features:

Interview with New Deputy President & Provost

Project Angel 8
A Youth Expedition Project

A Tribute to PROFESSOR LEO TAN WEE HIN

“...Since then, $279,694 has been raised from 36 donors...”

“...Our target for the fund is $500,000 in five years.”

Fiscal Year 2006 Update
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Acknowledgement
We thank Shaw Foundation for its continuing sponsorship and support of the Faculty.

Errata
In the last issue of OmniScience - Nov 2006 the article “Five from FoS receive Outstanding Mentorship Award” that was written under the section In the Forefront, Lang Mong Lung should have been identified as:
Associate Professor
Department of Mathematics
We apologise for the mistake and any other errors made in that issue.
As the new Dean of Science, I must express my deepest gratitude to the outgoing Dean, Professor Tan Eng Chye, for leading the Faculty to new heights over the past four years. The Faculty of Science has started to make an impact internationally in several areas of research, winning numerous national and international awards and having papers featured in top journals such as Nature and Science.

After several years of nurturing the Quantum Information group in the Department of Physics, the Research, Innovation and Enterprise Council (RIEC) recently announced the first Research Centre of Excellence (RCE) to be established in Quantum Information Science & Technology (QIST). The RCE will be led by Professor Artur Ekert, Professor of Quantum Physics at Oxford University and NUS Lee Kong Chian Centennial Professor. The RCE on QIST will conduct interdisciplinary theoretical and experimental research aimed at overcoming the fundamental limits to information processing. With funding of over S$150 million in the next five years as well as the influx of talent, the RCE has the potential to be among the world leaders in quantum information science and technology.

The reputation of a faculty is as good as those of its faculty members. Indeed, many talented academics and researchers have been recruited to all departments in the Faculty of Science over the last few years. One of my key tasks will be to build a collegial and conducive environment for all Faculty – both newly recruited and long serving – so that they develop successful academic careers in NUS and make major contributions in scientific discovery.

We live in exciting times as the government has announced many new initiatives to promote high-impact research to generate new breakthroughs. High-impact research as defined by the RIEC refers to “research aimed at solving significant practical problems while seeking to extend the boundaries of understanding. It embraces both elements of basic research (which is directed at creating new knowledge) and applied research (which is directed at finding applicable technologies).” As the largest pool of scientists in NUS, we need to transcend disciplinary boundaries to work with our colleagues in other faculties and industry, thus ensuring that basic research is translated to new technologies.

We are very heartened to note that the Science Student Overseas Exposure Fund, launched barely a year ago, has raised almost $300,000. This Fund aims to help students who find the cost of participating in overseas exchange programmes too prohibitive. Project Angel, a NUS Students’ Science Club overseas humanitarian initiative, can also draw from the Fund.

Please watch out for the announcement of our Science Alumni Day. Last June, we thoroughly enjoyed an evening under the shadow of T. rex SUE at the Singapore Science Centre. This year, we promise another fun-filled event that will include the whole family.

Every year, alumni are invited to add their insights into the Discretionary Admission Exercise. Under this exercise, talented students who may have less than stellar academic records are considered for admission by interview. We have found that alumni bring a whole different perspective into the selection process. I assure you, this is one worthwhile activity to participate in. Please contact us if you would like to help in the interviews.

Finally, my colleagues and I wish to thank all alumni and supporters for your continued interest in the Faculty of Science. I hope to have the opportunity to get to know you better during my Deanship term, and look forward to your continued support.

Dean’s MESSAGE

“One of my key tasks will be to build a collegial and conducive environment for all Faculty – both newly recruited and long serving – so that they develop successful academic careers in NUS and make major contributions in scientific discovery”
Meet Our NEW Professors:

Dr Alexandre CHAN (PHA)
- Symptom management in patients receiving chemotherapy for solid tumours, hematological malignancies and hematopoietic stem cell transplantation
- Use of cytoprotectants, growth factors and antibiotics in patients receiving chemotherapy

Assistant Professor GONG Jiangbin (PHY)
- Nonlinear Dynamics and Complex Systems
- Control of Quantum Systems
- Nanoscale Quantum Devices
- Fundamental Issues in Quantum Mechanics

Assistant Professor Murray D. BARRET (PHY)
- Laser cooling and trapping
- Bose-Eistein condensation
- Cavity quantum-electrodynamics
- Micro-fabricated magnetic trapping of ultra-cold atoms
- Quantum information processing with ultra-cold atoms

Assistant Professor David NOTT (STA)
- Bayesian hierachical modeling,
- Markov chain Monte Carlo methods
- Spatial statistics
- Applications of statistics in hydrology and meteorology
- Stochastic geometry
- Spatio-temporal modeling

Associate Professor Berwin A. TURLACH (STA)
- Nonparametric smoothing techniques
- Statistical computing
- Applications of statistics
- Model selection
- Statistical learning

Professor John David KALBFLEISH (STA)
Professor Kalbfleisch is visiting the Department of Statistics and Applied Probability in 2007 as the second holder of the Saw Swee Hock Professorship of Statistics. His regular appointment is with the University of Michigan, where he serves as Professor of Biostatistics and Statistics, and as Chair of the Biostatistics Department until recently.
Prof Feng Yuan Ping (Physics)
Promoted to full Professor (1 January 2007)

Prof Li Baowen (Physics)
Promoted to full Professor (1 January 2007)

Prof Mohan K Balasubramanian
(Biological Sciences and Temasek Lifesciences Laboratory)
Promoted to full Professor (1 January 2007)

Prof Xing ChaoPing (Mathematics)
Promoted to full Professor (1 January 2007)

A/P Zhang Jin-Ting (Statistics)
Granted tenure and promoted to Associate Professor
(1 January 2007)

Prof Belal Baaquie (Physics)
Promoted to full Professor (1 July 2006)

A/P Thomas Osipowicz (Physics)
Awarded tenure (1 July 2006)

A/P Wang Shu (Biological Sciences)
Awarded tenure (1 July 2006)

A/P Yao Shao Qin (CHE)
Appointed Assistant Head (1 Nov 2006)

A/P Leung Ka Hin (MAT)
Appointed Deputy Director of IMS, relinquishing his
position as Assistant Dean, Research and Graduate Programs.
He takes over from Associate Professor Denny H. Leung who
returns to the Department of Mathematics. (1 Jan 2007)

A/P Jagadese J Vittal (CHE)
Appointed Assistant Dean of Research and Graduate Programs.
(1 Jan 2007)

A/P John Yip Hon Kay (CHE)
Appointed Assistant Head. (1 Jan 2007)
Professor Louis Chen appointed Tan Chin Tuan Centennial Professor

We congratulated Professor Chen on his appointment as Tan Chin Tuan Centennial Professor. His appointment was made on the basis of his outstanding achievements and contributions both locally and internationally. The investiture ceremony was held at the University Cultural Centre on 20 Oct 2006. This is a highly prestigious and symbolic appointment as the centennial professorships were endowed to celebrate the centenary of our university last year. Professor Chen is the only Singaporean among the Centennial Professors and it is most fitting that the University chose to honour one of her favourite sons in this way.

National Science Awards again!

In this year’s National Science Awards, our Faculty has again done very well. Dr Yu Hao from Biological Sciences was a winner of the Singapore National Academy of Sciences and A*STAR Young Scientist Award 2006. A team from Physics comprising of Professor Oh Choo Hiap, Professor Berthod Englert, Dr Kaszlikowski Dagomir, together with Dr Kwek Leong Chuan (from NIE) won the National Science Award 2006. Heartiest congratulations to all award recipients!

Professor Chong Chi Tat appointed to ASL Executive Committee

Warmest congratulations to Prof Chong for being elected to the Executive Committee of the Council of the Association for Symbolic Logic (ASL is a prestigious international mathematical society founded 1936). The term of office is for three years beginning 1 January 2007.

First Research Centre of Excellence to be establish in NUS

The Research, Innovation and Enterprise Council (RIEC) recently announced the first Research Centre of Excellence (RCE) to be established in Quantum Information Science & Technology (QIST) here at NUS. Professor Artur Ekert, Professor of Quantum Physics at Oxford University and NUS Lee Kong Chian Centennial Professor will lead the team. The RCE on QIST will conduct interdisciplinary theoretical and experimental research aimed at overcoming the fundamental limits to information processing. Over the next five years, the RCE on QIST at NUS will receive more than $150 million to attract and nurture talent.
The Faculty of Science proudly announces the recipients of the Faculty Teaching Awards during the Faculty Awards Ceremony held on 1 November 2006. This is a significant event where we recognize and thank to those who have made important contributions to the growth of the Faculty.

This year, the ceremony was held in the Auditorium of the University Hall in conjunction with the “Cultures of Creativity – The Centennial Exhibition of the Nobel Prize” exhibition. Vice-Provost Professor Lai Choy Heng was the Guest-of-Honour for the event. The awardees and guests were also treated to a sumptuous lunch along the Linkbridge, followed by an optional tour of the exhibition.

The Faculty Teaching Awards recognize this special group of individuals who have contributed significantly to upholding the Faculty’s quest for excellence in teaching. They have demonstrated outstanding abilities and efforts in teaching to help enhance student learning outcomes such as creativity, independent learning, critical thinking, good communication skills, and lifelong learning skills. Congratulations to our winners for this year’s Faculty Teaching Awards.
NUS Faculty of Science alumnus Professor Leo Tan graduated from the then University of Singapore with a BSc (Hons) in Zoology in 1969. He proceeded to obtain his PhD in Marine Biology in 1974, before embarking on an outstanding career in science leadership and education.

Following a successful teaching stint at his alma mater, Leo went on to administration and leadership positions in successive organisations that have affected and continues to affect the development of science education in Singapore:

- Through his leadership and passion for science, thousands of teachers have been trained and are now deployed in primary and secondary schools, and junior colleges, playing a key role in developing succeeding generations of children.

- Despite a full (some might say, overflowing) plate, Leo has also served Singapore in many other aspects. He sits on the boards of several research institutes, statutory boards and public organisations – National Parks Board (Chairman), National Youth Achievement Award (Chairman), Singapore National Academy of Science (President) and Advisory Committee for English TV and Radio Programmes (Chairman). At the personal level, Leo also found time to contribute to his alma mater by serving as a Fellow of Sheares Hall and its predecessor Hall, Dunearn Road Hostel.

- For his indelible mark on the educational landscape of Singapore, Leo has been recognised by the nation with the Public Administration Gold Medal (1988), the Public Service Medal (1995), and the Public Service Star (2001). Other awards picked up in an outstanding career in public service are the Green Leaf Environment Award (1997), the National Science and Technology Medal (1999) and the Order of Merit from the French Government (2002). In 2003, he was honoured with an honorary Doctor of Science by Loughborough University. Then in 2006, his alma mater the NUS Faculty of Science conferred its Distinguished Science Alumnus Award on one of its most outstanding alumni.

In retiring as the Director of the National Institute of Education, Leo will return to his first passion of teaching, as he remains on the faculty staff in NIE’s Natural Sciences and Science Education (NSSE) academic group.

The fraternity of alumni, faculty, staff and students at NUS Faculty of Science takes this opportunity to salute one of its more illustrious sons, who has made a tremendous impact on the development of both science and education in Singapore.
Dean Tan Eng Chye will take office as the new Deputy President and Provost this April. The Faculty is both proud and excited by the news but, amidst the joy and jubilation, there was also a tinge of loss. We will definitely miss him as our endeared Dean.

Omniscience sat down with the Man of the Hour, Professor Tan Eng Chye, to talk about what he has done so far and learn more about his thoughts and priorities for the future.

Omniscience: Good Morning, Dean Tan. Congratulations on your new appointment! The whole Science Family of Alumni, Staff, and Students are happy and excited.

Dean: Thank you. You have all been very kind. All of you in Science mean much to me. I am grateful for the support I have enjoyed and will need this more in the challenging job ahead.

Omniscience: Indeed, from looking after one Faculty you will soon take charge of all the faculties in the university and it is at this time of unprecedented opportunity and change. Can you tell us what will be your role as both Deputy President and Provost?

Dean: As Provost, I will have to govern the faculties in NUS, working with the deans to provide strategic directions, implement academic policies, oversee educational programs and pursue quality assurance, etc. Amongst other things, there will be issues pertaining to faculty development, such as appointments, promotion, tenure, rewards and incentives.

Omniscience: Having seen you lead the Science staff and experienced the wonderful morale and progress of the Faculty, we are sure our NUS staff are in good hands.

Dean: Thank you. I have had a great time working with a wonderful team at the deanery and with the various Heads of Department and their staff. Science’s progress is very much the efforts of these people and the strong foundations laid down by previous deans and heads.

Omniscience: Tell us more about your perceptions and plans as Provost.

Dean: It is a bit early at this stage. Right now, I am still very much involved with our faculty’s matters. Science is forging ahead at a great speed and to new heights. I think we have built some momentum and I look forward to the appointment of the new Dean, whom I hope will continue with the momentum. We will need all colleagues to work closely in order to grow stronger. On this note, I would like to thank the current Provost, Professor Tan Chorh Chuan. He has been a great teacher, and I have learnt quite a bit from him these few months but there are still lots more to learn. I am humbled by this challenge!

Omniscience: Prof Tan, at this time as you reflect on your years as Dean, you may want to share some highlights.

Dean: Yes, I am most heartened by the participation of alumni. I am really thankful to the many who have stepped forth to help us, in the various capacities. Many have been helping us with the discretionary interviews, some have taken time to help our Pharmacy students in personal grooming, some have presided over fireside chats with our senior undergraduates, etc. One alumna, Ms Stella Tan, actually took over a General Education Module on Forensic Science, with an enrolment of about 400 students. She is doing it for the second time this semester, and last semester she received a students’ feedback grading of more than 4.3 (rather high for such a big class). Isn’t that marvellous? There are real talents and gems out there amongst our alumni, and I am confident our Science undergraduates will benefit from such engagements!

Omniscience: As for the students, your wide ranging and forward looking legacies include your pioneering the Science Student Overseas Exposure Fund for which we can already see the immediate benefits.

Dean: I believe this is a significant investment and again I’m grateful to alumni, staff and our supporters and friends for their generosity and sacrifice.

Omniscience: We can never thank you enough for all that you have meant to and done for the Faculty. As we bid you farewell with our gratitude and best wishes, we pledge to continue in the various endeavours that you have so magnificently led. We want us to be the Flagship Faculty that you will be proud of.

Dean: That’s great. I do want to thank you again and look forward to working with my successor and all you good folks to make this Faculty a premier Faculty in an eminent University.

Omniscience: Thank you, Dean!

Professor Tan Eng Chye was recently featured in the January 2007 issue of AlumNUS. You may read the article “Gunning for the Top Ten” reproduced on the AlumNUS website, https://www.alumni.nus.edu.sg/alumnus/article.jsp?issue=jan2007&id=profile
Stepping into Cambodia was like using a time machine to reverse time back to Singapore in the 1960s. It was an enriching experience. - Hutchun

"Education is power." That's what I said to the students in both villages, I hope it stays with them. - Chin Wee

20 angels, 18 days, 2 villages, 1 unique experience: the beauty of simplicity and within this simplicity is where true happiness lives. - Pei Hao

There is an obligation to help the poor through observation and experience in a completely different environment. - Chee Juan

Project Angel VIII
A Youth Expedition Project
Kampung Phluk
Ang Chagn Chass Village
Siem Reap Province
Kingdom of Cambodia
12-29 December 2006

An enriching and significantly memorable event of my life. Couldn't bear to let it go... - May Chee

Taking time off to enter a less developed country has let me discover much more simple things that can keep people alive in life. - Peiyu

My deepest moment was when we sang "little things". I cried as the Cambodians had really even less than what we Singaporeans have. We should really treasure our lives. - Alex

They lack almost everything that we have in abundance here, but yet are much more happier. Be content with what you have. - Sharon

It's the little things that 'WE' shared which serve as perennial memories. A thoroughly eventful trip! - Marcus

schlaboprojectangel@gmail.com
A valuable and inspiring experience indescribable by words, an exposure that gets me to learn and think. – Shih Lian

It’s the little things that we share; the love and joy that’s in the air; the children’s laughter everywhere and all our favorite things. – Ho Ling

It is truly a once in a lifetime experience. You would never regret. – Johnson

Friendships forged, lessons learned, days that can’t die while they still live in me. – Huimin

I have learnt the importance of giving back to the community. The experience has been impactful and memorable. – Wee Kar

I’m glad to experience more than what a typical tourist can have. Also, I’ve learnt to be a team player. – Mindice

A journey that told me to cherish every opportunity in life. – Liyuan

I have gained great insights from this trip and if given another chance I would want to go again. – Jacelyn

We have all experienced and tasted life, which can be poor and simple, or rich but complex. You choose it! – Ivan

I don’t know if I have touched the lives of these little “angels” but I know I was touched by them. Now I return, asking myself, “What more can I do for them?” – Xiaojun

The expedition has opened my eyes to many things and has changed the way I look at my own life. Experience it yourself. – Britmand

This is project angel 8. This is our story. What’s yours?

An initiative of: [Logo]

Supported by: Science Student Overseas Exposure Fund

Sponsored by: Leong Yew Trading

sciclub.project.angel@gmail.com
Science Student Overseas Exposure Fund

Fiscal Year 2006 Update

The Science Student Overseas Exposure Fund (SSOEF) was launched on 3 June 2006. Since then, $279,694 has been raised from 36 donors. Most of these donors are alumni who, in one way or another, have gained from some kind of overseas experience, and now wish to give our Science students that same exposure. Our target for the fund is $500,000 in five years.

Students from the Faculty of Science have been enriched by overseas exposure over the last few years through the NUS Overseas College, the ANU-NUS Joint Degree, the French Double Degree, the Caltech-SURF and our exclusive Summer Exchange with the University of New South Wales, University of Toronto and the University of California, Los Angeles.

Over the last 2 years, there has been more than a two-fold increase in the number of Science students going overseas. Within the next two years, the Faculty aims to expose at least 50% of its students to an overseas experience. Although all overseas opportunity are subsidised, many students still find the cost of self-funding their travel, board and lodging prohibitive. We believe many more qualify, but few take up this challenge because of cost. Grants through the SSOEF help to defray these costs.

During these first 10 months, two students have received funding from the SSOEF to go to the University of New South Wales in Australia on Summer Exchange. In addition, a group 20 students went to Cambodia to build schools under Project Angel organised by the NUS Student’s Science Club. So far, $8,200 in grants has been disbursed.

On 20 March 2007, a T. rex Footprint Path was unveiled at the entrance of the Faculty of Science Dean’s Office building to honour founding donors of the Science Student Overseas Exposure Fund.

Gifts to the Faculty of Science are entitled to double tax exemption from the IRAS and a dollar-for-dollar matching grant from the Government. This grant goes towards an endowment fund that provides support for Science in perpetuity.

“For more information on giving to the Faculty of Science, please contact Karen Wong at: karenwong@nus.edu.sg.”
Ong Kai Yi
Life Science major
“In the module, Australian Wildlife, we went on a field trip to Smith Lake Field Station and stayed in the wilderness for a week. We got in touch with nature and cooked our own meals. We learned to deal with insects and leaches, and set traps for rats and bats to study them. It was an eye opening experience as modules I took in NUS do not have such hands-on field trips. The flora and fauna are different from those in Singapore.

“I would really like to express my heartfelt thanks to the donors of the Science Student Overseas Exposure Fund because without their kind donations I would not have been able to go for the Summer Programme at the University of New South Wales. This Summer Programme has certainly enriched my university experience.”

Jennifer Ong
Life Science major
“First of all, I would like to thank everyone who had a part in making it possible for me to study at the University of New South Wales. If I had not been awarded this grant, I would never have had the chance to study overseas.

“Although it was only a short stay of a month, I have learned to manage my own life, which, I think, is a very valuable lesson. It has also taught me to be more independent, and appreciate the comforts of home, where simple daily chores like cooking and washing my own closes are often taken for granted. Through this programme, I have also made many good friends, whom I still keep in contact with.”

Lin Xiaojun
Director, Project Angel
“The generous financial support from the Science Student Overseas Exposure Fund has been of great help to Project Angel. It has helped to minimise our sacrifice as we would have drawn on our own savings for this project. Some of us had intentions of withdrawing as we were unable to afford the initial sum of money for the project. It would certainly be a shame if the spirit of volunteerism and learning was compromised because of financial problems. Without the funding, we would have to scout for more private sponsors and to do more extensive fundraising. The Fund has thus helped to decrease our already heavy workload. We are indeed grateful to have received the generous sponsorship from the Science Student Overseas Exposure Fund.”
“I was most impressed by the videos that portrayed selected world-class research institutions that produced many Nobel Laureates and promoted a ‘Culture of Creativity’. In particular, the portrayal of the beautiful spires of Cambridge with its rich unchanging traditions brought back fond memories. The video highlighted its open research culture where dons and students freely share and test out their ideas with each other. This unusual union of the ivory tower and creative minds has brought out the best in many generations of researchers and scientists. This is my vision for the NUS Faculty of Science - an open research culture facilitating collaborations within a stable intellectual environment.”

Professor Andrew Wee
Head, Department of Physics

“Being a student guide at the Centennial Exhibition of Nobel Prize cannot be a more challenging and innovating experience in NUS. Visitors from various backgrounds have thrown numerous questions on me for the last three months. Hence, I was made to think on issues that I had not touched before. During this period, my knowledge on the scientific and social development of human society in the past 100 years increased incredibly and I also have a deeper view into the relationship between science and creativity. In spite of facing dozens of questions everyday, it is a great pleasure to answer visitors’ questions as I can pass the knowledge and the information from Alfred Nobel to them.”

Tan Qianqiao
Student Guide
“The exhibition opened up my mind in more than one way. The inspiring stories of the Nobel Laureates are timeless and priceless. It’s encouraging to see that many of the Nobel Laureates did not come from very privileged background. They were simply passionate about what they were doing and were convicted of what they believed in. Visiting the exhibits also gave me a better insight into the history of the 20th century. The major events and highlights of that era were reflected by the nature and type of Nobel Prizes awarded. Learning from history is a humbling experience. Listening to the recorded speeches of some of the Nobel Laureates brought me closer to their hearts, and made them real to me—as compared to just names in the Nobel history. These Nobel Laureates have contributed to the betterment of mankind, and the least I could do is to appreciate them by knowing who they are and what they did. Many of the inventions and discoveries have benefited us, visiting the exhibits made me thank them in my heart for what they have done.”

Associate Professor Lim Tit Meng  
Vice-Dean Outreach  
& Human Resource  
Faculty of Science

“Other than learning more about the Nobel Prize and the man behind it, the exhibition allowed me to meet people from diverse backgrounds, and this includes the fellow guides as well as the visitors. It was interesting as we were able to learn something new each time we were there. There was even an opportunity to have lunch with the President S.R. Nathan himself when he came to visit the exhibition! This experience will stay in my memory for the years to come, and I will always remember the hour-long guided tour I give about Nobel Prizes.”

Eunice Phua  
Chemistry major.
COLUGO: The Flying Lemur of South-east Asia

This 80-page full-colour book, jointly published by the Raffles Museum of Biodiversity Research and Draco Publishing Pte. Ltd., focuses on this enigmatic mammal. With contributions from many field scientists and nature photographers, this book presents updated scientific knowledge about this elusive gliding mammal and is lavishly adorned with stunning colour photographs of the animal’s natural behaviour in the wild.

For a limited time duration, alumni members of Faculty of Science can purchase the book at a special price of S$20 (without DVD) and S$30 (with DVD footage of wild Colugos) from the visitor’s counter of Raffles Museum of Biodiversity Research (RMBR; Blk S6 Level 3). Call Ms. Greasi Simon at 6516-5082 or email her at dbsgs@nus.edu.sg for purchasing details.

The author, Norman Lim, is an alumni of the Faculty of Science and received his B.Sc. (Hons) in 2004, with his research project focusing on the autecology of the Malayan Colugo (Cynocephalus variegatus) in the forests of Singapore. This book is based largely on the results of his honours degree dissertation in the Department of Biological Sciences at NUS. Norman is currently researching on the Sunda Pangolin (Manis javanica) for his Masters programme at NUS.

Bukit Timah Guide Sheet

Learn about the wonderful natural wonders of Bukit Timah Nature Reserve. The Raffles Museum of Biodiversity Research is working with ExxonMobil Asia Pacific Pte Ltd to publish a series of guidesheets highlighting Singapore’s rich natural heritage. “A guidesheet to Bukit Timah Nature Reserve” is the first in this series. It is a set of poster-sized full-coloured brochure that can be folded for easy storage and carrying around. $5.00 per guidesheet.

Magnets

Wildlife magnetic stickers portraying some of the rich wildlife in Singapore are also for sale at $8.00 per sheet.

For these and more, please visit Raffles Museum of Biodiversity Research (RMBR; Faculty of Science, Blk S6 Level 3), or call Ms. Greasi Simon at 6516-5082 (dbsgs@nus.edu.sg) for more details. Log on to our website: http://rmbr.nus.edu.sg for more information.
What is in the discovery of a tiny fish? What’s another new fish to add to the world’s inventory of slowly increasing number of known species?

It was an unexpected bonus to discover and aid in the description of the smallest fish – *Paedocypris progenetica*. We had known of this fish since the mid-1990s, but it took so long to finally formally describe it. Initially, we thought we had obtained juveniles of cyprinids. It was only later when we were sorting the preserved specimens, and examining the larger specimens under the stereomicroscope that we realized that we were looking at mature females carrying eggs.

The genus name is derived from the Greek word Paideios, meaning children and “cypris” referring to the carp family. Both the genus and species names refer to the unique physical characters of this fish, which is very much a larva or juvenile, but yet exhibit full adult features. The fish retains many juvenile traits – reduced bone structure, absence of scales, a partially covered brain, large eyes, transparent body. What is more interesting is the highly developed pelvic fins of the male, which features possible grasping or egg depositing mechanisms, yet to be confirmed with future work.

What is more threatening at hand is the loss of more of such unique fauna (and flora) at the hands of mankind in the name of development. The habitat this fish occupies is an unusual mix of highly acidic strong tea-coloured water, low nutrient levels, deep organic peat bed and periodic droughts. This habitat was deemed low yield and viewed as a mosquito breeding ground; till recent research has shown this to be rich in biodiversity.

**Tan Heok Hui**  
Raffles Museum of Biodiversity Research, Department of Biological Sciences, National University of Singapore

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**Smallest fish found in Peat Swamp Forests in Southeast Asia**
Against the backdrop of the NUS theme “Discover Your Talent”, the Faculty of Science built our own Open House with “Sci•Unlimited”. Early in the planning stages, we recognised the power of using the image of building blocks – that NUS Science provides the raw materials for an individual to build one’s own unlimited future. The idea of using building blocks drove us to contact Lego® and, subsequently, to use their tagline “connect, construct, contemplate, continue”.

Of the thousands of prospective students who thronged NUS’ Multipurpose Halls (MPSH) at the Sports & Recreation Centre during the two days, many of them made their way to the foyer of LT7 Lim Seng Tjoe lecture theatre. In addition to meeting and talking to real professors and students of the Science Club, they also listened to talks on the various Science disciplines and special programmes we offer.

This year, a sure-win lucky dip was the teaser for prospective students to come this way. To tie-in with our theme, we gave away many Lego® prizes. Aztech sponsored two PC TV receivers for the lucky dip as well.

Our collaboration with Lego® will continue even after Open House as we are using the Lego® learning concept as a marketing tool for NUS Science. Lego® is also enthusiastically supporting our students’ effort to form a Lego® club.

For more information on the Lego® Club, please contact Karen Wong at karenwong@nus.edu.sg.
MOU between Department of Biological Sciences (DBS), NUS and School of Life Sciences, Yunnan University signed on 18 January 2007

On 18 January 2007, a general MOU for cooperation and collaboration was signed between the Department of Biological Sciences, NUS and the School of Life Sciences, Yunnan University at the Office of the Provost. Signatories were Professor Hew Choy Leong, Head, Department of Biological Sciences, NUS and Professor Xiao Heng, CPC Secretary for the School of Life Sciences, Yunnan University.

This MOU ceremony was held in conjunction with a 4-day visit by a 5-member delegation from Yunnan University led by the Vice-President of Yunnan University, Professor Zhang Keqin. Other members of the delegation included Prof. Prof. Xiao Chunjie and Prof. Duan Changqun, CPC Secretary Prof. Xiao Heng and Head of Department of Biotechnology Professor Zheng Bingrong.

This MOU would mark the start of closer ties between the two departments in student training and research collaboration. In academic programmes, the two departments have sufficient areas of overlap for exchange programmes in education and also specialized areas in which they would complement each other. This MOU would serve ideally in offering opportunities for complementary training and research.

Yunnan University is located in the fauna and flora species-rich area of south-west sub-tropical China. NUS looks forward to ties with Yunnan University which will firstly promote links between NUS and Universities in South-western China, and secondly provide opportunities to embark with Yunnan University on research projects in biodiversity, ecology, environmental management. In return, DBS will complement with training programmes in Structural Biology, Bioinformatics, Proteomics and Protein Sciences, among others.

Second Bilateral Symposium on Structural Biology – National University of Singapore and Indian Institute of Science 18 – 19 November 2006
Indian Institute of Science, Bangalore, India

The Second Bilateral Symposium on Structural biology organized by the Department of Biological Sciences, NUS and the Indian Institute of Science was held on 18 – 19 November 2006 at the Indian Institute of Science, Bangalore, India. This is the second bilateral conference following the Structural Biology Research Co-operation agreement signed on 18 July 2001 between these two institutions.

This agreement has fostered closer collaboration and facilitated partnerships by bringing together structural biologists and protein scientists from the two institutes to exchange new ideas and establish a common platform for embarking on collaborative scientific programs.

Since the signing of this agreement, there has been at numerous visits from faculty members from IISc to NUS, including Prof. K.R.K. Eswaran (2006), Prof. Dipankar Chatterjee (2006), Prof. Utpal Tatu (2005), Prof. R.Varadarajan (2002).

The conference centred on 3 themes which were:
1. Proteins-Structure, Engineering, Folding and Design
2. Structural Biology and Proteomics
3. Chemical Biology

A 9-member delegation from NUS consisting of structural biologists and biophysicists from DBS and the Department of Physics attended the 2-day Symposium.

Following the conference, members of the delegation also mounted outreach visits to Universities and Technical Institutes in Chennai.
The Joint 3rd AOHUPO and 4th Structural Biology and Functional Genomics Conference was held 4-7 Dec 2006 at the University cultural Centre of the National university of Singapore. The 4-day conference registered more than 900 participants and was a roaring success.

Officially opened by Guest of Honour, NUS President Professor Shi Choon Fong, the conference saw talks by international speakers from USA, Canada, UK, France, Germany, Sweden, Switzerland, China, India, Taiwan, Japan, Korea, Australia and New Zealand, including Professor Lee Hartwell, 2001 Nobel Laureate for Physiology or Medicine. Local speakers hailed from the National University of Singapore and research institutes in Singapore.

In conjunction with the conference, the Singapore Society for Mass Spectrometry (SSMS) presented a special Pre-Conference Workshop on “Selected Topics in Experimental Proteomics” which was widely attended. Following the AOHUPO conference, the Second AOHUPO Membrane Proteomics Workshop on “Membrane Proteins and Membrane Proteomics” was also held.

There were many “first”s in this conference ranging from a full-scale exhibition by the sponsors/vendors to a band playing at the welcome reception. Support from commercial sponsors had been very encouraging, with strong financial support as well as in-kind support ranging from free gifts at the conference, lunchtime talks to entertainment and hospitality.
Class Notes

2001 - Dr Rosemary Tan, PhD (DBS) received a gold award from former Deputy Prime Minister Dr Tony Tan at the Asian Innovation Awards, presented at the Global Entrepolis 2006 dinner event. The award is in recognition for her success in developing the highly effective H5N1 bird flu test kit.

2003 - Dr Kelvin Heng, BSc(Hons) (PHY) has been accepted as a postdoctoral Member at the Institute for Advanced Study (IAS) in Princeton University. He was UROPS student in Mathematics under Associate Professor Helmer Aslaksen.

Leslie Wou, CEO of Activate, bagged the prestigious title of “Most Innovative Infocomm Product” for its XGame system that can link thousands of gamers through PCs, mobile phones and even TVs. This event was organised by the Infocomm Development Authority of Singapore and the Singapore Infocomm Technology Federation which aims to recognize innovative technology solutions in the public and private sectors.

Mr Ken Chua Thiong Kien (DBS) is CEO and Director of iCell. iCell received $1.5 million in investment from The Board of Keppel T&T. iCell was one of three successful bidders of a tender worth more than $10 million for Wireless@SG.

We’d like to hear from you. Please send your Class Notes for OmniScience to Karen Wong at karenwong@nus.edu.sg.
Calendar

April – June
JC Roadshow

April 13
Chemistry Honours Symposium

April 26 – May 2
Discretionary Admissions Interview Exercise

May
Science Research Programme Congress

May 10-11
Conference: Molecular & Nanoscale Metal Clusters: From Science to Applications in Hydrogen Activation and Hydrogenation Catalysis

June
Science Focus 07

June
2007 Statistics Enrichment Camp

June
Science Alumni Awards and Family Day

18 – 22 June
NUS Students’ Science Club Freshman Orientation Programme
NUS-SCAMP 07

3 – 11 August
NUS Students’ Science Club Freshman Orientation Programme
Science Orientation Week

August
Donor’s Annual Dinner

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Science Alumni Awards and Family Day ... to be announced