

ACADEMIC ACTIVITIES

Publication(s) of the week

1. Verma, A., Lam, Y. M., Leung, Y. C., Hu, X., Chen, X., Cheung, E., and Tam, K. Y. (2018) Combined use of arginase and dichloroacetate exhibits anti-proliferative effects in triple negative breast cancer cells. *J Pharm Pharmacol*
2. Wang, Y. Y., Xiao, L., Rao, W. W., Chai, J. X., Zhang, S. F., Ng, C. H., Ungvari, G. S., Zhu, H., and Xiang, Y. T. (2018) The prevalence of depressive symptoms in 'left-behind children' in China: a meta-analysis of comparative studies and epidemiological surveys. *J Affect Disord* **244**, 209-216
3. Zhu, B., Pardeshi, L., Chen, Y., and Ge, W. (2018) Transcriptomic Analysis for Differentially Expressed Genes in Ovarian Follicle Activation in the Zebrafish. *Front Endocrinol (Lausanne)* **9**, 593

ACADEMIC ACTIVITIES

Seminar Series

The interconnected roles between DNA repair, NAD⁺, and mitophagy in aging and neurodegeneration - Prof. Evandro F. FANG

Prof. Evandro F. FANG, Assistant Professor of the Department of Clinical Molecular Biology, University of Oslo visited FHS and shared his research findings on the interconnected roles between DNA repair, NAD⁺, and mitophagy in aging and neurodegeneration on 29 October.

Prof. FANG has been focusing on the roles of the "human power house" mitochondria in human aging and age-related diseases, especially the role of DNA damage in neurodegeneration. He presented the relationship between mitochondria and Alzheimer's disease (AD) in the seminar. AD is one of the diseases, that has shown to

have an accumulation of damaged mitochondria, which is a hallmark of human aging and age-related neurodegeneration. A molecular mechanism called Mitophagy plays a fundamental role in maintaining neuronal function and survival by performing a cellular self-clearing process of damaged and superfluous mitochondria in order to avoid the accumulation.

Prof. FANG's team found out that the defective mitophagy causes exacerbation of AD progression. The accumulation of damaged mitochondria will further combine with the two main AD causative factors, amyloid β plaques and tau tangles. Thus, they have found a way to restore the mitophagy by an upregulation of cellular NAD⁺, a primary cofactor in human health and life, and to focus their research works on forestalls pathology and cognitive decline in *C. elegans* and mouse models of AD. An immediate therapeutic potential is shown by the view of the physiological feature of NAD⁺ in human from Prof. FANG's research.



STUDENT ACTIVITIES

FHS Postdoc Student Seminar - Presented by Prof. Sanming WANG's group and Prof. Lijun DI's group

This week, the FHS Postdoc Student Seminar series continues. On 1 November, Mr. Siddharth SINHA of Prof. Sanming WANG's group presented "Mechanistic Insights towards BRCT domain of BRCA1 gene" and Mr. Zhiqiang ZHAO of Prof. Lijun DI's group presented "CtBP promotes metastasis of Breast cancer through repressing Cholesterol and activating TGF-beta signaling". The next seminar will be held on 15 November, presented by the groups of Prof. Wei GE and Prof. William CHAO.



Workshop

Western blot (WB) troubleshooting workshop - Presented by Abcam (Hong Kong) Ltd.

Dr. Amy KWOK, Scientific Support Specialist of Abcam (Hong Kong) Ltd., shared the troubleshooting and optimization tips and working principles on Western blot (WB) in FHS on 1 November.



NOVEMBER				
Mon	Tues	Wed	Thurs	Fri
5	6	7	8	9
<p><u>Diet, Nutrition and Diseases Seminar</u> Prof. Henry KWOK, Dr. Vicki FONG, Ms. Carmen MAN Time: 13:30 Venue: N6-5001 *Register with Prof. KWOK if interested</p>		<p><u>B-CAT Meeting #29</u> Prof. Xuanjun ZHANG Time: 17:00 Venue: E12-G003</p>	<p><u>Seminar Series</u> Intravital imaging and micromanipulation of stem cell niches in bone Prof. Charles LIN Time: 11:00-12:00 Venue: E12-G004</p> <p><u>Seminar Series</u> Evans blue-based theranostics Prof. Xiaoyuan CHEN Time: 17:00-18:00 Venue: E12-G004</p>	<p><u>Seminar Series</u> Single Molecule Biosensors for Dynamic Multigene Analysis in Complex Tissue Environments Prof. Pak WONG Time: 09:30-10:30 Venue: E12-G004</p>
12	13	14	15	16
<p><u>Preparing for Graduate School in the US</u> Georgetown University Time: 10:30-12:45 Venue: E12-G004</p>	<p><u>Seminar Series</u> Caught in action: molecular mechanisms of the deadly type VI protein secretion system Prof. Tao DONG Time: 10:00-11:00 Venue: E12-G004</p>	<p><u>B-CAT Meeting #29</u> Prof. Henry KWOK Time: 17:00 Venue: E12-G003</p>	<p><u>FHS Postdoc/ Student Seminar Series</u> Host: Wei GE, William CHAO Time: 17:00 Venue: E12-G004</p>	
19	20	21	22	23
	<p><u>Seminar Series</u> The roles of gut microbiota, innate myeloid cells, and host genetic in determining the age-related HBV clearance in mice Prof. Hurng-Yi Wang Time: 10:30-11:30 Venue: E12-G004</p>			
26	27	28	29	30
			<p><u>FHS Postdoc/ Student Seminar Series</u> Host: Wei GE, Garry WONG Time: 17:00 Venue: E12-G004</p>	