# ACADEMIC ACTIVITIES
Publication(s) of the week

1. Hu, D., Lian, Z., Xian, H., Jiang, R., Wang, N., Weng, Y., Peng, X., Wang, S. M., and Ouyang, X. K. (2019) Adsorption of Pb(Ii) from Aqueous Solution by Polyacrylic Acid Grafted Magnetic Chitosan Nanocomposite. *Int J Biol Macromol* [IF=4.731]

2. Zeng, L. N., Zong, Q. Q., Zhang, J. W., An, F. R., Xiang, Y. F., Ng, C. H., Ungvari, G. S., Yang, F. Y., Yan, H., Chen, L. G., Hu, X., and Xiang, Y. T. (2019) Prevalence of Smoking in Nursing Students Worldwide: A Meta-Analysis of Observational Studies. *Nurse Educ Today* **84**, 104205 [IF=3.001]

PhD ORAL DEFENCE
PhD Oral Defences by Zuxianglan ZHAO of Prof. Edwin CHEUNG's group, Jie LIU of Prof. Qi ZHAO's group and Nana AI of Prof. Wei GE's group

Ms. Zuxianglan ZHAO supervised by Prof. Edwin CHEUNG, Ms. Jie LIU supervised by Prof. Qi ZHAO and Ms. Nana AI supervised by Prof. Wei GE completed their PhD oral defences on 13 and 19 November with thesis titles of "Single-Cell RNA Sequencing Data Reveals Estrogen-Stimulated Transcriptome in Breast Cancer Cell Lines", "Roles of Immune Checkpoint Molecules in Chimeric Antigen Receptor T cells for Cancer Therapy" and "Effects of Ponatinib on Angiogenesis and Thrombus Formation in the Zebrafish", respectively.

Ms. Zuxianglan ZHAO presented her research on the identification and validation of several novel specific breast cancer (BC) biomarkers, including both coding genes and lncRNAs, based on the bioinformatics analysis of single-cell RNA-seq data. She reported that single-cell RNA sequencing was performed in the current study on about 300 individual breast cancer cells derived from estradiol (E2)-treated BC cell lines MCF-7 and T47D at different time points and normal growing cells from MCF-7, T47D and MDA-MB-231 cell lines. She finally concluded that single-cell transcriptome analysis is an effective approach to reveal new insights into BC biology.
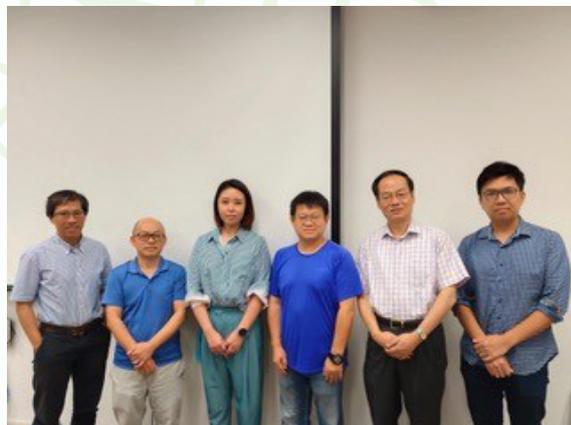
Moreover, Ms. Jie LIU reported that chimeric antigen receptor (CAR) is an emerging technology that uses genetic engineering technology to redirect T cells to exert anti-tumor efficacy. Immune checkpoints can prevent immune cells from exerting anti-cancer efficacy. She found that activated CAR T cells incrementally express PD-L1 that might attenuate anti-tumor efficacy of CAR T cells. B7H3 is a new immune checkpoint member of B7 family that can be highly expressed on multiple tumor cells. By a construction anti-B7H3 CAR T cells, she found that anti-B7H3 CAR T cells significantly inhibited tumor growth *in vitro* and *in vivo* in non-small-cell lung carcinoma (NSCLC) and colorectal carcinoma (CRC). She finally concluded that the immune checkpoints have different impacts on the anti-tumor efficacy of CAR T cells.

In addition, Ms. Nana AI presented the ability of Ponatinib to anti-angiogenesis using efficient zebrafish model. Ponatinib, as a third-stage clinical drug for the effective treatment of BCR-ABL and BCR-ABL mutations in Ph+ ALL and CML, was banned in clinical and market use in 2013 because the formation of blood clots is a serious side effect in treatment. The establishment of an efficient zebrafish model can verify the side effects of ponatinib and, on the other hand, establish an animal model that is more efficient than the mice thrombus model. She reported that ovarian angiogenesis was rarely noticed and finally concluded that establishing zebrafish ovarian angiogenesis model and studying the relationship between ovarian angiogenesis and ovarian development in zebrafish were more convenient and efficient research directions.

November

Mon	Tues	Wed	Thurs	Fri
25 **Seminar Series** Translation Research of Alzheimer's Disease: From Basic Study to Long-term Care Speaker: Prof. Yuan-Han YANG Host: Prof. Wenhua ZHENG Time: 09:00 - 10:00 Venue: E12-G003	**26**	**27** **Seminar Series** Constitutive Androstane Receptor (CAR) Activation and Regulatory Mechanisms Speaker: Dr. Masahiko NEGISHI Host: Prof. Garry WONG Time: 11:00 - 12:00 Venue: N22-G002 **Oral Defence** Jingyun TAN Supervisor : Prof. Xuanjun ZHANG Time: 15:00 Venue: N6-2022 **B-CAT Meeting #21** Speaker: Dr. Kaeling TAN Time: 17:00 Venue: E12-G004	**28** **Oral Defence** Gang FENG Supervisor : Prof. Xuanjun ZHANG Time: 10:00 Venue: N6-G010 **FHS Postdoc/ Student Seminar** Field: Chemistry Host: Prof. Yunlu DAI and Prof. Xuanjun ZHANG Time: 17:00-18:00 Venue: N22-G002	**29**
(December) 2	**3**	**4**	**5**	**6**
9 **The first working day after the Feast of Immaculate Conception**	**10**	**11**	**12** **Oral Defence** Ang LI Supervisor : Prof. Chris Koon Ho WONG Time: 10:00 Venue: N6-G010 **Oral Defence** Yuan WANG Supervisor : Prof. Lijun DI Time: 15:00 Venue: N6-2022 **FHS Postdoc/ Student Seminar** Field: Data science & Cancer research Host: Prof. San Ming WANG and Prof. Douglas ZHANG Time: 17:00-18:00 Venue: N22-G002	**13**