

## NEWSLETTER ISSUE 26 1 - 5 JULY 2019

### ACADEMIC ACTIVITIES

#### Publication(s) of the week

- Liu, Y., Gong, C. S., Lin, L., Zhou, Z., Liu, Y., Yang, Z., Shen, Z., Yu, G., Wang, Z., Wang, S., Ma, Y., Fan, W., He, L., Niu, G., **Dai, Y.**, and Chen, X. (2019) Core-Shell Metal-Organic Frameworks with Fluorescence Switch to Trigger an Enhanced Photodynamic Therapy. *Theranostics* 9, 2791-2799 [IF=8.651]
- Ding, Z., Wang, C., Wang, S., Wu, L., and Zhang, X. (2019) Light-Harvesting Metal-Organic Framework Nanoprobes for Ratiometric Fluorescence Energy Transfer-Based Determination of Ph Values and Temperature. *Mikrochim Acta* 186, 476 [IF=5.076]
- Zhou, X., Shi, D., Zhong, R., Ye, Z., Ma, C., Zhou, M., Xi, X., Wang, L., Chen, T., and Kwok, H. F. (2019) Bioevaluation of Ranatuerin-2pb from the Frog Skin Secretion of Rana Pipiens and Its Truncated Analogues. *Biomolecules* 9 [IF=4.694]
- Li, H., Sun, D., Wang, A., Pan, H., Feng, W., Ng, C. H., Ungvari, G. S., Tao, L., Li, X., Wang, W., Xiang, Y. T., and Guo, X. (2019) Serum 25-Hydroxyvitamin D Levels and Depression in Older Adults: A Dose-Response Meta-Analysis of Prospective Cohort Studies. *Am J Geriatr Psychiatry* [IF=3.886]
- Huang, S., and Zhao, Q. (2019) Nanomedicine-Combined Immunotherapy for Cancer. Curr Med Chem [IF=3.693]

#### **BCAT Meeting**

# The Regulatory Function of CtBP in Intracellular Metabolic Activities and the Potential Role of CtBP in Promoting the Chemosensitivities of Ovarian Cancer Treatment - Prof. Lijun DI

In the BCAT meeting on 3 July, Prof. Lijun DI presented the recent work from his lab. The focus was on the regulatory function of CtBP in intracellular metabolic activities and the potential role of CtBP in promoting the chemosensitivities of ovarian cancer treatment. After a brief introduction of previous knowledge about CtBP in the cancer development, Prof. DI described the repression of Sirt4 expression by CtBP. Then the importance of this regulation to cancer cell growth was analyzed including the maintenance of pH stability and coordinated consumption of glucose and glutamine during the cancer cell growth. Furthermore, the other important function of CtBP in repressing the cholesterol abundance in cancer cells was introduced. Again, the importance of CtBP repression of cholesterol was explained in detail. The last part of the presentation was about the application of metformin in order to boosting the repression function of CtBP. The target genes include the homologous recombination mediated DNA repair genes such as BRCA1, RAD50, RAD51, etc. Together, Prof. DI concluded that CtBP is an important oncogenic factor in both primary tumor growth and the late stage tumor metastasis. Moreover, CtBP might also be a therapeutic target in ovarian cancer owing to its repressive function on DNA damage repair.



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#### Seminar Series

#### Prevention and Therapy of Diabetic Complications - Prof. Yanming CHEN

Prof. Yanming CHEN, Professor and Vice Dean, Sun Yat-Sen University, presented a talk on "Prevention and Therapy of Diabetic Complications" on 5 July.

Prof. CHEN reported that the prevalence of diabetes in Chinese adults is 10.6%, while the diabetic retinopathy (DR) is 31%. In addition, the incidence of DR increases significantly as diabetes progresses. DR remains the major cause of blindness, which brings heavy soci-economic burden to diabetic patients.

Prof. CHEN presented the effect on DR between oral antidiabetic drugs (OADs) alone and in combination with basal insulin-supported OADs therapy (BOT) by studying enrolled 290 patients (age between 18 to 65 years old) with diabetes duration between 0 and 5 years. The study suggests that BOT is superior to OADs alone in preventing DR, and Prof. CHEN believes that the study can help clinicians select a suitable subsequent therapy after initialing the intensive insulin therapy.

Moreover, Prof. CHEN introduced her another study about the risk factor of diabetic macro-vascular complication. She conducted a prospective cohort study of 455 T2DM patients with a median of 4.7 years follow-up to effect of visit-to-visit fasting investigate the plasma glucose (FPG) variability on the left cardiac structure and the function in T2DM patients. The study demonstrated visit-to-visit variability in FPG could that be а novel risk factor for the long-term adverse changes in leftcardiac structure and systolic function in patients with Type 2 diabetes.



#### PhD ORAL DEFENSE PhD Oral Defense by Mengyun WANG of Prof. Zhen YUAN's group

Mr. Mengyun WANG supervised by Prof. Zhen YUAN completed his PhD Oral Defenses on 4 July with the thesis titled "Interrogating Human Brain Connectivity and Oscillations Utilizing Electroencephalograph and Functional Near-Infrared Spectroscopy".

Mr. WANG introduced that brain networks and oscillations are two predominant characters of the human brain that can be constructed or detected by noninvasive neuroimaging techniques, such as electroencephalography (EEG) and functional near infrared spectroscopy (fNIRS). Therefore, he collected the EEG and fNIRS data to interrogate brain networks and oscillations in resting and task-related states. Mr. WANG also explored different functions of low- and high-frequency brain oscillations with EEG-fNIRS data combed with fast Fourier transforms.





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#### HIGH SCHOOL VISIT

On 3 July, 19 Form 5 students from Sacred Heart Canossian College (English Section) visited UM and FHS. Prof. Vivien WANG warmly received them, guided them for a lab tour and showed them the research facilities in FHS. Prof. WANG also introduced the academic programmes and the research directions of FHS to the students. At the end, Prof. WANG also encouraged the students for continual striving the best out of their studies in science.





## UPCOMING

JULY				
Mon	Tues	Wed	Thurs	Fri
Mon 8 Qualify Examination Mr. Haoran CHEN Supervisor : Prof. Tzu-Ming LIU Time: 14:00 Venue: E12-1015 Seminar Series Novel Strategies for Cancer Immunotherapy Speaker: Prof. You-Wen HE Host: Prof. Chuxia DENG Time: 16:00-17:00 Venue: N22-G002	9	Wed 10 Qualify Examination Ms. Liangnan ZENG Supervisor : Prof. Yutao XIANG Time: 16:00 Venue: E12-4044 Qualify Examination Mr. Muhammad Jameel Supervisor: Prof. Henry KWOK Time: 10:00 Venue: E12-4004 Qualify Examination Ms. Yunfang XIONG Supervisor: Prof. Leo LEE Time: 10:00 Venue: N22-3042	11 Oral Defense Mr. Zhishan HU Supervisor : Prof. Zhen YUAN Time: 10:00 Venue: N6-G010	Fri 12 Qualify Examination Mr. Xingan XING Supervisor : Prof. Wenhua ZHENG Time: 14:30 Venue: E12-1018
15 Qualify Examination Mr. Jianming ZENG Supervisor : Prof. Chuxia DENG Time: 10:00 Venue: E12-4004 Qualify Examination Mr. Jie YE Supervisor : Prof. Ruiyu XIE Time: 16:00 Venue: N22-3042	16 <u>Qualify Examination</u> Ms. Cheng PENG Supervisor : Prof. Chuxia DENG Time: 10:00 Venue: N22-4028	17 Qualify Examination Mr. Zheng PENG Supervisor : Prof. Kathy LUO Time: 10:00 Venue: N22-4028 Qualify Examination Limei DENG Supervisor : Prof. Vivien WANG Time: 14:30 Venue: E12-4004 B-CAT Meeting #14 Speaker: Prof. Renhe XU Time: 17:00 Venue: E12-G004	18 Qualify Examination Ms. Huan WANG Supervisor : Prof. Wenhua ZHENG Time: 14:30 Venue: E12-1018	19 Seminar Series Molecular Basis of Precise Treatment of Lung Cancer with Ras Mutant Speaker: Prof. Mengfeng LI Host: Prof. Wenhua ZHENG Time: 10:00-11:00 Venue: N22-G002
22	23	24 Qualify Examination Mr. Zhengqiang MIAO Supervisor : Prof. Chris WONG Time: TBC Venue: TBC Venue: TBC Oral Defense Ms. Ting ZHANG Supervisor : Prof. Gang LI Time: 15:00 Venue: N6-2022	25 FHS Postdoc/ Student Seminar Host: Prof. Edwin CHEUNG and Prof. Leo LEE Time: 17:00-18:00 Venue: N22-G002	26 Seminar Series High Frequency Ultrasound for Multimodal Function Imaging and Stimulation Applications Speaker: Prof. Qifa ZHOU Host: Prof. Zhen YUAN Time: 15:00-16:00 Venue: E12-G004

For more information or submission of articles to be featured, please contact Ms. Mathilde CHEANG at mathildec@um.edu.mo or 8822 4909.