, the fund will be used to invest in local nanotechnology companies, which are expected to be established in the next few years.

Infinitesimal leaps



Infinitesimal leaps

Infinitesimal leaps

NUS spin-off tenCube was recently acquired by McAfee



07.29.2010

McAfee, Inc. to Acquire tenCube; To Deliver Next Generation Mobility Platform

McAfee to Deliver the Broadest Set of Mobile Security Protection Available for Businesses, Families and their Digital Lifestyles

SANTA CLARA, Calif., July 29, 2010 - McAfee, Inc. (NYSE: MFE) today announced that it has entered into a definitive agreement to acquire privately owned tenCube, the provider of the WaveSecure mobile security service. Adding WaveSecure's locate, lock, back-up and wipe technology to Trust Digital's enterprise mobility management and McAfee's mobile security technology, gives McAfee the capabilities it needs to deliver the industry's most complete next generation mobility platform. McAfee will now have a single platform, from the consumer to the enterprise, to address the management and security of all devices types, to all markets and with the most robust feature set.

Our Portfolio Companies in the News...

公司新闻

Partner

2010 Issue #3

COLLABORATION BETWEEN PERSONAL E-MOTION AND TIEN WAH PRESS TAKES DIGITAL PUBLISHING TO THE NEXT LEVEL



Creating e-books with a better user experience, delivered at a faster speed and at a more competitive pricing

NUS spin-off company, Personal e-Motion (PEM), has partnered with one of the world's largest printers, Tien Wah Press (TWP), to develop a new digital solution for the publishing industry. Called the TWP Digital Solution, it leverages upon PEM's technology platform, KooBits, to create full-colour, interactive e-books in a cost-effective manner, with a shorter turnaround time.

[Read more](#)

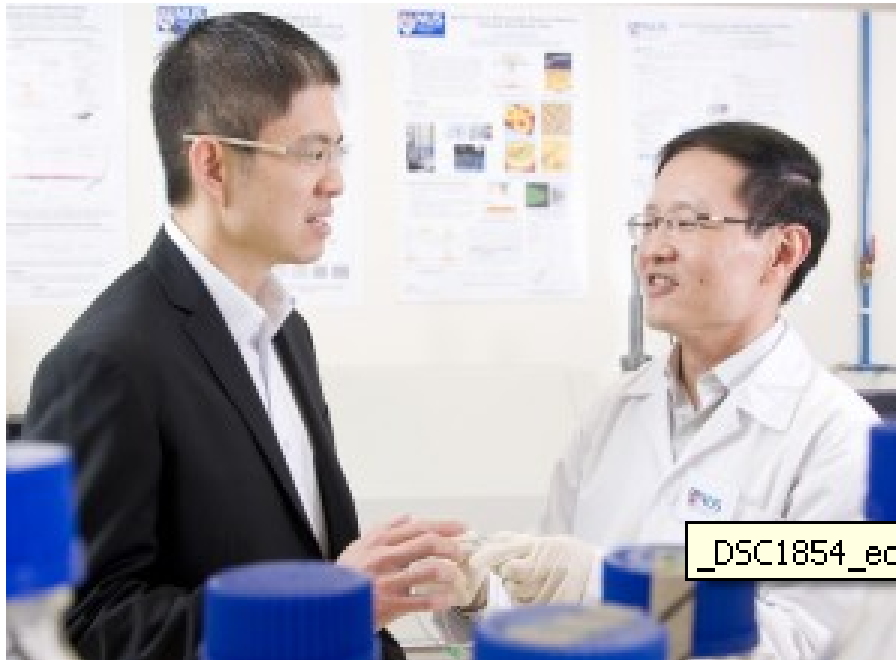
Our Portfolio Companies in the News...

公司新闻

Partner

2010 Issue #2

CLEARBRIDGE BIOMEDICS – BOOSTING CANCER RESEARCH, DIAGNOSTICS AND THERAPY



A new biochip invention from NUS looks set to change the entire spectrum of cancer therapy – from diagnostics to treatment, therapy determination, post-surgery care and research. Developed by Prof Lim Chwee Teck (Division of Bioengineering and Department of Mechanical Engineering), this medical device is able to trap rare circulating tumour cells (CTCs) from just 1 ml of blood obtained from the patient. CTCs are cancer cells circulating in the blood system and are extremely rare – as few as 1 CTC per ml of blood (which contains 5 billion red cells and 10 million white cells).

[Read more](#)

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Facebook : www.facebook.com/pohkam

Twitter : <http://twitter.com/pohkam>

Thank You
谢谢您

