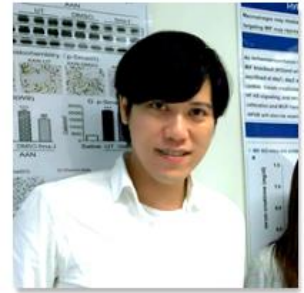


# CURRICULUM VITAE

[Patrick Ming-Kuen TANG]

## PERSONAL DATA

Full Name: Patrick Ming-Kuen TANG  
E-mail Address: patrick.tang@cuhk.edu.hk  
Webpage (URL): <http://www.cuhk.edu.hk/med/acp/acp/staff/patricktang.html>  
ORCID: 0000-0002-3194-3736



## EDUCATION

1999 – 2002 BSc, Biochemistry, The Chinese University of Hong Kong  
2003 – 2007 PhD, Biochemistry, The Chinese University of Hong Kong  
Thesis supervisor Prof. Kwok-Pui Fung and co-supervisor Prof. Wing-Ping Fong

## PROFESSIONAL EXPERIENCE

2002-2003 Junior Research Assistant, Biology, The Chinese University of Hong Kong  
2008-2009 Postdoctoral Fellow, Biochemistry, The Chinese University of Hong Kong  
2009-2011 Postdoctoral Research Fellow, Molecular Oncology Laboratory, University of Oxford  
(Supervisor: Prof. Adrian L Harris)  
2011-2013 Research Manager, Asia Pacific Stem Cell Science Limited, Hong Kong  
2014-2016 Research Associate, Li Ka Shing Institute of Health Science, CUHK  
2017-2020 Research Assistant Professor, Anatomical and Cellular Pathology, CUHK  
2020-present Assistant Professor, Anatomical and Cellular Pathology, Chung Chi College, CUHK

## PROFESSIONAL SOCIETIES

President, Hong Kong Society of Flow Cytometry, 10/2022 – 09/2023  
Committee, Hong Kong Society of Flow Cytometry, since 10/2018  
Committee, Hong Kong Society for Immunology, since 12/2021  
Member, Hong Kong Biotechnology Organization, since 07/2022  
Member, Youth DreamMakers Association, since 06/2021  
Member, International Society of Nephrology (ISN), since 10/2017  
Member, American Association for Cancer Research (AACR), since 10/2011  
Member, European Association for Cancer Research (EACR), since 03/2010  
Member, British Association for Cancer Research (BACR), since 03/2010

## MAIN RESEARCH INTERESTS

1. Understanding the Dynamics of Lung Cancer Microenvironment at Single-cell Resolution
2. Development of Novel Immunotherapy for Lung Cancer and Kidney Diseases
3. Improving the Safety and Efficiency of Gene Therapy with Virus-Free Methods

## LIST OF RESEARCH OUTPUTS OR CREATIVE WORKS

### **Publications (Total: 76) (Total Citations: >3500, H-index 30, Source: Google Scholar)**

Representative publications as first or corresponding author are listed in the following:

1. Chung JY, Tang PC, Chan MK, Lian J, Chan MK, Xue VW, Huang XR, Ng CS, Zhang DM, Leung KT, Wong CK, Lee TL, Lam EW, N-Paterson DJ, To KF, Lan HY, **Tang PM**: Smad3 is Essential for Polarization of Tumor-Associated Neutrophils in NSCLC. Nature Communications 2023 [In Press] (**IF: 17.694**; Times Cited: 127; Rank in Category: 6 of 73 MULTIDISCIPLINARY SCIENCES)
2. Tang PC, Chung JY, Lian J, Chan MK, Chan AS, Xue VW, Cheng G, Li C, Huang XR, Ng CS, Lam EW, Zhang DM, Ho YP, To KF, Leung KT, Jiang X, Ho K, Lee TL, Lan HY, **Tang PM**: Single-cell RNA-sequencing Uncovers a Neuron-like Macrophage Subset Associated with Cancer Pain. Science Advances 2022 [In Press] (**IF: 14.972**; Rank in Category: 7 of 134 in MULTIDISCIPLINARY SCIENCES)
3. Tang PC, Chung JY, Xue VW, Xiao J, Meng XM, Huang XR, Zhou S, Chan AS, Tsang AC, Cheng AS, Lee TL, Leung KT, Lam EW, To KF, **Tang PM (co-correspondence)**, Lan HY: Smad3 Promotes Cancer-

Associated Fibroblasts Generation via Macrophage-Myofibroblast Transition. *Advanced Science*, 9: e2101235, 2022 10.1002/advs.202101235 [**selected as Frontispiece Image**] (**IF: 17.521**; Times Cited: 8; Rank in Category: 14 of 179 in CHEMISTRY, MULTIDISCIPLINARY, 21 of 345 in MATERIALS SCIENCE, MULTIDISCIPLINARY, 12 of 109 in NANOSCIENCE & NANOTECHNOLOGY)

4. Chen J, Tang Y, Zhong Y, Wei B, Huang XR, Ming-Kuen **Tang PM (co-correspondence)**, Xu A, Lan HY: P2Y<sub>12</sub> inhibitor, Clopidogrel inhibits renal fibrosis by blocking macrophage-to-myofibroblast transition. *Mol Ther*, 2022 10.1016/j.ymthe.2022.06.019 (**IF: 12.91**; Rank in Category: 9 of 158 in BIOTECHNOLOGY & APPLIED MICROBIOLOGY, 7 of 175 in GENETICS & HEREDITY, 10 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

5. Jeff Y.F. Chung, **PM Tang (co-correspondence)**, Max K.K. Chan, L. Wang, X.R. Huang, K.F. To, Ronald C.W. Ma, H.Y. Lan. AANG Prevents Smad3-dependent Diabetic Nephropathy by Restoring Pancreatic  $\beta$ -Cell Development in db/db Mice. *Int. J. Biol. Sci.* 2022; doi:10.7150/ijbs.72977. (**IF: 10.750**; Times Cited: 1; Rank in Category: 28 of 296 in BIOCHEMISTRY & MOLECULAR BIOLOGY)

6. Chan MK, Chung JY, Tang PC, Chan AS, Ho JY, Lin TP, Chen J, Leung KT, To KF, Lan HY, **Tang PM**: TGF- $\beta$  Signaling Networks in the Tumor Microenvironment. *Cancer Letters* 2022 [In Press]. (IF: 9.756; Times Cited: 1; Rank in Category: 30 of 317 in ONCOLOGY)

7. Tang PC, Zhang YY, Li JS, Chan MK, Chen J, Tang Y, Zhou Y, Zhang D, Leung KT, To KF, Tang SC, Lan HY, **Tang PM**: LncRNA-Dependent Mechanisms of Transforming Growth Factor-beta: From Tissue Fibrosis to Cancer Progression. *Noncoding RNA*, 8, 2022 10.3390/ncrna8030036 (Rank in Category: 98 of 321 in BIOCHEMISTRY & MOLECULAR BIOLOGY, 60 of 191 in GENETICS & HEREDITY)

8. **Tang PM (co-correspondence)**, Zhang YY, Hung JS, Chung JY, Huang XR, To KF, Lan HY: DPP4/CD32b/NF-kappaB Circuit: A Novel Druggable Target for Inhibiting CRP-Driven Diabetic Nephropathy. *Mol Ther*, 29: 365-375, 2021 10.1016/j.ymthe.2020.08.017 (**IF: 12.91**; Times Cited: 16; Rank in Category: 9 of 158 in BIOTECHNOLOGY & APPLIED MICROBIOLOGY, 7 of 175 in GENETICS & HEREDITY, 10 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

9. Sheng J, Wang L, **Tang PM (co-first)**, Wang HL, Li JC, Xu BH, Xue VW, Tan RZ, Jin N, Chan TF, Huang XR, Ma RC, Lan HY: Smad3 deficiency promotes beta cell proliferation and function in db/db mice via restoring Pax6 expression. *Theranostics*, 11: 2845-2859, 2021 10.7150/thno.51857 (**IF: 11.6**; Times Cited: 8; Rank in Category: 13 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

10. Xue VW, Chung JY, Tang PC, Chan AS, To TH, Chung JS, Mussal F, Lam EW, Li C, To KF, Leung KT, Lan HY, **Tang PM**: USMB-shMincle: a virus-free gene therapy for blocking M1/M2 polarization of tumor-associated macrophages. *Mol Ther Oncolytics*, 23: 26-37, 2021 10.1016/j.omto.2021.08.010 (IF: 6.311; Times Cited: 4; Rank in Category: 39 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL, 65 of 245 in ONCOLOGY)

11. Zhao M, Xu M, Li H, Alqawasmeh O, Chung JPW, Li TC, Lee TL, **Tang PM (co-correspondence)**, Chan DY: Application of convolutional neural network on early human embryo segmentation during in vitro fertilization. *J Cell Mol Med*, 25: 2633-2644, 2021 10.1111/jcmm.16288 (IF: 5.295; Times Cited: 5; Rank in Category: 84 of 194 in CELL BIOLOGY, 54 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

12. Chan ASW, Ho JMC, Li JSF, Tam HL, **Tang PMK**: Impacts of COVID-19 Pandemic on Psychological Well-Being of Older Chronic Kidney Disease Patients. *Front Med (Lausanne)*, 8: 666973, 2021 10.3389/fmed.2021.666973 (IF: 5.058; Times Cited: 17; Rank in Category: 52 of 172 in MEDICINE, GENERAL & INTERNAL)

13. Chung JY, Chan MK, Li JS, Chan AS, Tang PC, Leung KT, To KF, Lan HY, **Tang PM**: TGF-beta Signaling: From Tissue Fibrosis to Tumor Microenvironment. *Int J Mol Sci*, 22, 2021 10.3390/ijms22147575 (IF: 6.208; Times Cited: 35; Rank in Category: 69 of 296 in BIOCHEMISTRY & MOLECULAR BIOLOGY, 50 of 179 in CHEMISTRY, MULTIDISCIPLINARY)

14. Tang PC, Chan AS, Zhang CB, Garcia Cordoba CA, Zhang YY, To KF, Leung KT, Lan HY, **Tang PM**: TGF-beta1 Signaling: Immune Dynamics of Chronic Kidney Diseases. *Front Med (Lausanne)*, 8: 628519, 2021

10.3389/fmed.2021.628519 (IF: 5.058; Times Cited: 12; Rank in Category: 52 of 172 in MEDICINE, GENERAL & INTERNAL)

15. Chung JY, Chan MK, Tang PC, Chan AS, Chung JS, Meng XM, To KF, Lan HY, Leung KT, **Tang PM**: AANG: A natural compound formula for overcoming multidrug resistance via synergistic rebalancing the TGF-beta/Smad signalling in hepatocellular carcinoma. *J Cell Mol Med*, 25: 9805-9813, 2021 10.1111/jcmm.16928 (IF: 5.295; Times Cited: 6; Rank in Category: 84 of 194 in CELL BIOLOGY, 54 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

16. **Tang PM (co-correspondence)**, Zhang YY, Xiao J, Tang PC, Chung JY, Li J, Xue VW, Huang XR, Chong CC, Ng CF, Lee TL, To KF, Nikolic-Paterson DJ, Lan HY: Neural transcription factor Pou4f1 promotes renal fibrosis via macrophage-myofibroblast transition. *Proc Natl Acad Sci U S A*, 117: 20741-20752, 2020 10.1073/pnas.1917663117 (IF: **12.779**; Times Cited: 40; Rank in Category: 9 of 73 in MULTIDISCIPLINARY SCIENCES)

17. Li C, Xue VW, Wang QM, Lian GY, Huang XR, Lee TL, To KF, **Tang PM (co-correspondence)**, Lan HY: The Minclre/Syk/NF-kappaB Signaling Circuit Is Essential for Maintaining the Protumoral Activities of Tumor-Associated Macrophages. *Cancer Immunol Res*, 8: 1004-1017, 2020 10.1158/2326-6066.CIR-19-0782 (IF: **12.02**; Times Cited: 22; Rank in Category: 19 of 161 in IMMUNOLOGY, 27 of 245 in ONCOLOGY)

18. Xue VW, Chung JY, Cordoba CAG, Cheung AH, Kang W, Lam EW, Leung KT, To KF, Lan HY, **Tang PM**: Transforming Growth Factor-beta: A Multifunctional Regulator of Cancer Immunity. *Cancers (Basel)*, 12, 2020 10.3390/cancers12113099 (IF: 6.575; Times Cited: 25; Rank in Category: 60 of 245 in ONCOLOGY)

19. Tang PC, Zhang YY, Chan MK, Lam WW, Chung JY, Kang W, To KF, Lan HY, **Tang PM**: The Emerging Role of Innate Immunity in Chronic Kidney Diseases. *Int J Mol Sci*, 21, 2020 10.3390/ijms21114018 (IF: 6.208; Times Cited: 22; Rank in Category: 69 of 296 in BIOCHEMISTRY & MOLECULAR BIOLOGY, 50 of 179 in CHEMISTRY, MULTIDISCIPLINARY)

20. Leung IC, Chong CC, Cheung TT, Yeung PC, Ng KK, Lai PB, Chan SL, Chan AW, **Tang PM (co-correspondence)**, Cheung ST: Genetic variation in ABCB5 associates with risk of hepatocellular carcinoma. *J Cell Mol Med*, 24: 10705-10713, 2020 10.1111/jcmm.15691 (IF: 5.295; Times Cited: 3; Rank in Category: 84 of 194 in CELL BIOLOGY, 54 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

21. **Tang, PM**, Nikolic-Paterson, DJ, Lan, HY: Macrophages: versatile players in renal inflammation and fibrosis. *Nature Reviews Nephrology*, 15:144-158. 2019. (IF: **42.429**; Times Cited: 349; Rank in Category: 1 of 90 in UROLOGY & NEPHROLOGY) [*The 5<sup>th</sup> most cited paper of Nature Reviews Nephrology 2021*]

22. Zhang, YY, **Tang, PMK (co-1<sup>st</sup>)**, Tang, PCT, Xiao, J, Huang, XR, Yu, C, Ma, RC, Lan, HY: LRNA9884, a Novel Smad3-Dependent LncRNA, Promotes Diabetic Kidney Injury in db/db Mice Via Enhancing MCP-1-Dependent Renal Inflammation. *Diabetes*. 2019 May 2. pii: db181075. [**Cover Page of Diabetes in 2019**]. (IF: 9.337; Times Cited: 58; Rank in Category: 12 of 146 in ENDOCRINOLOGY & METABOLISM)

23. **Tang, PM**, Zhou, S, Li, CJ, Liao, J, Xiao, J, Wang, QM, Lian, GY, Li, J, Huang, XR, To, KF, Ng, CF, Chong, CC, Ma, RC, Lee, TL, Lan, HY: The proto-oncogene tyrosine protein kinase Src is essential for macrophage-myofibroblast transition during renal scarring. *Kidney Int*, 93: 173-187, 2018. (IF: **18.998**; Times Cited: 60; Rank in Category: 3 of 90 in UROLOGY & NEPHROLOGY)

24. Feng, M, **Tang, PM (co-1<sup>st</sup>)**, Huang, XR, Sun, SF, You, YK, Xiao, J, Lv, LL, Xu, AP, Lan, HY: TGF-beta Mediates Renal Fibrosis via the Smad3-ErbB4-IR Long Noncoding RNA Axis. *Mol Ther*, 26: 148-161, 2018. (IF: **12.91**; Times Cited: 106; Rank in Category: 9 of 158 in BIOTECHNOLOGY & APPLIED MICROBIOLOGY, 7 of 175 in GENETICS & HEREDITY, 10 of 139 in MEDICINE, RESEARCH & EXPERIMENTAL)

25. Wang, QM, **Tang, PM (co-1<sup>st</sup>)**, Lian, GY, Li, C, Li, J, Huang, XR, To, KF, Lan, HY: Enhanced Cancer Immunotherapy with Smad3-Silenced NK-92 Cells. *Cancer Immunol Res*, 6: 965-977, 2018. (IF: **12.02**; Times Cited: 39; Rank in Category: 19 of 161 in IMMUNOLOGY, 27 of 245 in ONCOLOGY)

26. Sun, SF, **Tang, PMK (co-1<sup>st</sup>)**, Feng, M, Xiao, J, Huang, XR, Li, P, Ma, RCW, Lan, HY: Novel lncRNA ErbB4-IR Promotes Diabetic Kidney Injury in db/db Mice by Targeting miR-29b. *Diabetes*, 67: 731-744, 2018

[*Highlighted by Editorial Commentary*]. (IF: 9.337; Times Cited: 121; Rank in Category: 12 of 146 in ENDOCRINOLOGY & METABOLISM)

27. **Tang, PM**, Zhang, YY, Mak, TS, Tang, PC, Huang, XR, Lan, HY: Transforming growth factor-beta signalling in renal fibrosis: from Smads to non-coding RNAs. *The Journal of physiology*, 596: 3493-3503, 2018. (IF: 6.228; Times Cited: 72; Rank in Category: 56 of 274 in NEUROSCIENCES, 11 of 81 in PHYSIOLOGY)

28. **Tang, PM**, Zhou, S, Meng, XM, Wang, QM, Li, CJ, Lian, GY, Huang, XR, Tang, YJ, Guan, XY, Yan, BP, To, KF, Lan, HY: Smad3 promotes cancer progression by inhibiting E4BP4-mediated NK cell development. *Nature communications*, 8: 14677, 2017. (IF: 17.694; Times Cited: 127; Rank in Category: 6 of 73 MULTIDISCIPLINARY SCIENCES)

29. Bui-Xuan, NH, **Tang, PM (co-1<sup>st</sup>)**, Wong, CK, Fung, KP: Photo-activated pheophorbide-a, an active component of *Scutellaria barbata*, enhances apoptosis via the suppression of ERK-mediated autophagy in the estrogen receptor-negative human breast adenocarcinoma cells MDA-MB-231. *J Ethnopharmacol*, 131: 95-103, 2010. (IF: 5.195; Times Cited: 75; Rank in Category: 17 of 63 in CHEMISTRY, MEDICINAL, 4 of 30 in INTEGRATIVE & COMPLEMENTARY MEDICINE, 71 of 279 in PHARMACOLOGY & PHARMACY, 31 of 238 in PLANT SCIENCES)

30. **Tang, PM**, Bui-Xuan, NH, Wong, CK, Fong, WP, Fung, KP: Pheophorbide a-Mediated Photodynamic Therapy Triggers HLA Class I-Restricted Antigen Presentation in Human Hepatocellular Carcinoma. *Transl Oncol*, 3: 114-122, 2010. (IF: 4.803; Times Cited: 24; Rank in Category: 101 of 245 in ONCOLOGY)

31. **Tang, PM**, Zhang, DM, Xuan, NH, Tsui, SK, Waye, MM, Kong, SK, Fong, WP, Fung, KP: Photodynamic therapy inhibits P-glycoprotein mediated multidrug resistance via JNK activation in human hepatocellular carcinoma using the photosensitizer pheophorbide a. *Mol Cancer*, 8: 56, 2009. (IF: 41.444; Times Cited: 86; Rank in Category: 3 of 296 in BIOCHEMISTRY & MOLECULAR BIOLOGY, 7 of 245 in ONCOLOGY)

32. **Tang, PM**, Liu, XZ, Zhang, DM, Fong, WP, Fung, KP: Pheophorbide a based photodynamic therapy induces apoptosis via mitochondrial-mediated pathway in human uterine carcinosarcoma. *Cancer Biol Ther*, 8: 533-539, 2009. [*Highlighted by Editorial Commentary*] (IF: 4.875; Times Cited: 71; Rank in Category: 97 of 245 in ONCOLOGY)

33. **Tang, PM**, Chan, JY, Zhang, DM, Au, SW, Fong, WP, Kong, SK, Tsui, SK, Waye, MM, Mak, TC, Fung, KP: Pheophorbide a, an active component in *Scutellaria barbata*, reverses P-glycoprotein-mediated multidrug resistance on a human hepatoma cell line R-HepG2. *Cancer Biol Ther*, 6: 504-509, 2007. (IF: 4.875; Times Cited: 41; Rank in Category: 97 of 245 in ONCOLOGY)

34. **Tang, PM**, Chan, JY, Au, SW, Kong, SK, Tsui, SK, Waye, MM, Mak, TC, Fong, WP, Fung, KP: Pheophorbide a, an active compound isolated from *Scutellaria barbata*, possesses photodynamic activities by inducing apoptosis in human hepatocellular carcinoma. *Cancer Biol Ther*, 5: 1111-1116, 2006. (IF: 4.875; Times Cited: 98; Rank in Category: 97 of 245 in ONCOLOGY)

## **KNOWLEDGE TRANSFER ACTIVITIES**

1. VIRUS-FREE GENE TRANSFER METHOD FOR TISSUE-SPECIFIC TARGETING MINCLE  
US provisional patent US 62/987,079 31/03/2020
2. A VIRUS-FREE GENE TRANSFER METHOD FOR TISSUE-SPECIFIC TARGETING MINCLE  
Hong Kong short term patent HK30038659 25/06/2021
3. NANRINGENIN AND ASIATIC ACID COMBINATION TREATMENT OF DIABETES  
US provisional patent US 62/960,512 30/01/2020
4. NANRINGENIN AND ASIATIC ACID COMBINATION TREATMENT OF DIABETES  
Hong Kong short term patent HK30037701 11/06/2021
5. NEUTROPHIL-BASED COMPOSITION AND USE THEREOF  
Hong Kong short term patent HK30056670 01/04/2022
6. Academic advisor of project NG22-01 cohort in HKSTP IDEATION PROGRAM

**PI in RGC General Research Fund/ Earmarked Grant for Research**

- 08/2023-07/2026 Development and Preclinical Evaluation of a Novel Macrophage-Myofibroblast Transition Targeted Therapy for Chronic Kidney Disease (HMRF 10210726; HK\$1,500,000)
- 04/2023-03/2027 Development of a Highly Efficient Virus-free Gene Knock-In System for CAR-T/NK Cell Engineering (Passion for Perfection Scheme PFP202210-004; HK\$9,841,000)
- 01/2021-12/2023 Elucidating the Pathogenic Role and Regulatory Mechanism of TAM-CAF Transition in NSCLC at Single-Cell Resolution (Research Grants Council GRF 14111720; HK\$ 996,285)
- 01/2020-12/2022 Functional Role and Regulatory Mechanism of Macrophage to Neuron-like Cell Transition (MNT) in Tumor Microenvironment (RGC GRF 14111019; HK\$1,074,019)
- 01/2020-12/2024 Faculty Innovation Award 2019, Scheme A, CUHK (FIA2019/A/01; HK\$2,500,000)
- 01/2019-12/2021 Regulatory Role and Mechanism of Smad3 in Immunosuppression of Neutrophil Anticancer Activities (RGC GRF 14106518; HK\$1,151,040)
- 01/2019- 06/2020 Development of a Novel Virus-free Anticancer Gene Therapy: USMB-shMincle (Innovation & Technology Commission ITSP ITS/068/18; HK\$1,391,500)
- 05/2022 – 05/2025 Functional Role and Regulatory Mechanism of Macrophage to Neuron-like Cell Transition (MNT) in Tumor Microenvironment (CUHK - Research Committee - Postdoctoral Fellowship Scheme Ref.: NL/LT/PDFS2022/0360/22lt; HK\$750,000)
- 06/2022 – 06/2023 Development of a Novel Macrophage-Myofibroblast Transition Targeted Inhibitor for Anticancer Immunotherapy (CUHK - Direct Grants 4054668; HK\$75,000)
- 01/2021 – 12/2023 Incentive Research Scheme Project Top Up for General Research Fund HK\$20,000
- 06/2020 - 06/2021 Novel pathogenic role and mechanism of G protein-coupled purinergic receptor P2Y12 in NSCLC (CUHK - Direct Grants 143040356; HK\$51,000)
- 01/2020 – 12/2022 Incentive Research Scheme Project Top Up for General Research Fund 4442416 HK\$20,000
- 06/2019 – 06/2020 Elucidating the Pathogenic Role of TAM-CAF in NSCLC at Single-Cell Resolution in vivo and in vitro (CUHK - Direct Grants 133119056; HK\$150,000)
- 01/2019 – 12/2021 Incentive Research Scheme Project Top Up for General Research Fund 4442163 HK\$20,000
- 06/2018 – 06/2019 Neural Transcription Factor Pou4f1 Regulates Macrophage-Myofibroblast Transition Driven Kidney Fibrosis (CUHK - Direct Grants 4054386; HK\$150,000)

### **Co-I in RGC General Research Fund/ Earmarked Grant for Research**

- 2016-2017 Genetic Engineering a TGF-beta Tolerant Human NK Cell Line for Effective Anticancer Immunotherapy (ITF Tier 3; HK\$1,363,900)
- 2016-2018 Mechanisms and Therapeutic Implication of a DPP4-I, Sitagliptin, in High CRP-associated Type-2 Diabetic Nephropathy (HMRF; HK\$1,200,000)
- 2017-2019 Treatment of Diabetic Nephropathy by Targeting TGF-β/Smad Signalling with the Combination of Asiatic Acid and Naringenin (HMRF; HK\$1,200,000)
- 2018-2019 Development of a novel cell-free anticancer immunotherapy: SCND-SIS3 (ITF Tier3; HK\$1,393,800)
- 2018-2020 Novel Mechanisms and Therapeutic Implication of P2Y12 inhibitor, Clopidogrel, in Renal Fibrosis (HMRF 143040356; HK\$1,200,000)
- 2019-2021 Prevention and treatment of diabetes and diabetic complications by targeting Smad3 with a Smad3 inhibitor SIS3 (HMRF 136468905; HK\$1,500,000)
- 2020-2022 Molecular and functional characterization of the immunoregulatory CCRK-mTOR pathway in NAFLD-associated hepatocellular carcinoma (GRF 138278629; 1,049,917)
- 2021-2024 Driving Therapeutic Progress of Childhood Leukemia through Advanced Translational Research with Immediate and Long-term Impact (175581889) sponsored by Food and Health Bureau (HMRF 175581889; HK\$6,477,778)

### **PERSONAL AWARDS AND HONORS**

2022: First Prize in 17th National College Students' Extracurricular Academic Science and Technology Contest

2022: Bronze Medal in Inventions Geneva 2022 (Swiss)  
2022: Innovation Second-class Award of the 7th Hong Kong University Student Innovation and Entrepreneurship Competition (Hong Kong)  
2021: Winner of 7<sup>th</sup> Youth Dream Makers 2021 (Hong Kong)  
2021: Gold Medal with Congratulations of the Jury Medal in Inventions Geneva 2021 (Swiss)  
2021: Innovation First-class Award of the 7th Hong Kong University Student Innovation and Entrepreneurship Competition (Hong Kong)  
2019: Faculty Innovation Award (Scheme A), Faculty of Medicine, CUHK  
2018: Frontiers Young Investigator Award, Winner, International Society of Nephrology (Tokyo)  
2018: Young Investigator Award, First Runner-up, East Meets West Symposium, Hong Kong  
2018: Poster Award, Hong Kong Immunology Forum  
2018: Poster Award, SYSU-CUHK State Key Laboratory Retreat Conference  
2009: Postdoctoral Research Fellowship (Oxford-China Exchange), Cancer Research UK  
2006: Postgraduate Students Publication Award, Department of Biochemistry, CUHK

## **INVITED PRESENTATIONS/ LECTURES**

### **Invited Presentations/ Lectures at Conferences, Research Institutes and Universities (Total: 9)**

1. Neural Transcription Factor Pou4f1 is Essential for Macrophage-Myofibroblast Transition Driven Kidney Fibrosis in ISN Frontiers Meetings 2018 organized by International Society of Nephrology, Japan (2018-02)
2. Uncovering novel Immunotherapeutics from the Tumor microenvironment in SYSU-CUHK State Key Laboratory Retreat Conference organized by SYSU-CUHK State Key Laboratory, Sun Yat-Sen University, China (2018-05)
3. 糖腎方通過促進 ABCA1 介導的腎臟膽固醇流出減輕糖尿病損害 in 2018 Asian Pacific Congress of Nephrology organized by Asian Pacific Society of Nephrology, China (2018-03)
4. Mechanism of Kidney Fibrosis in The ISN World Congress of Nephrology, Melbourne, Australia (2019-04)
5. Smad3 Deficiency Restores Anticancer Activity of Tumor-Associated Neutrophils in NSCLC in EACRAACR-ASPIC 'Basic and Translational Research Conference Tumor Microenvironment' organized by European Association for Cancer Research, American Association for Cancer Research, Associação Portuguesa De Investigação Em Cancro (2020-03)
6. Macrophage-specific RNA-sequencing reveals a novel pathogenic mechanism for malignancy-associated kidney injury at single-cell resolution in World Congress of Nephrology 2020 organized by International Society of Nephrology (2020-03)
7. HER3 reactivation: A compensatory shift between Akt-mediated positive and negative feedback loops in HER2-overexpressed human breast cancer cells. Annual Meeting of the British Association for Cancer Research; 2011 Dec Edinburgh, UK.
8. HER3 reactivation: A compensatory shift between Akt-mediated positive and negative feedback loops in HER2-overexpressed human breast cancer cells. Proceedings of the 102nd Annual Meeting of the American Association for Cancer Research; 2011 Apr 2-6; Orlando, FL. Philadelphia, USA
9. Virus-free Anticancer Gene Therapy in Science Exposition, the Hong Kong Laurate Forum (2021-09)

## **KEYNOTE SPEECHES/ DISTINGUISHED LECTURES**

1. Uncovering Novel Immunotherapeutics from the Tumor Microenvironment in 暨南大学生命科学技术

学院、基因工程药物国家工程研究中心、广东省生物工程药物重点实验室学术讲座 organized by 暨南大学生命科学技术学院, China (2018-04)

2. A Novel Mechanism for Kidney Fibrosis: Macrophage-Myofibroblast Transition in 北京協和醫院-中山大學附屬第七醫院腎內科"三名工程"項目系列講座五 organized by 中山大學附屬第七醫院腎內風濕科, China (2019-12)

3. A Novel Virus-free Anticancer Gene Therapy: USMB-shMincl in Hong Kong Society of Flow Cytometry 25th Annual General Meeting and Scientific Meeting organized by Hong Kong Society of Flow Cytometry, Hong Kong (2021-06)

4. Uncovering Novel Therapeutic Targets from the Tumor Microenvironment. School of Life Science and Technology, Harbin Institute of Technology, Harbin, Heilongjiang Province, China (2022-08)

## **CONFERENCE ORGANIZATION**

Organizing Committee Member, Hong Kong Society of Flow Cytometry 26th Annual General Meeting and Scientific Meeting, Hong Kong, 10/2022

## **POSTGRADUATE STUDENTS**

Graduated PhD students (Total: 2) Graduated MSc students (Total: 3 as Prospective Project Supervisor)  
Current PhD Students (Total: 4) Current MSc Students (Total: 3 as Prospective Project Supervisor)

### **Awards obtained under supervision:**

2022: Ideation Program, Hong Kong Science & Technology Parks Corporation

2022: Bronze Medal of the Geneva International Exhibition of Inventions, Switzerland

2022: 2nd class award, 8th HK University Student Innovation & Entrepreneurship Competition, HK

2021: First Prize, 17th "Challenge Cup" National College Students' Extracurricular Academic Science and Technology Contest (Challenge Cup), HK

2021: Postdoctoral Fellowship Scheme (PDFS) Award, Research Grants Council, HK

2021: 1st class award, 7th HK University Student Innovation & Entrepreneurship Competition, HK

2021: Outstanding student award 2021, CUHK, HK

2021: Young Investigator Award, Hong Kong Society for Immunology, HK

2021: Highest scoring abstracts, The European Association for Cancer Research 2021, England

2021: Poster Presentation Award, Hong Kong Society for Immunology, HK

2021: Honorable Mention Award, Research Poster Exhibition 2021, CUHK, HK

2020: Merit Award, European Society for Medical Oncology, Switzerland

2017: Poster Presentation Award, Hong Kong Society for Immunology, HK