BUZZ • 2020

NUS National University of Singapore

Department of Biochemistry
Yong Loo Lin School of Medicine

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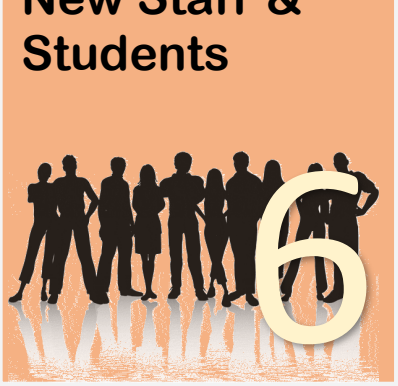
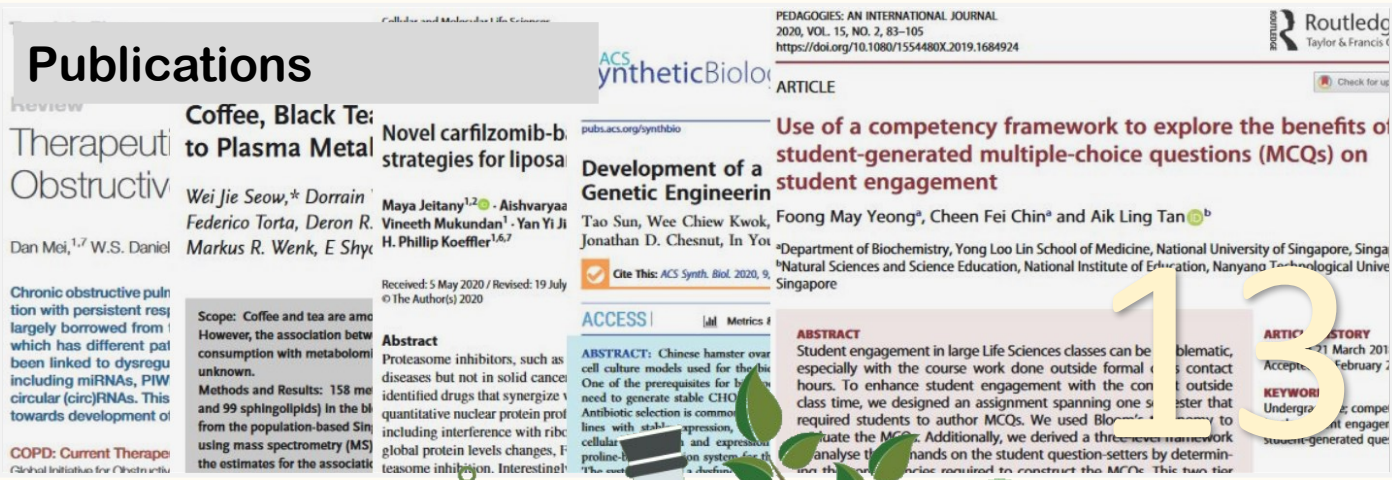
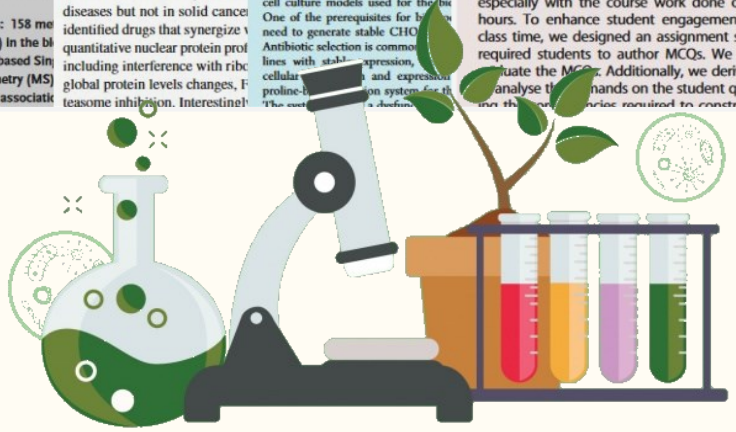






MESSAGE FROM HEAD OF DEPARTMENT

Professor Markus Wenk

Dear All,

Thank you very much for all your contributions to the Department, School and University during the past year, even more so given the challenges of the year 2020. This BUZZ again lists many of these achievements awards to students and staff among other events throughout last year. Among all of these I would like to express my particular gratitude and appreciation to Maxey Chung for his efforts and support as Deputy Head of Department for the past five years. I wish all of you a good start into the New Year 2021, health, happiness and success.

Best wishes,
Markus

THANK YOU

Associate Professor Maxey Chung

STAFF congratulations

AWARDS & APPOINTMENTS

- Department of Biochemistry received the Excellence Award for the NUS Safety & Health Awards (NUSSHA) 2020.
- Recipients of the NUS Medicine Fortitude Award in recognition of their contributions and efforts beyond the call of duty during the 2020 COVID-19 pandemic:
  - Associate Professor Marie Clement
  - Associate Professor Theresa Tan
  - Dr Kenneth Ban
- Associate Professor Yeong Foong May being accorded Senior Fellowship with the Higher Education Academy, United Kingdom.
- Dr Kenneth Ban being appointed as Deputy Head of Department of Biochemistry from 1 January 2021.
- Associate Professor Tang Bor Luen has been appointed as Department's Safety Chair from 1 January 2021.
- Mr Chow Kean Pang, Ms Wang Yuwei, Cheryl and Dr Chua Yee Liu on their promotion to Assistant Lab Manager.

RESEARCH GRANT AWARDS

PI	Project Title	Amount
Associate Professor Too Heng-Phon	Developing solutions for cryopreservation and hypotermic transport of therapeutic modified MSCs for brain tumor treatment – Grant Call 17 - NHIC-I2D-1908233 - NUHS	$205,000
	Towards commercialization of "TraFEN: Technology – Increasing Technology Readiness of a novel non-viral gene medication for Cell Therapy and Biotechnology – Grant Call: Ad-hoc funding for Cell Therapy and Biotechnology	$1,488,000
Associate Professor Caroline Lee	Exploring miRNAs in Saliva as Biomarkers for Hepatocellular Carcinoma in Cirrhotic Patients – MOE Tier 1	$149,900
Associate Professor Gan Yunn Hwen	Deciphering the post-transcriptional regulatory networks involved in virulence and antibiotic resistance of Klebsiella pneumonia - Third NRF-ISF Joint Grant Call	$425,844
Associate Professor Matthew Chang	Synthetic Biology Strategic Research Programme: Repurposing probiotics for autonomous prevention and treatment of human diseases – MOE Tier 1	$130,000
Assistant Professor Yvonne Tay	Pseudogenes in colorectal cancer: key regulators or evolutionary junk? – MOE Tier 1	$150,000
Assistant Professor Dennis Kappei	Deciphering highly recurrent TERT promoter mutations through single-locus chromatin purification coupled to quantitative mass spectrometry - NUSMed Post-Doctoral Fellowship (PDF)	-
Research Assistant Professor Federico Tesio Torta	Sphingolipids as diagnostic markers and regulators of cardiovascular and metabolic diseases – Third NRF-ISF Joint Grant Call	$414,000
Research Assistant Professor Hwang In Young	Fighting Amebiasis with bacteria: a combined approach with natural probiotics and engineered bacteria – NRF-ISF Joint Scientific Research Program	$423,600

STAFF
LONG SERVICE AWARDS

35 years	Mrs Kalimuthu Malihay
30 years	Mrs Long Lee Hua
20 years	Associate Professor Caroline Lee Associate Professor Theresa Tan
15 years	Professor Markus Wenk Associate Professor Deng Lih Wen Miss Tan Weiqi
10 years	Research Assistant Professor Amaury Cazenave Gassiot Research Assistant Professor Maybelle Darlene Kho Go Ms Chew Yuanyuan Ms Shen Yanqing
5 years	Assistant Professor Yvonne Tay Research Assistant Professor Hwang In Young Dr Chua Koon Jiew Ms Liu Ruirui Miss Adelia Vicanatalita Susanto Mr Koh Yong Zher Miss Ng Xiao Wei

UNDERGRADUATE
ACADEMIC YEAR 2019 / 2020
STUDENT AWARDS

AWARD	: Singapore Society for Biochemistry and Molecular Biology Medal
DESCRIPTION	: Top 10 Honours Project Students
STUDENT	: Liow Yuh Yiing (PI: Dr Yvonne Tay)

AWARD	: Emeritus Professor Sit Kim Ping's Book Prize
STUDENT	: Lew Zhe Zhang, Ryan (PI: Associate Professor Gan Yunn Hwen)

congratulations

POSTGRADUATE STUDENTS' CONFERMENT

Name	Main Supervisor
Chai Tin Fan	Adjunct Associate Professor Mei Wang-Casey
Chen Weiming	Assistant Professor Jiang Jianming
Chua Puay Suan, Jasmine	Associate Professor Yew Wen Shan
Geraldine Tu Xue En	Associate Professor Too Heng-Phon
Han Jian	Associate Professor Caroline Lee
Kerem Fidan	Adjunct Professor Vinay Tergaonkar
Liao Dan	Assistant Professor Jiang Jianming
Lim Lee Jin	Associate Professor Caroline Lee
Mert Burak Ozturk	Adjunct Professor Vinay Tergaonkar
Nguyen Thi Ha Linh	Assistant Professor Adrian Teo
Nikhil Aggarwal	Associate Professor Matthew Chang
Ong Chengsi	Professor Christiani Jeyakumar Henry
Pierre-Alexis Vincent Goy	Adjunct Associate Professor Ernesto Guccione*
Shainan Hora	Assistant Professor Sudhakar Jha
Sun Tao	Associate Professor Matthew Chang
Tan Chew Teng	Adjunct Professor Wang Yue
Tan Hwei Ling	Associate Professor Chen Ee Sin
Wang Siyu	Assistant Professor Jiang Jianming
Wong Wei Jie Garrett	Associate Professor Yew Wen Shan
Yohannes Abere Ambaw	Professor Markus Wenk

* : Adjunct staff contract lapse in 2020.

NEW HIRES STAFF

David Cameron-Smith
Professor

Office Location:
Singapore Institute of Clinical Sciences, A*STAR

Yu Haojie
Assistant Professor

Office Location:
Centre for Translational Medicine, MD6 Level 9

Reporting Officer	Staff	Designation
Research Assistant Professor Amaury Cazenave Gassiot	Lim Pei Yen	Research Assistant
Professor Barry Halliwell	Tang Ming Yi, Richard	Research Assistant
Professor Brian Kennedy	• Fann Yang-Wei David • Lee Noela Jin-Young • Lim Zi Xiang	Research Fellow Research Fellow Research Fellow
Associate Professor Caroline Lee	Lim Lee Jin	Research Fellow
Associate Professor Matthew Chang	• Christopher Martinus • Deepshikha • Quek Hui Ping Delia	Research Assistant Research Assistant Research Associate
Assistant Professor Dennis Kappei	Chua Boon Haow#	Research Fellow
Research Assistant Professor Federico Tesio Torta	• Gao Liang • Tham Wai Kin#	Assistant Lab Manager Research Assistant
Research Assistant Professor Goh Jor Ming	Bibek Gyanwali	Research Fellow
Associate Professor Gan Yunn Hwen	Goh Kwok Jian	Research Fellow
Professor Markus Wenk	Schoett Hans Frieder	Senior Research Fellow
Assistant Professor Nguyen Nam Long	• Baik Sangha# • Le Thanh Nha Uyen • Nguyen Huong Tra* • Tejasvene Ramesh	Research Fellow Research Fellow Research Assistant Research Assistant
Associate Professor Too Heng-Phon	• Ng Wei Qing, Justin • Teh Yuan Han • Tham Koei Wan# • Wee Tze Boon Kenneth	Research Fellow Research Assistant Research Assistant Research Fellow
Associate Professor Yew Wen Shan	• Chua Puay Suan, Jasmine* • Chua Yuen Siong* • Theng Poh Ying • Zhu Tingting	Research Assistant Research Assistant Research Assistant Research Assistant
Ms Violet Teo, Senior Manager	Putera Dandiar Bin Ahmad	Management Assistant Officer

* : Staff has since left the department in 2020 as well.
\# : Staff has left department in early 2021.

NEW POSTGRADUATE STUDENTS

PhD

Student Name	Main Supervisor
Chang Jing Kai	Professor Markus Wenk
Chua Yuen Siong	Associate Professor Yew Wen Shan
Fong Weijie, Zachary	Professor Hong Wanjin
Ha Thi Thuy Hoa	Assistant Professor Nguyen Nam Long
Jessica Ng Pei Zhen	Associate Professor Matthew Chang
Lee Tian Seong Andrew	Professor Hong Wanjin
Maximilian Unfried	Professor Brian Kennedy
Yong Qian Ying Cheryl	Associate Professor Tang Bor Luen

MSc

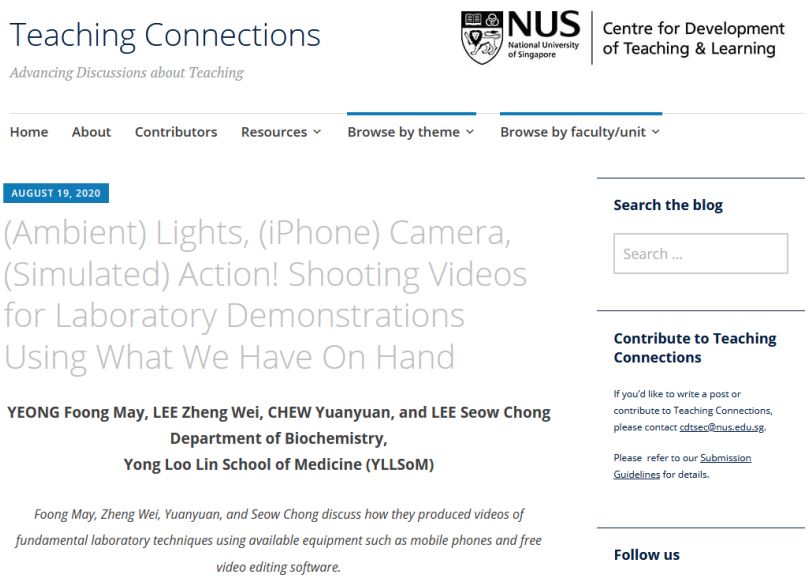
Student Name	Main Supervisor
Adelia Vicanatalita Susanto	Associate Professor Matthew Chang
Shabana Binte Idres	Associate Professor Deng Lih Wen

ACTIVITIES

EDUCATION-RELATED

By Dr Lee Zheng Wei, Instructor

Associate Professor Yeong Foong May, Dr Lee Zheng-Wei, Ms Chew Yuanyuan, Dr Lee Seow Chong.
Teaching Connections. Centre for Development of Teaching & Learning, National University of Singapore.
(Ambient) Lights, (iPhone) Camera, (Simulated) Action!
Shooting videos for laboratory demonstrations using what we have on hand. 19 August 2020.



Teaching Connections

Advancing Discussions about Teaching

NUS National University of Singapore | Centre for Development of Teaching & Learning

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AUGUST 19, 2020

(Ambient) Lights, (iPhone) Camera, (Simulated) Action! Shooting Videos for Laboratory Demonstrations Using What We Have On Hand

YEONG Foong May, LEE Zheng Wei, CHEW Yuanyuan, and LEE Seow Chong
Department of Biochemistry,
Yong Loo Lin School of Medicine (YLLSoM)

Foong May, Zheng Wei, Yuanyuan, and Seow Chong discuss how they produced videos of fundamental laboratory techniques using available equipment such as mobile phones and free video editing software.

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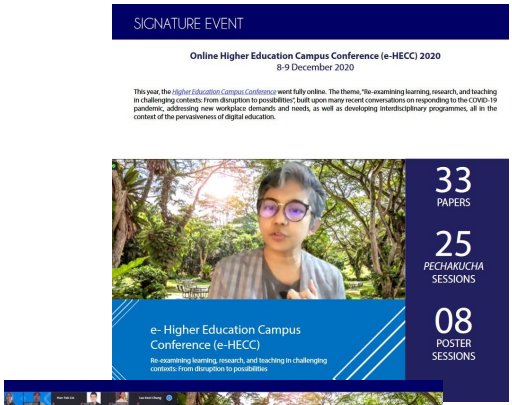
In this blogpost, we shared how we produced videos using readily available materials and equipment to demonstrate several laboratory techniques applicable in our practical modules. We also suggested tips and considerations to teachers who intend to make use of videos to deliver laboratory techniques.

Click link to read more!

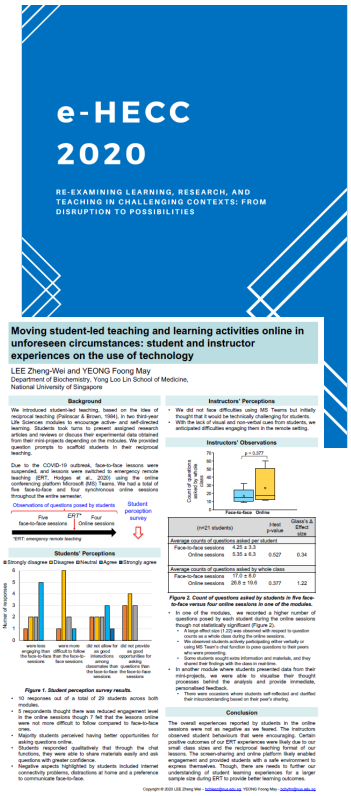


Photos credit to CDTL 2020 e-publication (Page 6 & 7)

Dr Lee Zheng-Wei, Associate Professor Yeong Foong May.
Moving student-led teaching and learning activities online in unforeseen circumstances: student and instructor experiences on the use of technology.
The online Higher Education Campus Conference (e-HECC 2020),
National University of Singapore.

In this poster presentation, we shared student's perceptions experiences on the use of technology as classes moving online under unforeseen circumstances in the second semester of AY1920. Specifically, students reported online lessons were not more difficult to follow and possessed greater confidence in asking questions. We also observed large effect size in count of questions asked by students during online lessons. The study showed encouraging student behaviors in online delivery of lessons.

Click link to read more!



EVENTS

SOCIAL COMMITTEE TEAM

By Dr Chua Yee Liu, Lead of Biochemistry's Social Welfare Committee. Photos contributed by department staff.

Staff Welfare: The "new norm" Staff Welfare Events

Year 2020 is a challenging one for everyone. Due to the circuit breaker imposed to fight COVID-19, our staff welfare committee has to think out of the box to carry out our events.

One month after the circuit breaker, we prepared care pack gifts to boost fellow colleagues' morale. The different care packs have a variety of tasty desserts and wholesome food to cater everyone's needs. Everyone stayed connected by sharing photos of the delightful care packs in the common WhatsApp chat group.

As social gathering is still discouraged after post circuit breaker, we decided to distribute sweet and savoury healthy snacks. They are interesting chips like okra, figs or sour cream and onion coated pumpkin so that everyone can munch them without feeling guilty. Those who came to pick up their snacks were happy to see each other and were grinning from ear to ear underneath their masks.

EVENTS

SAFETY COMMITTEE TEAM

Safety Tea on 12 May 2020

By Mr Chow Kean Pang, Member of Biochemistry's Safety Committee

The first e-Safety Tea of the year 2020 was held on 12th May 2020, Tuesday, from 2 to 3 pm. Our HOD, Professor Markus Wenk, opened the session by urging everyone to keep vigilant and to follow the COVID-19 safety measure. This was reinforced by the Safety Chair, Dr Kenneth Ban, who conducted a PollEV session to gauge the level of awareness of participants and proceeded to explain the different ways of how we could work together to minimize the spread of COVID-19 virus.

Following that, Kean provided updates on the department safety during the COVID-19 shutdown and started by thanking all PIs for their donations of lab consumables towards the national testing efforts. He provided OSHE updates as well as a summary of 2019 unannounced inspections and recommendations for improvements. For accidents/incidents, there were 2 accidents in early 2020 and everyone was reminded to stay alert and think safety when doing experiments.

The Committee was also pleased to announce that the department received the Excellence Award for NUSSHA 2020 and thanked everyone for working together to achieve this award. In lieu of a tea treat due to COVID-19 restrictions, a quiz was conducted and participants who answered correctly were given a mystery gift that could be collected after the circuit breaker.

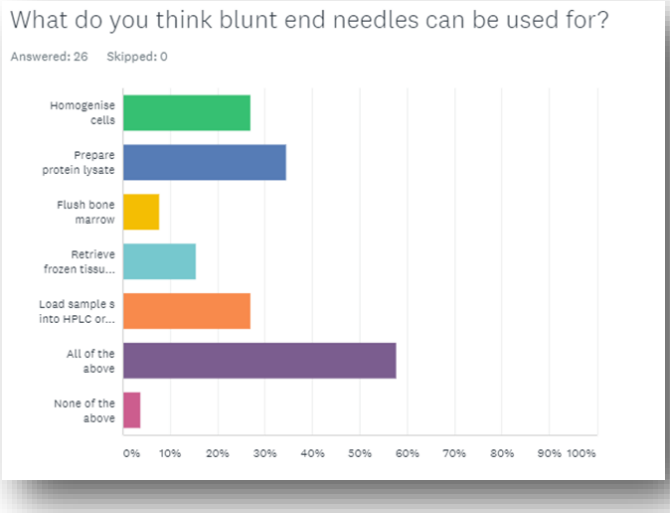
Needlestick Injury Prevention Programme on 7 July 2020

By Ms Guan Jye Swei, Member of Biochemistry's Safety Committee

The Safety Committee wanted to raise awareness about needle handling at the workplace as needlestick injuries can occur at any time when people use or dispose of needles. As part of the Needlestick Injury Prevention Programme, a survey was conducted to gauge the understanding on safe handling of needles about lab users.

From the survey, 26 responses were collected. Most of the respondents (96%) knew that they should avoid recapping the needles after use. However, only 12% of the respondents indicated that they were aware that blunt end needles could be used.

Respondents were also asked about situations where blunt-end needles could be used, and they were allowed to choose more than one option. Here, respondents indicated that blunt-end needles could be used to homogenize cells (27%), prepare protein lysate (35%), retrieve frozen tissue sample or cryobeads from cryovials (15%), load samples into HPLC or FPLC (27%) and flush the bone marrow (8%). Overall, more than half of the respondents knew that the needles could be used for the options given.



Finally, most respondents indicated that they would request from BCHSAFETY or purchase the blunt-end needles directly from vendor if needed.

The Safety Committee would like to thank all respondents for participating in this survey. We hope for more participation in future!

Safety Tea on 11 September 2020

By Mr Chow Kean Pang, Member of Biochemistry's Safety Committee

The last e-Safety Tea of the year 2020 was held on 11th Sept, Friday, from 3 to 4 pm. Our HOD, Professor Markus Wenk, opened the session and this was followed by a presentation by The Safety Chair, Dr Kenneth Ban, on Safety & Health Objectives for 2020.

To reinforce the need for using the uNivUS app, pop quizzes were conducted to test the awareness of its use for contact tracing and the safety reminders on campus. Next, the committee presented results of the OSHE inspection and highlighted an issue with drain blockage from improperly disposed material from the sink. All staff were reminded of proper waste disposal when using the sink. In addition, electrical safety was emphasized especially in situations where water from unattended defrosting of freezers may lead to inadvertent contact with electrical circuits.

As safety is always a priority, the Committee welcomed any suggestions or feedback about improving safety in the department. To show their appreciation for the department's participation in the e-Safety Tea, all attendees were given a healthy snack box that could be collected after the session.

Wellness Friday on 16 October 2020

By Mr Chow Kean Pang, Member of Biochemistry's Safety Committee

The Safety Committee organized the very first Wellness Day on 16th Oct, Friday, 6 pm. The entire session was led by an experienced coach, Mr Tan Wei Siang. He is passionate about gym coaching, sharing it through classes and volunteer work.

Although the session was held online via Zoom, we received a good response from staff who thoroughly enjoyed it! Participants followed the coach's instructions enthusiastically for a healthy workout. This session served to promote health benefits of exercise such as losing weight and reducing the risk of chronic diseases. Above all, it reminded staff to work smart, stay fit and keep moving.

The session was ended with a big smile from all participants. The Safety Committee would like to thank everyone who tried this first ever online exercise session.

All staff can look forward to more of such activities to come!

Mini Safety Day on 16 December 2020

By Mr Chow Kean Pang, Member of Biochemistry's Safety Committee

The year of 2020 ended with our very first Department e-Safety Day, it was held on 16th Dec 2020, Wednesday, from 2 to 3 pm. This event serves as a recap of safety knowledge and started with an opening speech by HOD, Professor Markus Wenk.

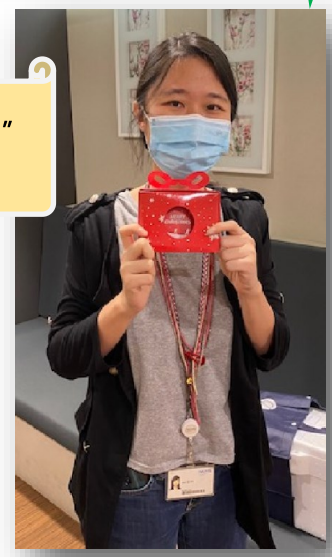
Next, we have Dr Kenneth Ban, the Safety Chair to say a few words about Safety Day, there are prizes to be won from the interactive games. Thereafter, Kean introduced the invited speaker Ms Juliette Lim, an executive from UHC to talk about the importance of screening, exercises tips, selection of our footwear and ideal mode of recovery to mitigate injuries during exercises.

The event continued with the interactive game – Kahoot! was led by Safety Team member, Melvin Dai with 30 safety related questions, which includes current events, national phase 3 updates, departmental emergency response, biological, chemical and radioactive waste management system and etc. Then, the top 5 highest score players will receive attractive prizes, they are:

1st – Ng Xiao Wei, Joey
2nd – Maybelle Darlene Kho Go
3rd – Cheryl Yong
4th – Lee Hui Ling
5th – Lim Yan Ping

The event followed by announcing of Safety Slogan Competition winner: Sam Qi Hui.

> "A great place to work starts with a safe place to work"
> By Sam Qi Hui



All participants will receive a complimentary Fruit Drink from Science Canteen.

Safety Team reminded all staff to stay alert while performing experiments. The Committee is also pleased to announce that the department has received the Excellence Award for NUSSHA 2020. We are grateful for this award and will work harder next year! As the department is unable to gather physically altogether due to the restrictions from COVID-19, there were no tea treat for this year, however, participants who have submitted their correct answers to a quiz called "Safety Tea Highlight", received a mystery gift that can be collected after the Circuit Breaker period.

PUBLICATIONS

EXTRACTED CLAIMED JOURNAL ARTICLES FROM NUS ELEMENTS (JANUARY — DECEMBER 2020)

AMAURY CAZENAVE GASSIOT, RESEARCH ASSISTANT PROFESSOR

Gao, L., Cazenave-Gassiot, A., Burla, B., Wenk, M. R., & Torta, F. (2020). Dual mass spectrometry as a tool to improve annotation and quantification in targeted plasma lipidomics. *METABOLOMICS*, *16*(5), 12 pages. doi:10.1007/s11306-020-01677-z

Guo, J., Chia, G. W. N., Berezhnoy, N. V., Cazenave-Gassiot, A., Kjelleberg, S., Hinks, J., . . . Seviour, T. (2020). Bacterial lipopolysaccharide core structures mediate effects of butanol ingress. *BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES*, *1862*(2), 11 pages. doi:10.1016/j.bbamem.2019.183150

Mondino, S., Vázquez, C. L., Cabruja, M., Sala, C., Cazenave-Gassiot, A., Blanco, F. C., . . . Gago, G. (n.d.). FasR regulates fatty acid biosynthesis and is essential for virulence of Mycobacterium tuberculosis. doi:10.1101/2020.06.08.140004

BRIAN KENNEDY, PROFESSOR

Zou, K., Rouskin, S., Dervishi, K., McCormick, M. A., Sasikumar, A., Deng, C., . . . Li, H. (2020). Life span extension by glucose restriction is abrogated by methionine supplementation: Cross-talk between glucose and methionine and implication of methionine as a key regulator of life span. *Science Advances*, *6*(32). doi:10.1126/sciadv.aba1306

Teh, D. B. L., Bansal, A., Chai, C., Toh, T. B., Tucker, R. A. J., Gammad, G. G. L., . . . Kennedy, B. K. (2020). A Flexi-PEGDA Upconversion Implant for Wireless Brain Photodynamic Therapy. *ADVANCED MATERIALS*, *32*(29), 8 pages. doi:10.1002/adma.202001459

Bicknell, R., Kennedy, B., Pham, T., Bugeja, L., & Ibrahim, J. E. (2020). Thermal Injury Deaths of Community-dwelling Older People With Dementia.. *Alzheimer Dis Assoc Disord*, *34*(1), 101-104. doi:10.1097/WAD.0000000000000290

Lee, J. Y., Kennedy, B. K., & Liao, C. Y. (2020). Mechanistic target of rapamycin signaling in mouse models of accelerated aging. *The journals of gerontology. Series A, Biological sciences and medical sciences*, *75*(1), 64-72. doi:10.1093/gerona/glz059

CHANG, MATTHEW WOOK, ASSOCIATE PROFESSOR

Foo, J. L., Rasouliha, B. H., Susanto, A. V., Leong, S. S. J., & Chang, M. W. (2020). Engineering an Alcohol-Forming Fatty Acyl-CoA Reductase for Aldehyde and Hydrocarbon Biosynthesis inSaccharomyces cerevisiae. *FRONTIERS IN BIOENGINEERING AND BIOTECHNOLOGY*, *8*, 17 pages. doi:10.3389/fbioe.2020.585935

March, J. C., & Chang, M. W. (2020). Microbiome Engineering: A New Generation of Ideas. *BIOTECHNOLOGY JOURNAL*, *15*(10), 2 pages. doi:10.1002/biot.202000406

Aggarwal, N., Breedon, A. M. E., Davis, C. M., Hwang, I. Y., & Chang, M. W. (2020). Engineering probiotics for therapeutic applications: recent examples and translational outlook. *Current Opinion in Biotechnology*, *65*, 171-179. doi:10.1016/j.copbio.2020.02.016

Chen, B., Foo, J. L., Ling, H., & Chang, M. W. (2020). Mechanism-Driven Metabolic Engineering for Bio-Based Production of Free R-Lipoic Acid in Saccharomyces cerevisiae Mitochondria. *Frontiers in Bioengineering and Biotechnology*, *8*. doi:10.3389/fbioe.2020.00965

Sun, T., Kwok, W. C., Chua, K. J., Lo, T. -M., Potter, J., Yew, W. S., . . . Chang, M. W. (2020). Development of a Proline-Based Selection System for Reliable Genetic Engineering in Chinese Hamster Ovary Cells. *ACS SYNTHETIC BIOLOGY*, *9*(7), 1864-1872. doi:10.1021/acssynbio.0c00221

Hossain, G. S., Saini, M., Miyake, R., Ling, H., & Chang, M. W. (2020). Genetic Biosensor Design for Natural Product Biosynthesis in Microorganisms. *TRENDS IN BIOTECHNOLOGY*, *38*(7), 797-810. doi:10.1016/j.tibtech.2020.03.013

Ho, C. L., Tan, H. Q., Chua, K. J., Kang, A., Lim, K. H., Ling, K. L., . . . Chang, M. W. (2020). Engineered commensal microbes for diet-mediated colorectal-cancer chemoprevention (vol 2, pg 27, 2018). *NATURE BIOMEDICAL ENGINEERING*, *4*(7), 754-755. doi:10.1038/s41551-020-0580-3

Liow, L. T., Go, M. K., Chang, M. W., & Yew, W. S. (2020). Toolkit Development for Cyanogenic and Gold Biorecovery Chassis Chromobacterium violaceum. *ACS SYNTHETIC BIOLOGY*, *9*(4), 953-961. doi:10.1021/acssynbio.0c00064

Hwang, I. Y., & Chang, M. W. (2020). Engineering commensal bacteria to rewire host-microbiome interactions. *CURRENT OPINION IN BIOTECHNOLOGY*, *62*, 116-122. doi:10.1016/j.copbio.2019.09.007

Sieow, B. F. L., Wun, K. S., Yong, W. P., Hwang, I. Y., & Chang, M. W. (2020). Tweak to Treat: Reprograming Bacteria for Cancer Treatment. Trends in Cancer. doi:10.1016/j.trecan.2020.11.004

Ng, T. -K., Yu, A. -Q., Ling, H., Juwono, N. K. P., Choi, W. J., Leong, S. S. J., & Chang, M. W. (2020). Engineering Yarrowia lipolytica towards food waste bioremediation: Production of fatty acid ethyl esters from vegetable cooking oil. *JOURNAL OF BIOSCIENCE AND BIOENGINEERING*, *129*(1), 31-40. doi:10.1016/j.jbiosc.2019.06.009

CHEN EE SIN, ASSOCIATE PROFESSOR

Tan, H. L., Zeng, Y. B., & Chen, E. S. (2020). N-terminus does not govern protein turnover of schizosaccharomyces pombe cenp-a. *International Journal of Molecular Sciences*, *21*(17), 1-13. doi:10.3390/ijms21176175

Hoong, B. Y. D., Gan, Y. H., Liu, H., & Chen, E. S. (2020). cGAS-STING pathway in oncogenesis and cancer therapeutics. *Oncotarget*, *11*(30), 2930-2955. doi:10.18632/oncotarget.27673

CHEONG JIT KONG, RESEARCH ASSISTANT PROFESSOR

Tan, B. W. Q., Sim, W. L., Cheong, J. K., Kuan, W. S., Tran, T., & Lim, H. F. (2020). MicroRNAs in chronic airway diseases: Clinical correlation and translational applications. *Pharmacological Research*, *160*. doi:10.1016/j.phrs.2020.105045

CHRISTIANI JEYAKUMAR HENRY, PROFESSOR

Haldar, S., Wong, L. H., Tay, S. L., Jacoby, J. J., He, P., Osman, F., . . . Henry, C. J. (2020). Two Blends of Refined Rice Bran, Flaxseed, and Sesame Seed Oils Affect the Blood Lipid Profile of Chinese Adults with Borderline Hypercholesterolemia to a Similar Extent as Refined Olive Oil. *The Journal of nutrition*, *150*(12), 3141-3151. doi:10.1093/jn/nxaa274

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... CHRISTIANI JEYAKUMAR HENRY, PROFESSOR

Kaur, B., Koh, M., Ponnalagu, S., & Henry, C. J. (2020). Postprandial blood glucose response: does the glycaemic index (GI) value matter even in the low GI range?. *Nutrition and Diabetes*, *10*(1). doi:10.1038/s41387-020-0118-5

Henry, C. J., Kaur, B., & Quek, R. Y. C. (2020). Chrononutrition in the management of diabetes. *Nutrition and Diabetes*, *10*(1). doi:10.1038/s41387-020-0109-6

Loo, E. X. L., Soh, S. -E., Loy, S. L., Ng, S., Tint, M. T., Chan, S. -Y., . . . Eriksson, J. G. (2020). Cohort profile: Singapore Preconception Study of Long-Term Maternal and Child Outcomes (S-PRESTO). *EUROPEAN JOURNAL OF EPIDEMIOLOGY*, 14 pages. doi:10.1007/s10654-020-00697-2

Yu, A. H. M., Phoon, P. Y., Ng, G. C. F., & Henry, C. J. (2020). Physicochemical characteristics of green banana flour and its use in the development of konjac-green banana noodles. *Journal of Food Science*, *85*(10), 3026-3033. doi:10.1111/1750-3841.15458

Camps, S. G., Koh, H. R., Wang, N. X., & Henry, C. J. (2020). A fructose-based meal challenge to assess metabotypes and their metabolic risk profile: A randomized, crossover, controlled trial. *Nutrition*, *78*. doi:10.1016/j.nut.2020.110799

Lightowler, H., Schweitzer, L., Theis, S., & Henry, C. J. (2020). Reply to "comparisons of within-group instead of between-group affect the conclusions. Comment on: Changes in weight and substrate oxidation in overweight adults following isomaltulose intake during a 12-week weight loss intervention: A randomized, double-blind, controlled trial. nutrients 2019, 11(10), 2367". *Nutrients*, *12*(8), 1-3. doi:10.3390/nu12082339

Yeo, M. T. Y., Yeo, P. L. Q., Bi, X., & Henry, C. J. (2020). Energy density and nutrient contents of selective Chinese new year snacks. *Foods*, *9*(8). doi:10.3390/foods9081137

Osman, F., Haldar, S., & Henry, C. J. (2020). Effects of time-restricted feeding during ramadan on dietary intake, body composition and metabolic outcomes. *Nutrients*, *12*(8), 1-25. doi:10.3390/nu12082478

Sim, S. Y. J., Hua, X. Y., & Henry, C. J. (2020). A novel approach to structure plant-based yogurts using high pressure processing. *Foods*, *9*(8). doi:10.3390/foods9081126

Kivipelto, M., Mangialasche, F., Snyder, H. M., Allegri, R., Andrieu, S., Arai, H., . . . Carrillo, M. C. (2020). World-Wide FINGERS Network: A global approach to risk reduction and prevention of dementia. *ALZHEIMERS & DEMENTIA*, *16*(7), 1078-1094. doi:10.1002/alz.12123

Sun, L., Goh, H. J., Govindharajulu, P., Sun, L., Henry, C. J., & Leow, M. K. -S. (2020). A Feedforward Loop within the Thyroid-Brown Fat Axis Facilitates Thermoregulation. *SCIENTIFIC REPORTS*, *10*(1), 9 pages. doi:10.1038/s41598-020-66697-0

Michael, N., Gupta, V., Sadananthan, S. A., Sampathkumar, A., Chen, L., Pan, H., . . . Velan, S. S. (2020). Determinants of intramyocellular lipid accumulation in early childhood. *INTERNATIONAL JOURNAL OF OBESITY*, *44*(5), 1141-1151. doi:10.1038/s41366-019-0435-8

Haldar, S., Egli, L., De Castro, C. A., Tay, S. L., Koh, M. X. N., Darimont, C., . . . Henry, C. J. (2020). High or low glycemic index (GI) meals at dinner results in greater postprandial glycemia compared with breakfast: A randomized controlled trial. *BMJ Open Diabetes Research and Care*, *8*(1). doi:10.1136/bmjdrc-2019-001099

Tan, W. S. K., Chia, P. F. W., Ponnalagu, S., Karnik, K., & Henry, C. J. (2020). The role of soluble corn fiber on glycemic and insulin response. *Nutrients*, *12*(4). doi:10.3390/nu12040961

Quek, R. Y. C., Peh, E. W. Y., & Henry, C. J. (2020). Effects of cocoa butter and cocoa butter equivalent in a chocolate confectionery on human blood triglycerides, glucose and insulin. *Foods*, *9*(4). doi:10.3390/foods9040455

Tay, W., Kaur, B., Quek, R., Lim, J., & Henry, C. J. (2020). Current developments in digital quantitative volume estimation for the optimisation of dietary assessment. *Nutrients*, *12*(4). doi:10.3390/nu12041167

Peh, E. W. Y., Koecher, K., Menon, R., & Henry, C. J. (2020). Breakfast consumption modulates postprandial glycaemic, insulinaemic and NEFA response in pre-diabetic Asian males. *British Journal of Nutrition*, *123*(6), 664-672. doi:10.1017/S0007114519003180

Wee, M. S. M., & Henry, C. J. (2020). Reducing the glycemic impact of carbohydrates on foods and meals: Strategies for the food industry and consumers with special focus on Asia. *Comprehensive Reviews in Food Science and Food Safety*, *19*(2), 670-702. doi:10.1111/1541-4337.12525

Sun, L., Goh, H. J., Govindharajulu, P., Leow, M. K. -S., & Henry, C. J. (2020). Postprandial glucose, insulin and incretin responses differ by test meal macronutrient ingestion sequence (PATTERN study). *CLINICAL NUTRITION*, *39*(3), 950-957. doi:10.1016/j.clnu.2019.04.001

Sun, L., Yan, J., Goh, H. J., Govindharajulu, P., Verma, S., Michael, N., . . . Leow, M. K. -S. (2020). Fibroblast Growth Factor-21, Leptin, and Adiponectin Responses to Acute Cold-Induced Brown Adipose Tissue Activation. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*, *105*(3), E520-E531. doi:10.1210/clinem/dgaa005

Ramzan, F., D'Souza, R. F., Durainayagam, B. R., Milan, A. M., Roy, N. C., Kruger, M. C., . . . Cameron-Smith, D. (2020). Inflexibility of the plasma miRNA response following a high-carbohydrate meal in overweight insulin-resistant women. *GENES AND NUTRITION*, *15*(1), 12 pages. doi:10.1186/s12263-020-0660-8

Bi, X., Loo, Y. T., & Henry, C. J. (2020). Relationships between adiponectin and bone: Sex difference. *Nutrition*, *70*. doi:10.1016/j.nut.2019.04.004

Phoon, P. Y., & Henry, C. J. (2020). Fibre-based oleogels: effect of the structure of insoluble fibre on its physical properties. *Food and Function*, *11*(2), 1349-1361. doi:10.1039/c9fo02431j

Tay, S. H., Goh, H. J., Govindharajulu, P., Cheng, J., Camps, S. G. J. A., Haldar, S., . . . Leow, M. K. -S. (2020). Brown Fat Activity Determined by Infrared Thermography and Thermogenesis Measurement Using Whole Body Calorimetry (BRIGHT Study). *PHYSIOLOGICAL RESEARCH*, *69*(1), 85-97. doi:10.33549/physiolres.934190

Henry, C. J., Kaur, B., & Quek, R. Y. C. (2020). Are Asian foods as "fattening" as western-styled fast foods?. *European Journal of Clinical Nutrition*, *74*(2), 348-350. doi:10.1038/s41430-019-0537-3

Grace, N. C. F., & Henry, C. J. (2020). The physicochemical characterization of unconventional starches and flours used in Asia. *Foods*, *9*(2). doi:10.3390/foods9020182

Kaur, B., Lim, J., Chusak, C., & Henry, C. J. (2020). Microwave cooking enhances glycaemic potential of rice: An in vitro study. *Malaysian Journal of Nutrition*, *26*(1), 117-128. doi:10.31246/MJN-2019-0106

CHUA KIM LEE, ASSOCIATE PROFESSOR

Yang, G., Cheng, C., Xu, G. B., Tang, L., Chua, K. L., & Yang, Y. Y. (2020). Synthesis and antibiofilm evaluation of 3-hydroxy-2,3-dihydroquinazolin-4(1H)-one derivatives against opportunistic pathogen Acinetobacter baumannii. *Bioorganic and Medicinal Chemistry*, *28*(16). doi:10.1016/j.bmc.2020.115606

CHUNG CHING MING, MAXEY, ASSOCIATE PROFESSOR

Chung, M. C. M., & Kennedy, B. K. (2020). Aging: Mechanisms, Measures, and Interventions. *PROTEOMICS*, *20*(5-6), 2 pages. doi:10.1002/pmic.201800336

CLEMENT, MARIE-VERONIQUE, ASSOCIATE PROFESSOR

Jagannathan, N. S., Ihsan, M. O., Kin, X. X., Welsch, R. E., Clement, M. -V., & Tucker-Kellogg, L. (2020). TRANSCOMPP: understanding phenotypic plasticity by estimating Markov transition rates for cell state transitions. *BIOINFORMATICS*, *36*(9), 2813-2820. doi:10.1093/bioinformatics/btaa021

Clement, M. -V., & Luo, L. (2020). Organismal Aging and Oxidants beyond Macromolecules Damage. *PROTEOMICS*, *20*(5-6), 9 pages. doi:10.1002/pmic.201800400

Hirpara, J. L., Subramaniam, K., Bellot, G., Qu, J., Seah, S., Loh, T., . . . Pervaiz, S. (2020). Superoxide induced inhibition of death receptor signaling is mediated via induced expression of apoptosis inhibitory protein cFLIP. *REDOX BIOLOGY*, *30*, 14 pages. doi:10.1016/j.redox.2019.101403

DENG LIH WEN, ASSOCIATE PROFESSOR

Novera, W., Lee, Z. W., Nin, D. S., Dai, M. Z. Y., Binte Idres, S., Wu, H., . . . Deng, L. W. (2020). Cysteine Deprivation Targets Ovarian Clear Cell Carcinoma Via Oxidative Stress and Iron-Sulfur Cluster Biogenesis Deficit. *Antioxidants and Redox Signaling*, *33*(17), 1191-1208. doi:10.1089/ars.2019.7850

Ho, Y. K., Woo, J. Y., Tu, G. X. E., Deng, L. -W., & Too, H. -P. (2020). A highly efficient non-viral process for programming mesenchymal stem cells for gene directed enzyme prodrug cancer therapy. *SCIENTIFIC REPORTS*, *10*(1), 15 pages. doi:10.1038/s41598-020-71224-2

Yan, J., Cheo, H. W., Teo, W. K., Shi, X., Wu, H., Idres, S. B., . . . Wu, J. W. (2020). A Radical Smiles Rearrangement Promoted by Neutral Eosin Y as a Direct Hydrogen Atom Transfer Photocatalyst. *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, *142*(26), 11357-11362. doi:10.1021/jacs.0c02052

Szmyd, R., Niska-Blakie, J., Diril, M. K., Nunes, P. R., Tzelepis, K., Lacroix, A., . . . Kaldis, P. (2020). Premature activation of Cdk1 leads to mitotic events in S phase and embryonic lethality (vol 38, pg 998, 2019). *ONCOGENE*, *39*(9), 2030. doi:10.1038/s41388-019-1114-x

Nin, D. S., Idres, S. B., Song, Z. J., Moore, P. K., & Deng, L. W. (2020). Biological Effects of Morpholin-4-ium 4 Methoxyphenyl (Morpholino) Phosphinodithioate and Other Phosphorothioate-Based Hydrogen Sulfide Donors. *Antioxidants and Redox Signaling*, *32*(2), 145-158. doi:10.1089/ars.2019.7896

DENNIS KAPPEI, ASSISTANT PROFESSOR

Song, Y., An, O., Ren, X., Chan, T. H. M., Tay, D. J. T., Tang, S. J., . . . Chen, L. (2020). RNA editing mediates the functional switch of COPA in a novel mechanism of hepatocarcinogenesis. *Journal of Hepatology*. doi:10.1016/j.jhep.2020.07.021

Roelofs, P. A., Goh, C. Y., Chua, B. H., Jarvis, M. C., Stewart, T. A., McCann, J. L., . . . Harris, R. S. (2020). Characterization of the mechanism by which the RB/E2F pathway controls expression of the cancer genomic DNA deaminase APOBEC3B. *ELIFE*, *9*, 27 pages. doi:10.7554/eLife.61287

Jeitany, M., Prabhu, A., Dakle, P., Pathak, E., Madan, V., Kanojia, D., . . . Koeffler, H. P. (2020). Novel carfilzomib-based combinations as potential therapeutic strategies for liposarcomas. *CELLULAR AND MOLECULAR LIFE SCIENCES*, 15 pages. doi:10.1007/s00018-020-03620-w

Kong, L. R., Salleh, N. A. B. M., Ong, R. W., Tan, T. Z., Syn, N. L., Goh, R. M., . . . Goh, B. C. (2020). A common MET polymorphism harnesses HER2 signaling to drive aggressive squamous cell carcinoma. *NATURE COMMUNICATIONS*, *11*(1), 14 pages. doi:10.1038/s41467-020-15318-5

FEDERICO TESIO TORTA, RESEARCH ASSISTANT PROFESSOR

Nguyen, T. Q., Vu, T. M., Tukijan, F., Muralidharan, S., Foo, J. C., Chin, J. F. L., . . . Nguyen, L. N. (2020). Erythrocytes efficiently utilize exogenous sphingosines for S1P synthesis and export via Mfsd2b.. *J Biol Chem*. doi:10.1074/jbc.RA120.012941

Ambaw, Y. A., Fuchs, D., Raida, M., Mazengia, N. T., Torta, F., Wheelock, C. E., . . . Tong, L. (2020). Changes of tear lipid mediators after eyelid warming or thermopulsation treatment for meibomian gland dysfunction. *Prostaglandins and Other Lipid Mediators*, *151*. doi:10.1016/j.prostaglandins.2020.106474

Seow, W. J., Low, D. Y., Pan, W. -C., Gunther, S. H., Sim, X., Torta, F., . . . van Dam, R. M. (2020). Coffee, Black Tea, and Green Tea Consumption in Relation to Plasma Metabolites in an Asian Population. *MOLECULAR NUTRITION & FOOD RESEARCH*, 9 pages. doi:10.1002/mnfr.202000527

Benke, P. I., Burla, B., Ekroos, K., Wenk, M. R., & Torta, F. (2020). Impact of ion suppression by sample cap liners in lipidomics. *Analytica Chimica Acta*, *1137*, 136-142. doi:10.1016/j.aca.2020.09.055

Kopczynski, D., Hentschel, A., Coman, C., Schebb, N. H., Hornemann, T., Mashek, D. G., . . . Ahrends, R. (2020). Simple Targeted Assays for Metabolic Pathways and Signaling: A Powerful Tool for Targeted Proteomics. *ANALYTICAL CHEMISTRY*, *92*(20), 13672-13676. doi:10.1021/acs.analchem.0c02793

Teo, G., Chew, W. S., Burla, B. J., Herr, D., Tai, E. S., Wenk, M. R., . . . Choi, H. (2020). MRMkit: Automated Data Processing for Large-Scale Targeted Metabolomics Analysis. *ANALYTICAL CHEMISTRY*, *92*(20), 13677-13682. doi:10.1021/acs.analchem.0c03060

Evans, A. M., O'Donovan, C., Playdon, M., Beecher, C., Beger, R. D., Bowden, J. A., . . . Vuckovic, D. (2020). Dissemination and analysis of the quality assurance (QA) and quality control (QC) practices of LC-MS based untargeted metabolomics practitioners. *METABOLOMICS*, *16*(10), 16 pages. doi:10.1007/s11306-020-01728-5

... continue

... FEDERICO TESIO TORTA, RESEARCH ASSISTANT PROFESSOR

Carrat, G. R., Haythorne, E., Tomas, A., Haataja, L., Müller, A., Arvan, P., . . . Rutter, G. A. (2020). The type 2 diabetes gene product STARD10 is a phosphoinositide-binding protein that controls insulin secretory granule biogenesis. *Molecular Metabolism*, *40*. doi:10.1016/j.molmet.2020.101015

Ambaw, Y. A., Wong, T., Chong, R., Ah, H., Ji, S., Raida, M., . . . Tong, L. (2020). Change of tear lipid mediators in a post-trabeculectomy cohort. *Ocular Surface*, *18*(4), 565-574. doi:10.1016/j.jtos.2020.06.004

Chua, X. Y., Chai, Y. L., Chew, W. S., Chong, J. R., Ang, H. L., Xiang, P., . . . Lai, M. K. P. (2020). Immunomodulatory sphingosine-1-phosphates as plasma biomarkers of Alzheimer's disease and vascular cognitive impairment. *ALZHEIMERS RESEARCH & THERAPY*, *12*(1), 12 pages. doi:10.1186/s13195-020-00694-3

Suresh, J., Khor, I. W., Kaur, P., Heng, H. L., Torta, F., Dawe, G. S., . . . Tolwinski, N. S. (2020). Shared signaling pathways in Alzheimer's and metabolic disease may point to new treatment approaches. *FEBS JOURNAL*, 19 pages. doi:10.1111/febs.15540

Zhao, P., Liu, I. D., Hodgin, J. B., Benke, P. I., Selva, J., Torta, F., . . . Saba, J. D. (2020). Responsiveness of sphingosine phosphate lyase insufficiency syndrome to vitaminB6cofactor supplementation. *JOURNAL OF INHERITED METABOLIC DISEASE*, *43*(5), 1131-1142. doi:10.1002/jimd.12238

Seah, J. Y. H., Chew, W. S., Torta, F., Khoo, C. M., Wenk, M. R., Herr, D. R., . . . van Dam, R. M. (2020). Plasma sphingolipids and risk of cardiovascular diseases: a large-scale lipidomic analysis. *METABOLOMICS*, *16*(9), 12 pages. doi:10.1007/s11306-020-01709-8

Peng, B., Kopczynski, D., Pratt, B. S., Ejsing, C. S., Burla, B., Hermansson, M., . . . Ahrends, R. (2020). LipidCreator workbench to probe the lipidomic landscape. *NATURE COMMUNICATIONS*, *11*(1), 14 pages. doi:10.1038/s41467-020-15960-z

Gao, L., Cazenave-Gassiot, A., Burla, B., Wenk, M. R., & Torta, F. (2020). Dual mass spectrometry as a tool to improve annotation and quantification in targeted plasma lipidomics. *METABOLOMICS*, *16*(5), 12 pages. doi:10.1007/s11306-020-01677-z

Gupta, A., Muralidharan, S., Torta, F., Wenk, M. R., & Wohland, T. (2020). Long acyl chain ceramides govern cholesterol and cytoskeleton dependence of membrane outer leaflet dynamics. *BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES*, *1862*(3), 13 pages. doi:10.1016/j.bbamem.2019.183153

Wang, W., Xiang, P., Chew, W. S., Torta, F., Bandla, A., Lopez, V., . . . Herr, D. R. (2020). Activation of sphingosine 1-phosphate receptor 2 attenuates chemotherapy-induced neuropathy. *JOURNAL OF BIOLOGICAL CHEMISTRY*, *295*(4), 1143-1152. doi:10.1074/jbc.RA119.011699

Chai, J. -F., Raichur, S., Khor, I. W., Torta, F., Chew, W. S., Herr, D. R., . . . Sim, X. (2020). Associations with metabolites in Chinese suggest new metabolic roles in Alzheimer's and Parkinson's diseases. *HUMAN MOLECULAR GENETICS*, *29*(2), 189-201. doi:10.1093/hmg/ddz246

Tran, T. M., Ma, Z., Triebl, A., Nath, S., Cheng, Y., Gong, B. Q., . . . Miao, Y. (2020). The bacterial quorum sensing signal DSF hijacks Arabidopsis thaliana sterol biosynthesis to suppress plant innate immunity. *Life Science Alliance*, *3*(10). doi:10.26508/LSA.202000720

Kutuzova, S., Colaianni, P., Röst, H., Sachsenberg, T., Alka, O., Kohlbacher, O., . . . Mccloskey, D. (2020). SmartPeak Automates Targeted and Quantitative Metabolomics Data Processing. *Analytical Chemistry*. doi:10.1021/acs.analchem.0c03421

Triebl, A., Burla, B., Selvalatchmanan, J., Oh, J., Tan, S. H., Chan, M. Y., . . . Wenk, M. R. (2020). Shared reference materials harmonize lipidomics across MS-based detection platforms and laboratories[S]. *JOURNAL OF LIPID RESEARCH*, *61*(1), 105-115. doi:10.1194/jlr.D119000393

Ambaw, Y. A., Timbadia, D. P., Raida, M., Torta, F., Wenk, M. R., & Tong, L. (2020). Profile of tear lipid mediator as a biomarker of inflammation for meibomian gland dysfunction and ocular surface diseases: Standard operating procedures. *Ocular Surface*. doi:10.1016/j.jtos.2020.09.008

Mohamed, A., Collins, J., Jiang, H., Molendijk, J., Stoll, T., Torta, F., . . . Hill, M. M. (2020). Concurrent lipidomics and proteomics on malignant plasma cells from multiple myeloma patients: Probing the lipid metabolome. *PLoS ONE*, *15*(1). doi:10.1371/journal.pone.0227455

Kutuzova, S., Colaianni, P., Röst, H., Sachsenberg, T., Alka, O., Kohlbacher, O., . . . McCloskey, D. (n.d.). SmartPeak automates targeted and quantitative metabolomics data processing. doi:10.1101/2020.07.14.202002

FOO JEE LOON, RESEARCH ASSISTANT PROFESSOR

Li, J., Rong, L., Zhao, Y., Li, S., Zhang, C., Xiao, D., . . . Yu, A. (2020). Next-generation metabolic engineering of non-conventional microbial cell factories for carboxylic acid platform chemicals. *Biotechnology Advances*, *43*. doi:10.1016/j.biotechadv.2020.107605

GAN YUNN HWEN, ASSOCIATE PROFESSOR

Zhong, W., Shi, Z., Mahadevegowda, S. H., Liu, B., Zhang, K., Koh, C. H., . . . Chan-Park, M. B. (2020). Designer broad-spectrum poly-imidazolium antibiotics. *Proceedings of the National Academy of Sciences of the United States of America*, *117*(49), 31376-31385. doi:10.1073/pnas.2011024117

Chng, K. R., Ghosh, T. S., Tan, Y. H., Nandi, T., Lee, I. R., Ng, A. H. Q., . . . Nagarajan, N. (2020). Metagenome-wide association analysis identifies microbial determinants of post-antibiotic ecological recovery in the gut. *Nature Ecology and Evolution*, *4*(9), 1256-1267. doi:10.1038/s41559-020-1236-0

Hoong, B. Y. D., Gan, Y. H., Liu, H., & Chen, E. S. (2020). cGAS-STING pathway in oncogenesis and cancer therapeutics. *Oncotarget*, *11*(30), 2930-2955. doi:10.18632/oncotarget.27673

Ku, J. W. K., Chen, Y., Lim, B. J. W., Gasser, S., Crasta, K. C., & Gan, Y. -H. (2020). Bacterial-induced cell fusion is a danger signal triggering cGAS-STING pathway via micronuclei formation. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, *117*(27), 15923-15934. doi:10.1073/pnas.2006908117

Qi, G., Hu, F., Kenry., Chong, K. C., Wu, M., Gan, Y. H., & Liu, B. (2020). Bacterium-Templated Polymer for Self-Selective Ablation of Multidrug-Resistant Bacteria. *ADVANCED FUNCTIONAL MATERIALS*, *30*(31), 10 pages. doi:10.1002/adfm.202001338

Si, Z., Lim, H. W., Tay, M. Y. F., Du, Y., Ruan, L., Qiu, H., . . . Pethe, K. (2020). A Glycosylated Cationic Block Poly(β-peptide) Reverses Intrinsic Antibiotic Resistance in All ESKAPE Gram-Negative Bacteria. *Angewandte Chemie - International Edition*, *59*(17), 6819-6826. doi:10.1002/anie.201914304

... continue

... GAN YUNN HWEN, ASSOCIATE PROFESSOR

Tan, Y. H., Chen, Y., Chu, W. H. W., Sham, L. -T., & Gan, Y. -H. (2020). Cell envelope defects of different capsule-null mutants in K1 hypervirulent Klebsiella pneumoniae can affect bacterial pathogenesis. *MOLECULAR MICROBIOLOGY*, *113*(5), 889-905. doi:10.1111/mmi.14447

Chen, Y., Marimuthu, K., Teo, J., Venkatachalam, I., Cherng, B. P. Z., de Wang, L., . . . Gan, Y. H. (2020). Acquisition of plasmid with carbapenem-resistance gene bla_{KPC2} in Hypervirulent Klebsiella pneumoniae, Singapore. *Emerging Infectious Diseases*, *26*(3), 549-559. doi:10.3201/eid2603.191230

HONG WANJIN, PROFESSOR

Adihou, H., Gopalakrishnan, R., Förster, T., Guéret, S. M., Gasper, R., Geschwindner, S., . . . Waldmann, H. (2020). A protein tertiary structure mimetic modulator of the Hippo signalling pathway. *Nature Communications*, *11*(1). doi:10.1038/s41467-020-19224-8

Liu, C., Teo, M. H. Y., Pek, S. L. T., Wu, X., Leong, M. L., Tay, H. M., . . . Wang, X. (2020). A multifunctional role of leucine-rich a-2-glycoprotein 1 in cutaneous wound healing under normal and diabetic conditions. *Diabetes*, *69*(11), 2467-2480. doi:10.2337/db20-0585

Karatas, H., Akbarzadeh, M., Adihou, H., Hahne, G., Pobbati, A. V., Yihui Ng, E., . . . Waldmann, H. (2020). Discovery of Covalent Inhibitors Targeting the Transcriptional Enhanced Associate Domain Central Pocket. *Journal of Medicinal Chemistry*, *63*(20), 11972-11989. doi:10.1021/acs.jmedchem.0c01275

Wang, D., Yang, Y., Wang, Y., Proulle, V., Andreasen, P. A., Hong, W., . . . Xu, P. (2020). Embelin ameliorated sepsis-induced disseminated intravascular coagulation intensities by simultaneously suppressing inflammation and thrombosis. *Biomedicine and Pharmacotherapy*, *130*. doi:10.1016/j.biopha.2020.110528

Wang, D., Liu, W., Wang, L., Wang, Y., Liao, C. K., Chen, J., . . . Xu, P. (2020). Suppression of cancer proliferation and metastasis by a versatile nanomedicine integrating photodynamic therapy, photothermal therapy, and enzyme inhibition. *Acta Biomaterialia*, *113*, 541-553. doi:10.1016/j.actbio.2020.06.021

Yang, D., Wei, G., Long, F., Nie, H., Tian, X., Qu, L., . . . Zhu, Y. Z. (2020). Histone methyltransferase Smyd3 is a new regulator for vascular senescence. *Aging Cell*, *19*(9). doi:10.1111/acel.13212

Lim, S. K., Tabatabaeian, H., Lu, S. Y., Kang, S. A., Sundaram, G. M., Sampath, P., . . . Lim, Y. P. (2020). Hippo/MST blocks breast cancer by downregulating WBP2 oncogene expression via miRNA processor Dicer. *Cell Death and Disease*, *11*(8). doi:10.1038/s41419-020-02901-3

Zheng, Z., Monteil, V. M., Maurer-Stroh, S., Yew, C. W., Leong, C., Mohd-Ismail, N. K., . . . Tan, Y. -J. (2020). Monoclonal antibodies for the S2 subunit of spike of SARS-CoV-1 cross-react with the newly-emerged SARS-CoV-2. *EUROSURVEILLANCE*, *25*(28), 19-28. doi:10.2807/1560-7917.ES.2020.25.28.2000291

Chakraborty, S., & Hong, W. (2020). Oncogenetic engagement with mechanosensing. *Nature Materials*, *19*(7), 707-709. doi:10.1038/s41563-020-0700-1

Lam, H. Y., Arumugam, S., Gyu, H., Wang, C. C., Jung, S., St John, A. L., . . . Tergaonkar, V. (2020). ELKS1 controls mast cell degranulation by regulating the transcription of Stxbp2 and Syntaxin 4 via Kdm2b stabilization. *SCIENCE ADVANCES*, *6*(31), 12 pages. doi:10.1126/sciadv.abb2497

Hong, W. (2020). Combating COVID-19 with Chloroquine. *Journal of molecular cell biology*, *12*(4), 249-250. doi:10.1093/jmcb/mjaa015

Gole, L., Yeong, J., Lim, J. C. T., Ong, K. H., Han, H., Thike, A. A., . . . Tan, P. H. (2020). Quantitative stain-free imaging and digital profiling of collagen structure reveal diverse survival of triple negative breast cancer patients. *BREAST CANCER RESEARCH*, *22*(1), 13 pages. doi:10.1186/s13058-020-01282-x

Zhang, S., Huang, F., Tian, W., Lai, J., Qian, L., Hong, W., . . . Li, L. C. (2020). Andrographolide promotes pancreatic duct cells differentiation into insulin-producing cells by targeting PDX-1. *Biochemical Pharmacology*, *174*. doi:10.1016/j.bcp.2019.113785

Lin, H., Xu, L., Yu, S., Hong, W., Huang, M., & Xu, P. (2020). Therapeutics targeting the fibrinolytic system. *Experimental and Molecular Medicine*, *52*(3), 367-379. doi:10.1038/s12276-020-0397-x

Chakraborty, S., Njah, K., & Hong, W. (2020). Agrin Mediates Angiogenesis in the Tumor Microenvironment. *Trends in Cancer*, *6*(2), 81-85. doi:10.1016/j.trecan.2019.12.002

Chin, T. -M., Boopathy, G. T. K., Man, E. P. S., Clohessy, J. G., Csizmadia, E., Quinlan, M. P., . . . Tenen, D. G. (2020). Targeting microtubules sensitizes drug resistant lung cancer cells to lysosomal pathway inhibitors. *THERANOSTICS*, *10*(6), 2727-2743. doi:10.7150/thno.38729

Zhou, Y., Liu, Z., Zhang, S., Zhuang, R., Liu, H., Liu, X., . . . Wang, T. (2020). RILP restricts insulin secretion through mediating lysosomal degradation of proinsulin. *Diabetes*, *69*(1), 67-82. doi:10.2337/db19-0086

Hu, P., Shang, L., Chen, J., Chen, X., Chen, C., Hong, W., . . . Chen, Z. (2020). A nanometer-sized protease inhibitor for precise cancer diagnosis and treatment. *Journal of Materials Chemistry B*, *8*(3), 504-514. doi:10.1039/c9tb02081k

Pobbati, A. V., & Hong, W. (2020). A combat with the YAP/TAZ-TEAD oncoproteins for cancer therapy. *Theranostics*, *10*(8), 3622-3635. doi:10.7150/thno.40889

HWANG IN YOUNG, RESEARCH ASSISTANT PROFESSOR

Aggarwal, N., Breedon, A. M. E., Davis, C. M., Hwang, I. Y., & Chang, M. W. (2020). Engineering probiotics for therapeutic applications: recent examples and translational outlook. *Current Opinion in Biotechnology*, *65*, 171-179. doi:10.1016/j.copbio.2020.02.016

Sun, T., Kwok, W. C., Chua, K. J., Lo, T. -M., Potter, J., Yew, W. S., . . . Chang, M. W. (2020). Development of a Proline-Based Selection System for Reliable Genetic Engineering in Chinese Hamster Ovary Cells. *ACS SYNTHETIC BIOLOGY*, *9*(7), 1864-1872. doi:10.1021/acssynbio.0c00221

Tham, E. H., Koh, E., Common, J. E. A., & Hwang, I. Y. (2020). Biotherapeutic Approaches in Atopic Dermatitis. *BIOTECHNOLOGY JOURNAL*, *15*(10), 10 pages. doi:10.1002/biot.201900322

Hwang, I. Y., & Chang, M. W. (2020). Engineering commensal bacteria to rewire host-microbiome interactions. *CURRENT OPINION IN BIOTECHNOLOGY*, *62*, 116-122. doi:10.1016/j.copbio.2019.09.007

JIANG JIANMING, ASSISTANT PROFESOR

Chen, X. S., Jiang, J. M., Sun, P. D., Zhang, Z. F., & Ren, H. L. (2020). How the clinical dosage of bone cement biomechanically affects adjacent vertebrae. *Journal of Orthopaedic Surgery and Research*, *15*(1). doi:10.1186/s13018-020-01906-0

Lavenniah, A., Tuan, D. A. L., Li, Y. P., Lim, T. B., Jiang, J., Ackers-Johnson, M., & Foo, R. S. -Y. (2020). Engineered Circular RNA Sponges Act as miRNA Inhibitors to Attenuate Pressure Overload-Induced Cardiac Hypertrophy. *MOLECULAR THERAPY*, *28*(6), 1506-1517. doi:10.1016/j.ymthe.2020.04.006

LEE ZHENG WEI, TEACHING ASSISTANT

Lee, Z. -W., & Yeong, F. M. (2020). Online conferencing platform provides opportunity for reciprocal teaching. *BIOCHEMISTRY AND MOLECULAR BIOLOGY EDUCATION*, *48*(5), 471-472. doi:10.1002/bmb.21405

LIM YOON PIN, ASSISTANT PROFESSOR

Lim, S. K., Tabatabaeian, H., Lu, S. Y., Kang, S. A., Sundaram, G. M., Sampath, P., . . . Lim, Y. P. (2020). Hippo/MST blocks breast cancer by downregulating WBP2 oncogene expression via miRNA processor Dicer. *Cell Death and Disease*, *11*(8). doi:10.1038/s41419-020-02901-3

Tabatabaeian, H., Rao, A., Ramos, A., Chu, T., Sudol, M., & Lim, Y. P. (2020). The emerging roles of WBP2 oncogene in human cancers. *Oncogene*, *39*(24), 4621-4635. doi:10.1038/s41388-020-1318-0

LING HUA, RESEARCH ASSISTANT PROFESSOR

Chen, B., Foo, J. L., Ling, H., & Chang, M. W. (2020). Mechanism-Driven Metabolic Engineering for Bio-Based Production of Free R-Lipoic Acid in Saccharomyces cerevisiae Mitochondria. *Frontiers in Bioengineering and Biotechnology*, *8*. doi:10.3389/fbioe.2020.00965

Hossain, G. S., Saini, M., Miyake, R., Ling, H., & Chang, M. W. (2020). Genetic Biosensor Design for Natural Product Biosynthesis in Microorganisms. *TRENDS IN BIOTECHNOLOGY*, *38*(7), 797-810. doi:10.1016/j.tibtech.2020.03.013

Ng, T. -K., Yu, A. -Q., Ling, H., Juwono, N. K. P., Choi, W. J., Leong, S. S. J., & Chang, M. W. (2020). Engineering Yarrowia lipolytica towards food waste bioremediation: Production of fatty acid ethyl esters from vegetable cooking oil. *JOURNAL OF BIOSCIENCE AND BIOENGINEERING*, *129*(1), 31-40. doi:10.1016/j.jbiosc.2019.06.009

LONG YUN CHAU, SENIOR LECTURER

Novera, W., Lee, Z. W., Nin, D. S., Dai, M. Z. Y., Binte Idres, S., Wu, H., . . . Deng, L. W. (2020). Cysteine Deprivation Targets Ovarian Clear Cell Carcinoma Via Oxidative Stress and Iron-Sulfur Cluster Biogenesis Deficit. *Antioxidants and Redox Signaling*, *33*(17), 1191-1208. doi:10.1089/ars.2019.7850

MARKUS WENK, PROFESSOR

Ambaw, Y. A., Fuchs, D., Raida, M., Mazengia, N. T., Torta, F., Wheelock, C. E., . . . Tong, L. (2020). Changes of tear lipid mediators after eyelid warming or thermopulsation treatment for meibomian gland dysfunction. *Prostaglandins and Other Lipid Mediators*, *151*. doi:10.1016/j.prostaglandins.2020.106474

Seow, W. J., Low, D. Y., Pan, W. -C., Gunther, S. H., Sim, X., Torta, F., . . . van Dam, R. M. (2020). Coffee, Black Tea, and Green Tea Consumption in Relation to Plasma Metabolites in an Asian Population. *MOLECULAR NUTRITION & FOOD RESEARCH*, 9 pages. doi:10.1002/mnfr.202000527

Benke, P. I., Burla, B., Ekroos, K., Wenk, M. R., & Torta, F. (2020). Impact of ion suppression by sample cap liners in lipidomics. *Analytica Chimica Acta*, *1137*, 136-142. doi:10.1016/j.aca.2020.09.055

Mondino, S., Vázquez, C. L., Cabruja, M., Sala, C., Cazenave-Gassiot, A., Blanco, F. C., . . . Gago, G. (2020). FasR Regulates Fatty Acid Biosynthesis and Is Essential for Virulence of Mycobacterium tuberculosis. *Frontiers in Microbiology*, *11*. doi:10.3389/fmicb.2020.586285

Teo, G., Chew, W. S., Burla, B. J., Herr, D., Tai, E. S., Wenk, M. R., . . . Choi, H. (2020). MRMkit: Automated Data Processing for Large-Scale Targeted Metabolomics Analysis. *ANALYTICAL CHEMISTRY*, *92*(20), 13677-13682. doi:10.1021/acs.analchem.0c03060

Ambaw, Y. A., Wong, T., Chong, R., Ah, H., Ji, S., Raida, M., . . . Tong, L. (2020). Change of tear lipid mediators in a post-trabeculectomy cohort. *Ocular Surface*, *18*(4), 565-574. doi:10.1016/j.jtos.2020.06.004

Chua, X. Y., Chai, Y. L., Chew, W. S., Chong, J. R., Ang, H. L., Xiang, P., . . . Lai, M. K. P. (2020). Immunomodulatory sphingosine-1-phosphates as plasma biomarkers of Alzheimer's disease and vascular cognitive impairment. *ALZHEIMERS RESEARCH & THERAPY*, *12*(1), 12 pages. doi:10.1186/s13195-020-00694-3

Zhao, P., Liu, I. D., Hodgin, J. B., Benke, P. I., Selva, J., Torta, F., . . . Saba, J. D. (2020). Responsiveness of sphingosine phosphate lyase insufficiency syndrome to vitaminB6cofactor supplementation. *JOURNAL OF INHERITED METABOLIC DISEASE*, *43*(5), 1131-1142. doi:10.1002/jimd.12238

Seah, J. Y. H., Chew, W. S., Torta, F., Khoo, C. M., Wenk, M. R., Herr, D. R., . . . van Dam, R. M. (2020). Plasma sphingolipids and risk of cardiovascular diseases: a large-scale lipidomic analysis. *METABOLOMICS*, *16*(9), 12 pages. doi:10.1007/s11306-020-01709-8

Peng, B., Kopczynski, D., Pratt, B. S., Ejsing, C. S., Burla, B., Hermansson, M., . . . Ahrends, R. (2020). LipidCreator workbench to probe the lipidomic landscape. *NATURE COMMUNICATIONS*, *11*(1), 14 pages. doi:10.1038/s41467-020-15960-z

Gao, L., Cazenave-Gassiot, A., Burla, B., Wenk, M. R., & Torta, F. (2020). Dual mass spectrometry as a tool to improve annotation and quantification in targeted plasma lipidomics. *METABOLOMICS*, *16*(5), 12 pages. doi:10.1007/s11306-020-01677-z

Santa-Marinha, L., Castanho, I., Silva, R. R., Bravo, F. V., Miranda, A. M., Meira, T., . . . Oliveira, T. G. (2020). Phospholipase D1 Ablation Disrupts Mouse Longitudinal Hippocampal Axis Organization and Functioning. *Cell Reports*, *30*(12), 4197-4208.e6. doi:10.1016/j.celrep.2020.02.102

Gupta, A., Muralidharan, S., Torta, F., Wenk, M. R., & Wohland, T. (2020). Long acyl chain ceramides govern cholesterol and cytoskeleton dependence of membrane outer leaflet dynamics. *BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES*, *1862*(3), 13 pages. doi:10.1016/j.bbamem.2019.183153

Bhardwaj, S., Jolander, L. S. -H., Wenk, M. R., Oliver, J. C., Nijhout, H. F., & Monteiro, A. (2020). Origin of the mechanism of phenotypic plasticity in satyrid butterfly eyespots. *ELIFE*, *9*, 13 pages. doi:10.7554/eLife.49544

... continue

... MARKUS WENK, PROFESSOR

Wang, W., Xiang, P., Chew, W. S., Torta, F., Bandla, A., Lopez, V., . . . Herr, D. R. (2020). Activation of sphingosine 1-phosphate receptor 2 attenuates chemotherapy-induced neuropathy. *JOURNAL OF BIOLOGICAL CHEMISTRY*, *295*(4), 1143-1152. doi:10.1074/jbc.RA119.011699

Chai, J. -F., Raichur, S., Khor, I. W., Torta, F., Chew, W. S., Herr, D. R., . . . Sim, X. (2020). Associations with metabolites in Chinese suggest new metabolic roles in Alzheimer's and Parkinson's diseases. *HUMAN MOLECULAR GENETICS*, *29*(2), 189-201. doi:10.1093/hmg/ddz246

Tran, T. M., Ma, Z., Triebl, A., Nath, S., Cheng, Y., Gong, B. Q., . . . Miao, Y. (2020). The bacterial quorum sensing signal DSF hijacks Arabidopsis thaliana sterol biosynthesis to suppress plant innate immunity. *Life Science Alliance*, *3*(10). doi:10.26508/LSA.202000720

Triebl, A., Burla, B., Selvalatchmanan, J., Oh, J., Tan, S. H., Chan, M. Y., . . . Wenk, M. R. (2020). Shared reference materials harmonize lipidomics across MS-based detection platforms and laboratories[S]. *JOURNAL OF LIPID RESEARCH*, *61*(1), 105-115. doi:10.1194/jlr.D119000393

Ambaw, Y. A., Timbadia, D. P., Raida, M., Torta, F., Wenk, M. R., & Tong, L. (2020). Profile of tear lipid mediator as a biomarker of inflammation for meibomian gland dysfunction and ocular surface diseases: Standard operating procedures. *Ocular Surface*. doi:10.1016/j.jtos.2020.09.008

Pedrini, S., Hone, E., Gupta, V. B., James, I., Teimouri, E., Bush, A. I., . . . Martins, R. N. (2020). Plasma High Density Lipoprotein Small Subclass is Reduced in Alzheimer's Disease Patients and Correlates with Cognitive Performance. *Journal of Alzheimer's Disease*, *77*(2), 733-744. doi:10.3233/JAD-200291

Mohamed, A., Collins, J., Jiang, H., Molendijk, J., Stoll, T., Torta, F., . . . Hill, M. M. (2020). Concurrent lipidomics and proteomics on malignant plasma cells from multiple myeloma patients: Probing the lipid metabolome. *PLoS ONE*, *15*(1). doi:10.1371/journal.pone.0227455

NGUYEN NAM LONG, ASSISTANT PROFESSOR

Tan, S. T., Ramesh, T., Toh, X. R., & Nguyen, L. N. (2020). Emerging roles of lysophospholipids in health and disease. *Progress in Lipid Research*, *80*. doi:10.1016/j.plipres.2020.101068

Kalailingam, P., Wang, K. Q., Toh, X. R., Nguyen, T. Q., Chandrakanthan, M., Hasan, Z., . . . Nguyen, L. N. (2020). Deficiency of MFSD7c results in microcephaly-associated vasculopathy in Fowler syndrome. *JOURNAL OF CLINICAL INVESTIGATION*, *130*(8), 4081-4093. doi:10.1172/JCI136727

SUDHAKAR JHA, ASSISTANT PROFESSOR

Numata, A., Kwok, H. S., Zhou, Q. -L., Li, J., Tirado-Magallanes, R., Angarica, V. E., . . . Tenen, D. G. (2020). Lysine acetyltransferase Tip60 is required for hematopoietic stem cell maintenance. *BLOOD*, *136*(15), 1735-1747. doi:10.1182/blood.2019001279

Jadhav, S. P., Kumari, N., Ng, L., Tan, P. F., Yeo-Teh, N. S. L., Goh, Y., . . . Jha, S. (2020). circASXL1-1 regulates BAP1 deubiquitinase activity in leukemia. *HAEMATOLOGICA*, *105*(7), E343-E348. doi:10.3324/haematol.2019.225961

Zhang, X. Y., Rajagopalan, D., Chung, T. -H., Hooi, L., Toh, T. B., Tian, J. S., . . . Chow, E. K. -H. (2020). Frequent upregulation of G9a promotes RelB-dependent proliferation and survival in multiple myeloma. *EXPERIMENTAL HEMATOLOGY & ONCOLOGY*, *9*(1), 17 pages. doi:10.1186/s40164-020-00164-4

Lin, Q. X. X., Thieffry, D., Jha, S., & Benoukraf, T. (2020). TFregulomeR reveals transcription factors' context-specific features and functions. *NUCLEIC ACIDS RESEARCH*, *48*(2), 12 pages. doi:10.1093/nar/gkz1088

Lee, K. K., Rajagopalan, D., Bhatia, S. S., Chng, W. J., & Jha, S. (n.d.). The oncogenic E3 ligase TRIP12 suppresses epithelial-mesenchymal transition (EMT) and metastasis-related processes through ZEB1/2. doi:10.1101/2020.11.04.368209

TANG BOR LUEN, ASSOCIATE PROFESSOR

Tang, B. L. (2020). Nogo-A and the regulation of neurotransmitter receptors. *NEURAL REGENERATION RESEARCH*, *15*(11), 2037-2038. doi:10.4103/1673-5374.282250

Tang, B. L. (2020). SNAREs and developmental disorders. *JOURNAL OF CELLULAR PHYSIOLOGY*, 23 pages. doi:10.1002/jcp.30067

Tang, B. L. (2020). Trafficking Unconventionally via UPS. *CELLS*, *9*(9), 3 pages. doi:10.3390/cells9092009

Tang, B. L. (2020). RAB39B's role in membrane traffic, autophagy, and associated neuropathology. *JOURNAL OF CELLULAR PHYSIOLOGY*, 14 pages. doi:10.1002/jcp.29962

Yeo-Teh, N. S. L., & Tang, B. L. (2020). Letter to the editor: Response to An "alarming" and "exceptionally high" rate of COVID-19 retractions? By Oransky. *ACCOUNTABILITY IN RESEARCH-POLICIES AND QUALITY ASSURANCE*, 2 pages. doi:10.1080/08989621.2020.1794856

Tang, B. L. (2020). Vesicle transport through interaction with t-SNAREs 1a (Vti1a)'s roles in neurons. *Heliyon*, *6*(8). doi:10.1016/j.heliyon.2020.e04600

Yeo-Teh, N. S. L., & Tang, B. L. (2020). An alarming retraction rate for scientific publications on Coronavirus Disease 2019 (COVID-19). *ACCOUNTABILITY IN RESEARCH-POLICIES AND QUALITY ASSURANCE*, 7 pages. doi:10.1080/08989621.2020.1782203

Tang, B. L. (2020). Neuropathological Mechanisms Associated with Pesticides in Alzheimer's Disease. *TOXICS*, *8*(2), 16 pages. doi:10.3390/toxics8020021

Tang, B. L. (2020). Can Ethics be Based on Science?. *SCIENCE AND ENGINEERING ETHICS*, *26*(3), 1873-1874. doi:10.1007/s11948-019-00127-x

Tang, B. L. (2020). Glucose, glycolysis, and neurodegenerative diseases. *JOURNAL OF CELLULAR PHYSIOLOGY*, *235*(11), 7653-7662. doi:10.1002/jcp.29682

Tang, B. L. (2020). It is the Quality of the Review that Matters. *SCIENCE AND ENGINEERING ETHICS*, *26*(2), 1129-1130. doi:10.1007/s11948-018-0056-y

Tang, B. L. (2020). Could metformin be therapeutically useful in Huntington's disease?. *REVIEWS IN THE NEUROSCIENCES*, *31*(3), 297-317. doi:10.1515/revneuro-2019-0072

Yong, C. Q. Y., Valiyaveetill, S., & Tang, B. L. (2020). Toxicity of Microplastics and Nanoplastics in Mammalian Systems. *INTERNATIONAL JOURNAL OF ENVIRONMENTAL RESEARCH AND PUBLIC HEALTH*, *17*(5), 24 pages. doi:10.3390/ijerph17051509 **... continue**

... TANG BOR LUEN, ASSOCIATE PROFESSOR

Tang, B. L., & Lee, J. S. C. (2020). A Reflective Account of a Research Ethics Course for an Interdisciplinary Cohort of Graduate Students. *SCIENCE AND ENGINEERING ETHICS*, *26*(2), 1089-1105. doi:10.1007/s11948-020-00200-w

Tang, B. L. (2020). Enhancing alpha-secretase Processing for Alzheimer's Disease-A View on SFRP1. *BRAIN SCIENCES*, *10*(2), 15 pages. doi:10.3390/brainsci10020122

Tang, B. L. (2020). The Expanding Therapeutic Potential of Neuronal KCC2. *CELLS*, *9*(1), 15 pages. doi:10.3390/cells9010240

Yeo-Teh, N. S. L., & Tang, B. L. (2020). Research ethics courses as a vaccination against a toxic research environment or culture. *Research Ethics*. doi:10.1177/1747016120926686

Tang, B. L. (2020). Maturing iPSC-Derived Cardiomyocytes. *CELLS*, *9*(1), 3 pages. doi:10.3390/cells9010213

Yong, C. Q. Y., & Tang, B. L. (2020). Cancer-driving mutations and variants of components of the membrane trafficking core machinery. *Life Sciences*. doi:10.1016/j.lfs.2020.118662

Tang, B. L. (2020). Axon regeneration induced by environmental enrichment- epigenetic mechanisms. *NEURAL REGENERATION RESEARCH*, *15*(1), 10-15. doi:10.4103/1673-5374.264440

TAY MEI SIAN YVONNE, ASSISTANT PROFESSOR

Mei, D., Tan, W. S. D., Tay, Y., Mukhopadhyay, A., & Wong, W. S. F. (2020). Therapeutic RNA Strategies for Chronic Obstructive Pulmonary Disease. *TRENDS IN PHARMACOLOGICAL SCIENCES*, *41*(7), 475-486. doi:10.1016/j.tips.2020.04.007

Zhang, B., Babu, K. R., Lim, C. Y., Kwok, Z. H., Li, J., Zhou, S., . . . Tay, Y. (2020). A comprehensive expression landscape of RNA-binding proteins (RBPs) across 16 human cancer types. *RNA Biology*, *17*(2), 211-226. doi:10.1080/15476286.2019.1673657

TEO KEE KEONG ADRIAN, ASSISTANT PROFESSOR

Amirruddin, N. S., Low, B. S. J., Lee, K. O., Tai, E. S., & Teo, A. K. K. (2020). New insights into human beta cell biology using human pluripotent stem cells. *SEMINARS IN CELL & DEVELOPMENTAL BIOLOGY*, *103*, 31-40. doi:10.1016/j.semcdb.2019.11.004

Neo, C. W. Y., Ciaramicoli, L. M., Soetedjo, A. A. P., Teo, A. K. K., & Kang, N. -Y. (2020). A new perspective of probe development for imaging pancreatic beta cell in vivo. *SEMINARS IN CELL & DEVELOPMENTAL BIOLOGY*, *103*, 3-13. doi:10.1016/j.semcdb.2020.01.009

Chan, J. -W., & Teo, A. K. K. (2020). Replicates in stem cell models-How complicated!. *STEM CELLS*, *38*(9), 1055-1059. doi:10.1002/stem.3237

Loo, L. S. W., Soetedjo, A. A. P., Lau, H. H., Ng, N. H. J., Ghosh, S., Nguyen, L., . . . Teo, A. K. K. (2020). BCL-xL/BCL2L1 is a critical anti-apoptotic protein that promotes the survival of differentiating pancreatic cells from human pluripotent stem cells. *CELL DEATH & DISEASE*, *11*(5), 18 pages. doi:10.1038/s41419-020-2589-7

Kang, N. -Y., Lee, J. Y., Lee, S. H., Song, I. H., Hwang, Y. H., Kim, M. J., . . . Chang, Y. -T. (2020). Multimodal Imaging Probe Development for Pancreatic beta Cells: From Fluorescence to PET. *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, *142*(7), 3430-3439. doi:10.1021/jacs.9b11173

Loo, L. S. W., Vethe, H., Soetedjo, A. A. P., Paulo, J. A., Jasmen, J., Jackson, N., . . . Kulkarni, R. N. (2020). Dynamic proteome profiling of human pluripotent stem cell-derived pancreatic progenitors. *STEM CELLS*, *38*(4), 542-555. doi:10.1002/stem.3135

THILO HAGEN, ASSOCIATE PROFESSOR

Oh, S. L., Cheng, L. Y., Zhou, J. F., Henke, W., & Hagen, T. (2020). Galactose 1-phosphate accumulates to high levels in galactose-treated cells due to low GALT activity and absence of product inhibition of GALK. *JOURNAL OF INHERITED METABOLIC DISEASE*, *43*(3), 529-539. doi:10.1002/jimd.12198

TOO HENG-PHON, ASSOCIATE PROFESSOR

Ying, L., Du, L., Zou, R., Shi, L., Zhang, N., Jin, J., . . . Su, D. (2020). Development of a serum miRNA panel for detection of early stage non-small cell lung cancer. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, *117*(40), 25036-25042. doi:10.1073/pnas.2006212117

Tu, G. X. E., Ho, Y. K., Ng, Z. X., Teo, K. J., Yeo, T. T., & Too, H. -P. (2020). A facile and scalable in production non-viral gene engineered mesenchymal stem cells for effective suppression of temozolomide-resistant (TMZR) glioblastoma growth. *STEM CELL RESEARCH & THERAPY*, *11*(1), 15 pages. doi:10.1186/s13287-020-01899-x

Kapoor, R., So, J. B. Y., Zhu, F., Too, H. -P., Yeoh, K. -G., & Yoong, J. S. -Y. (2020). Evaluating the Use of microRNA Blood Tests for Gastric Cancer Screening in a Stratified Population-Level Screening Program: An Early Model-Based Cost-Effectiveness Analysis. *VALUE IN HEALTH*, *23*(9), 1171-1179. doi:10.1016/j.jval.2020.04.1829

Ho, Y. K., Woo, J. Y., Tu, G. X. E., Deng, L. -W., & Too, H. -P. (2020). A highly efficient non-viral process for programming mesenchymal stem cells for gene directed enzyme prodrug cancer therapy. *SCIENTIFIC REPORTS*, *10*(1), 15 pages. doi:10.1038/s41598-020-71224-2

Zhang, C., Chen, X., Orban, A., Shukal, S., Birk, F., Too, H. -P., & Ruehl, M. (2020). Agrocybe aegerita Serves As a Gateway for Identifying Sesquiterpene Biosynthetic Enzymes in Higher Fungi. *ACS CHEMICAL BIOLOGY*, *15*(5), 1268-1277. doi:10.1021/acschembio.0c00155

Zhang, C., Chen, X., & Too, H. -P. (2020). Microbial astaxanthin biosynthesis: recent achievements, challenges, and commercialization outlook. *APPLIED MICROBIOLOGY AND BIOTECHNOLOGY*, *104*(13), 5725-5737. doi:10.1007/s00253-020-10648-2

Chung, K. Y., Quek, J. M., Neo, S. H., & Too, H. P. (2020). Polymer-Based Precipitation of Extracellular Vesicular miRNAs from Serum Improve Gastric Cancer miRNA Biomarker Performance. *JOURNAL OF MOLECULAR DIAGNOSTICS*, *22*(5), 610-618. doi:10.1016/j.jmoldx.2020.01.016

Ho, Y. K., & Too, H. P. (2020). Development of a laboratory scalable process for enhancing lentivirus production by transient transfection of HEK293 adherent cultures. *GENE THERAPY*, 13 pages. doi:10.1038/s41434-020-0152-x

Zhang, C., & Too, H. -P. (2020). Strategies for the Biosynthesis of Pharmaceuticals and Nutraceuticals in Microbes from Renewable Feedstock. *CURRENT MEDICINAL CHEMISTRY*, *27*(28), 4613-4621. doi:10.2174/0929867327666200212121047

So, J. B. Y., Kapoor, R., Zhu, F., Koh, C., Zhou, L., Zou, R., . . . Yeoh, K. G. (2020). Development and validation of a serum microRNA biomarker panel for detecting gastric cancer in a high-risk population. *Gut*. doi:10.1136/gutjnl-2020-322065

XUE BO, RESEARCH ASSISTANT PROFESSOR

Go, M. K., Zhao, L. N., Xue, B., Supekar, S., Robinson, R. C., Fan, H., & Yew, W. S. (2020). Directed Computational Evolution of Quorum-Quenching Lactonases from the Amidohydrolase Superfamily. *STRUCTURE*, *28*(6), 635-+. doi:10.1016/j.str.2020.03.011

YEONG FOONG MAY, ASSOCIATE PROFESSOR

Lee, Z. -W., & Yeong, F. M. (2020). Online conferencing platform provides opportunity for reciprocal teaching. *BIOCHEMISTRY AND MOLECULAR BIOLOGY EDUCATION*, *48*(5), 471-472. doi:10.1002/bmb.21405

Yeong, F. M., Chin, C. F., & Tan, A. L. (2020). Use of a competency framework to explore the benefits of student-generated multiple-choice questions (MCQs) on student engagement. *Pedagogies*, *15*(2), 83-105. doi:10.1080/1554480X.2019.1684924

YEW WEN SHAN, ASSOCIATE PROFESSOR

Chua, J. P. S., Go, M. K., Osothprarop, T., Mcdonald, S., Karabadzhak, A. G., Yew, W. S., . . . Nirantar, S. (2020). Evolving a Thermostable Terminal Deoxynucleotidyl Transferase. *ACS SYNTHETIC BIOLOGY*, *9*(7), 1725-1735. doi:10.1021/acssynbio.0c00078

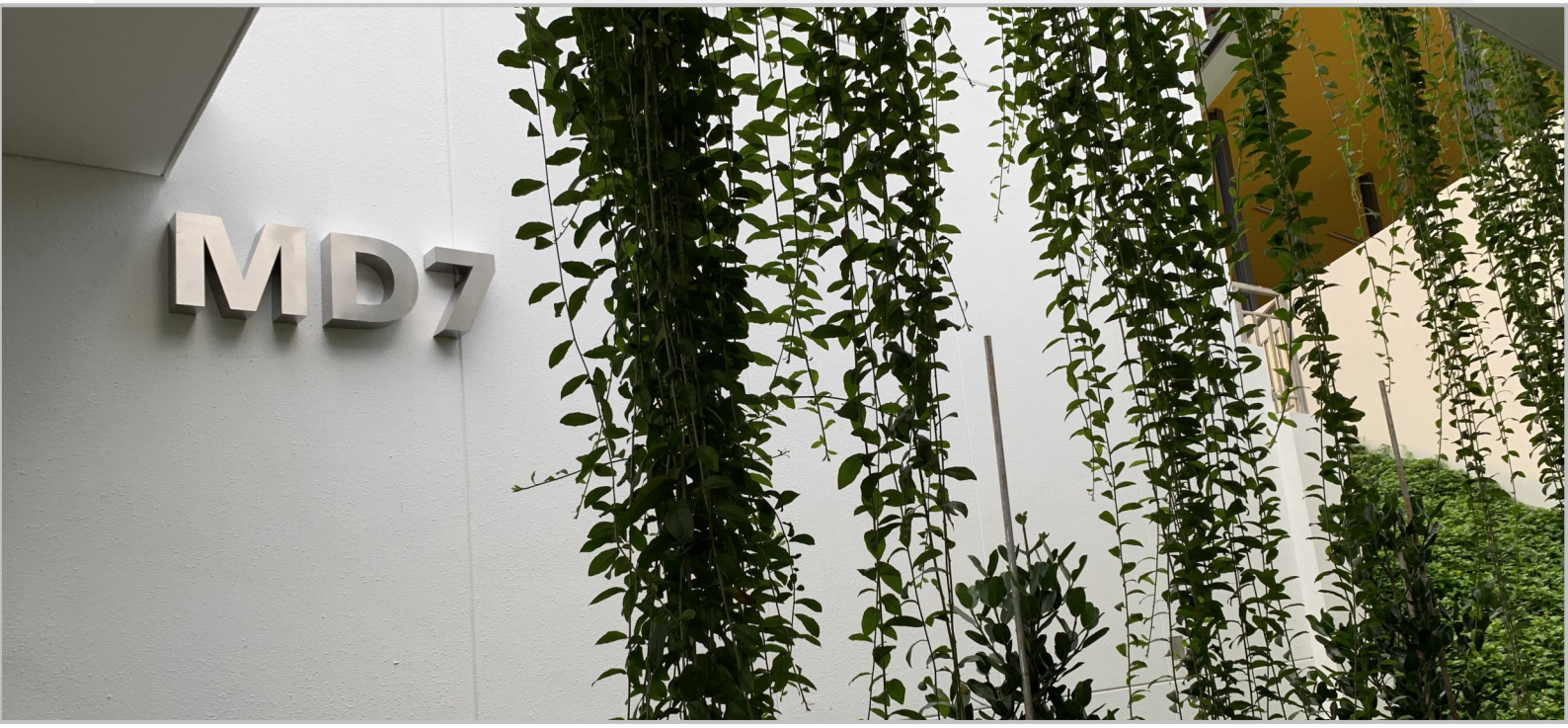
Sun, T., Kwok, W. C., Chua, K. J., Lo, T. -M., Potter, J., Yew, W. S., . . . Chang, M. W. (2020). Development of a Proline-Based Selection System for Reliable Genetic Engineering in Chinese Hamster Ovary Cells. *ACS SYNTHETIC BIOLOGY*, *9*(7), 1864-1872. doi:10.1021/acssynbio.0c00221

Ho, C. L., Tan, H. Q., Chua, K. J., Kang, A., Lim, K. H., Ling, K. L., . . . Chang, M. W. (2020). Engineered commensal microbes for diet-mediated colorectal-cancer chemoprevention (vol 2, pg 27, 2018). *NATURE BIOMEDICAL ENGINEERING*, *4*(7), 754-755. doi:10.1038/s41551-020-0580-3

Go, M. K., Zhao, L. N., Xue, B., Supekar, S., Robinson, R. C., Fan, H., & Yew, W. S. (2020). Directed Computational Evolution of Quorum-Quenching Lactonases from the Amidohydrolase Superfamily. *STRUCTURE*, *28*(6), 635-+. doi:10.1016/j.str.2020.03.011

Liow, L. T., Go, M. K., Chang, M. W., & Yew, W. S. (2020). Toolkit Development for Cyanogenic and Gold Biorecovery Chassis Chromobacterium violaceum. *ACS SYNTHETIC BIOLOGY*, *9*(4), 953-961. doi:10.1021/acssynbio.0c00064

Go, M. K., Lim, K. J. H., & Yew, W. S. (n.d.). Cannabinoid Biosynthesis using Noncanonical Cannabinoid Synthases. doi:10.1101/2020.01.29.926089



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

8 Medical Drive, MD7, Singapore 117596
https://medicine.nus.edu.sg/bch/
+65-6516 3682
bchsec@nus.edu.sg