FACULTY OF HEALTH SCIENCES

2021 WEEKLY NEWSLETTER

Issue 9 | 8 - 12 March

Publication

1. Wu, R., Li, K., Yuan, M., and **Luo, K. Q.** (2021) Nerve Growth Factor Receptor Increases the Tumor Growth and Metastatic Potential of Triple-Negative Breast Cancer Cells. *Oncogene* **[2019 IF = 7.971]**
2. Zhou, G., Liu, J., Li, X., Sang, Y., Zhang, Y., Gao, L., Wang, J., Yu, Y., **Ge, W.**, Sun, Z., and Zhou, X. (2021) Silica Nanoparticles Inducing the Apoptosis via Microrna-450b-3p Targeting MTCH2 in Mice and Spermatocyte Cell. *Environ Pollut* **277**, 116771 **[5yr IF = 6.939]**
3. Ren, Y., Chen, J., Chen, P., Hao, Q., Cheong, L. K., Tang, M., Hong, L. L., Hu, X. Y., Celestial, T. Y., Bay, B. H., Ling, Z. Q., and **Shen, H. M.** (2021) Oxidative Stress-Mediated AMPK Inactivation Determines the High Susceptibility of LKB1-Mutant NSCLC Cells to Glucose Starvation. *Free Radic Biol Med* **[5yr IF = 6.456]**
4. Dong, X., Chen, C., Geng, Q., Zhang, W., and **Zhang, X. D.** (2021) Fast Algorithm Based on Parallel Computing for Sample Entropy Calculation. *IEEE Access* **9**, 20223-20234 **[5yr IF = 4.076]**

1 PhD Oral Defence

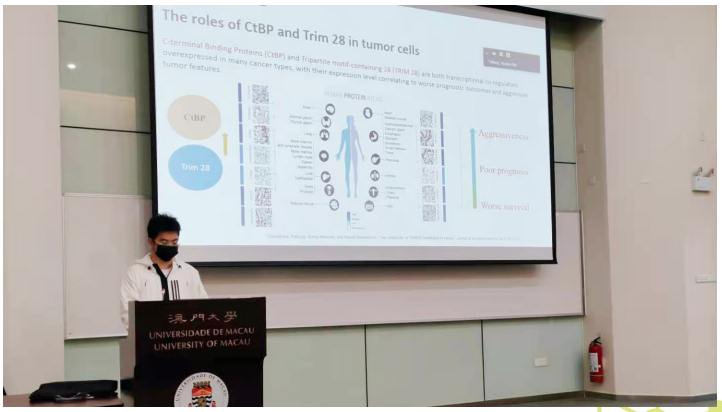
In the BCAT meeting on 3 March, Dr. Kai MIAO shared his latest research. He introduced that cancer metastasis is a process that the tumor cells disseminated into blood or lymph system and finally colonize to distant organs/tissues for further development. He further said that metastasis is responsible for as much as 66.7% of cancer related mortality and the driving forces for cancer metastasis are still elusive. Therefore, he has applied the celltag system based single-cell lineage tracing approach to illustrate the rates, routes, and cross talk drivers with the TME components during the breast cancer metastasis. He found that the tumor cells showed different gene expression pattern in different circumstances. The communication of the cancer cells-tumor microenvironment cells varied significantly among the primary tumors and metastatic tumors. Moreover, compared with the non-metastatic cells, he found that the metastatic tumor cells maintained much quiescent status which demonstrated less activity under the immune cells paracrine circumstance, and pre-wired with the Il2 secretion ability to achieve the *in vivo* migration ability. He demonstrated the power of tumor-TME cell communication at cancer metastasis.

2 FHS Postdoc Student Seminar

Presented by Prof. Lijun DI's group and Prof. Vivian WANG's group

On 4 March, Mr. Lixin TAI of Prof. Lijun DI's group presented "The Co-functions of Trim 28 and CtBP in the Progression of Breast Cancer" and Ms. WenFei PAN of Prof. Vivian WANG's group presented "Kinetic Studies Reveal the NFκB-DNA Recognition Preference".

The next seminar will be held on 18 March, and presented by the group members of Prof. Ren-He XU and Prof. Guokai CHEN via Zoom again.



UPCOMING EVENTS

March		
Mon	8	15
Tue	9	16
Wed	10	17 **BCAT Meeting** Speaker: Prof. Lijun DI Time: 17:00-18:00 Venue: E12-G004
Thu	11	18 **FHS Postdoc/ Student Seminar** Session: Stem Cell Biology Host: Prof. Ren-He XU and Prof. Guokai CHEN Time: 17:00-18:00 Venue: N22-G002 and Zoom
Fri	12	19
Sat	13 **Seminar Series** 1st AOHUPO Online Education Series on "Next Generation Proteomics in Precision Oncology" Time: 08:30-11:00 Venue: ZOOM	20

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