

Publication(s)

1. Li, J., Li, X., Yuan, Y., Wang, Q., Xie, L., **Dai, Y.**, Wang, W., Li, L., Lu, X., Fan, Q., and Huang, W. (2020) Efficient Polysulfide-Based Nanotheranostics for Triple-Negative Breast Cancer: Ratiometric Photoacoustics Monitored Tumor Microenvironment-Initiated H₂S Therapy. *Small*, e2002939 [2019 IF = 11.459]
2. Ma, R., and **Kwok, H. F.** (2020) New Opportunities and Challenges of Venom-Based and Bacteria-Derived Molecules for Anticancer Targeted Therapy. *Semin Cancer Biol* [5yr IF = 11.29]
3. Zhu, L. P., Gao, D. Y., Xie, L. S., Dai, Y., and **Zhao, Q.** (2020) NIR II-Excited and pH-Responsive Ultrasmall Nanoplatfor for Deep Optical Tissue and Drug Delivery Penetration and Effective Cancer Chemophotherapy. *Mol Pharm* [5yr IF = 4.54]
4. Su, Z., McDonnell, D., Ahmad, J., Cheshmehzangi, A., Li, X., Meyer, K., Cai, Y., Yang, L., and **Xiang, Y. T.** (2020) Time to Stop the Use of 'Wuhan Virus', 'China Virus' or 'Chinese Virus' across the Scientific Community. *BMJ Glob Health* 5 (9), e003746 [2019 IF = 4.28]
5. An, Y., Yang, Y., Wang, A., Li, Y., Zhang, Q., Cheung, T., Ungvari, G. S., Qin, M. Z., An, F. R., and **Xiang, Y. T.** (2020) Prevalence of Depression and Its Impact on Quality of Life among Frontline Nurses in Emergency Departments during the COVID-19 Outbreak. *J Affect Disord* 276, 312-315 [5yr IF = 4.226]

Academic Promotion

Prof. Chris Koon Ho WONG promoted to Associate Professor



FHS congratulates Prof. Chris Koon Ho WONG for his promotion to the rank of Associate Professor. Since he established his own independent research group as an Assistant Professor in FHS in 2013, Prof. Wong has achieved significant accomplishments in his research studying transcription regulatory mechanisms in model and pathogenic fungi.

Prof. Wong has been interested in gene regulation since his undergraduate study, and had received research training in two world-renowned laboratories famous for fungal genetics and transcription regulation at the University of Melbourne in

Australia and Harvard Medical School in USA. During his post-doctoral research training, he was awarded a fellowship from the Croucher Foundation in Hong Kong.

From Prof. Wong's perspective, academia requires strong commitment and determination, and is not just about research and teaching but involves mentoring and sharing knowledge and experience. "Motivating and mentoring my students and team members, by far, is the most challenging part for me as an academic as everyone in the team has his/her own specific set of strengths and weaknesses." Prof. Wong believes in navigating students to solutions rather than solving problems for them, and through the process he tries to help them identify their strengths and weaknesses. "I would like to recognize the incredible efforts made by all members of my research team. Their immense hard works have led to many interesting insights into gene regulation and fungal biology. Without them, my research and academic experience would not have been as fun and successful."

Congratulations again to Prof. Wong's promotion and we look forward to his continual contributions to FHS. You may learn more about Prof. Wong via his profile page in our website (<https://fhs.um.edu.mo/en/staff/chris-koon-ho-wong/>).



BCAT Meeting

Interactions of BRCA1 and FGF/FGFR2 Signaling in Breast Cancer Initiation and Evolution – Prof. Chuxia DENG

In the BCAT meeting on 9 September, Prof. DENG reported his research about “Interactions of BRCA1 and FGF/FGFR2 Signaling in Breast Cancer Initiation and Evolution”. Prof. Deng claimed that fibroblast growth factor receptor 2 (FGFR2) is a membrane-spanning tyrosine kinase that mediates signaling for FGFs. Recent studies detected various alterations of FGFR2 in breast cancer, yet it remains unproved that activation of FGFR2 signaling could initiate tumor formation. To investigate this, Prof. Deng’s group generated a mouse model carrying an activation mutation of FGFR2 (FGFR2-S252W) in the mammary tissue. They found that FGF/FGFR2 signaling drove the triple negative breast cancer (TNBC) formation in 55% mutant mice accompanied by the epithelial-mesenchymal transition (EMT) regulated by FGFR2-STAT3 signaling, and also found that the knockout of the BRCA1 in FGFR2-S252W mice accelerated tumorigenesis significantly

Moreover, Prof. Deng discussed the mechanisms underlying how the activated FGFs/FGFR2 signaling reshapes tumor microenvironment and promotes breast cancer formation in collaboration with BRCA1 through multiple pathways. Prof. Deng concluded that their mouse model could mimic human TNBC and lead to the identification of actionable therapeutic targets for precision medicine guided TNBC treatment.

PhD Oral Defence

PhD Oral Defence by Yiqi YANG of Prof. Gang LI’s group

Mr. Yiqi YANG supervised by Prof. Gang LI completed his PhD oral defence on 9 September. His thesis title is “Acetylation of EED by CBP/P300 Regulates the Targeting of PRC2 and is Required for mESC Differentiation”.

Mr. Yang introduced that PRC2 catalyzes the methylation of histone H3 at lysine 27, which is required for epigenetic silencing in diverse biological processes. Besides, EED is a core component of PRC2 that binds to H3K27me3 and allosterically stimulates the catalytic activity of PRC2. He then reported that EED is acetylated by CBP/P300 at K19 in his research, and this acetylation could be deacetylated by HDAC1/HDAC3. The acetylation of EED-K19 could reduce PRC2 binding affinity for native nucleosome *in vitro*, and cause PRC2 to leave its chromatin targets *in vivo*. Moreover, mESCs with EED-K19R non-acetylated mimics showed defects in EB differentiation due to aberrant expression of development-specific genes. Mr. Yang concluded that his study revealed a critical mechanism for controlling cell fate by regulating PRC2 targeting through EED acetylation.



Sep / Oct				
Mon	Tue	Wed	Thu	Fri
14	15	16	17	18
		<p><u>Oral Defence</u> Shuai LI Supervisor: Prof. Wenhua ZHENG Time: 10:00 Venue: N6-2022</p> <p><u>Qualifying Exam</u> Zhiqiang DONG Supervisor: Prof. Chris WONG Time: 10:00 Venue: E12-4004</p> <p><u>Qualifying Exam</u> Teng HUANG Supervisor: Prof. San Ming WANG Time: 14:00 Venue: E12-4004</p>	<p><u>FHS Postdoc/ Student Seminar</u> Session: Public Health Host: Prof. Garry WONG and Prof. Yutao XIANG Time: 17:00-18:00 Venue: N22-G002 & ZOOM</p> <p><u>Qualifying Exam</u> Wei SANG Supervisor: Prof. Yunlu DAI Time: 9:00 Venue: E12-4004</p> <p><u>Qualifying Exam</u> Zhan ZHANG Supervisor: Prof. Yunlu DAI Time: 11:00 Venue: E12-4004</p>	
21	22	23	24	25
<p><u>Qualifying Exam</u> Lipeng ZHU Supervisor: Prof. Qi ZHAO Time: 14:00 Venue: E12-4044</p>		<p><u>BCAT Meeting</u> Speaker: Prof. Tzu-Ming LIU Time: 17:00-18:00 Venue: E12-G004</p> <p><u>Oral Defence</u> Carlos Godoy PAREJO Supervisor: Prof. Guokai CHEN Time: 10:00 Venue: N6-2022</p>	<p><u>Qualifying Exam</u> Pu Kei MOU Supervisor: Prof. Joong Sup SHIM Time: 15:00 Venue: N22-3042</p>	<p><u>Qualifying Exam</u> Wenshu ZHOU Supervisor: Prof. Wenhua ZHENG Time: 14:30 Venue: E12-4044</p>
28	29	30	Oct 1	2
	<p><u>Qualifying Exam</u> Quan LIU Supervisor: Prof. Kin Yip TAM Time: 10:00 Venue: E12-4004</p>			