

## David Kung Chun Chiu

Basic Life Research Scientist, Pathology Sponsored Projects

### Publications

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#### PUBLICATIONS

- **Using mouse liver cancer models based on somatic genome editing to predict immune checkpoint inhibitor responses** *JOURNAL OF HEPATOLOGY*  
Yuen, V., Chiu, D., Law, C., Cheu, J., Chan, C., Wong, B., Goh, C., Zhang, M., Xue, H., Tse, A., Zhang, Y., Lau, H., Lee, et al  
2023; 78 (2): 376-389
- **Hepatocellular Carcinoma Cells Up-regulate PVRL1, Stabilizing PVR and Inhibiting the Cytotoxic T-Cell Response via TIGIT to Mediate Tumor Resistance to PD1 Inhibitors in Mice** *GASTROENTEROLOGY*  
Chiu, D., Yuen, V., Cheu, J., Wei, L., Ting, V., Fehlings, M., Sumatoh, H., Nardin, A., Newell, E. W., Ng, I., Yau, T., Wong, C., Wong, et al  
2020; 159 (2): 609-623
- **Hypoxia regulates the mitochondrial activity of hepatocellular carcinoma cells through HIF/HEY1/PINK1 pathway** *CELL DEATH & DISEASE*  
Chiu, D., Tse, A., Law, C., Xu, I., Lee, D., Chen, M., Lai, R., Yuen, V., Cheu, J., Ho, D., Wong, C., Zhang, H., Ng, et al  
2019; 10: 934
- **Hypoxia inducible factor HIF-1 promotes myeloid-derived suppressor cells accumulation through ENTPD2/CD39L1 in hepatocellular carcinoma** *NATURE COMMUNICATIONS*  
Chiu, D., Tse, A., Xu, I., Di Cui, J., Lai, R., Li, L., Koh, H., Tsang, F., Wei, L., Wong, C., Ng, I., Wong, C.  
2017; 8: 517
- **Hypoxia induces myeloid-derived suppressor cell recruitment to hepatocellular carcinoma through chemokine (C-C motif) ligand 26** *HEPATOLOGY*  
Chiu, D., Xu, I., Lai, R., Tse, A., Wei, L., Koh, H., Li, L., Lee, D., Lo, R., Wong, C., Ng, I., Wong, C.  
2016; 64 (3): 797-813
- **Neutrophil-activating therapy for the treatment of cancer.** *Cancer cell*  
Linde, I. L., Prestwood, T. R., Qiu, J., Pilarowski, G., Linde, M. H., Zhang, X., Shen, L., Reticker-Flynn, N. E., Chiu, D. K., Sheu, L. Y., Van Deursen, S., Tolentino, L. L., Song, et al  
2023
- **CFI-402257, a TTK inhibitor, effectively suppresses hepatocellular carcinoma** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Chan, C., Chiu, D., Yuen, V., Law, C., Wong, B., Thu, K., Cescon, D., Soria-Bretones, I., Cheu, J., Lee, D., Tse, A., Zhang, M., Tan, et al  
2022; 119 (32): e2119514119
- **Polo-like kinase 4 inhibitor CFI-400945 suppresses liver cancer through cell cycle perturbation and eliciting antitumor immunity** *HEPATOLOGY*  
Chan, C., Yuen, V., Chiu, D., Goh, C., Thu, K. L., Cescon, D. W., Soria-Bretones, I., Law, C., Cheu, J., Lee, D., Tse, A., Tan, K., Zhang, et al  
2022
- **Hypoxia-induced macropinocytosis represents a metabolic route for liver cancer** *NATURE COMMUNICATIONS*  
Zhang, M., Cui, J., Lee, D., Yuen, V., Chiu, D., Goh, C., Cheu, J., Tse, A., Bao, M., Wong, B., Chen, C., Wong, C., Ng, et al  
2022; 13 (1): 954
- **The Amot/integrin protein complex transmits mechanical forces required for vascular expansion** *CELL REPORTS*  
Zhang, Y., Zhang, Y., Kameishi, S., Barutello, G., Zheng, Y., Tobin, N. P., Nicosia, J., Hennig, K., Chiu, D., Bolland, M., Barker, T. H., Cavallo, F., Holmgren, et al  
2021; 36 (8): 109616
- **Adaptive and Constitutive Activations of Malic Enzymes Confer Liver Cancer Multilayered Protection Against Reactive Oxygen Species** *HEPATOLOGY*

- Lee, D., Zhang, M., Tsang, F., Bao, M., Xu, I., Lai, R., Chiu, D., Tse, A., Law, C., Chan, C., Yuen, V., Chui, N., Ng, et al  
2021; 74 (2): 776-796
- **Inhibition of CMTM4 Sensitizes Cholangiocarcinoma and Hepatocellular Carcinoma to T Cell-Mediated Antitumor Immunity Through PD-L1** *HEPATOLOGY COMMUNICATIONS*  
Chui, N., Cheu, J., Yuen, V., Chiu, D., Goh, C., Lee, D., Zhang, M., Ng, I., Wong, C.  
2022; 6 (1): 178-193
  - **Genome-wide CRISPR-Cas9 knockout library screening identified PTPMT1 in cardiolipin synthesis is crucial to survival in hypoxia in liver cancer** *CELL REPORTS*  
Bao, M., Yang, C., Tse, A., Wei, L., Lee, D., Zhang, M., Goh, C., Chiu, D., Yuen, V., Law, C., Chin, W., Chui, N., Wong, et al  
2021; 34 (4): 108676
  - **Adipose-derived stem cells and cancer cells fuse to generate cancer stem cell-like cells with increased tumorigenicity** *JOURNAL OF CELLULAR PHYSIOLOGY*  
Chan, Y., So, C., Yau, K., Chiu, K., Wang, X., Chan, F., Tsang, S.  
2020; 235 (10): 6794-6807
  - **Induction of Oxidative Stress Through Inhibition of Thioredoxin Reductase 1 Is an Effective Therapeutic Approach for Hepatocellular Carcinoma** *HEPATOLOGY*  
Lee, D., Xu, I., Chiu, D., Leibold, J., Tse, A., Bao, M., Yuen, V., Chan, C., Lai, R., Chin, D., Chan, D., Cheung, T., Chok, et al  
2019; 69 (4): 1768-86
  - **Assessment of Stabilization and Activity of the HIFs Important for Hypoxia-Induced Signalling in Cancer Cells.** *Methods in molecular biology (Clifton, N.J.)*  
Chiu, D. K., Zhang, M. S., Tse, A. P., Wong, C. C.  
2019; 1928: 77-99
  - **RNA N6-methyladenosine methyltransferase-like 3 promotes liver cancer progression through YTHDF2-dependent posttranscriptional silencing of SOCS2** *HEPATOLOGY*  
Chen, M., Wei, L., Law, C., Tsang, F., Shen, J., Cheng, C., Tsang, L., Ho, D., Chiu, D., Lee, J., Wong, C., Ng, I., Wong, et al  
2018; 67 (6): 2254-70
  - **Hepatitis transactivator protein X promotes extracellular matrix modification through HIF/LOX pathway in liver cancer** *ONCOGENESIS*  
Tse, A., Sze, K., Shea, Q., Chiu, E., Tsang, F., Chiu, D., Zhang, M., Lee, D., Xu, I., Chan, C., Koh, H., Wong, C., Zheng, et al  
2018; 7: 44
  - **Histone methyltransferase G9a promotes liver cancer development by epigenetic silencing of tumor suppressor gene RARRES3** *JOURNAL OF HEPATOLOGY*  
Wei, L., Chiu, D., Tsang, F., Law, C., Cheng, C., Au, S., Lee, J., Wong, C., Ng, I., Wong, C.  
2017; 67 (4): 758-69
  - **Folate cycle enzyme MTHFD1L confers metabolic advantages in hepatocellular carcinoma** *JOURNAL OF CLINICAL INVESTIGATION*  
Lee, D., Xu, I., Chiu, D., Lai, R., Tse, A., Li, L., Law, C., Tsang, F., Wei, L., Chan, C., Wong, C., Ng, I., Wong, et al  
2017; 127 (5): 1856-72
  - **NDUFA4L2 Fine-tunes Oxidative Stress in Hepatocellular Carcinoma** *CLINICAL CANCER RESEARCH*  
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2016; 22 (12): 3105-17
  - **Transketolase counteracts oxidative stress to drive cancer development** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
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2016; 113 (6): E725-E734
  - **Switching of Pyruvate Kinase Isoform L to M2 Promotes Metabolic Reprogramming in Hepatocarcinogenesis** *PLOS ONE*  
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2014; 9 (12): e115036
  - **Lysyl Oxidase-Like 2 Is Critical to Tumor Microenvironment and Metastatic Niche Formation in Hepatocellular Carcinoma** *HEPATOLOGY*  
Wong, C., Tse, A., Huang, Y., Zhu, Y., Chiu, D., Lai, R., Au, S., Kai, A., Lee, J., Wei, L., Tsang, F., Lo, R., Shi, et al  
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