



Merry Christmas
&
Happy New Year

*HOD's Message
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New Students*

*Student Conferments
Research Publications
Events
Welcome to the Family
Farewell*

HOD's Message

Dear Colleagues,

As 2016 is coming to its end I would like to thank all of you for your contributions. There are many achievements from individual members who have raised the profile of the Department by securing grants, publishing research and education papers, receiving awards, or starting new exciting initiatives.

I'd like to briefly reflect on overarching changes that we have introduced throughout 2016. Together we have updated and adjusted various elements of the organizational structures and committees within the Department. The main aim of this exercise is to develop visible administrative structures and procedures; an important step towards collectively agreed strategies. I believe we have increasingly more defined roles and deliverables for individual members of the Department at all levels of responsibilities. These developments will help create stronger sense of ownership. Clearly a good start and we shall continue this path in 2017.

A second major element of change has been arising from the main recommendation by Visiting Committees to various departments at NUS Medicine, including Biochemistry: enhanced communication and collaboration among basic science and clinical departments, a process in which Biochemistry as a field, and, specifically as an established Department within NUS Medicine can play a central role and indeed should do so.

In an effort to create additional opportunities for casual feedback and to enhance communication and coordination, I am offering to meet each member of the Department for a chat, one-on-one, and once a year. We've just started and I trust this will be well received by many. Personally, I look forward to hearing your views and expectations for the Department.

I wish you and your families all the best for the festive season and a good start into 2017!

Thank you once again and best wishes,

Markus



Staff Awards

Congratulations



Chairman of the Biomedical Research Council (BMRC)

Prof Barry Halliwell has been appointed as Chairman of the Biomedical Research Council (BMRC), with effect from 1 January 2017.



Provost's Chair

Prof Markus Wenk was appointed as Provost's Chair in NUS Medicine in recognition of his outstanding and impactful scholarly accomplishments, which are internationally acknowledged.



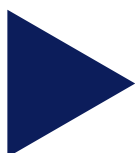
Excellence in Teaching Award 2016

Dr Long Yun Chau was presented with the Faculty of Dentistry Excellence in Teaching Award for AY2015/2016.



Young Investigator Award 2016

Dr Nguyen Nam Long was presented with the Young Investigator Award 2016.



NUS Quality Service Award 2016

Mr Chow Kean Pang and Mr Mohammad Aslam Khan received the NUS Quality Service Award (QSA) 2016 (Advocate Level).

Staff Awards

Most Promising Startup Award 2016

Congratulations

A/P Too Heng-Phon, founder of Mirxes, was given the Most Promising Startup Award 2016 at the Emerging Awards Ceremony at St Regis Hotel. The event was held on Friday, 16 September 2016. Mirxes is a life science company focused on detection kits for the early identification and management of cancer cases.

<http://www.straitstimes.com/business/companies-markets/business-prizes-winning-firms-lauded-for-tech-focus>



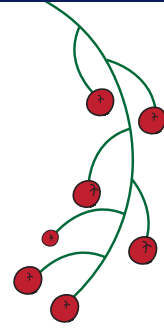
(From left) **Mirxes founder Too Heng-Phon**, Business Times editor Alvin Tay, Minister of State (National Development and Trade and Industry) Koh Poh Koon, Benjamin Barker managing director Nelson Yap, Ecommerce Enablers CEO Henry Chan, Innovfusion project director Gabriel Tan, OCBC Bank global commercial banking head Linus Goh and Cravefx creative director Joshua Tan at the Emerging Enterprise Awards ceremony.

PHOTO: OCBC BANK

Staff Awards

SINERGY Launch

Congratulations



A/P Matthew Chang and the team at SynCTI programme for the launch of SINERGY. The Singapore Consortium for Synthetic Biology (SINERGY) was launched by Deputy Prime Minister Mr Teo Chee Hean, Coordinating Minister for National Security and Chairman of NRF Singapore on 20 September 2016 at the opening of the inaugural Singapore Week of Innovation & Technology (SWITCH). The consortium will organise activities to promote collaboration between researchers and industry including annual meetings for biofoundry users certification courses, networking events and strategic workshops.

<https://news.nus.edu.sg/press-releases/10891-consortia-cybersecurity-synthetic-biology>

<http://www.straitstimes.com/singapore/govt-unveils-plans-to-spur-innovation-and-enterprise>



Mr Teo Chee Hean, Deputy Prime Minister and Co-ordinating Minister for National Security, and Chairman of National Research Foundation speaking during the Singapore Week of Innovation and Technology. ST Photo: Geraldine Goh.



Associate Professor Matthew Chang, Lead Principal Investigator for the Singapore Consortium for Synthetic Biology (left), and Professor Abhik Roychoudhury, Lead Principal Investigator for the Singapore Cybersecurity Consortium. Photo: National Research Foundation Singapore.

Staff Awards

NUHS Values-In-Action Award

Congratulations



Biochemistry LSM Level 2000 Team has been awarded the NUHS Values-In-Action Award (VIA).

Awardees have demonstrated extraordinary efforts and exhibited NUHS TRICE values in their course of work.

Good Job!



Terence Jay



Iman Kameed



Arthur Sim



Shen Yanqing



Liyana Jamal



Qian Feng



Long Lee Hua



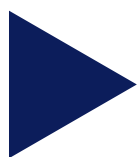
Koh Yong Zher



Melvin Dai



Jan Boon Kheng



Department Grant Awards

April 2016 - November 2016

AcRF Tier 1 FRC (Apr 16 call)

Targeting E3 ubiquitin ligase EDD1/UBR5 for treatment of virus-induced cancers

Dr Sudhakar Jha

\$179,953

Understand cells' state equilibrium in the Basal-like breast cancer subtype

A/P Marie-Veronique Clement

\$90,000

Mitochondrial function in the galactose induced ageing model

A/P Thilo Hagen

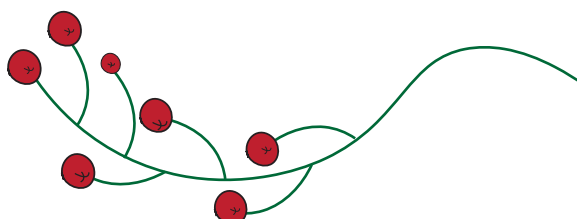
\$90,000

MoE Tertiary Education Research Fund (TRF)

Solving Ill Structured Problems : Role of Scaffolding and Feedback

A/P Yeong Foong May

\$110,625



Student Awards

Congratulations

Best UROPS Student Award

Cho Yik Lam for his outstanding performance in Undergraduate Research Opportunities in Science (UROPS), AY2015/2016.

Supervisor: Dr Long Yun Chau

Honours Book Prize

Sim Cheng Teck Clement for his outstanding performance in Life Sciences Honours Project, AY2015/2016.

Supervisor: A/P Caroline Lee

3MT Three Minute Thesis

Alisha Ramos, whose 3-minute research video presentation won the 1st prize at the NUS level, has been selected as one of the 16 finalists for the McDonnell International Scholars Academy 6th International Symposium.

She is also the sole representative from NUS in the finals of Asia Pacific 3MT competition. Alisha will compete live at the respective symposiums in Brisbane on September 23rd and 30th 2016.

NUS 3MT, organized by The Graduate Students' Society (GSS) in NUS, aims to select the best candidate to represent NUS at the international competitions. This 3MT Competition in NUS is a franchise of the University of Queensland

developed academic competition for research graduate students. To qualify for this competition, competitors have to send in a self-recorded video explaining their research topic to a general audience in three minutes.

The videos are categorized into 4 themes and judged by a judging panel of esteemed professors from NUS and senior research students from NUS GSS. Alisha's entry was categorized under Populations Aging and Global Health theme. It described her PhD project, under the supervision of Dr Lim Yoon Pin at the Department of Biochemistry, which investigates the regulation and molecular mechanism of WBP2 in oncogenesis.



New Students

August 2016 Student Intake



Chia Ren Hui Derrick

Main Supervisor: A/P Tang Bor Luen
Co-Supervisor: Prof Kanaga Sabapathy



Diogo Gonclaves Barardo

Main Supervisor: Dr Jan Gruber
Co-Supervisor: A/P Thilo Hagen



Lam Hiu Yan

Main Supervisor: Prof Vinay Tergaonkar
Co-Supervisor: A/P Reshma Taneja



Ngai Tsz Wai

Main Supervisor: Dr Cheek Chit Fang
Co-Supervisor: A/P Ho Han Kiat



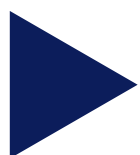
Luca Pignata

Main Supervisor: A/P Ernesto Guccione
Co-Supervisor: A/P Reshma Taneja



Student Conferment

Congratulations



Biochemistry Post Graduate Commencement 2016

Akshamal Mihiranga Gamage, PhD

Supervisor: A/P Gan Yunn Hwen

Conferred Date: 30.04.2016

Lam Yuk Man, PhD

Supervisor: Prof Barry Halliwell

Conferred Date: 30.06.2016

Christine Hu Zhi Wen, PhD

Supervisor: A/P Thilo Hagen

Conferred Date: 30.04.2016

Goh Kah Yee, PhD

Supervisor: Dr Takao Inoue

Conferred Date: 31.05.2016

Zhou Yi, PhD

Supervisor: Prof Fu Xin-Yuan

Conferred Date: 30.04.2016

Beryl Augustine, PhD

Supervisor: A/P Yeong Foong May

Conferred Date: 31.05.2016

Gokhan Cildir, PhD

Supervisor: Prof Vinay Tergaonkar

Conferred Date: 30.04.2016

Silambarasan Maskomani, PhD

Supervisor: Prof Jeyaseelan Kandiah

Conferred Date: 31.05.2016

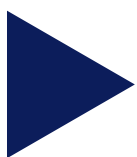
Lim Kim Kiat, PhD

Supervisor: Dr Chen Ee Sin

Conferred Date: 30.04.2016



Research Publications



April 2016 to October 2016

Hou, Ah, K P Law, QT Tan, **Y P Lim** and G T H Louis-Marie, "In vitro Secretomics study of Pterygium-derived Fibroblasts by iTRAQ-based Quantitative Proteomics Strategy". *Experimental Eye Research*, no. 153 (2016): 14-22. (United States).

Jiang, H, H Hang, F Lin, **Y P Lim***, Y Hua, X Tong and S Zhang, "S100P is overexpressed in squamous cell and adenosquamous carcinoma subtypes of endometrial cancer and promotes cancer cell proliferation and invasion.". *Cancer Investigation*, 35 (2016): 1-12. (United States).

Li*, Z, Y Xia, LN Feng, JR Chen, HM Li, J Cui, QQ Cai, KS Sim, ML Nairismägi, Y Laurensia, WY Meah, WS Liu, YM Guo, LZ Chen, QS Feng, CP Pang, LJ Chen, S H Chew, R P Ebstein, JN Foo, J Liu, J Ha, LP Khoo, ST Chin, YX Zeng, T Aung, B Chowbay, CP Diong, F Zhang, YH Liu, T Tang, M Tao, R Quek, F Mohamad, S Y Tan, B T Teh, S B Ng, W J Chng, CK Ong, Y Okada, S Raychaudhuri, S T LIM, W Tan, RJ Peng, **CC Khor** and JX Bei, "Genetic risk of extranodal natural killer T-cell lymphoma: a genome-wide association study". *Lancet Oncology*, 17, no. 9 (2016): 240-247. (United States).

Mishra, P, Gy Park, M Lakshmanan, Hs Lee, H Lee, **M W Chang**, C B Ching, J Ahn And D Lee*, "Genome-scale metabolic modeling and in silico analysis of lipid accumulating yeast *Candida tropicalis* for dicarboxylic acid production". *Biotechnology And Bioengineering*, 113, no. 9 (2016): 1993-2004. (United States).

Lo*, T M S, S H Chng, W S Teo, H.-S. Cho and **M W Chang***, "A two-layer gene circuit for decoupling cell growth from metabolite production". *Cell Systems*, (2016). (United States).

Fuchsberger*, C, J Flannick*, Tm Teslovich*, A Mahajan*, V Agarwala*, Kj Gaulton*, Authors 7-12, X Sim, Authors 14-38, P Chen, Authors 40-53, M K Ikram, Authors 55-63, X Wang, Authors 65-105, T Aung, C Edmund, Authors 108, Cy Cheng, Authors 110-119, **CC Khor**, Authors 121-123, W Y Lim, J Liu, Authors 126-135, T Y Wong, Authors 137-220, K S Chia, Authors 222-234, YY Teo, Authors 236-278, E S TAI, Authors 280-298, M Boehnke*, D Altshuler* and MI McCarthy*, "The genetic architecture of type 2 diabetes". *Nature*, (2016).(United Kingdom). (Asia) (Singapore).

Hwang*, I Y, E Koh, H R Kim, **W S Yew** and **M W Chang***, "Reprogrammable microbial cell-based therapeutics against antibiotic-resistant bacteria". *Drug Resistance Updates*, 27 (2016). (United Kingdom).

Tang, B L, "Rab, Arf and Arl-regulated membrane traffic in cortical neuron migration". *Journal Of Cellular Physiology*, 231 (2016): 1417-1423. (United States).

Research Publications

Wu, S, Y Zhou, T Wang, **H P Too**, D. I. C. Wang and Z LI*, "Highly regio- and enantioselective multiple oxy- and amino-functionalizations of alkenes by modular cascade biocatalysis". *Nature Communications*, 7, part. 11917 (2016). (United Kingdom).

Lim, Y P, D K G Maybelle and **W S Yew***, "Exploiting the Biosynthetic Potential of Type III Polyketide Synthases". *Molecules*, 21, no. 6 (2016): E806. (Switzerland).

M Kang, S Lu, P K Chong, K G Yeoh and **Y P Lim***, "Comparative proteomic profiling of extracellular proteins between normal and gastric cancer cells". *Current Cancer Drug Targets*, 16, no. 5 (2016): 442-54. (Netherlands).

Toh, C D, C A K El Farran, Zs Chong, H Wang, YS Tan, J Maury, HC Guo, DR Ma, YL Goh, Y Chang, J Collins, G Daley, Hu Li, **Y P LIM**, B FREDERIC and Y LOH, "RNAi Reveals Phase-Specific Global Regulators of Human Somatic Cell Reprogramming". *Cell Reports*, S2211-1247(16)3 (2016). (United States).

ENG, L P, J C TONG and **T W Tan***, "Distinct host tropism protein signatures to identify possible zoonotic influenza A viruses". *PLoS One*, 11, no. 2 (2016): e0150173-0. (United States). (Asia) (Singapore)

Patmanathan, SN, SP Johnson, SL Lai, S Panja Bernam, V Lopes, W Wei, MH Ibrahim, T T FEDERICO, N PRADEEP, **M R Wenk**, R H DERON, PG Murry, LF Yap and IC Paterson*, "Aberrant expression of the S1P regulating enzymes, SPHK1 and SGPL1, contributes to a migratory phenotype in OSCC mediated through S1PR2". *Scientific Reports*, 6 (2016). (United Kingdom).

et al, ., **CC Khor***, P T K Chew, C A S CHELVIN, S H CHEW, R P EBSTEIN, YY Teo, E S TAI, S M Saw, CY Cheng and T Aung, "Genome-wide association study identifies five new susceptibility loci for primary angle closure glaucoma.". *Nature Genetics*, (2016). (United States). (Asia)

NGUYEN, N L, "Structural insights into the transport mechanism of the human sodium-dependentlysophosphatidylcholine transporter Mfsd2a". *Journal of Biological Chemistry*, (2016). (United States).

RAMAN, D, C H J FOO, **M V Clement** and S Pervaiz*, "Keeping abreast with cancer: a molecular and redox snapshot". *Antioxidants and Redox Signaling*, (2016). (United States).

SHEN, Y, L F NG, P W N LOW, **T HAGEN**, J. Gruber and **T Inoue**, "C. elegans miro-1 Mutation Reduces the Amount of Mitochondria and Extends Life Span". *PLoS One*, (2016). (United States).

JIN*, Z, C K WONG*, J L FOO, J Ng, YX Cao, **M W CHANG*** and YJ Yuan, "Engineering *Saccharomyces cerevisiae* to produce odd chain-length fatty alcohols". *Biotechnology and Bioengineering*, 113, no. 4 (2016): 842-851. (United States).

Research Publications

Tang, B L, "(WNK)ing at death: With-no-lysine (Wnk) kinases in neuropathies and neuronal survival". *Brain Research Bulletin*, 125 (2016): 92-98. (United Kingdom).

Guarnerio*, J., M. Bezzi, J.C. Jeong, S.V. Paffenholz, K. Berry, M.M. Naldini, F. Lo-Coco, **M S Y TAY**, A.H. Beck and P.P. Pandolfi*, "Oncogenic Role of Fusion-circRNAs Derived from Cancer-Associated Chromosomal Translocations". *Cell*, 165, no. 2 (2016): 289-302. (United States).

VANITHA, K S, Y ZHANG*, D RAJAGOPALAN, L B A NURRUL, N YEO SHU LING, V Tomaic, L Banks, MP Myers, K C EDWARD and **S Jha***, "E3 ligase EDD1/UBR5 is utilized by the HPV E6 oncogene to destabilize tumor suppressor TIP60.". *Oncogene*, 35, no. 16 (2016): 2062-74. (United Kingdom). (Asia) (Singapore)

ENG, L P, **T W Tan*** and J C TONG, "T-cell epitope prediction of Chikungunya virus". *Methods in Molecular Biology*, 1426 (2016): 201-207. (Germany). (Asia) (Singapore)

TAY*, **M S Y** and P.P. Pandolfi*, "Posttranscriptional regulation of PTEN by competing endogenous RNAs". *Methods in Molecular Biology*, 1388 (2016): 139-154. (Germany).

Yeong, F M, "Office Hours with EdComm - Helping Undergraduates Approach Research Articles". *ASCB Newsletters*, 26 - 27. *USA: American Society for Cell Biology*, 2016. (This is my contribution as an Associate member of the Education Committee that is part of the American Society for Cell Biology). (Asia) (Singapore).





Safety Tea

12th August 2016 @ MD6, LT35

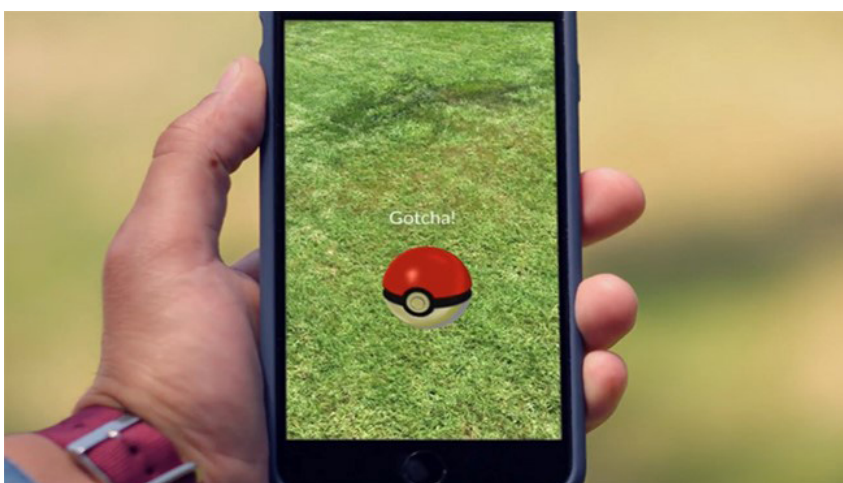
The second Safety Tea for 2016 was held on 12th August 2016 at LT35 in MD6. A new highlight of the Safety Tea was the use of the tap-card reader to record attendance of participants instead of the previous hardcopy sign-in attendance which was time-consuming and tedious.



A staff trying out the new card reader

During the Safety Tea, the Safety Committee shared accidents and incidents that occurred in 2016 as well as the findings from the OSHE Unannounced Inspection in June. Some environmentally sustainability tips and reminders were also shared.

Dr Vernon Seow, our NUSMed Faculty Safety & Health Officer from OSHE, was invited to speak on the new EHS 360 Safety System and he also shared the new AIMS (Accident & Incident Management System) with everyone. He ended the talk by telling everyone,



"It takes time & practise to 'AIMS' properly".

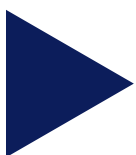
More than 180 staff and students attended the Safety Tea, and this was followed by a delightful afternoon tea.

Events

Safety Tea



Events



NUS Medicine Safety Day

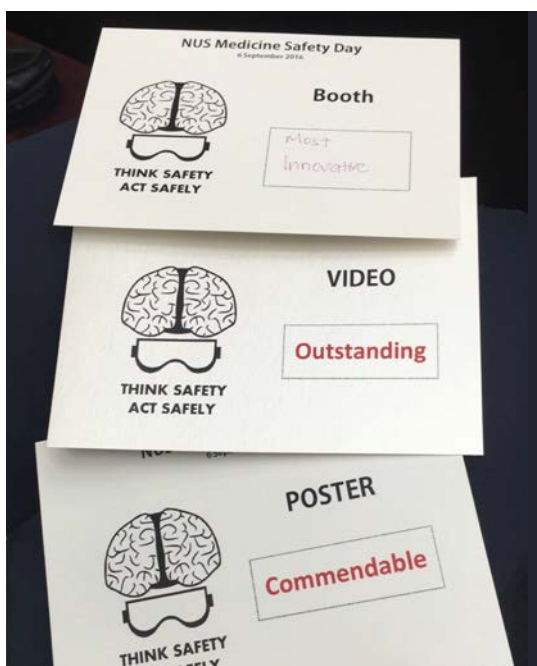
6th September 2016 @ MD1, Multi-Purpose Hall



The inaugural NUS Medicine Safety Day was held on 6th September 2016 in the Multi-Purpose Hall in MD1 with the theme of “Think Safety; Act Safely”. There were more than 300 participants. Through this event, the school aims to inculcate a committed safety culture among the staff and students through a fun-filled safety exhibition, games and forum. Departments from the School of Medicine were invited to set up display and game booths to showcase their safety practices and culture.

Department of Biochemistry participated in the NUS Medicine Safety Day event and the theme of the Biochemistry booth was “Safety Begins With Me”. The participating Team consisted of Aslam, Luxmi, Safia, Si Hui, Wee Chiew, Yu Song, Jia Xing, Hui Ling and Lai Lai also took part in the poster and video competition. The safety video won the Outstanding Video Prize and the poster won the Commendable Prize. The safety booth also won the Most Innovative Prize for the interactive game to spot the lab hazards.

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A student playing the “Biochemistry safety lab game” during the event.

Events

NUS Medicine Safety Day

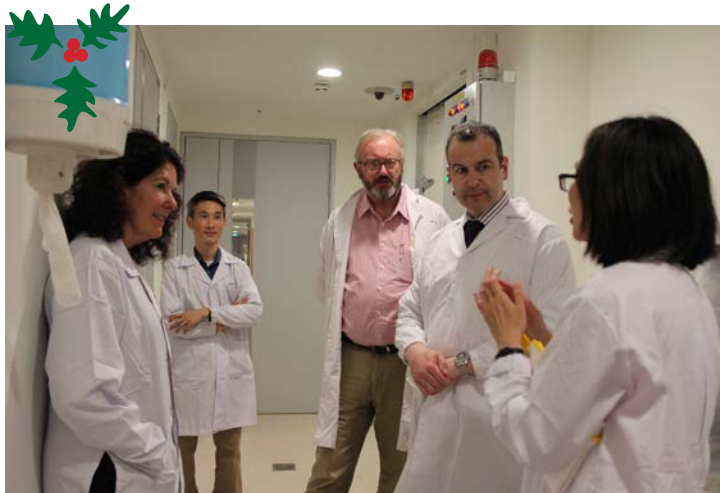


Events

Visiting Committee

21st September 2016 @ Biochemistry Department

A panel of Visiting Committee consisted of Professor Kimberly Topp from the University of California, San Francisco, Professor Mark Sansom from the University of Oxford and Professor Gordon Lynch from the University of Melbourne visited the Department on 21 September 2016. They were invited by the University to review the Department's teaching, research and outreach. Overall, they were impressed with the high standards of the Department and thanked the Department for the efforts in preparing for the Visit.



Events

Student Symposium

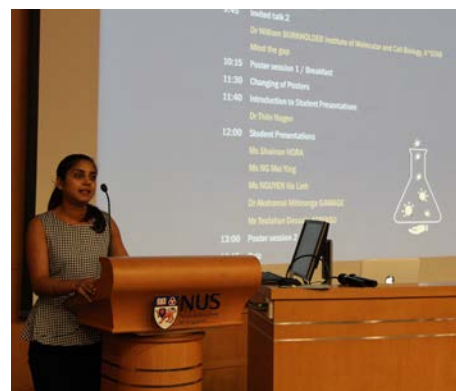
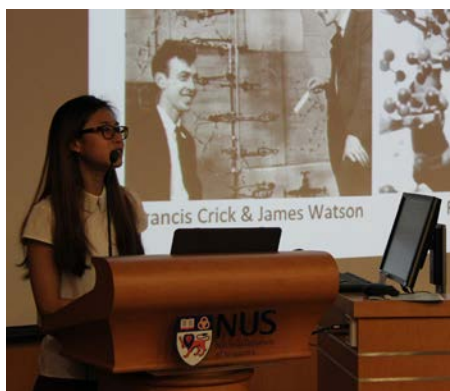
23rd September 2016 @ CeLS Auditorium



On 23rd September 2016 the 8th Biochemistry Postgraduate Student Symposium was held in the CeLS Auditorium. This year's event was organized by Associate Professor Thilo Hagen with great help from our enthusiastic administrative staff Grace, Amanda, Luxmi and Safia. This year's theme was "Sharing our experience". Dr. Bill Burkholder from IMCB, A*Star, shared his experiences and lessons from his research (and non-research) career in his opening talk. One lesson learned: 'Do not be afraid of change'. A change opens up new opportunities, almost never closes doors but usually opens new doors that one did not imagine.

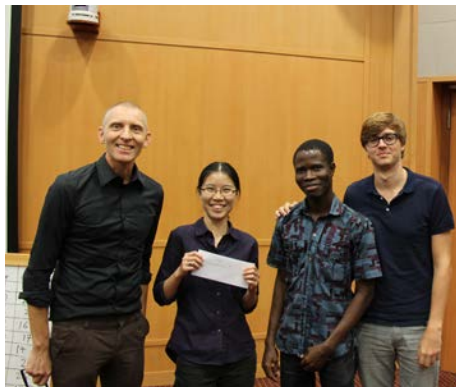
Subsequently, some of our current and former students - including Shainan Hira, Linh Nguyen, Ng Mei Ying, Akshamal Gamage and Tesfahun Admasu - shared their experiences on how to overcome difficulties in research and stay motivated, how to manage a healthy work-life balance, what are the lessons learned during an academic exchange and what is it like staying in one student's home country of Ethiopia. In-between the oral presentations, there were two lively poster sessions. PIs and students visited the 32 posters which were presented by fellow students. The symposium ended with an exciting quiz where 17 groups of three students competed for attractive cash prizes.

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Events

Student Symposium



Welcome to the Family



Aparna Jain
Research Assistant

Supervisor: A/P Yew Wen Shan
Date Joined: 01-06-2016



Kumar Jaspal Kaur
Research Fellow

Supervisor: Prof Markus Wenk
Date Joined: 01-05-2016



Cheah Wai Yuen
Research Fellow

Supervisor: A/P Yew Wen Shan
Date Joined: 08-10-2016



Lim Jie Han Kevin
Research Assistant

Supervisor: A/P Yew Wen Shan
Date Joined: 01-06-2016



Goh Kah Yee
Research Assistant

Supervisor: Dr Takao Inoue
Date Joined: 18-04-2016



Otto Fong Yong Chin
Research Assistant

Supervisor: A/P Matthew Chang
Date Joined: 28-03-2016



Welcome to the Family



Tan Yi Han
Research Assistant

Supervisor: A/P Gan Yunn Hwen
Date Joined: 01-08-2016



Wang Zilong
Research Assistant

Supervisor: A/P Yew Wen Shan
Date Joined: 04-08-2016



Tay Song Buck, Terence
Research Assistant

Supervisor: A/P Matthew Chang
Date Joined: 01-09-2016



Wong Wai Yen
Research Assistant

Supervisor: A/P Theresa Tan
Date Joined: 01-07-2016



Vidhi Kanaiyalal Patel
Research Fellow

Supervisor: Dr Takao Inoue
Date Joined: 27-06-2016



Yu Sue
Research Assistant

Supervisor: Dr Wu Qiang
Date Joined: 01-08-2016

Welcome to the Family



Guan Jye Swei
Laboratory Technologist

Supervisor: A/P Maxey Chung
Date Joined: 19-09-2016



Loh Jian Yun
Laboratory Technologist

Supervisor: Dr Chen Ee Sin
Date Joined: 19-10-2016



Ng Xiao Wei, Joey
Laboratory Executive

Supervisor: A/P Matthew Chang
Date Joined: 14-11-2016



Farewell

We are sad to see you leave ...



Li Yingying

Seah Kwi Shan

Suresh Selvarasu

Tan Weng Siong Hayden

Teo Wei Suong, Simon

Liyana Binte Jamal



Good luck in your future endeavours



If we missed any news that you would like to share, please contact:
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