

# NEWSLETTER ISSUE 34 21 - 25 SEPTEMBER 2020

#### Publication(s)

Liu, J., Adhav, R., Miao, K., Su, S.M., Mo, L., Chan, U.I., Zhang, X., Xu, J., Li, J., Shu, X., Zeng, J., Zhang, X., Lyu, X., Pardeshi, L., Tan, K., Sun, H., Wong, K. H., Deng, C., Xu, X. (2020) Characterization of BRCA1-deficient Premalignant Tissues and Cancers Identifies Plekha5 as a Tumor Metastasis Supressor. Nat Commun 11 (1) [5yr IF = 13.610]

\*This article was recorded in "15<sup>th</sup> Shanghai International Breast Cancer Symposium", please visit the link for the abstract: https://mp.weixin.qq.com/s/gL2C3TytxzyNknOZiLrwjw

科学家解密三阴性乳腺癌转移抑制基因

以下文章来源于SIBCS ,作者自然 | 自然通讯



上海国际乳腺癌论坛(SIBCS)由中国抗癌协会乳腺癌专业委员会





- Bhaskaran, S. P., Huang, T., Rajendran, B. K., Guo, M., Luo, J., Qin, Z., Zhao, B., Chian, J., Li, S., and Wang, S. M. (2020) Ethnic-Specific BRCA1/2 Variation within Asia Population: Evidence from over 78 000 Cancer and 40 000 Non-Cancer Cases of Indian, Chinese, Korean and Japanese Populations. J Med Genet [5yr IF = 5.779]
- Zheng, P., Huang, C., Leng, D., Sun, B., and Zhang, X. D. (2020) Transcriptome Analysis of Peripheral Whole Blood Identifies Crucial IncRNAs Implicated in Childhood Asthma. *Bmc Med Genomics* 13 (1), 136 [5yr IF = 3.193]
- 4. Dai, M. Y., Chen, Z., Leng, Y., Wu, M., Liu, Y., Zhou, F., Ming, C., Shao, N., Liu, M., and Cai, H. (2020) Patients with Lung Cancer Have High Susceptibility of COVID-19: A Retrospective Study in Wuhan, China. *Cancer Control* 27 (1), 1073274820960467 [2019 IF = 3.103]

### **BCAT Meeting**

In the BCAT meeting on 23 September, Prof. Tzu-Ming LIU introduced his research about the use of fluorochromes in the diagnosis of inflammation. The contexts included the acute inflammation in sepsis, therapeutic inflammation in drug screening, and chronic inflammation in diabetes mellitus. By using the wavelength tunable (700-1300 nm) multi-photon imaging and spectroscopy system, he excited the blood plasma and cells to extract the spectral profiles of endogenous fluorophores of NADH, flavin, lipofuscin, and bilirubin dimers. A lifetime imaging modality was integrated to resolve the surrounding environment of endogenous fluorophores. Through this analytical technique of photochemistry, he successfully found the fluorescent features that can be used to diagnose systemic radical burst in blood circulation, detect the apoptosis in cells after drug treatment, and evaluate the outcomes of immune therapy in 3D tumor culture.



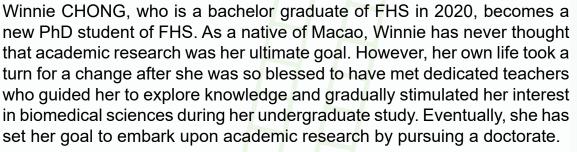
# NEWSLETTER ISSUE 34 21 - 25 SEPTEMBER 2020

## **FHS Community Story**

## Seize the Days in University for Bettering Yourselves

While the browns come as a comforting quilt to the earth, the University of Macau ushered a new cohort of students. They are going to start their golden time of university life which will fly like an arrow. What will they attain in addition to a degree?







Winnie has a roll call of brilliant teachers to whom she feels indebted, and FHS Associate Professor Chris Koon Ho WONG is one of them. Prof. Wong gave her autonomy in the research work but inspired and motivated her through all stages of work, particularly when she has lost her direction. "High school teachers keep repeating the keys of the lessons for strengthening our knowledge. Unlike high schools, a teacher in a university is a guide and mentor to direct and inspire students, not an encyclopedia or a self-help book. They steer students towards the research objectives with academic freedom. Attendance in universities is autonomous. You will no longer be forced to attend classes. Thus, we should build our motivation and active participation to learn, explore and practice." Winnie emphasized that one should take the initiative in approaching the teachers. She added, "You can learn from everyone, your supervisor and all other professors, the postgraduate students and even your own classmates, who are the sources of knowledge. Teachers are all around you."

Recalling the past four years, Winnie describes her undergraduate life in one word "vibrant". She enjoyed a busy and meaningful campus life through the participation of various activities organized by colleges and the Faculty. She fostered her soft skills through meeting and partnering with a variety of diverse people from different majors and backgrounds. In her spare time, Winnie also took part in the science promotion activities held by the Association for Promotion of Science and Technology Macau to pass on her knowledge by delivering lectures on experiments of biomedical sciences to the local high school students.



Winnie thought that it was important for the undergraduate students to identify research interests at the early stage of their studies, and take the initiative to approach professors for joining the research projects about which they are passionate. She has this tip for freshmen, "Cherish the university life in which you can become a better version of yourselves. You only get one shot, try to scream out no regrets in your graduation."



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# PhD Oral Defence PhD Oral Defence by Carlos Godoy PAREJO of Prof. Guokai CHEN's group

Mr. Carlos Godoy PAREJO supervised by Prof. Guokai CHEN completed his PhD oral defence on 23 September. His thesis title is "Cell Survival and Lineage Specification in Human Embryonic Stem Cells".



Carlos said that the human embryonic stem cells (hESCs) have the potential to differentiate into any cell composing the organism. In his research, he focused on two phenomena, one during their pluripotent stage, and one right after their differentiation. He first elucidated the molecular mechanism of insulin as an essential growth factor for hESC survival. He showed that insulin promoted integrin and E-cadherin pathways expression, while reduced the apoptosis by inhibiting Caspase activity and actinomyosin contraction. He then studied the early lineage specification between the extraembryonic and embryonic cell types,

and identified PKC as the main downstream effector controlling the extraembryonic differentiation. Besides, he found that the PKC inhibition promoted the mesodermal induction, and led to SMAD4 reducing and nuclear βcatenin promoting. He concluded that he has elucidated the function of two key pathways in hESCs culture and differentiation.





Sep / Oct				
Mon	Tue	Wed	Thu	Fri
Qualifying Exam Chen CHANG Supervisor: Prof. Edwin CHEUNG Time: 14:00 Venue: Zoom (Video meeting)	Qualifying Exam Quan LIU Supervisor: Prof. Kin Yip TAM Time: 10:00 Venue: E12-4004  Oral Defence Ruotong ZHANG Supervisor: Prof. Hongjie ZHANG Time: 15:00 Venue: N6-2022	30	Oct Holiday - National Day of the People's Republic of China	Holiday - The Day following the National Day of the People's Republic of China
Holiday - Exemption from work by the Chief Executive	13	BCAT Meeting Speaker: Prof. Yunlu DAI Time: 17:00-18:00 Venue: E12-G004	FHS Postdoc/ Student Seminar Session: Cancer research Host: Prof. Edwin CHEUNG and Prof. Chuxia DENG Time: 17:00-18:00 Venue: N22-G002 and Zoom	16
19	20	21	22	23
	Oral Defence Xinwei WU Supervisor: Prof. Ruiyu XIE Time: 9:30 Venue: N6-2022	BCAT Meeting Speaker: Prof. Kathy LUO Time: 17:00-18:00 Venue: E12-G004	FHS Postdoc/ Student Seminar Session: Drug development Host: Prof. Chris WONG and Prof. Jun ZHENG Time: 17:00-18:00 Venue: N22-G002 and Zoom  Oral Defence Xingshun WANG Supervisor: Prof. Wei GE Time: 10:00 Venue: N6-2022  Oral Defence Linlin LIU Supervisor: Prof. Wenhua ZHENG Time: 15:00 Venue: N6-2022	Oral Defence Jiankang FANG Supervisor: Prof. Wenhua ZHENG Time: 10:00 Venue: N6-2022

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