NUS National University of Singapore

Department of Biochemistry
Yong Loo Lin School of Medicine

# BUZZ • 2019

# STAFF AWARDS & APPOINTMENTS


| | |
|---|---|
| Professor Christiani J. Henry | • The prestigious W.K. Kellogg International Food Security Award & Lectureship 2019 |
| Professor Markus Wenk | • University Research Recognition Award 2019 |
| Associate Professor Matthew Chang | • NRF Investigatorship 2019<br>• NUS Medicine Research Excellence Award 2019<br>• NUHS Research Excellence Award 2019<br>• Yong Loo Lin School of Medicine Research Excellence Award for AY2017/2018 |
| Associate Professor Gan Yunn Hwen | • Appointed as Assistant Dean (Equal Opportunity & Career Development, Academic Affairs) in the Yong Loo Lin School of Medicine effective 1 August 2019. |
| Dr Chen Ee Sin | • Promoted to Associate Professor effective 1 January 2019 |
| Dr Kenneth Ban | • Appointed as Fellow of the NUS Teaching Academy for 3 years from 1 July 2019. |
| Dr Long Yun Chau | • Excellence in Teaching Award by Faculty of Dentistry in AY2017/2018<br>• Excellence in Teaching Award by Faculty of Dentistry in AY2018/2019<br>• NUS Annual Teaching Excellence Award for AY2017/2018 |
| Dr Nguyen Nam Long | • Yong Loo Lin School of Medicine Research Excellence Award for AY2017/2018 |

# LONG SERVICE AWARDS

| | |
|---|---|
| 35 years | Associate Professor Chung Ching Ming, Maxey |
| 25 years | Associate Professor Too Heng-Phon |
| 15 years | Associate Professor Yeong Foong May<br>Dr Chua Yee Liu<br>Ms Aniza Binte Abdul Wahid* |
| 10 years | Professor Fu Xin-Yuan<br>Research Assistant Professor Cheong Jit Kong<br>Mr Melvin Dai<br>Ms Iman Fahim Hammed# |
| 5 years | Professor Christiani J. Henry<br>Associate Professor Matthew Chang<br>Research Assistant Professor Ling Hua<br>Dr Cheung Wing Ngar Vivian*<br>Dr Gourvendu Saxena<br>Mr Kelvin Lim Jie Han<br>Ms Guan Jye Swei<br>Ms Aparna Jain<br>Ms Lu, Ssu-Yi# |

* : Staff has since transferred to another department in 2019.
\# : Staff has since left the department in 2019.

# STAFF GRANT AWARDS


| | | |
|---|---|---|
| Professor Markus Wenk | NUS-Agilent Hub for Translation & Capture— *Grant Call: Industry Alignment Fund - Industrial Collaboration Project* | $38,000,000 |
| Associate Professor Matthew Chang | Autonomous, programmable cells for precision microbiome modulation— *Grant Call: NRF Investigatorship* | $2,284,960 |
| Associate Professor Marie Clement | Investigating Signaling pathways governing the dynamic of tumour cell states equilibrium — *Grant Call: NUHS Seed Grant* | $150,000 |
| Associate Professor Deng Lih Wen | Role of GAGE12 and its regulation in radio-resistance of cervical cancer— *Grant Call: MOE T2* | $793,260 |
| Associate Professor Gan Yunn Hwen | • A gut-on-the-chip model with intestinal organoids for examining microbiome interaction— *Grant Call: Microbiome in health, disease and ageing*<br>• Targeting bacterial membrane biology with novel main chain cationic polymers— *Grant Call: MOE2018 - T3* | $100,000<br>$927,000 |
| Associate Professor Thilo Hagen | Targeting anti-obesity drugs to adipose tissue by increasing drug lipophilicity— *Grant Call: NUHS Seed Grant* | $45,000 |
| Associate Professor Too Heng-Phon | • Towards a clinical scale production of Mesenchymal Stem Cells modified with therapeutic gene for 5-Fluorocytosine prodrug targeted treatment of Temozolomide resistant glioblastomas— *Grant Call: Smart Innovation Centre*<br>• Prototyping of fused yeast cytosine deaminase— *Grant Call: TAP Grant*<br>• Developing solutions for cryopreservation and hypotermic transport of therapeutic modified MSCs for brain tumor treatment — *Grant Call: NHIC Innovation to Develop (I2D) Grant Call – 2nd Batch for 2019* | $250,000<br>$197,700<br>$205,000 |
| Associate Professor Yew Wen Shan | Development of next-generation design tools for sustainable production of aromas for the Lifestyle and Wellness industry— *Grant Call: Wilmar International Limited (Under the EDB-IPP programme)* | $100,000 |
| Research Assistant Professor Federico Tesio Torta | • Establishing a high throughput setup for in-house clinical assays development and evaluation of its market potential— *Grant Call: Technology Acceleration Program TAP MICRO*<br>• Standardization of high-throughput, longitudinal and quantitative metabolome analysis for high definition medicine— *Grant Call: BIGHEART Precision Medicine & Personalised Therapeutics*<br>• A fast lipid-based assay to diagnose sepsis and measure its severity— *Grant Call: NUHS-NHIC Joint MedTech Grant 2019* | $28,000<br>$100,000<br>$90,800 |
| Research Assistant Professor Ling Hua | Establishment of the Synthetic Biology Type Culture Collection Platform— *Grant Call: SBP-P9* | $349,770 |
| Senior Research Fellow, Dr Nin Sijin Dawn | Extracellular/circulating miRNAs as Biomarkers and therapeutic targets for radio-resistance in cervial cancers— *Grant Call: NUHS Seed Fund Mar 19* | $93,000 |

*Grants shared above were mentioned in the 2019 Staff meetings.*

# UNDERGRADUATE STUDENT AWARDS


AY2018—2019

| | |
|---|---|
| AWARD | : Emeritus Professor Sit Kim Ping's Book Prize |
| STUDENT | : Ang Zi Ning (PI: Dr Long Yun Chau) |

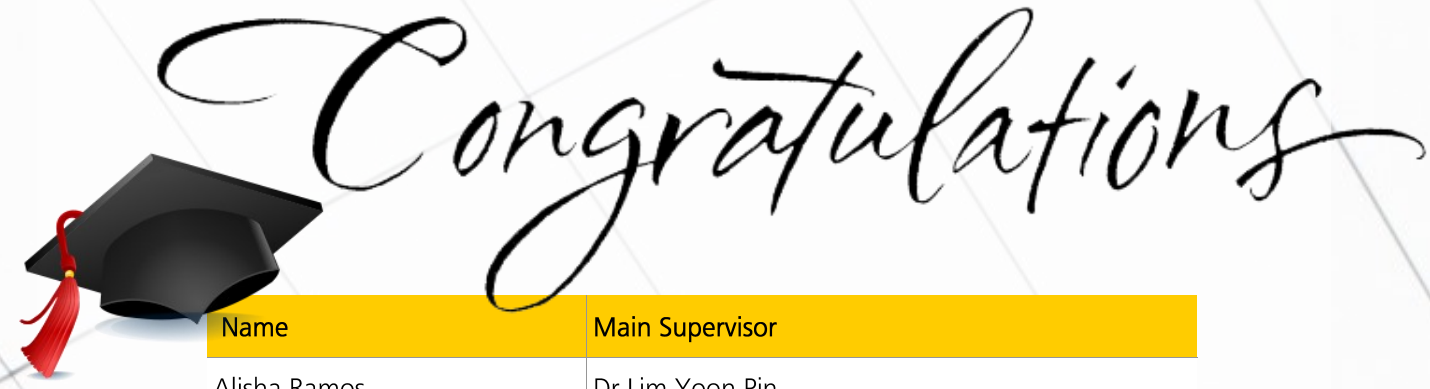
AY2018—2019 Semester 1

| | |
|---|---|
| AWARD | : Singapore Society for Biochemistry and Molecular Biology Medal |
| DESCRIPTION | : Top 10 Honours Project Students |
| STUDENT | : Woo Jun Yung (PI: Associate Professor Too Heng-Phon) |

AY2018—2019 Semester 2

| | |
|---|---|
| AWARD | : Singapore Society for Biochemistry and Molecular Biology Medal |
| DESCRIPTION | : Top 10 Honours Project Students |
| STUDENT | : Ang Zi Ning (PI: Dr Long Yun Chau) |

# POSTGRADUATE STUDENTS' CONFERMENT




| Name | Main Supervisor |
|---|---|
| Alisha Ramos | Dr Lim Yoon Pin |
| Azad Saei | Dr Tam Wai Leong |
| Desi | Dr Yvonne Tay |
| Heng Yu Chyuan | Associate Professor Matthew Chang |
| Iwona Szczerbinska | Professor Ng Huck Hui |
| Joanna Tan Hui Juan | Associate Professor Tan Tin Wee |
| Melissa Hum Wen Ching | Dr Lim Yoon Pin |
| Sultan Abda Neja | Professor Vinay Tergaonkar^ |
| Tesfahun Dessale Admasu | Dr Jan Gruber |
| Yee Zhuangli | Dr Jan Gruber |
| Su Yixun | Dr Kenneth Ban |
| Nishi Kumari | Dr Sudhakar Jha |
| Obed Akwasi Aning | Dr Cheok Chit Fang |
| Kakanga Moses | Associate Professor Robert Charles Robinson* |
| Liow Lu Ting | Associate Professor Yew Wen Shan |
| Clement Pierre Marcel Scipion | Associate Professor Robert Charles Robinson* |
| Ege Deniz Yildirim | Professor Ng Huck Hui |
| Fong Hei Tung | Associate Professor Thilo Hagen |
| Hossein Tabatabaeian | Dr Lim Yoon Pin |
| Kim Hye Rim | Associate Professor Matthew Chang |
| Mu Tianhao | Professor Fu Xin-Yuan |
| Nathan Palmer | Associate Professor Philipp Kaldis* |
| Sidika Tapsin | Professor Ng Huck Hui |
| Bilal Unal | Professor Vinay Tergaonkar^ |
| Ryan Haryadi | Associate Professor Song Zhiwei* |

^ : Adjunct staff has since transferred to another department in 2019.
* : Adjunct staff contract lapse in 2019.

# STUDENT TRAVEL FELLOWSHIP

This fellowship provides funding for our promising graduate students to attend an overseas international conference, workshop or symposium. There are two calls per year. Each recipient will receive S$2,500.

## July 2019 Call

| Student Name | Supervisor | Name of Conference |
|---|---|---|
| Chu Hon Weng, Wilson | Associate Professor Gan Yunn Hwen | 10—14 September 2019<br>Microbial Pathogenesis & Host Response—Cold Spring Harbor Laboratory—New York, USA |

## January 2019 Call

| Student Name | Supervisor | Name of Conference |
|---|---|---|
| Yohannes Abere Ambaw | Professor Markus Wenk | 28 April – 2 May 2019<br>The Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting 2019—Vancouver, British Columbia, Canada |
| Shainan Hora | Dr Sudhakar Jha | 15 – 18 June 2019<br>European Human Genetics Conference (ESHG) 2019 - Gothenburg, Sweden |
| Nguyen Thi Ha Linh | Dr Adrian Teo | 26 – 29 June 2019<br>International Society for Stem Cell Research Annual Meeting (ISSCR) 2019 - Los Angeles Convention Center, CA USA |

## July 2018 Call

| Student Name | Supervisor | Name of Conference |
|---|---|---|
| Geraldine Tu Xue En | Associate Professor Too Heng-Phon | 2 – 4 December 2018<br>Cell Symposia : Translation of Stem Cells to the Clinic: Challenges and Opportunities - Cedars-Sinai, Los Angeles, CA, USA |
| Wong Wei Jie Garrett | Associate Professor Yew Wen Shan | 6 – 9 January 2019<br>26th Enzyme Mechanisms Conference - New Orleans, LA, USA |
| Chia Ren Hui Derrick | Associate Professor Tang Bor Luen | 10 – 14 February 2019<br>Keystone Symposia on Molecular and Cellular Biology : Obesity and Adipose Tissue Biology—Fairmont Banff Springs, Banff, Alberta, Canada |
| Lim Lee Jin | Associate Professor Caroline Lee | 24 – 28 February 2019<br>Keystone Symposia on Molecular and Cellular Biology: Long Noncoding RNAs: From Molecular Mechanism to Functional Genetics (X2) - Whistler Conference Centre, Whistler, British Columbia, Canada |

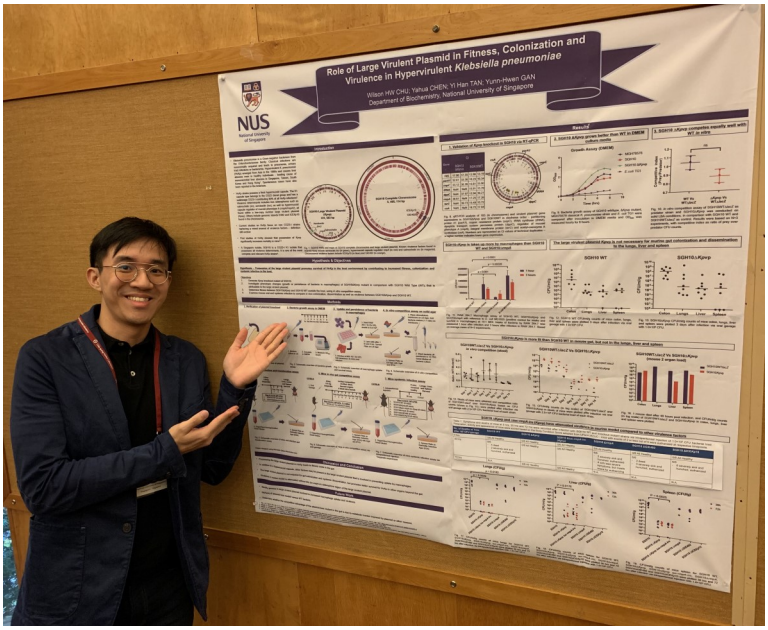
Images on this page contributed by Chu Hon Weng Wilson

# STUDENT TRAVEL FELLOWSHIP WRITE UP

By Chu Hon Weng Wilson, PhD student, Supervisor: A/P Gan Yunn Hwen

Cold Springs Harbor Laboratory (CSHL) was established in 1890 in Long Island, New York in USA. Today, more than 1000 people work across the vast hectares of the privately owned laboratory, which is located just next to the Inner Harbor and has a beach facing the main Cold Spring Harbor itself. It is also home to several Nobel Prize awardees, one of the most famous being the co-discoverer of the DNA helix structure, James Watson.

I had the opportunity to attend a conference there on Microbial Pathogenesis and Host Response from September 10 to 14. This meeting focused on infectious disease studies involving bacterial, viral and a handful of fungal and parasitic microbes. Many principal investigators, graduate students and research staff across the US and around the world attended the conference, working in diverse fields of microbiology, cell biology and immunology. As I am studying the pathogenesis of hypervirulent *K. pneumoniae*, I attended this meeting to gain some experience and exposure in other fields of infectious disease study as well as getting feedback on my project, which will be beneficial for my upcoming qualifying examination.




The meeting comprised of morning and evening seminar sessions, as well as poster presentations during the afternoon. There are several very interesting and eye-opening seminars, such as the topic of heteroresistance by Dr. David Weiss, who documented that a single antibiotic monotherapy results in the survival and propagation of a small population of bacterial cells pan-resistant to the antibiotic. This results in the emergence of highly antibiotic resistant bacteria that are difficult to treat and through this study, he proposed several combinations of current antibiotics that proved to be effective in treating such resistant infections, which will be helpful in the clinical and hospital settings.

There are also many poster presentations that are relevant to my study, including some on *K. pneumoniae* such as the development of a mouse model depicting gastrointestinal colonization of *K. pneumoniae* and on the hypermucoid capsule of hypervirulent *K. pneumoniae*. Outside of *K. pneumoniae*, there were also other interesting posters such as one presented an experimental set up of in vitro gut mucosal layer by harvesting pig mucin and another poster presentation on the utilization of a tandem fluorescent protein dye that changes color based on intracellular activity by Salmonella in epithelial cells.

Overall, I had an amazing experience visiting CSHL. The meeting has inspired me in my research and gave me a broader insight on the different mechanisms of infection by different bacterial species. I would highly recommend anyone interested in microbiology to participate this conference in the future.

# STUDENT TRAVEL FELLOWSHIP WRITE UP

By Nguyen Thi Ha Linh, PhD student, Supervisor: Dr Adrian Teo


This year's ISSCR Annual Meeting has done a very good job at reflecting the trends and works that has been going on in the field for the past year. And those works has been extraordinary. The field of stem cell and regenerative medicine has been going at neck breaking speed and showing no sign of slowing down.

Amongst the remarkable achievements shown in this year meeting, what caught my eyes were the number of exciting reports on the early clinical trials for stem cell therapy from many countries. The recent trials' focus seems to be on degenerative neurological diseases and conditions, starting with reports on a new Parkinson's disease model from Dr. Deidre Hoban and announcements of ambitious clinical trials from both Dr. Jun Takahashi (Kyoto University, Japan) and Dr. Stefan Irion (BlueRock Therapeutics, Canada and USA) for the same condition. Another trial from Dr. Masaya Nakamura's group (Keio University of Medicine) is aiming to restore motor functions in patients with debilitating spinal cord injury. The data from their study in rodent and primate models were amazing!

The group efforts from the Japanese groups are even more remarkable with the reports on the HLA-matched stem cell banking efforts and the report on the 'master line' generated using HLA gene disruption from Dr. Hotta Akitsu. Theoretically, generation of 14 CRISPR-Cas9 genome edited iPSC lines can cover most of the world's population without the need for patient's sample and overcome the issue of immune rejection and production time for transplant organs! The speed to clinical trials of these works also highlighted the more permissive attitude of Japanese policy makers towards stem cell therapy, for better or worse.

Another trend I have spotted in the works presented this year is the ubiquitous use of single cell RNA-seq to identify cell type identity within organoids and their interactions. The technique has highlighted how our heterogenous stem cell-derived organoids can be and how closely (or not) they resemble human organs and our development. Single cell RNA-seq really showed how far we still are from making perfect models of human organs and development. Also, there was a talk on a new RNA-seq technique called RNA-SEQFISH+ from Dr. Long Cai (CalTech, USA). This technique allows visualization of both read counts and the spatial localization of those transcripts at subcellular level. I think this is a very exciting progress in technology and will be widely applied in the years to follow, like single cell RNA-seq now.

I didn't take any pictures of talks and poster since it was against the conference's policy but we all enjoyed the ISSCR meeting this year. Los Angeles is an exciting destination, unlike any other places I have been too. This was an eye-opening trip for me and really showed how life and science are conducted so differently in different parts of the world.

Images on this page contributed by Nguyen Thi Ha Linh

# NEW STAFF

Dennis Kappei,
Assistant Professor

Office Location:
Cancer Science Institute Level 12

Teo Kee Keong Adrian,
Assistant Professor

Office Location:
Institute of Molecular and Cell Biology, A*STAR

Amaury C Gassiot,
Research Assistant Professor

- Lee Suet Ying, Research Assistant

Brian Kennedy,
Professor

- Chan Su Jing, Research Fellow
- Fatemeh A., Research Assistant
- Hataitip Tasena, Research Fellow
- Sim Toh Sim, Research Assistant
- Chan Weng Tat, Lab Executive

Chen Ee Sin,
Associate Professor

- Ma Yingrui, Research Assistant
- Raechell, Research Assistant#

Cheong Jit Kong,
Research Assistant Professor

- Venetia Kok Jing Tong, Research Assistant
- Tan Shin Yi, Research Assistant

Caroline Lee,
Associate Professor

- Brandon Ooi Nick Sern, Research Fellow
- Raechell, Research Assistant#

Deng Lih Wen,
Associate Professor

- Shabana Binte Idres, Research Assistant

Federico Tesio Torta,
Research Assistant Professor

- Oh Jeongah, Research Fellow

Gan Yunn Hwen,
Associate Professor

- Chu Hong Weng Wilson, Research Assistant

Jiang Jianming,
Assistant Professor

- Hansen Tan, Research Assistant
- Liao Dan, Research Associate
- Chen Weiming, Research Assistant

**Kenneth Ban, Senior Lecturer**

- Chen Shangying, Research Fellow

**Long Yun Chau, Senior Lecturer**

- Lau Aik Meng, Lab Executive

**Markus Wenk, Professor**

- Phua Zai Yang, Research Assistant

**Matthew Chang, Associate Professor**

- Nina Kurniasih Pratomo Juwono, Research Assistant
- Roopa Rajashekar, Research Fellow
- R Abirami, Research Assistant^
- Mukesh Saini, Research Fellow
- Bibhuti Ranjan, Research Fellow
- Wun Kwok Soon, Senior Research Fellow
- Santosh Kumar Srivastava, Research Fellow
- Liang Yuanmei, Research Fellow
- Nikhil Aggarwal, Research Associate
- Sun Tao, Research Associate
- Wong Qian Yee, Lab Technologist

**Nguyen Nam Long, Assistant Professor**

- Md Zafrul Hasan, Research Fellow
- Noor Rashidha Binte Meera Sahib, Research Assistant^
- Nur Ayuni Binte Muhammad Taib, Lab Technologist

**Tang Bor Luen, Associate Professor**

- Yong Qian Ying Cheryl, Research Assistant^

**Too Heng-Phon, Associate Professor**

- Loke Kin Man, Research Associate
- Teo Wei Song, Research Assistant

**Yew Wen Shan, Associate Professor**

- Ling Lay Hiang, Research Assistant
- Tan Yong Quan, Research Assistant
- Wong Wei Jie, Garrett, Research Assistant
- Shaw Kar Ming, Research Assistant
- Dina Amallia Darwis, Research Associate

Special mention to Sim Yi Loong, Arthur (Lab Executive in Dr Long Yun Chau's lab) and Loh Jian Yun (Lab Technologist, Associate Professor Chen Ee Sin's lab) who had transferred to other departments in 2019.

# : Raechell was a Research Assistant under Associate Professor Caroline Lee until 9 December 2019. Raechell officially transferred to Associate Professor Chen Ee Sin's lab effective 10 December 2019.

^ : Staff has since left the department in 2019 as well.

*Information was correct at the time of print.*

# NEW POSTGRADUATE STUDENTS

## Doctor of Philosophy Programme

| Name | Main Supervisor |
|---|---|
| Jessica Xie Jiaxin | Professor Ng Huck Hui |
| Lim Dingjie Jonathan | Associate Professor Yew Wen Shan |
| Lim Yijuan Yvonne | Associate Professor Matthew Chang |
| Lin Ciai | Associate Professor Matthew Chang |
| Liu Tingting | Associate Professor Deng Lih Wen |
| Melvin Yong | Associate Professor Gan Yunn Hwen |
| Ng Mong Jie Andre | Associate Professor Yew Wen Shan |
| Ong Xiang Yu Belinda | Dr Xu Feng |
| Puah Ru Ying Ginette | Associate Professor Matthew Chang |
| Stephen Dinesh Raj | Professor Brian Kennedy |
| Tan Yi Han | Associate Professor Gan Yunn Hwen |
| Tong Yi Sheng, Juztin James | Associate Professor Yew Wen Shan |
| Woo Jun Yung | Associate Professor Too Heng-Phon |
| Zeng Yibing | Associate Professor Chen Ee Sin |

## Master of Science Programme

| Name | Main Supervisor |
|---|---|
| Tan Hwei Ling | Associate Professor Chen Ee Sin |

# STAFF WELFARE EVENT

We travelled all the way to far west for our pottery workshop at the oldest and only surviving dragon kiln in Singapore, Thow Kwang Pottery.

After our catered buffet lunch, the instructor gave us a brief overview of the pottery studio's history, followed by a walk-through of the dragon kiln. The highlight was when we were given the opportunity to experience and "get our hands dirty" with the potter's wheel, hand building and decorate our artwork with colours. Some of us were very talented and came up with our exquisite professional looking bowls or cups, while most of us required full attention from the instructor and several TAs to achieve our ideal-looking masterpieces. As the dragon kiln is fired only 3 - 4 times a year, our pottery pieces will take 3 months to be completed.

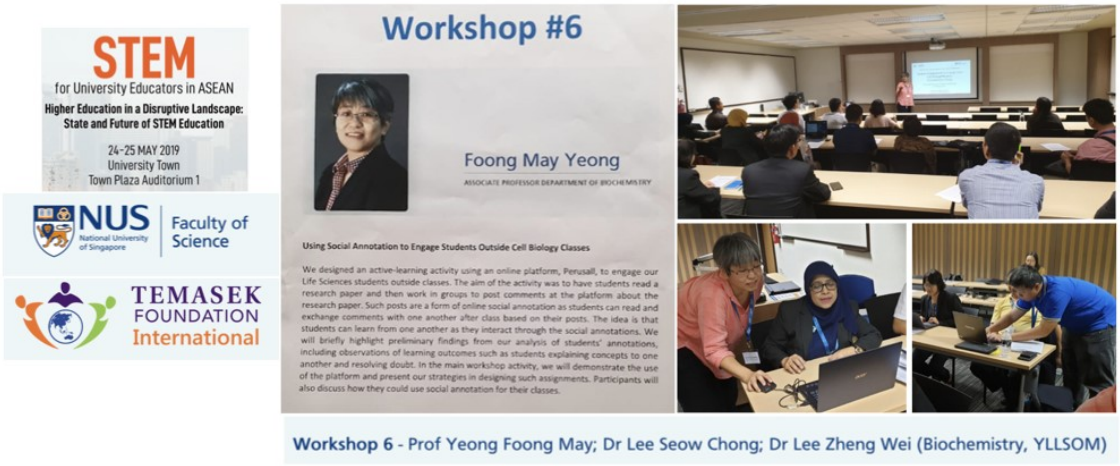
Some of us ended the workshop by gulping down refreshing cold drinks after 3 hours of hard work in open air. All of us went home with a pocket full of new knowledge.

We can't wait to receive our finished products!

Write up and Images from Staff Welfare event contributed by Chua Yee Liu, Department Staff Welfare Committee

# HIGHLIGHTS: EDUCATION-RELATED ACTIVITIES

## HIGHER EDUCATION IN A DISRUPTIVE LANDSCAPE, THE STATE AND FUTURE OF SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS (STEM) EDUCATION, 24—25 MAY 2019




**Workshop 6** - Prof Yeong Foong May; Dr Lee Seow Chong; Dr Lee Zheng Wei (Biochemistry, YLLSOM)

The Faculty of Science, National University of Singapore, together with Temasek Foundation International, brought together academic staff from institutes of higher education in ASEAN to a dialogue on the changing face of STEM education. This was organised in the form of a symposium with plenary talk and a series of workshops held from 24th and 25th May 2019.

To promote innovation in STEM higher education, Associate Professor Yeong Foong May had facilitated a workshop together with Dr Lee Seow Chong and Dr Lee Zheng Wei on the use of social annotation for supporting student learning in this symposium. The workshop was held on 25 May 2019, 1.30pm to 5.00pm.

http://www.science.nus.edu.sg/newshub/2585-higher-education-in-a-disruptive-landscape-the-state-and-future-of-stem-education

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## MEETING WITH PROFESSOR MARY DEANE SORCINELLI, NUS EDUCATOR-IN-RESIDENCE 2019, 11—19 NOVEMBER 2019

Representative presenters at the conference:

- 14 November 2019—"Sustaining informal networks with colleagues within department and documenting practices in SoTL-manner": Associate Professor Yeong Foong May & team

http://nus.edu.sg/cdtl/engagement/educator-in-residence/educator-in-residence-programme

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## 36TH INTERNATIONAL CONFERENCE ON INNOVATION, PRACTICE AND RESEARCH IN THE USE OF EDUCATION TECHNOLOGIES IN TERTIARY EDUCATION, 2—5 DECEMBER 2019

Representative presenters at the conference:

- 3 December 2019—"Using social annotations to support collaborative learning in a Life Sciences module": Dr Lee Seow Chong, Dr Lee Zheng Wei and Associate Professor Yeong Foong May.
- 4 December 2019—"Solving ill-structured problems mediated by online-discussion forums: mass customisation of learning": Ms Ramya Chandrakanathan, Associate Professor Tan Aik Ling (NIE), Dr Tan Seng Chee (NIE) and Associate Professor Yeong Foong May.

https://2019conference.ascilite.org/

# SAFETY EVENTS

## MD7 FIRE DRILL, 28 FEBRUARY 2019

On 28th February 2019 at 1030am, an alarm in the department was activated causing our hardworking biochemistry staffs and students to drop everything they are doing and started walking to the multi-purpose field. Yes! This is our annual fire drill conducted by the fire safety committee in view of preparing the department for evacuation in the event of fire. Under the watchful eyes of our OSHE colleagues, our fire wardens went about to carry out their roles in checking the source of the fire and combing through their respective floors of any casualties making sure no one is left behind. The assistant fire wardens then lead the occupants in a calm and orderly manner to the assembly area for attendance taking before reporting to the fire coordinator. MD7 was finally fully evacuated in 3 minutes 45 seconds with an attendance rate of 66.7% which was an improvement to what was achieved in 2018.

By Melvin Dai, Department's Fire Coordinator

## DEPARTMENT SAFETY TEA, 8 MARCH & 13 SEPTEMBER 2019

The last Safety Tea of the year 2019 was held on 13th Sept 2019, Friday, from 3 to 4 pm at LT35, MD6. Started with attendance taking by using VCard scanning QR code and we got more than 170 staff and students participated. HOD gave an opening speech urging everyone to build a positive Safety and Health culture in the department. Then, Dr Kenneth Ban introduced new Biochemistry Safety Committee, updated on N2 license and presented on Safety and Health Objectives of 2019. Also, Dr Ban showed the downtrend in AIMS statistics of the Department, followed by accident incident sharing, legislative updates, and introducing department waste labels. Furthermore, the department is participating in NUS Safety and Health Awards 2020 and will be undergoing NUSSHA audit in Nov this year. The event ended with a sumptuous tea treat for everyone.

By Chow Kean Pang, Department Safety Committee

## DEPARTMENT SAFETY AUDIT, 27 NOVEMBER 2019

The department safety was audited on 27th Nov 2019 by Dr Rajkumar Ramamoorthy & Ms Jayavani D/O Karuppasamy from NUS Office of Safety, Health and Environment (OSHE) .The audit took place from 9am to 5pm and was attended by Head of Department Prof Wenk, Safety Chair Dr Kenneth Ban and all safety committee members, Chow Kean Pang, Kelvin Tan, Guan Jye Swei, Cheryl Wang and Melvin Dai. Besides the 14 department safety and health management system (DSHMS) standard elements, the safety committee presented to the auditors several interdepartmental safety and health events jointly organized with the Department of Anaesthesia and the Department of Orthopaedic Surgery. These include the cross department safety audit and Macritchie Walk. These initiatives received positive comments and are much encouraged by the auditors. After document audit, the auditors also inspected the life science teaching lab at MD7 level 1 and a core facility at level 3. As the departmental safety audit coincides with NUS Safety and Health Awards (NUSSHA) 2020, the audit review will be integrated as part of the judging criteria for NUSSHA 2020. The Department of Biochemistry has received the Commendation awards twice in a row.

By Guan Jye Swei, Department Safety Committee

## AMAURY CAZENAVE GASSIOT, RESEARCH ASSISTANT PROFESSOR


Piccirillo, A. R., Hyzny, E. J., Beppu, L. Y., Menk, A. V., Wallace, C. T., Hawse, W. F., . . . D'Cruz, L. M. (2019). The Lysophosphatidylcholine Transporter MFSD2A Is Essential for CD8(+) Memory T Cell Maintenance and Secondary Response to Infection. *JOURNAL OF IMMUNOLOGY*, *203*(1), 117-126. doi:10.4049/jimmunol.1801585

Sieber-Ruckstuhl, N. S., Burla, B., Spoerel, S., Schmid, F., Venzin, C., Cazenave-Gassiot, A., . . . Boretti, F. S. (2019). Changes in the Canine Plasma Lipidome after Short- and Long-Term Excess Glucocorticoid Exposure. *SCIENTIFIC REPORTS*, *9*, 14 pages. doi:10.1038/s41598-019-42190-1

Watkins, O. C., Islam, M. O., Selvam, P., Pillai, R. A., Cazenave-Gassiot, A., Bendt, A. K., . . . Chan, S. -Y. (2019). Metabolism of C-13-Labeled Fatty Acids in Term Human Placental Explants by Liquid Chromatography-Mass Spectrometry. *ENDOCRINOLOGY*, *160*(6), 1394-1408. doi:10.1210/en.2018-01020


## BRIAN KENNEDY, PROFESSOR


Sasikumar, A. N., Killilea, D. W., Kennedy, B. K., & Brem, R. B. (2019). Potassium restriction boosts vacuolar acidity and extends lifespan in yeast. *EXPERIMENTAL GERONTOLOGY*, *120*, 101-106. doi:10.1016/j.exger.2019.02.001

Tian, X., Firsanov, D., Zhang, Z., Cheng, Y., Luo, L., Tombline, G., . . . Gorbunova, V. (2019). SIRT6 Is Responsible for More Efficient DNA Double-Strand Break Repair in Long-Lived Species.. *Cell*, *177*(3), 622-638.e22. doi:10.1016/j.cell.2019.03.043

Lee, J. Y., Kennedy, B. K., & Liao, C. -Y. (2019). mTOR signaling in mouse models of accelerated aging.. *J Gerontol A Biol Sci Med Sci*. doi:10.1093/gerona/glz059

Kennedy, B. K. (2019). Borrowed Time The Science of How and Why We Age. *SCIENCE*, *363*(6429), 822. doi:10.1126/science.aaw2246

Cai, X., Bandla, A., Chuan, C. K., Magarajah, G., Liao, L. -D., Teh, D. B. L., . . . Liu, B. (2019). Identifying glioblastoma margins using dual-targeted organic nanoparticles for efficient in vivo fluorescence image-guided photothermal therapy. *MATERIALS HORIZONS*, *6*(2), 311-317. doi:10.1039/c8mh00946e

Bicknell, R., Kennedy, B., Pham, T., Bugeja, L., & Ibrahim, J. E. (2019). Thermal Injury Deaths of Community-dwelling Older People With Dementia.. *Alzheimer Dis Assoc Disord*. doi:10.1097/WAD.0000000000000290

Lau, A., Kennedy, B. K., Kirkland, J. L., & Tullius, S. G. (2019). Mixing old and young: enhancing rejuvenation and accelerating aging. *JOURNAL OF CLINICAL INVESTIGATION*, *129*(1), 4-11. doi:10.1172/JCI123946


## CHANG, MATTHEW WOOK, ASSOCIATE PROFESSOR


Aggarwal, N., Hwang, I. Y., & Chang, M. W. (2019). Phage-boosted chemotherapy. *Nature Biomedical Engineering*, *3*(9), 680-681. doi:10.1038/s41551-019-0450-z

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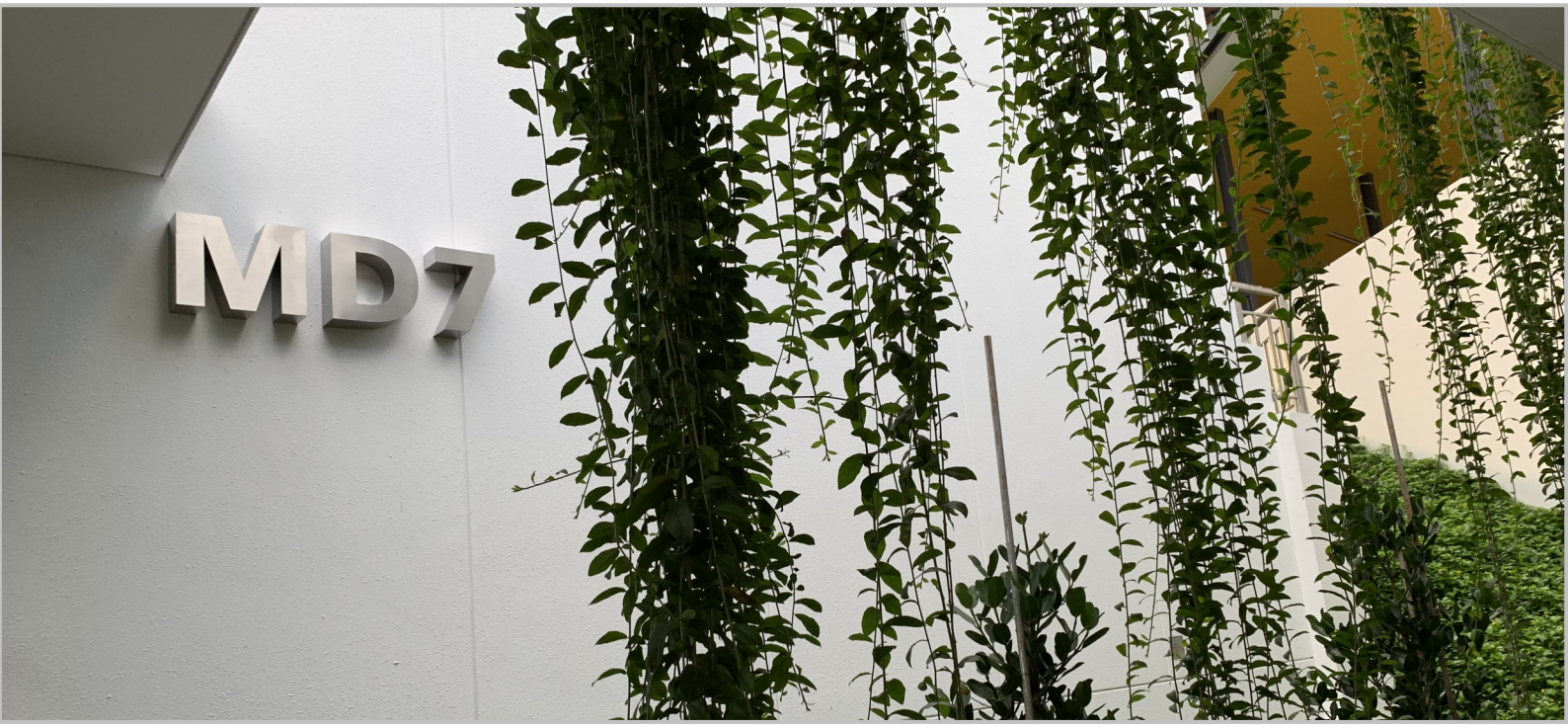


NUS National University of Singapore | Department of Biochemistry
Yong Loo Lin School of Medicine

8 Medical Drive, MD7, Singapore 117597
https://bch.nus.edu.sg/
+65-6516 3682
bchsec@nus.edu.sg