



University of
Nottingham

UK | CHINA | MALAYSIA



UNMC School of Biosciences Research Bulletin 2018 Vol 2 Issue 2

Introduction

UNMC SoB Research Bulletin 2018 Vol 1 Issue 2 publishes the research activities of the School from April to June 2018 including publication, conference presentation, staff news and research activities including the 29th Intersociety Biochemistry Seminar and School of Biosciences Postgraduate Research Symposium.

It is hoped that these research activities could promote scientific research knowledge sharing and exchange, develop new research collaborations, strengthen existing networking, train the postgraduate and undergraduate research students to become the competent and independent scientists in the near future as well as encourage novel science and technology development to increase the quality of life of humanity.

In this issue, the winner of the 29th Intersociety Biochemistry Seminar, Mr. Adilet Beishenaliev was invited to write a few words of appreciation. Besides, a debrief report of the School of Biosciences Postgraduate Research Symposium prepared by the Secretary of the Symposium, Ms. Sonia Wong is also included.

We hope that the research achievements could inspire you to continue with your hard work to achieve higher milestones in research in the future. Hope you enjoy reading this issue. Thank you.

Yours sincerely,

Ngai Siew Ching (Eunice)

Editor

UNMC SoB Research Bulletin 2018 Vol 1 Issue 2

Committee member of SoB Research Committee

On behalf of SoB Research Committee



April – June 2018...

Publications in School of Biosciences:

1. Chen, J.K.H. and **Lim, Y.S.** (2018) Isolation, identification and characterization of enzyme-producing lactic acid bacteria from traditional fermented foods. *Bioscience Horizons: The International Journal of Student Research*, Volume 11 (hzy004).
2. Foong, SZY, Goh, KM, **Supramaniam, CV**, Ng, DKS (2018) Input-output optimisation model for sustainable oil palm plantation development. *Sustainable Production and Consumption*, Elsevier (accepted for publication)
3. Akram Al Abbar, Norshariza Nordin, **Siew Ching Ngai**, Syahril Abdullah. (2018) Production of lentiviral vector with polycistronic transcripts for reprogramming of mouse fibroblast cells. *Pertanika Journal of Science and Technology* 26 (2): 627 – 640
4. **Ngai Siew Ching**, Wong How Ming Sonia. (2018) Targeted TRAIL resistance for targeted cancer therapy. *Biomedical Journal of Scientific and Technical Research* 4 (1)-2018
5. Chee MY, Lycett GW, **Chin CF**. (2018) Development of a direct transformation method by GFP screening and in vitro whole plant regeneration of *Capsicum frutescens* L. *Electron J Biotechnol* 34.
6. **Chiew Foan Chin** and Hooi Sin Tan (2018) The use of proteomic tools to address challenges faced in clonal propagation of tropical crops through somatic embryogenesis. *Proteomes* 6 (21).
7. Tamunonengiyeofori Lawson, Sean Mayes, Grantley W. Lycett & **Chiew Foan Chin** (2018): Plant Rabs and the role in fruit ripening, *Biotechnology and Genetic Engineering Reviews*.
8. Jindal HM, Ramanathan B, **Le CF**, Gudimella R, Razali R, et al. (2018) Comparative genomic analysis of ten clinical *Streptococcus pneumoniae* collected from a Malaysian hospital reveal 31 new unique drug-resistant SNPs using whole genome sequencing. *J Biomed Sci* 25: 15.
9. Soh FCO, Kee JH, Myo TT, Ying YL, **Le CF**, et al. (2018) Antibacterial activity by ZnO nanorods and ZnO nanodisks: A model used to illustrate “Nanotoxicity Threshold”. *Journal of Industrial and Engineering Chemistry* 62: 333-340.
10. Phong WN, Show PL, **Le CF**, Tao Y, Chang JS, et al. (2018) Improving cell disruption efficiency to facilitate protein release from microalgae using chemical and mechanical integrated method. *Biochemical Engineering Journal* 135: 83-90.



Conferences:

1. **Supramaniam, CV**, Ridzuan NI, Goh KM (2018) Efficacy of organic fertilizer from oil palm industrial waste and indigenous biological control agent to control basal stem rot disease in oil palm. Malaysian International Palm Oil Conference, 25-26 July, Sibu, Sarawak. Poster presentation.
2. Ridzuan, NI, Goh, KM, **Supramaniam CV** (2018) Biological control agents-natural solutions for the control of Ganoderma basal stem rot in oil palm. International Conference on Beneficial Microbes, 31 July -1 August, Kuching Sarawak. Poster presentation (shortlisted for Young Scientist Award)
3. Tan P Y, Amini F and **Mitra S R** (2018) Improved anthropometric and metabolic profile in Malaysian adults – A 6 month dietary intervention with 30% calories from protein. 33rd Scientific Conference of the Nutrition Society of Malaysia at Hotel Istana, Kuala Lumpur 24 - 26 July 2018 (accepted as oral presentation)
4. Abidin Z N, Tay H X and **Mitra S R** (2018) The influence of body fat on the association of serum 25-hydroxy Vitamin D and muscle strength in postmenopausal Malaysian Malay women. 33rd Scientific Conference of the Nutrition Society of Malaysia at Hotel Istana, Kuala Lumpur, 24 - 26 July 2018 (accepted as poster presentation)
5. Sonia How Ming Wong, Chee Mun Fang, Sandy Hwei San Loh, Wei Yang Kong, **Siew Ching Ngai** (2018) The potential of epigenetic drugs, Trichostatin A and Zebularine, in sensitizing the triple negative breast cancer cell line, MDA-MB-231, towards TRAIL apoptosis-inducing effect. 2nd Faculty of Science Postgraduate Research Showcase. 20 June 2018, UNMC.
6. Kong Wei Yang, Amelia Farahani binti Zulkifli, Ton Nu Quy Thien, Sophia Sok Ping Meow, **Ngai Siew Ching** (2018) The anti-cancer effects of Zebularine and Scriptaid on breast cancer cells. 2nd Faculty of Science Postgraduate Research Showcase. 20 June 2018, UNMC.
7. Tamunonengiyeofori Lawson, Grantley W. Lycett, Sean Mayes, Asgar Alia and **Chiew-Foan Chin** (2018) A transcriptomic analysis on fruit ripening in mango (*Mangifera indica* var. Chokanan). 2nd Faculty of Science Postgraduate Research Showcase. 20 June 2018, UNMC.



Staff News:

1. **Christina Supramaniam** meet with Dr Mike Salter from AB Agri, Associated British Foods and CFF on 12 June 2018 for potential waste feedstock for protein source.
2. On 13 June 2018, **Christina Supramaniam**, Dr Niall McNamara and Dr Dafydd Elias of CEH went for a field trip at Tg Karang, Selangor for soil fertility in relation to Ganoderma infections in peatland.
3. **Christina Supramaniam** collaborate with WildAsia.org in Air Kuning, Perak for a workshop on sustainable palm oil production for small holders to be held on 27-29 July 2018.
4. **Asgar Ali** appointed as a member of the Scientific committee for symposium “Strategies and Technologies to Maintain Quality and Reduce Postharvest Losses” organized under International Horticultural Congress 2018 (Turkey).
5. **Asgar Ali** appointed as an External Examiner for Four PG students from UPM during April to June 2018.
6. **Eunice Ngai** has been invited to be a judge in the 29th Intervarsity Biochemistry Seminar held in Taylor’s University Lakeside Campus on 12th May 2018.

Research Activities:

1. The 29th Intervarsity Biochemistry Seminar was held on 12th May 2018 in Taylor’s University Lakeside Campus. Three undergraduate students from the School of Biosciences presented at the Seminar. Mr. Adilet Beishenaliev and Ms. Teoh Ee Yang who were under the supervision of Prof. Sandy Loh and Dr. Chin Chiew Foan respectively, presented orally at the Seminar. Ms. Goh Chin Yee who was under supervision of Prof. Sandy Loh presented by poster. Adilet stood out and won the Best Oral Presentation.
 2. The School of Biosciences Postgraduate Research Symposium was held on 5th June 2018 in the Great Hall, UNMC. This is an annual event of the School as part of the School annual review for the postgraduate research students to present their annual report. Besides oral presentation, there was poster display to showcase the School research. The Symposium was organised by the postgraduate research students chaired by Ms. Melissa Kam and advised by Dr. Eunice Ngai. The event went well with very good participation of a total of 60 attendees. Besides, a total of RM500 sponsorship was secured which was sponsored by Nano Life Quest Sdn. Bhd. and Synergy Scientific Sdn. Bhd.
-

Words of Appreciation from Adilet, the Winner of the Best Oral Presenter

"On May 12, I was honoured to participate in 29th Intervarsity Biochemistry Seminar held in Taylor's University Lakeside Campus. I am grateful to University of Nottingham for funding my Final Year Project, and giving me the opportunity to represent the university in the event of such caliber. I also would like to thank my supervisors - Prof. Sandy Loh and Dr. Lim Siew Shee - for training and guiding me throughout my entire project."

Written by: Adilet Beishenaliev

Best Oral Presenter, 29th Intervarsity Biochemistry Seminar



The photo was taken at the end of the 29th Intervarsity Biochemistry Seminar. Three undergraduate students from the School of Biosciences participated in the Seminar as presenters.



The winner of the Best Oral Presenter, Mr. Adilet Beishenaliev. Adilet's excellent performance has shined the name of the University of Nottingham Malaysia Campus at the Seminar.

Debrief Report of the School of Biosciences Postgraduate Research Symposium

On the 5th June 2018, a beautiful Wednesday morning, postgraduate students from the School of Biosciences were gathered at the Great Hall of the University of Nottingham Malaysia to present their research findings on an annual platform of the School of Biosciences Postgraduate Research Symposium. This year's symposium was an inaugural one organized by four postgraduate students and advised by Dr. Eunice Ngai. From as early as 9.30 a.m., the registration booth was all set to welcome the arrival of guests, academic staffs, members of the Crops for the Future Research Centre (CFFRC), Sime Darby and Malaysian Palm Oil Board (MPOB), presenters as well as audience. Apart from sweets, the symposium participants were also well-served with nutritious breakfast consisting of milk cereal, pasta and sandwiches as we believe a full stomach makes a happy heart. Besides, both the silver and bronze sponsors, Synergy Scientific and Nano Life Quest, have also pitched their booths to showcase their products in this annual event.

At 9 a.m. sharp, all audiences were settled in the Great Hall in wait of the inauguration of the symposium. The emcee of the day, Ms. Sonia Wong, has kicked start the event by introducing the



sponsors and thanking them for their contribution in making the symposium a success. Thereafter, the Associate Dean of Research, Prof. Nashiru Billa, and the Head of School of Biosciences, Dr. Winnie Yap have inaugurated the event by giving their welcoming speech intertwined with several words of encouragement for the fellow presenters.

A total of 13 presenters have their work laid out on meticulously yet creatively designed power point slides to be understood and questioned by audience of the floor from 9.30 a.m. till 4 p.m. with an hour of lunch break in between. Both the presenters and the audience were benefited from the critical and fruitful discussion on research ideas. The symposium ended by the giving of the certification of appreciation to the symposium organizing committee and a short inspirational speech by the emcee. *"Wisdom will enter your heart and knowledge will be pleasant to your soul."* With this inspirational sentence, the symposium was elegantly adjourned at 4.30 p.m.

Written by: Sonia Wong

Secretary of the School of Biosciences Postgraduate Research Symposium



The photo was taken during the School of Biosciences Postgraduate Research Symposium held on 5th June 2018 in the Great Hall, UNMC.



Some of the organising committees, Nur Izzati Binti Ridzuan, Sonia Wong and Kong Wei Yang chaired by Melisa Kam.