



Nurture

Creating a holistic startup eco-system

GLOBAL ENTREPRENEURSHIP WEEK (17 – 23 NOV 2008)



'The Week' Opening Ceremony

The inaugural Global Entrepreneurship Week (The Week) ie 17-23 November 2008) was officially launched by Mr. Lee Yi Shyan (Minister of State for Trade & Industry and Minister in charge of Entrepreneurship), Professor Tan Chor Chuan (NUS President) and Ms. Elim Chew (President and Founder, 77th Street (S) Pte Ltd). The event was attended by some 200 entrepreneurs, businessmen, policy makers and student entrepreneurs.



One of the key objectives of The Week was to engage and inspire the youths. Among the young entrepreneurs was 12-year old Muhamad Ashik, who set up a postcard business when he was just nine years old and has since moved into bookmarks and written a book entitled "Seven Steps To Becoming A Young Entrepreneur", which was launched at the Opening Ceremony.

Technology Commercialisation Forum (TCF) 2008

With the theme "Innovations for a Better World", TCF08 drew a record 307 participants from 109 organizations in 13 countries including Denmark, Germany, Japan, US and Taiwan. These delegates represented a total of 22 industry sectors including biomedical sciences, chemicals, environment, infocommunications, interactive digital media and renewable energy. This event, which was held during "The Week", brought together the highest number of partners and participants since its launch four years ago, demonstrating the value of TCF to the community.



At TCF08, we witnessed a milestone achievement – the signing of the Master Research Agreement with the Polytechnics. It brought the symbiotic partnership in technology commercialization between NUS and the five polytechnics to the next level. NUS and the polytechnics have worked together in a number of successful partnerships in the past that have brought critical capabilities and technologies into the industry.

The Big Pitch

The BIG Pitch brought 80 entrepreneurs, researchers, investors and industry partners together in a pitching and networking session. The aim was to create a new avenue for creative ideas to transit into prototypes and eventually commercial products. The main industry focuses were engineering/nanotech and medtech/assistive tech. 12 pitches were presented, 6 of which were from NUS. One of the presenters, Prof. Theodoros Kofidis, was subsequently awarded a NRF POC (Proof Of Concept) grant in December.

Speednetworking The Globe

51 IT savvy entrepreneurs and aspiring entrepreneurs connected with participants from NOC Silicon Valley and Stockholm through online video conferencing in this one-day Speednetworking event. Keynotes speakers Kevin Walsh (CTO, Oracle) and Nick Kaye (Executive Director, Stockholm School of Entrepreneurship) spoke on cloud computing and encouraging entrepreneurship. Three local startups (Buuuk, ZopIM and JamiQ), were also featured.

MAJOR EVENTS IN 2009

GLOBAL ENTREPRENEURSHIP WEEK 2009 (THE WEEK) 16-22 NOV 2009

TECHNOLOGY COMMERCIALISATION FORUM 2009 18-19 NOV 2009

Enterprise Race

17 teams from secondary schools, Junior Colleges and ITE participated in the finale event – The Enterprise Race. At several checkpoints, teams had to complete entrepreneurial-related challenges, before racing to the finishing line at Clarke Quay. The winners of the Enterprise Race were announced at the Closing ceremony and received their prizes from Ms Chew Mok Lee, Group Director Enterprise Promotion Group, SPRING Singapore and ACE Secretariat.



National Pushcart Challenge 2008

132 secondary students from 22 secondary schools spent the first two days of The Week managing pushcarts located at the HDB Hub Retail Mall. As part of the Republic Polytechnic National Pushcart Challenge 2008, these student entrepreneurs sold items ranging from customised t-shirts to herbal plants. The winners of the challenge received their prizes and trophies from Mr Lee Yi Shyan, Minister of State for Trade & Industry and Minister in charge of Entrepreneurship.



Enterprise @NUS

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A NOTE FROM EDITOR

The last quarter of 2008 has been eventful! We bring you highlights of the inaugural Global Entrepreneurship Week (17-23 Nov) where we successfully engaged 11,400 participants in 40 entrepreneurial events organised by over 30 local partner organisations. This event was the world's largest single celebration to promote innovation, entrepreneurship and creativity globally. Joining 74 other countries taking part in this event, NUS Enterprise was selected to be the country host for Singapore, and we were delighted when Action Community for Entrepreneurship (ACE) accepted our invitation to come onboard as a co-host to lead and engage the nation in "The Week".

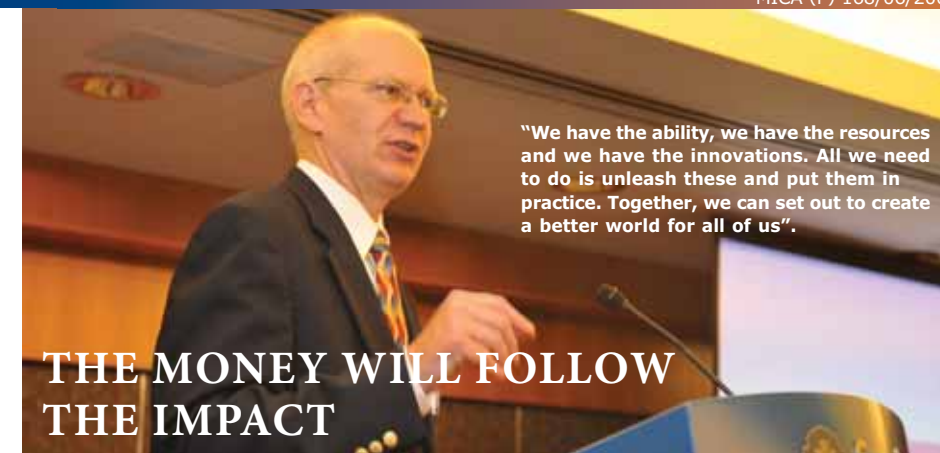
The 2008 Technology Commercialisation Forum (TCF), a premier event in Asia organised by Industry Liaison Office (a division of NUS Enterprise), was held during the Global Entrepreneurship Week. The event brought together the highest number of partners and participants since its launch four years ago. Read on to find out what the keynote speaker, Jon Soderstrom, said about successful technology transfers.

Best wishes for 2009!

From the Enterprise@NUS team

NUS Enterprise provides an entrepreneurial and innovative dimension to the National University of Singapore's educational and research missions. NUS Enterprise consists of 3 divisions (NUS Overseas Colleges, NUS Industry Liaison Office and NUS Entrepreneurship Centre) and 3 business units (NUS Extension, NUS Press Pte Ltd and NUS Technology Holdings Pte Ltd). For more information, visit www.nus.edu.sg/enterprise. To subscribe / unsubscribe from this newsletter or to provide feedback, email enterprise@nus.edu.sg

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"We have the ability, we have the resources and we have the innovations. All we need to do is unleash these and put them in practice. Together, we can set out to create a better world for all of us".

THE MONEY WILL FOLLOW THE IMPACT

The 2008 Technology Commercialisation Forum (TCF) was the biggest ever, with 300 participants attending to discuss latest trends in the commercialisation of inventions. During the keynote address, DR JON SODERSTROM, President of the Association of University Technology Managers (AUTM), highlighted how new technologies are making this a better world. AUTM is a volunteer organization that brings together technology transfer professionals from around the world to develop and promote leadership excellence in academic technology transfer.

Technology transfer transforms the way we live and conduct business. It is changing the world as we know it today. For academic technology transfer, Dr Soderstrom stressed the need to look beyond numbers (eg. royalties earned, patents granted or spin-offs generated). Instead, he suggested looking at cases that have made a difference. To do this, AUTM published the "Better World Reports", which document the outcomes of technology transfers.

After looking through many cases, Dr Soderstrom identified commonalities behind successful technology transfers:

Community – This is an inter-related global community. Everything depends on one another, and you need to establish a certain level of trust.

Collaboration – In any project, there will be a network of people involved, from inventor, to tech transfer officer, industry player and consumer.

Communication – As things change, constant communication is needed, to ensure investments in time, energy and resources lead to an outcome.

Commitment – Creating a product that transforms the way that mankind lives almost

always needs a long time frame, and failure rate is high. So all parties must be committed. **Creativity** – This is necessary in all players (inventor, investor, tech transfer officer, company, etc) to figure out creative ways to shape the product and maximize its impact **Commercialisation** – Someone must be willing to pay for the product.

One example of technology transfer making an impact was a collaboration between Yale University and Bristol Myers Squibb. They used a d4T stavudine, originally discovered in the 1960s, to inhibit the HIV virus. Called Zerit, this is now part of an anti-AIDS cocktail used to manage the disease. By discovering how the compound has worked, others have leveraged on this knowledge and there are now 24 new drugs approved by FDA to treat AIDS. Dr Soderstrom worked with Bristol Myers Squibb to make Zerit more affordable to people in Africa. This allowed the drug to reach the people who needed it the most.

When being part of an innovation ecosystem, Dr Soderstrom suggested the following tips:

- 1) Reserve rights to practice licensed inventions
- 2) Structure exclusive licenses to encourage development and use
- 3) Minimize licensing of "future improvements"
- 4) Anticipate and help manage conflicts of interest
- 5) Ensure broad access to research tools
- 6) Enforcement action should be carefully considered
- 7) Be mindful of export regulations
- 8) Be mindful of the implications of patent aggregators
- 9) Promote social responsibility by helping address unmet needs, particularly in the developing world



BRINGING TECHNOLOGY FROM THE UNITED STATES TO SINGAPORE!



PRASHANT KUMAR, a final year NUS student, is back to school, after spending a year abroad under the **NUS Overseas Colleges (NOC) programme** (BioValley). As part of his experiential entrepreneurship education, Prashant was associated with **Altosoft Corporation**.

In February 2007, Altosoft launched a new enterprise software product for the Operational Business Intelligence market, in addition to its legacy software development services business. Prashant worked closely with the founders and senior management in areas such as product management, servicing partner relations, sales engineering and marketing. Altosoft has now achieved recognition and success as a revolutionary Operational Business Intelligence solution in the American and North European markets. Prashant also took a Minor in Engineering

Entrepreneurship at the University of Pennsylvania.

"My experience in the NOC programme is as much a lesson on self-discovery and character formation as it is in entrepreneurship. While undertaking various responsibilities at Altosoft Corporation, I became a key member of the team and a highly-involved participant in the effort to establish Altosoft's products in the market. Along with acquiring professional hard skills, I also learnt softer skills such as communication and relationship building. The NOC programme has made me a better-rounded person, with a newfound confidence in my abilities," said Prashant.

Prashant is now finishing his last year of undergraduate education at NUS. However, he is still working for Altosoft, aiming to introduce the company's operational business intelligence solutions to the domestic market, as he believes that organizations in the region can benefit immensely from Altosoft's superior technology. Juggling responsibilities at work and school is something he has learnt on the NOC programme, and he is confident that he can continue to add value to himself, his organization and Singapore's economy.

"I unconditionally recommend the NOC programme to any student who wants to push himself to the limit and discover the world of opportunities which lies beyond. For me, I have experienced first-hand the passion and rush which go into making an entrepreneur. Having seen people take the

first step in converting simple ideas into a full business, I am more disposed to making that move myself, when I am ready for it" said Prashant.

(For Altosoft related queries, Prashant Kumar can be contacted at pkumar@altosoft.com)

New Developments in NUS Overseas Colleges (NOC)

Latest - **The NUS College in Beijing (NCBJ)** is now open for application by NUS undergraduates interested in technological areas!

Beijing, the capital of China, strongly encourages entrepreneurship. Almost all the start-ups are within the vicinity of the universities. E.g. Tsinghua Science Park houses start-ups from Tsinghua graduates as well as anyone who is interested to start their own company in Beijing.

Students in NCBJ will get the opportunity to intern full-time with companies located at the technological science parks of Beijing while studying entrepreneurship-related and discipline-based courses at the prestigious Tsinghua University in Beijing.

The pioneer batch will depart for NCBJ programme in August 2009. See www.nus.edu.sg/enterprise/noc for more information!

UPDATES

The growing pool of 593 NOC alumni continued to organize activities to create more awareness of entrepreneurship on campus and beyond. In this quarter, they started a new series of regular networking talks - **"NOC Alumni-In Conversation"**, bringing in prominent speakers to spur the alumni in their entrepreneurial pursuits.

NOC has received a gift of S\$200,000 from Prof Shih Choon Fong. This gift will be used to set up the **Odyssey Fund**, an endowed

fund that will support students and programmes that embody the "Spirit of Odyssey". The gift will attract the prevailing dollar-for-dollar government matching grant.

With the gift endowment from Prof Shih, NOC hopes to further strengthen alumni relations and facilitate the continual expansion of the programme.

Over in the local scene, **iLEAD** (innovative Local Enterprise Achiever Development) programme's intake of 28 students in January

2009 were successfully matched to 28 companies. This intake had students coming from Science, Engineering, Computing, Arts, Business and Design & Environment. Amongst the new partner companies which have iLEAD students joining them are Mozat, Cadi Scientific, Spring Seeds, Xssion, and Conference Bay. The iLEAD Alumni has also been established.

RESEARCH TO MARKET PLATFORM – BRINGING THE LAB AND THE MARKET CLOSER TOGETHER



Picture by Jeremy Sor

"This initiative will provide a platform to bring together stakeholders in the whole technology transfer value chain to have closer interaction. This will increase the effectiveness and efficiency of translating technologies to the market." **DR TONY TAN, Chairman National Research Foundation on the launch of the Research to Market Platform on 21 November 2008.**

Universities are generally at the cutting edge of new technologies, have skilled researchers and house sophisticated research and testing facilities. However, most of these technologies and inventions may work in the lab on a small scale, but the journey from the lab to the market is very long and requires a lot of development. Just like the phrase "It takes a village to raise a child", it takes a whole community to develop an invention to a product which can be sold in the market.

This community, made up of a diverse group with very different and specialized expertise, includes the research community, businesses, academic and research institutions and government agencies.

Launched at the Technology Commercialisation Forum (www.nus.edu.sg/ilo/tcf08) on 21 November 2008 by Guest of Honour Dr Tony Tan, the Research to Market (R2M) Platform is a way to bring this community together to provide the infrastructural support for the transfer of research to the market.

R2M

The key objectives of R2M are to:

- Encourage, catalyse and support research and development between commercial and research entities
- Improve knowledge transfer between industry and research community
- Create market opportunities for technologies and innovations
- Increase economic growth and quality of life through research and innovation

There are 2 key components to the R2M platform – a virtual and a physical one. The former takes the form of the R2M website (www.r2m.nus.edu.sg) while the latter will be in the form of targeted meetings and sessions for face-to-face interactions.

R2M website

The R2M website is a free access website providing a wide range of information including cutting edge technologies, industry and company details and government policies and funding schemes. The website has 2 key focus areas. In "Interest Groups", there are trend writeups of specific industries – Aerospace, IDM, Medical Technology Security and Environment and Water, which are closely aligned to the Strategic Research Programs identified by the National Research Foundation (<http://www.nrf.gov.sg/nrf>). The number of interest areas will increase over time, taking into account capability, market interest and activity in these areas. The "Opportunities" webpage has a searchable database of NUS technologies, NUS Research Centres and companies which showcases skills and capabilities, highlights the company and University interest for collaboration and further development. The Funding Gallery also provides links to all the local funding schemes and organizations for easy access.

Events

NUS will also arrange face-to-face activities such as forums, seminars and focus group discussions to seed innovative ideas, facilitate communication and interaction so as to explore, collaborate and develop various areas of research and bring the technologies to the market.

Join us

Membership of the R2M community is currently free. Please visit us at <http://r2m.nus.edu.sg/register.php> to register.

UPDATES

NUS signed an MOU with **Tritech International Holdings Pte Ltd** to explore research collaboration in the areas of engineering, environment, water and material science. The parties also agreed to cooperate in promoting the commercialisation of technologies in those areas.

Working with APCME (Asia Pacific Centre of Management Education), NEX is offering a new

Global Success Management Workshop to IIPM which will be conducted in Singapore for batches of students from India on specific business related topics.

Leading up to the IV-Sigma programme, **Up Close and Personal with Nash Benjamin**, CEO of F J Benjamin Holdings Ltd was the third in the series of CEOs talks organised by NUS

Extension and Strategic Moves. Forthcoming and charismatic, Mr Nash Benjamin shared some light-hearted notes about his passion, his life, his reign in the luxurious goods empire and his beliefs in the importance of training.