

# **CURRICULUM VITAE**

Gilberto K. K. Leung

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# Curriculum Vitae

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## **Biography**

Professor Gilberto K. K. Leung is a neurosurgeon, Clinical Professor, and holder of the Tsang Wing-Hing Professor in Clinical Neuroscience at the University of Hong Kong (HKU). He graduated from the Medical College of St. Bartholomew's Hospital, University of London, with M.B.B.S. in 1992. During postgraduate training in England, United States and Hong Kong, he was awarded the Hallett Gold Medal by the Royal College of Surgeons of England, and the J. Douglas Miller Medal in Neurosurgery by the Royal College of Surgeons of Edinburgh. He joined HKU in 2005 where he subsequently obtained his MS, PhD, and MD.

Beyond the field of medicine, he holds an Intercalated BSc in Physical Anthropology and an LLB from the University of London; and an LLM in Medical Law and Ethics with Distinction from the University of Edinburgh and its School of Law's McLagan Prize for Best Graduate.

He is currently President of the Hong Kong Academy of Medicine, Co-Chairperson of its Professionalism and Ethics Committee, Associate Dean (Teaching & Learning) of his medical faculty, Co-Director of the Centre for Medical Ethics and Law at HKU, and Board Member of the International Association of Medical Regulatory Authorities. He is a member of the Research Council, Health Bureau, and Chairperson of the Grant Review Board (HMRF) of The Government of the HKSAR. He delivers clinical services as an Honorary Consultant Neurosurgeon at Queen Mary Hospital, Hong Kong.

He previously served as an Elected Member of the HKU Senate, Director of Trauma Service at Queen Mary Hospital, Chairman of the Hospital Authority Central Committee on Trauma Service, Vice-President of the Hong Kong Neurosurgical Society, Deputy Chief of Service in Neurosurgery at Queen Mary Hospital, Division Chief of Neurosurgery at the HKU-Shenzhen Hospital, and Region XVI Chief (Asia-Australasia) of the Advanced Trauma Life Support Programme of the American College of Surgeons.

His clinical and research interests include endoscopic skull base surgery, molecular biology of brain tumour, neuroprotective therapy, medical education, and medical law and ethics. He has supervised 30 postgraduate degree students and published 214 peer-reviewed journal

articles, 13 book chapters, three monographs, 130 conference papers, 71 other publications, and delivered 140 invited lectures, with an H-index (Scopus) of 36.

## Curriculum Vitae

**Name:** Professor Gilberto Ka Kit Leung

**Institution:** School of Clinical Medicine, LKS Faculty of Medicine, The University of Hong Kong.

**Academic Title:** Tsang Wing-Hing Professor in Clinical Neuroscience

**Academic Rank:** Clinical Professor

**Clinical Position:** Honorary Consultant Neurosurgeon, Queen Mary Hospital, Hong Kong.

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**HKU Scholars Hub:** <https://repository.hku.hk/cris/rp/rp00522>

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### Academic Qualifications:

1989 Intercalated BSc. (Physical Anthropology), University College London, University of London.

1992 M.B.B.S., The Medical College of St. Bartholomew's Hospital, University of London.

2009 Master of Surgery (MS), The University of Hong Kong.

2014 Doctor of Philosophy (PhD), The University of Hong Kong.

2017 LLM (Medical Law & Ethics) with Distinction, University of Edinburgh.

2022 LLB (Second Class Honours, Upper Division), University of London.

2023 Doctor of Medicine (MD), The University of Hong Kong.

### Professional Qualifications:

1996 Fellowship of the Royal College of Surgeons of Edinburgh (F.R.C.S.)

- 1996 Fellowship of the Hong Kong College of Surgeons (F.H.K.C.S.)
- 2001 Fellowship of the Hong Kong Academy of Medicine (F.H.K.A.M. (Surgery))
- 2003 United States Medical Licentiate Examination (U.S.M.L.E.)
- 2013 Fellowship of the American College of Surgeons (relinquished 2022)

### **Academic Positions:**

- 2005-2013 Clinical Assistant Professor, The University of Hong Kong.
- 2013-2017 Clinical Associate Professor, The University of Hong Kong.
- 2017-present Clinical Professor, The University of Hong Kong.
- 2017-present Tsang Wing-Hing Professor in Clinical Neuroscience, The University of Hong Kong.

### **Current Leadership Positions:**

- 2018-present Associate Dean (Teaching & Learning), LKS Faculty of Medicine, The University of Hong Kong.
- 2021-2024 President, Hong Kong Academy of Medicine.
- 2019-present Co-Chairperson, Professionalism and Ethics Committee, Hong Kong Academy of Medicine.
- 2022-2025 Co-Director, Centre for Medical Ethics and Law, The University of Hong Kong.
- 2022-2025 Member, Board of Directors, International Association of Medical Regulatory Authorities (IAMRA)

### **Previous Leadership Positions:**

- 2007-2018 Director of Trauma Service, Queen Mary Hospital, Hong Kong.
- 2008-2014 Chairman, Central Committee (Trauma Service), Hospital Authority, Hong Kong.
- 2010-2013 Elected Member, Senate, The University of Hong Kong.
- 2012-2017 Division Chief of Neurosurgery, Department of Surgery, HKU-Shenzhen Hospital, People's Republic of China.

- 2016-2020 Vice-president, The Hong Kong Neurosurgical Society.
- 2016-2023 Region XVI Chief, Advanced Trauma Life Support International, American College of Surgeons.
- 2016-2020 Vice-President (Education & Examinations) and Chairperson, Education and Examination Committee, Hong Kong Academy of Medicine.
- 2019-2022 Governor, China-Hong Kong Chapter, American College of Surgeons.

**Past/Present Honorary Appointments:**

- 2005-2013 Honorary Associate Consultant Neurosurgeon, Queen Mary Hospital, Hong Kong.
- 2013-present Honorary Consultant Neurosurgeon, Queen Mary Hospital, Hong Kong.
- 2009-2015 Honorary Assistant Professor, Department of Anatomy, LKS Faculty of Medicine, The University of Hong Kong.
- 2015-2017 Honorary Associate Professor, School of Biomedical Sciences, LKS Faculty of Medicine, The University of Hong Kong.
- 2023-2025 Honorary Consultant, Neuromedicine Center, HKU-Shenzhen Hospital, Shenzhen, People's Republic of China.

**Postgraduate Training:**

- 1992-1993 House Officer, North Middlesex Hospital and St. Bartholomew's Hospital, London, U.K.
- 1993-1994 Senior House Officer, Northwick Park Hospital and St. Bartholomew's Hospital, London, U.K.
- 1995-2001 Basic and Higher Surgical Trainee, Department of Surgery, Queen Mary Hospital, Hong Kong.
- 2003 Neuroendocrine Fellowship (Dr Edward Laws, Jr.), Department of Neurosurgery, University of Virginia, U.S.

**License to Practice:**

General Register (M09893), Medical Council of Hong Kong.

Specialist Register (S30-0035), Medical Council of Hong Kong.

## Honours & Awards

- 1988 Foster Prize in Anatomy, The Medical College of St. Bartholomew's Hospital, University of London.
- 1992 Certificate of Merits in Pharmacology, Final M.B.B.S., The Medical College of St. Bartholomew's Hospital, University of London.
- 1994 Hallett Gold Medal, The Royal College of Surgeons of England, U.K.
- 2001 J. Douglas Miller Medal in Neurosurgery, The College of Surgeons of Hong Kong, H.K.
- 2006 Best Poster Presentation, The 13<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society, H.K.
- 2008 First Prize, Faculty of Medicine Essay Competition, LKS Faculty of Medicine, The University of Hong Kong.
- 2009 Faculty Teaching Medal, LKS Faculty of Medicine, The University of Hong Kong.
- 2012 Outstanding Poster Presentation, Research Postgraduate Symposium, LKS Faculty of Medicine, The University of Hong Kong, H.K.
- 2012 Visiting Professorship, Joint Laboratory for Brain Function and Health, Jinan University, Guangzhou, People's Republic of China.
- 2015 Best Free Paper, Joint 11<sup>th</sup> Biennial Convention of the ASEAN Neurological Association and 16<sup>th</sup> ASEAN Congress of Neurological Surgery.
- 2017 Endowed Tsang Wing-Hing Professorship in Clinical Neuroscience, The University of Hong Kong.
- 2017 Prize for Best Distance Learning LLM Dissertation, School of Law, University of Edinburgh.
- 2017 McLagan Prize for Best Graduate in LLM (Medical law and Ethics), School of Law, University of Edinburgh.
- 2018 Fellowship of the Academy of Medicine of Malaysia.
- 2019 HKU Excellence Awards 2019 - Outstanding Teaching Award (Team)
- 2021 Fellowship of the Academy of the Asian Collaboration for Trauma
- 2021 Honorary Fellowship, American College of Physicians.
- 2022 Fellowship of the Academy of Medicine of Singapore.



## Research & Scholarship:

### A. Publications

Peer-reviewed journal article: 214

Book chapter: 13

Doctorate thesis: 3

Other publication: 71

Conference paper: 130

Invited lecture: 140

H-index (Scopus) = 36

Citation (Scopus) = 4,727

H-index (Google Scholar) = 47

Citation (Google Scholar) = 8,051

\* corresponding authorship

#### Five representative publications as first/corresponding author in the last five years

1. Kiang KM, Zhang P, Li N, Zhu Z, Jin L, **Leung GK\***. Loss of cytoskeleton protein ADD3 promotes tumor growth and angiogenesis in glioblastoma multiforme. *Cancer Lett* 2020; 474:118-26. (IF:9.756)
2. Li N, Yao M, Liu J, Zhu Z, Lam T, Zhang P, Kiang KM, **Leung GK\***. Vitamin D promotes remyelination by suppressing c-Myc and inducing oligodendrocyte precursor cell differentiation after traumatic spinal cord injury. *Int J Bio Sci* 2022: doi:10.7150/ijbs.73673 (IF:10.750)
3. Liu J, Li N, Zhu Z, Kiang KM, Ng ACK, Dong CM, **Leung GK\***. Vitamin D enhances hematoma clearance and neurologic recovery in intracerebral hemorrhage. *Stroke* 2022;53(6):2058-2068. (IF:10.17)
4. Zhu Z, Kiang KM, Li N, Liu J, Zhang P, Jin L, He X, Zhang S, **Leung GK\***. Folate enzyme MTHFD2 links one-carbon metabolism to unfolded protein response in glioblastoma. *Cancer Lett* 2022:549;215903. (IF:9.756)
5. Kiang KM, Tang W, Song Q, Liu J, Li N, Lam T, Shum Ho, Zhu Z, **Leung GK\***. Targeting unfolded protein response using albumin-encapsulated nanoparticles attenuates temozolomide resistance in glioblastoma. *Brit J Cancer* 2023:128;1955-1963. (IF:9.082)

#### Five representative publications in collaborative research in the last five years

1. Liu Y, Leong ATL, Zhao Y, Xiao L, Mak HKF, Tsang ACO, Lau GKK, **Leung GKK**, Wu EX. A low-cost and shielding-free ultra-low-field brain MRI scanner. *Nat Commun* 2021;12:7238. (IF:17.694)
2. Choudhury A, Magil ST, Eaton CD, Prage BC, Chen WC, Cady MA, Seo K, Lucas CG, Casey-Clyde TJ, Vasudevan HN, Liu SJ, Villanueva-Meyer JE, Lam T, Pu JK, Li L, **Leung GK**, Swaney DL, Zhang MY, ChanJW, Qiu Z, Martin MV, Susko MS, Braunstein SE, Bush EAO, Schulte J, Butowski N, Sneed PK, Berger MS, Krogan NJ, Perry A, Phillips JJ, Solomon DA, Costello JF, McDermott MC, Rich JN, Raleigh DR. Meningioma DNA methylation grouping reveals biologic drivers and therapeutic vulnerabilities. *Nat Genet* 2022;54(5):649-659. (IF:41.376)
3. Man C, Lau V, Su S, Zhao Y, Xiao L, Ding Y, **Leung GKK**, Leong ATL, Wu E. Deep learning enabled fast 3D brain MRI at 0.055 Tesla. *Sci Advances* 2023;9(38):edai9367. (IF:14.98)
4. Teo K, Fong S, Leung WCY, Leung IYH, Wong Y, Choi OMY, Yam KK, Lo RCN, Cheung RTF, Ho S, Tsang ACO, **Leung GKK**, Chan KH, Lau GKK. Location-specific hematoma volume cut-off and clinical outcomes in intracerebral hemorrhage. *Stroke* 2023;54;1538-1557. (IF: 10.17)
5. Chen WC, Choudhury A, Young MW, Polley MC, LucasCG, MirchiaK, MaasSLN, Suwala A, Won, Bayley JC, Harmanci AS, Klisch T, NguyenMP, Vasudevan HN, Yu TJ, Bhave V, Lam TC, Pu JK, Li L, **Leung GK**, Chan JW, Perlow HK, Palmer JD, Haberler C, Berghoff AS, Preusser M, Nicolaidis TP, Mawrin C, Agnihotri S, Resnick A, Rood B, Chew J, Young JS, Boreta L, Braunstein SE, Schulte J, Butowski N, Santagata S, Spetzler D, Bush NAO, Villanueva-Meyer JE, Solomon DA, Pugh SL, Mehta MP, Sneed PK, Berger MS, Horbinski CM, McDermott MW, Perry A, Bi WL, Patel AL, Sahm F, Magill ST, Raleigh DR. Targeted gene expression profiling predicts meningioma outcomes and radiotherapy responses. *Nat Medicine* 2023 (in press). (IF:87.244)

#### Five representative publications beyond the last five years

1. **Leung GKK\***, Porter G. Safety of candour: how protected are apologies in open disclosure? *BMJ* 2019;365:14047. (IF:96.216)
2. Zhang X, Kiang KM, Wang Y, Pu KKS, Ho AS, Zhang P, Lee D, Cheng SY, Chen J, Lui W, Fung C, **Leung GK\***. IDH1 Mutation-associated long non-coding RNA expression profile changes in glioma. *J Neurooncol* 2015; 125:253-63. (IF:4.506)
3. Zhang X, Sun S, Lam KF, Kiang KMY, Pu JKS, Ho ASW, Lui WM, Gung CF, **Leung GKK\***. A long non-coding RNA signature in glioblastoma multiforme predicts survival. *Neurobio Dis* 2013; 58:123-131. (IF:7.046)
4. Sun S, Lee D, Ho AS, Pu JK, Zhang XQ, Lee NP, Day PJ, Lui WM, Fung CF, **Leung GK\***. Inhibition of prolyl 4-hydroxylase, beta polypeptide (P4HB) attenuates temozolomide resistance in malignant glioma via the endoplasmic reticulum stress response (ERSR) pathways. *Neuro-oncol* 2013; 15:562-577. (IF:13.029)

5. Zhang X, Pu JK, Tsang AC, Lee D, Man VO, Lui W, Wong ST, **Leung GK\***. Long non-coding RNAs expression profiles predict clinical phenotype in glioma. *Neurobiol Dis* 2012; 48(1):1-8. (IF:7.046)

**Peer-reviewed Journal Articles** (\*corresponding authorship)

1. **Leung GKK\***, Cheng PW, Leung SY, Ng THK, Fung CF, Chan FL. Faces to remember. *Int J Neurorad* 1998; 4(6):417-424.
2. **Leung GKK\***, Ho SL, Fan YW. Rubral tremor associated with cavernous angioma of the midbrain. *Mov Disord* 1999; 14(1):191-193.
3. **Leung GKK\***, Hung KN, Fan YW. Surgical treatment for Parkinson's disease. *Hong Kong Practitioner* 1999; 21:106-115.
4. Shek TWH, Peh WCG, **Leung GKK**. Chondromyxoid fibroma of skull base: a tumour prone to local recurrence. *J Laryng Otolology* 1999; 113:380-385.
5. **Leung GKK\***, Lee SYM, Chung HY, Fan YW. Surgical outcome of acute subdural haematoma in patients above the age of 65 years. *Ann Coll Surg H K* 1999; 3:80-84.
6. **Leung GKK\***, Yip P, Fan YW. Spontaneous epidural haematoma associated with radiation-induced malignant fibrous histiocytoma. *J R Coll Surg Edin* 1999; 44:404-406.
7. **Leung GKK\***, Fan YW, Fong KY. Temporal lobectomy for intractable epilepsy. *H K Med J* 1999; 5:329-336.
8. Fan YW, **Leung GKK\***. The use of MRI CSF flow studies in neurosurgery. *J H K Coll Radiol* 2000; 3:165-169.
9. Au WY, Kwong YL, Shek TW, **Leung G**, Ooi C. Diffuse large-cell B-cell lymphoma in a pituitary adenoma: An unusual cause of pituitary apoplexy. *Am J Hematol* 2000; 63(4):231-232.
10. Au WY, Shek TW, Ma SK, **Leung G**, Ooi C, Liang R, Kwong YL. Meningeal granulocytic sarcoma (chloroma) in essential thrombocythemia. *J Clin Oncol* 2000; 18(23):3996-3997.
11. **Leung GKK\***, Wong ATY, Kwan EYC, Khor S, Fan YW. Extradural haematoma – a five-year audit at a tertiary trauma centre in Hong Kong. *Asian J Surg* 2001; 24(3):305-309.
12. **Leung GKK\***, Fan JKM, Tam MCH, Fan YW. Surgical complications of chronic subdural haematoma: a 5-year audit. *Ann Coll Surg H K* 2001; 5:99-103.
13. Lui WM, **Leung GKK\***, Hui Y, Lee KK, Fan YW. Endonasal endoscopic removal of growth-hormone-secreting pituitary adenomas. *H K Med J* 2001; 7:155-161.

14. **Leung GKK\***, Chow WS, Tan KCB, Fan YW, Lam KSL. Metastatic melanoma of the pituitary gland. *J Neurosurg* 2003; 99:913-915.
15. Leung DC, Man JHK, Tang THC, Wong LKY, **Leung GKK\***. Surgical hand-washing. *Ann Coll Surg H K* 2004; 8:71-75.
16. **Leung GKK\***, Lopes MBS, Thorner MO, Vance ML, Laws ER. Primary hypophysitis: a single-centre experience in 16 cases. *J Neurosurg* 2004; 101:262-271.
17. Tse YH, **Leung GK**, Fan YW. Cerebral protection in traumatic brain injury. *Surg Practice* 2005; 9:122-125.
18. **Leung GKK\***, Fan YW. Chronic subdural haematoma and arachnoid cyst in autosomal dominant polycystic kidney disease (ADPKD). *J Clin Neurosci* 2005; 12(7):817-819.
19. **Leung GKK\***, Auyeung KM, Lui WM, Fan YW. Emergency placement of a self-expandable covered stent for carotid artery injury during transsphenoidal surgery. *Br J Neurosurg* 2006; 20(1):55-57.
20. Lee R, Lui WM, Cheung RTF, **Leung GKK**, Chan KH. Mechanical thrombectomy in acute proximal middle cerebral artery thrombosis with the Alligator Retrieval Device. *Cerebrovas Dis* 2007; 23:69-71.
21. **Leung GKK\***, Ng KB, Taw BBT, Fan YW. Extended subcutaneous tunneling technique for extended ventricular drainage. *Br J Neurosurg* 2007; 21:359-364.
22. Hussaini IM, Trotter C, Zhao Y, Abdel-Fattah R, Amos S, Xiao A, Agi CU, Redpath GT, Fang Z, **Leung GK**, Lopes MB, Laws ER Jr. Matrix metalloproteinase-9 is differentially expressed in nonfunctioning invasive and noninvasive pituitary adenomas and increases invasion in human pituitary adenoma cell line. *Am J Pathol* 2007; 170(1):356-365.
23. **Leung GKK\***, Chan SK, Hung KN. Trilogly of neurosurgical complications after radiotherapy for nasopharyngeal carcinoma. *Surg Neurol* 2007; 68:466-470.
24. **Leung GKK\***, Lee CK, Nicholls JM. Radiation-induced rhabdomyosarcomatous transformation of a recurrent meningeal haemangiopericytoma. *Acta Neurochir (Wien)* 2007; 149(11):1163-1167.
25. Chan DCW, Fong DHF, Leung JYY, Patil NG, **Leung GKK\***. Maggot debridement therapy in chronic wound care. *H K Med J* 2007; 13(5):382-386.
26. Wong SSN, **Leung GKK**. Injury Severity Score (ISS) vs. ICD-derived Injury Severity Score (ICISS) in a patient population treated in a designated Hong Kong trauma centre. *McGill J of Medicine* 2008; 11(1):9-13.
27. Fung OYC, Leung KHK, Au CC, Chan MKD, **Leung GKK\***. Knowledge, acceptance and perception towards brainstem death among medical students in Hong Kong: a questionnaire survey on brainstem death. *Med Teacher* 2008; 30(5):e125-e130.

28. Leung KK, Fung CO, Au CC, Chan DM, **Leung GK\***. Knowledge and attitudes toward brain stem death among university undergraduates. *Transplant Proceedings* 2009; 41:1469-1472.
29. **Leung GKK\***, Chan SK, Lam TS. Patients' attitudes towards medical student 'clerking' in Hong Kong. *Med Teacher* 2009; 13;1.
30. Guo JS, **Leung GKK**, Su H, Liang Y, Wong WM, Ellis-Behnke RG, So KF, Wu W. Self-assembling peptide nanofiber scaffold promotes the reconstruction of acutely injured brain. *Nanomedicinis: Nanotech Bio Med* 2009; 5(3):345-351.
31. Cheung JPY, Tsang HHL, Cheung JJC, Yu HHY, **Leung GKK**, Law WL. Adjuvant therapy for the reduction of post-operative intra-abdominal adhesion formation. *Asian J Surg* 2009; 32(3);180-187.
32. Gandhi A, **Leung GKK**, Patil NG, Wong J. Clinical undergraduate examination - voluntary patients' perspective. *Med Teacher* 2010; 32(1):e1-4.
33. **Leung GKK\***, Patil NG. Patient safety in the undergraduate curriculum: medical students' perception. *H K Med J* 2010; 16(2):1-5.
34. **Leung GKK\***. Trauma system in Hong Kong. *Surg Practice* 2010; 14(2):1-5.
35. **Leung GKK\***, Lee R, Lui WM, Hung KN. Thalamo-perforating artery aneurysm in Moyamoya disease. *Br J Neurosurg* 2010; 24(4):479-481.
36. **Leung KK\***, Ho W, Tong KH, Yuen WK. Outcome of severely injured trauma patients at a designated trauma centre in the Hong Kong Special Administrative Region. *Chin Med J (Engl)* 2010; 123(10):1251-1254.
37. **Leung GKK\***. Cerebrospinal fluid (CSF) pseudocyst presented with inferior vena caval obstruction and hydronephrosis. *Childs Nerv Syst* 2010; 26:1243-1245.
38. Li LF, Leung SC, Chan SK, **Leung GKK**. Neurocutaneous melanosis and negative fluorodeoxyglucose positron emission tomography. *Surg Practice* 2010; 14:107-110.
39. **Leung GKK\***. Medicine as our liberal arts. *Med Teacher* 2010; 32:923-933.
40. Steinbok P, Milner R, Agrawal D, Farace E, **Leung GK**, Ng I, Tomita T, Wang E, Wang N, Wong GK, Zhou LF. A multicenter multinational registry for assessing ventriculoperitoneal shunt infections for hydrocephalus. *Neurosurgery* 2010; 67(5):1303-1310.
41. Lui VCH, Sin SSL, Pu JKS, Hung KN, **Leung GKK\***. Invasion of human glioma cells is regulated by multiple chloride channels including ClC-3. *Anticancer Res* 2010; 30:4515-4524.
42. **Leung GKK\***, Patil NG, Ip MSM. Introducing patient safety to undergraduate medical students - a pilot program by health care administrators. *Med Teacher* 2010; 32(12):e547-551.

43. **Leung GKK\***, Chang A, Cheung FC, Ho HF, Ho W, Hui SM, Kam CW, Lai A, Lam KW, Leung M, Liu SH, Mok F, Rainer TH, Shen WY, So FL, Wong G, Wu A, Yeung JHH, Yuen WK. The first five years since trauma center designation in the Hong Kong Special Administrative Region, the People's Republic of China. *J Trauma* 2011; 70(5):1128-1133.
44. **Leung GKK\***, Patil NG. Medical students as observers in theatre – is an explicit consent necessary? *Clin Teacher* 2011; 8:122-125.
45. **Leung GKK\***. Growing skull fracture in an adult presented nine years after blunt head trauma. *J Clin Neurosci* 2011; 18:855-857.
46. **Leung GK\***. Spontaneous pneumocephalus after esophagogastrosocopy. *Endoscopy* 2011; 43 (Suppl 2):E208.
47. **Leung GKK\***, Law HY, Hung KN, Fan YW, Lui WM. Combined simultaneous transcranial and transsphenoidal resection of large-to-giant pituitary adenomas. *Acta Neurochir (Wien)* 2011; 153(7):1401-1408.
48. **Leung GKK\***, Wong SWH, Ng GKB, Hung KN. Concomitant use of Western and Traditional Chinese Medicine treatments in neurosurgical patients. *Chin J Integ Med* 2011; 17(8):1-5.
49. Pu JKS, Chan RTT, Ng GKB, **Leung GKK**, Hung KN, Fung CF. Using bevacizumab in the fight against malignant glioma: first results in Asian patients. *H K Med J* 2011; 17(4):274-279.
50. **Leung GKK\***, Ho J, Ho JKS. Pituitary enlargement in spontaneous intracranial hypotension - a diagnostic pitfall. *Acta Neurochir (Wien)* 2011; 153(12):2445-2446.
51. Mei LL, Ding X, Tsang SY, Pun FW, Ng SK, Wang J, Zhao C, Li D, Wan W, Yu CH, Tan TC, Poon WS, **Leung GKK**, Ng HK, Zhang L, Xue H. AluScan: a method for genome-wide scanning of sequence and structure variations in the human genome. *BMC Genomics* 2011; 12:564-572.
52. Sun S, Wong TS, Zhang XQ, Pu JK, Lee NP, Day PJ, Ng GK, Lui WM, **Leung GK\***. Protein alterations associated with temozolomide resistance in subclones of human glioblastoma cell lines. *J Neurooncol* 2012; 107(1):89-100.
53. Chong BH, Lau KK, Chan KH, Lui WM, **Leung GKK**, Lau CP, Tse HF, Pu JKS, Siu CW. Use of aspirin in Chinese after recovery from primary intracranial hemorrhage. *Thrombo Haemost* 2012; 107(2):241-247.
54. Xia H, Cheung WKC, Ng SS, Jiang X, Jiang S, Sze J, **Leung GKK**, Chan DTM, Bian X, Kung H, Poon WS, Lin MC. Loss of brain-enriched miR-124 enhances the stem-like traits and invasiveness of glioma cells. *J Bio Chem* 2012; 287(13):9962-9971.
55. **Leung GKK\***, Ng GKB, Ho W, Hung KN, Yuen WK. Impact of a trauma team on the outcome of patients with acute subdural haematoma (ASDH). *Injury* 2012; 43:1419-1422.

56. Chu JP, Mak HKF, Yau KKW, Zhang L, Tsang J, Chan Q, **Leung GKK**. Pilot study on evaluation of any correlation between MR perfusion (Ktrans) and diffusion (apparent diffusion coefficient) parameters in brain tumors at 3 Tesla. *Cancer Imaging* 2012; 12(1):1-6.
57. Pong V, Chan K, Chong B, Lui W, **Leung GK**, Tse H, Pu JK, Siu C. Long-term outcome and prognostic factors after spontaneous cerebellar hemorrhage. *Cerebellum* 2012; 11(4):939-945.
58. **Leung GKK\***, Yuen MMA, Chow WS, Tse PYH, Lui WM. An endoscopic modification of the simultaneous 'above and below' approach to large pituitary adenomas. *Pituitary* 2012; 15(2):237-141.
59. Archibald L, Pople IK, Meling T, Poon W, Assaker R, Mathieu D, Iantosca M, Wang E, Zhang L, **Leung G**, Chumas P, Menei P, Beydon L, Hamilton M, Kamaly-Asl I, Lewis S, Ning W, Megerian J, Murphy J, Michael A. Comparison of infection rate with the use of antibiotic-impregnated versus standard extraventricular drainage devices (EVD): A prospective, randomized controlled trial. *Neurosurgery* 2012; 71(1):6-13.
60. Wong STS, Zhang XQ, Zhuang JTF, Chan HL, Li CH, **Leung GKK\***. MicroRNA-21 inhibition enhances *in vitro* chemosensitivity of temozolomide-resistant glioblastoma cells. *Anticancer Res* 2012; 32(7):2835-2841.
61. Zhang X, Pu JK, Tsang AC, Lee D, Man VO, Lui W, Wong ST, **Leung GK\***. Long non-coding RNAs expression profiles predict clinical phenotype in glioma. *Neurobio Dis* 2012; 48(1):1-8.
62. Taw BBT, **Leung GKK**, Lam ACS, Ho FLY, Hung KN. Functional survival after acute care for severe head injury at a designated trauma centre in Hong Kong. *Asian J Surg* 2012; 35:117-122.
63. Sun S, Lee D, Lee NP, Pu JKS, Wong STS, Lui WM, Fung CF, **Leung GKK\***. Hyperoxia resensitizes chemoresistant human glioblastoma cells to temozolomide. *J Neurooncol* 2012; 109:467-475.
64. Tang AYS, Lai SK, Leung KM, **Leung GKK**, Chow KW. Influence of aspect ratio on the endovascular treatment of intracranial aneurysms: A computational investigation. *J Biomed Sc Engineer* 2012; 5:422-431.
65. Lau V, Lui WM, Lee R, **Leung GKK**. Carotid-cavernous sinus fistula presented with contralateral intracerebral haemorrhage. *Hong Kong J Radiol* 2012; 15:170-173.
66. Pu J, Ng GKB, **Leung GKK**, Wong CK. A One-year review of the incidence of brain tumours in Hong Kong Chinese patients as part of the Hong Kong Brain and Spinal Tumours Registry. *Surg Practice* 2012; 16:133-136.
67. Cheung KS, Wong HT, Leung LP, Tsang TC, **Leung GKK**. The diagnostic accuracy of focused abdominal sonography for trauma in blunt abdominal trauma patients in a local trauma center of Hong Kong. *Chin J Traumatol* 2012; 15(5):273-278.

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13. **Leung GKK**. Initial experience with the PFA-100 analyzer in neurosurgical patients taking aspirin. The 13<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2006)
14. Tse YH, **Leung GKK**. Preliminary results of sequential diffusion tensor imaging (DTI) assessment of white fiber tract integrity in head-injured rats. The 13<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2006)
15. Li LF, **Leung GKK**. Relations between intracerebral space-occupying lesions and autonomic activities in terms of heart rate variability (HRV) by 24-hr Holter machine. The 13<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2006)
16. Leung MS, **Leung GKK**. Surgery for brain metastasis: the Queen Mary Hospital experience. The 13<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2006)
17. **Leung GKK**. Three years' outcome from five trauma centres in Hong Kong. Hospital Authority Convention. (H.K., May 2007)
18. **Leung GKK**. The Trauma Injury Severity Score (TRISS) is a predictor of mortality in patients with severe but not moderate or mild head injury. Conjoint Meeting of the College of Surgeons of Hong Kong and The Royal College of Surgeons of England. (H.K., May 2007)
19. Sin S, **Leung GKK**. The effect of chlorotoxin on glioma cell invasion. The 14<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2007)
20. **Leung GKK**. Self-assembling peptide promotes the recovery of acute injured brain. The 14<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2007)
21. Wong D, **Leung GKK**. Infection related to external ventriculostomy: a retrospective review. The 14<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2007)
22. Mak WK, **Leung GKK**. Neurological improvement after cranioplasty: correlation with vascular study by transcranial doppler sonography. The 14<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2007)
23. **Leung GKK**. Outcome of head injury patients at trauma centers in Hong Kong. The 14<sup>th</sup> Annual Scientific Meeting. The Hong Kong Neurosurgical Society. (H.K., Dec 2007)

24. **Leung GKK.** Self-assembling peptide nanofiber scaffold (SAPNS) promotes the reconstruction of the acutely injured brain. The 5<sup>th</sup> Asia Pacific Multidisciplinary Meeting for Nervous System Diseases. (H.K., Jan 2008)
25. Gandhi G, **Leung GKK.** Clinical undergraduate examination - voluntary patient's perspective. The 5<sup>th</sup> Asia Pacific Medical Education Conference. (Singapore, Mar 2008)
26. **Leung GKK.** Primary trauma diversion in Hong Kong – an audit from five designated trauma centres. Annual Scientific meeting, The College of Surgeons of Hong Kong. (H.K., Sep 2009)
27. Li LF, **Leung GKK.** Incidence of subjective anosmia after interhemispheric approach to anterior skull base pathology. The 15<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2008)
28. **Leung GKK.** Self-assembling peptide nanofiber scaffold (SAPNS) as a potential neuro-regenerative biomaterial in surgically induced brain injury. The 7<sup>th</sup> Annual Congress of Multidisciplinary Neurotraumatology. (H.K., Nov 2009)
29. Taw B, **Leung GKK.** Functional survival after acute hospital admission for severe head injury at a trauma centre in Hong Kong. The 7<sup>th</sup> Annual Congress of Multidisciplinary Neurotraumatology. (H.K., Nov 2009)
30. Un T, **Leung GKK.** Glial reaction of the brain after bipolar coagulation: a pilot study. The 7<sup>th</sup> Annual Congress of Multidisciplinary Neurotraumatology. (H.K., Nov 2009)
31. Tsang M, **Leung GKK.** Validation and application of two quality of life (QoL) instruments specific for local Chinese patients with malignant brain tumour. The 6<sup>th</sup> Annual Meeting of the Centre for Cancer Research, HKU. (H.K., Nov 2009)
32. **Leung GKK, Patil NG.** Patient safety in undergraduate curriculum – medical students' perception. The 7<sup>th</sup> Asian Pacific Medical Education Conference. (Singapore, Feb 2010)
33. **Leung GKK.** Simultaneous combined transsphenoidal transcranial approach for the resection of large or giant pituitary adenoma. The 7<sup>th</sup> Meeting of the Asian Society for Neuro-Oncology. (Seoul, Jun 2010)
34. **Leung GKK.** The potential use of micro-RNA 21 inhibitors to overcome temozolomide resistance in glioblastoma multiforme. The 7<sup>th</sup> Meeting of the Asian Society for Neuro-Oncology. (Seoul, Jun 2010)
35. Sun S, **Leung GKK.** Proteomic alterations associated with acquired temozolomide resistance in human malignant gliomas: the role of protein disulfide isomerase. Human Proteome World Congress 2010. (Sydney, Sep 2010)
36. Chu J, Chan Q, Yau K, Simonetti AW, Tsang J, Mak HK, **Leung GKK.** Pilot study on correlation of MR perfusion (Ktrans) and diffusion (Apparent Diffusion Coefficient) parameters in brain tumors. Radiological Society of North America Annual Scientific Meeting. (Chicago, Nov 2010)
37. **Leung GKK, Un TKC, Wu W.** Self-assembling peptide nanofiber scaffold (SAPNS)

- as a haemostatic agent in surgically induced brain injury. Research Post-graduate Symposium, HKU. (H.K., Dec 2010)
38. **Leung GKK.** Overcoming temozolomide resistance in glioblastoma multiforme – the potential application of microRNA inhibition. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2010)
  39. **Leung GKK.** An animal study comparing electrocoagulation, fibrin glue, and nanoparticle scaffold in neurosurgical haemostasis. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2010)
  40. Sun S, **Leung GKK.** Proteomic alterations associated with acquired temozolomide resistance in human malignant gliomas: the role of prolyl 4-hydroxylase, beta polypeptide. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2010)
  41. Wong STS, **Leung GKK.** Changes of MGMT and CD133 methylation status in glioma cells in response to chronic temozolomide treatment. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2010)
  42. Tsang ACO, **Leung GKK.** Endoscopic-assisted craniobasal resection of olfactory neuroblastoma - local experience. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2010)
  43. Li LF, **Leung GKK.** Initial experience in the use of 5-aminolevulinic acid (5-ALA) to assist malignant glioma and cerebral metastasis resection in two centers in Hong Kong. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Dec 2010)
  44. **Leung GKK,** Sun S, Wong TS, XQ Zhang, Pu JKS, Lui WM. Proteomic alterations associated with acquired temozolomide resistance in human malignant gliomas: the potential role of prolyl 4-hydroxylase, beta polypeptide. The 8<sup>th</sup> Meeting of the Asian Society of Neuro-Oncology. (Suzhou, May 2011)
  45. Li LF, Wong HT, Yuen WK, **Leung GKK.** Operative intervention for traumatic brain injury in the elderly. The 36<sup>th</sup> Annual Scientific Meeting of the Royal College of Surgeons of Thailand. (Pattaya, July 2011)
  46. Sun S, **Leung GKK.** Proteomic alterations associated with acquired temozolomide resistance in human malignant gliomas: the role of prolyl 4-hydroxylase, beta polypeptide. Round Asia Oncology Forum 2011. (Shanghai, Aug 2011)
  47. **Leung GKK,** Un T, YC Wang, Wu WT. An animal study comparing electrocautery and nanoparticle scaffold in neurosurgical haemostasis. The 14<sup>th</sup> European Congress of Neurosurgery. (Rome, Oct 2011)
  48. **Leung GKK,** Sun S, Wong TS, XQ Zhang, Pu JKS, Lui WM. Identifying molecular candidates associated with acquired temozolomide resistance in human malignant glioma - a proteomics approach. The 14<sup>th</sup> European Congress of Neurosurgery. (Rome, Oct 2011)

49. Sun S, **Leung GKK**. Prolyl 4-hydroxylase, beta polypeptide (P4HB): a potential target for overcoming temozolomide resistance in human malignant glioma. The Hong Kong International Cancer Congress. (H.K., Nov 2011)
50. Sun S, Pu JKS, Wong TS, **Leung GKK**. Prolyl 4-hydroxylase, beta polypeptide (P4HB): A potential target for overcoming temozolomide resistance in human malignant glioma. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2011)
51. Lam S, **Leung GKK**, Li LS, Fung A, Yuen M, Lui WM. Pure endonasal endoscopic transsphenoidal surgery - an endocrinologist-led assessment of a single-surgeon's experience. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2011)
52. Li LF, **Leung GKK**, Wong HHT, Yuen WK. Operative intervention for traumatic brain injuries in the elderly. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2011)
53. Tsang ACO, Leung KM, **Leung GKK**, Lui WM. Carotid blowout syndrome: EC-IC bypass and endovascular management of ruptured radiation-related pseudoaneurysm in nasopharyngeal cancer patients. The 17<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2011)
54. **Leung GKK**, Sun S, Wong TS, Zhang XS, Pu JKS, Lui WM. Acquired temozolomide resistance in malignant gliomas - a proteomics approach and the role of prolyl 4-hydroxylase, beta polypeptide (P4HB). The 14<sup>th</sup> Annual Scientific Congress, Society of Neuro-Oncology. (Orange County, Nov 2011)
55. Leung M, So FL, Cheng A, Yeung JHH, Wong HHT, **Leung GKK**. Characterization of sports-related injury attendance at trauma centers in Hong Kong. Hospital Authority Convention 2012. (H.K., May 2012)
56. Leung M, So FL, Cheng A, Yeung JHH, Wong HHT, **Leung GKK**. Pediatric trauma: causes and pattern in Hong Kong. Hospital Authority Convention 2012. (H.K., May 2012)
57. **Leung GKK**, Sun S, Lee DYC, Lee NP, Pu JKS. Hyperoxia resensitizes chemoresistant human glioblastoma cells to temozolomide. The 9<sup>th</sup> Meeting of the Asian Society of Neuro-oncology. (Taipei, Apr 2012)
58. Wong WH, Wong HT, Tong DKH, **Leung GKK**, Yuen WK. Utilization of whole body computed tomography (WBCT) for trauma patients. The Advanced Trauma Life Support Region XVI Meeting. (Malaysia, May 2012)
59. **Leung GKK**. Self-assembling peptide nanofiber scaffold as a potential carrier of transplantable cells for neuro-regenerative therapy. Postgraduate Symposium 2012, Department of Anatomy, HKU. (H.K., Jun 2012)
60. **Leung GKK**, Zhang X, Sun S, Wong STS, Lui WM. Long non-coding RNA expression profiles differentiate between subtypes of human glioma. The 9<sup>th</sup> Asian Congress of Neurological Surgeons. (Istanbul, Sep 2012)

61. **Leung GKK**, Tsang ACO, WK Ho, Lui WM. Cranionasal resection for esthesioblastoma – a single centre experience. The 9<sup>th</sup> Asian Congress of Neurological Surgeons. (Istanbul, Sep 2012)
62. Tsang, ACO, **Leung GKK**, Lee R, Leung KM, Lui WM. Pipeline embolization device for ruptured radiation-induced carotid pseudoaneurysms in nasopharyngeal cancer patient. The 9<sup>th</sup> Asian Congress of Neurological Surgeons. (Istanbul, Sep 2012)
63. Fung AMY, Tsang ACO, **Leung GKK**, Lui WM. Pipeline stenting in anterior circulation cerebral saccular aneurysms: a risk factor analysis for treatment success. The Royal College of Surgeons of Edinburgh and The College of Surgeons of Hong Kong Conjoint Scientific Congress 2012. (H.K., Sep 2012)
64. **Leung GKK**. Translation implications of endoplasmic reticulum stress response in glioblastoma chemoresistance. The 19<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2012)
65. **Leung GKK**. Delayed epistaxis after endoscopic transsphenoidal surgery - possible cause, treatment and prevention. The 19<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2012)
66. Zhang XQ, **Leung GK**. Prognostic value of long non-coding RNA signatures in patients with glioblastoma multiforme. The 19<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2012)
67. Tsang ACO, Chow KW, Leung KM, **Leung GKK**. Computer fluid dynamics study of intracerebral aneurysm after flow diverter treatment. The 19<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (H.K., Nov 2012)
68. Zhang XQ, Lam EKF, **Leung GKK**. Prognostic value of long non-coding RNA signatures in patients with glioblastoma multiforme. The 19<sup>th</sup> Hong Kong International Cancer Congress (H.K., Nov 2012)
69. Sun S, Lee D, Ho ASW, Pu JKS, Zhang XQ, **Leung GKK**. Inhibition of prolyl 4-hydroxylase, beta polypeptide (P4HB) overcomes temozolomide resistance in malignant glioma via the ER stress response pathways. The 19<sup>th</sup> Hong Kong International Cancer Congress (H.K., Nov 2012)
70. **Leung GKK**, SBL Ang, TC Lau TC, HK Neo, NG Patil, LK Ti. Patient safety culture among medical students in Singapore and Hong Kong. The 10<sup>th</sup> Asian Pacific Medical Education Conference. (Singapore, Jan 2013)
71. Chan HHN, Tang AYS, Tsang ACO, **Leung GKK**, Leung KM, Chow KW. Influence of stent porosity on the endovascular treatment of intracranial aneurysms located near a bifurcation: a computational investigation. The 11<sup>th</sup> International Symposium on Computer Methods in Biomechanics and Biomedical Engineering. (Utah, Apr 2013)
72. Leung RYY, Wong HT, Ip AHW, Chan AHC, Choy TWM, Chiu DSM, **Leung G**, Lam CCK. More than a ratio: A review of Trauma Transfusion Protocol (TTP) in Queen Mary Hospital. Hospital Authority Convention 2013. (H.K., May 2013)
73. Zhu F, Poulton JM, Fan JKM, **Leung GKK**, Masters RSW. Examining multi-task

- training of technical skills in surgery. The 19TH Asian Congress of Surgery & 1<sup>st</sup> Singhealth Surgical Congress. (Singapore, July 2013)
74. **Leung GKK.** Outcome comparison between young and elderly patients undergoing intracranial meningioma resections. Congress of Neurological Surgeons 2013 Annual Meeting. (San Francisco, Oct 2013)
  75. **Leung GKK.** The implication of persistent fetal-type circulation for the treatment of intracranial aneurysms using the pipeline embolization device. Congress of Neurological Surgeons 2013 Annual Meeting. (San Francisco, Oct 2013)
  76. Sang YH, Yang XY, Su HX, **Leung GKK**, Wu WT, Cheung RTF. Transplantation of NPCS into the hematoma cavity improves functional outcome in a rat model of intracerebral hemorrhage. The 5<sup>th</sup> World Conference of Intracerebral Haemorrhage cum the 20<sup>th</sup> Annual Scientific Meeting of the Hong Kong Neurosurgical Society. (Hong Kong, Nov 2013)
  77. Xu FF, Sun S, Ho ASW, Lee D, Kiang KMY, **Leung GKK.** The effects of progesterone versus dexamethasone on brain oedema and inflammatory responses following experimental brain resection. The 5<sup>th</sup> World Conference of Intracerebral Haemorrhage cum the 20<sup>th</sup> Annual Scientific Meeting of the Hong Kong Neurosurgical Society. (Hong Kong, Nov 2013)
  78. **Leung GKK.** Up-regulation of the chaperone protein prolyl 4-hydroxylase, beta polypeptide (P4HB), promotes tumour invasion, angiogenesis and growth via EGFR/MAPK (ERK) signaling. The 18<sup>th</sup> Annual Meeting of the Society of Neuro-oncology. (San Francisco, Nov 2013)
  79. **Leung GKK.** Hyperoxia resensitizes chemoresistant glioblastoma cells to temozolomide through prolonged activation of unfolded protein response (UPR). The 18<sup>th</sup> Annual Meeting of the Society of Neuro-oncology. (San Francisco, Nov 2013)
  80. **Leung GKK.** Prognostic values of long non-coding RNA signatures in glioblastoma multiforme. The 18<sup>th</sup> Annual Meeting of the Society of Neuro-oncology. (San Francisco, Nov 2013)
  81. **Leung GKK**, Wu WT. Applications of self-assembling peptide nanofibre scaffold and mesenchymal stem cell graft on surgery-induced brain injury. Research Postgraduate Symposium, Li ka Shing faculty of Medicine, HKU. (Hong Kong, Dec 2013)
  82. **Leung GKK.** Multi-task versus single-task training of laparoscopic surgical skill: Performance and kinematic outcomes. The 11th Asian Pacific Medical Education Conference, National University of Singapore. (Singapore, Jan 2014)
  83. Cheung KS, Wong HT, **Leung GKK.** Diagnostic accuracy of Focused Abdominal Sonography for Trauma in blunt abdominal trauma patients in a trauma centre of Hong Kong. Singapore Trauma 2014. (Singapore, Apr 2014)
  84. Lui DTW, Leung LP, Wong HT, **Leung GKK.** Secondary trauma diversion: what are the reasons? Singapore Trauma 2014. (Singapore, Apr 2014)



85. Chow FC, Wong HT, **Leung GK**. Clinical parameters predicting in-hospital mortality in geriatric patients following severe trauma: a 15-year experience. The Advanced Trauma Life Support (ATLS) Region XVI Annual Meeting, American College of Surgeons. (Taipei, Jun 2014)
86. Wu EX, Wang AM, Liang KM, **Leung GK**, Tsang A, Xie B, Guo H. Separation and quantitative assessment of mobile lipid and lactate level by diffusion weighted magnetic resonance spectroscopy (DW-MRS). The 2014 joint ISMRM-ESMRMB Annual Meeting. (Milano, May 2014)
87. Tsang ACO, **Leung GKK**, Lui WM. Functional outcome of normal pressure hydrocephalus patients after ventriculoperitoneal shunt. The Royal College of Surgeons of Edinburgh/College of Surgeons of Hong Kong Conjoint Scientific Congress. (Hong Kong, Sep 2014)
88. Chow FFL, Wong HHT, **Leung GKK**. How old is old? Age and other parameters predicting in-hospital mortality in elderly trauma patients. The Royal College of Surgeons of Edinburgh/College of Surgeons of Hong Kong Conjoint Scientific Congress. (Hong Kong, Sep 2014)
89. **Leung GKK**. Effects of progesterone versus dexamethasone on brain edema and inflammatory responses following experimental brain resection. The 15th European Congress of Neurosurgery. (Prague, Oct 2014)
90. **Leung GKK**, Sun S. Using a proteomics approach to identify potential therapeutic targets in temozolomide-resistant glioblastoma multiform. The 19th Scientific Meeting of the Society of Neuro-oncology. (Florida, Nov 2014)
91. **Leung GKK**, Zhang XQ, Kiang KMY. IDH1-mutation-associated long non-coding RNA expression changes in glioma. The 19th Scientific Meeting of the Society of Neuro-oncology. (Florida, Nov 2014)
92. **Leung GKK**, Sun S. Upregulation of the endoplasmic reticulum chaperone, prolyl 4-hydroxylase, beta polypeptide (P4HB) promotes invasion, angiogenesis and growth via EGFR/MAPK (ERK) signaling pathway in malignant glioma. The 19th Scientific Meeting of the Society of Neuro-oncology. (Florida, Nov 2014)
93. Zhang XQ, **Leung GKK**. CRNDE, an EGFR-regulated long non-coding RNA, plays oncogenic role in glioma. The 21<sup>st</sup> Hong Kong International Cancer Congress. (Hong Kong, Nov 2014)
94. Lee D, **Leung GKK**. MicroRNA-210 and endoplasmic reticulum chaperones in the regulation of chemoresistance in glioma. The 21<sup>st</sup> Hong Kong International Cancer Congress. (Hong Kong, Nov 2014)
95. **Leung GKK**, Tsang RK, Tsang ACO, Lam JW, Ho WK. Long-term oncological outcome of endoscopy-assisted craniobasal resection for olfactory neuroblastoma. The 14th Asian Australasian Congress of Neurological Surgeons. (Jeju Island, Korea, Apr 2015)
96. **Leung GKK**, Zhang XQ. Associations between long non-coding RNA dysregulations,

- IDH-1 mutation and clinical phenotypes in glioma. International Symposium on Frontiers in Cancer Biology and Drug Development. (Hong Kong, Mar 2015)
97. **Leung GKK**. Differential expression of long non-coding RNA in gliomas with or without IDH-1 mutation. Joint 11<sup>th</sup> Biennial Convention of the ASEAN Neurological Association and 16<sup>th</sup> ASEAN Congress of Neurological Surgery. (Singapore, July 2015)
  98. Tsang ACO, **Leung GKK**. The Hong Kong Neurosurgical Society prospective observational study on outcome of cerebrospinal fluid diversion procedures: an interim report. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  99. Zhang P, **Leung GKK**. Rutin increases the efficacy of temozolomide in glioblastoma via autophagy inhibition. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  100. Kiang KMY, **Leung GKK**. Differential long non-coding RNA expressions in gliomas with EGFR alteration. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  101. Cheng SY, **Leung GKK**. Progesterone, a neurosteroid, as a potential novel glioma therapeutic agent. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  102. Ming MW, **Leung GKK**. Potential roles of cytoskeletal protein in glioblastoma resistance. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  103. Li N, Cheng H, **Leung GKK**. Regional deep hypothermia preserves nerve conduction and myelin sheaths integrity after contusive spinal cord injury in rats: a short-term and pilot study. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  104. Cai JF, Ho WS, **Leung GKK**, Ho SL. Neuro-endovascular service in the University of Hong Kong Shenzhen Hospital. The 22<sup>nd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2015)
  105. **Leung GKK**. Long-term oncological outcome of endoscopy-assisted craniobasal resection for olfactory neuroblastoma. European Congress of Neurological Surgeons 2015 (Madrid, Oct 2015)
  106. Vacek D, Wong S, **Leung GK**. What young doctors should learn about risk disclosure when informing patients waiting operations? Frontiers and Medical and Health Sciences Education 2016 (Hong Kong, Nov 2016)
  107. Chen CPY, Tsang ACO, Tsang FCP, Ho WS, **Leung GKK**, Lui WM. Extracranial-intracranial bypass and craniofacial resection for complex skull base tumour involving the internal carotid artery. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
  108. Lam YY, **Leung GK**. Knowledge and expectations of the general public in Hong Kong

on the symptomatology, risk factors and contemporary management of acute stroke. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)

109. Yee HF, Tsang CP, **Leung GK**. Transluminal angioplasty for the treatment of cerebral vasospasm following subarachnoid haemorrhage: a ten-year retrospective review. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
110. Tsang ACO, **Leung GKK**, Wong GKC, Li LF, Woo PYM, Ho LY, Cheng KF, mak CHK, Yeung LYT. A prospective territory-wide observational study of external ventricular drains outcome and complication after introduction of antibiotics and silver-impregnated catheters in Hong Kong (The HKNS EVD Study). The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
111. Lui FCW, tau BBT, lau E, Lam TC, Lee VHF, Leung DKC, **Leung GKK**, Lui WM. Whole-brain radiotherapy for more than three brain metastases: a single-centre experience. The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
112. Kiang KM, **Leung GK**. Role of long non-coding RNA CRNDE in gliomagenesis. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
113. Hwang AC, Cheng KF, Leung GKK, Ho WWS, Lui WM. Spinal lipoma of the filum terminale: review of 30 patients in Queen Mary Hospital. The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
114. Zhang GP, **Leung GK**. Quinacrine increases the cytotoxicity of temozolomide in glioblastoma via autophagy inhibition. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
115. Cheng SY, **Leung GK**. Progesterone benefits experimental non-operable glioma-bearing rats in survival and functional preservation. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
116. Li N, **Leung GK**. Caffeine sensitizes temozolomide's chemo-efficacy by impeding cell cycle arrest in glioma cell-line. The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
117. Vacek D, **Leung GKK**. How doctors should approach risk disclosure when informing patients of their surgical operation during a preoperative meeting? The 23<sup>rd</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2016)
118. Li N, **Leung GK**. Vitamin D3 promotes motor functional recovery after experimental spinal cord injuries. The 24<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2017)
119. Kiang KK, **Leung GK**. The functional roles of cytoskeleton protein adducin 3 in glioblastoma multiforme. The 24<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2017)

120. Xhang GP, **Leung GK**. IOX, an analogue of genistein Increases the Cytotoxicity of Temozolomide in Glioblastoma cells. The 24<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2017)
121. Ye XF, **Leung GK**. The establishment and outcome of endoscopic transsphenoidal surgery for sella lesions at the University of Hong Kong-Shenzhen Hospital. The 24<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2017)
122. Zhu Z, **Leung GK**. Differential gene expression profiles and functional properties associated with Cathepsin D in glioblastoma. The 24<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Nov 2017)
123. Zhu Z, **Leung GK**. Lovastatin enhances cytotoxicity of temozolomide via impairing autophagic flux in glioblastoma cells. The 25<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Dec 2018)
124. Lei J, **Leung GK**. Identification of a novel promising prognostic and therapeutic autophagy-related biomarker for glioblastoma. The 26<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Dec 2019)
125. Kiang KMY, **Leung GK**. Detection of loss of heterozygosity in GBM revealed the role of a tumor suppressive gene in regulating glioma progression and tumor recurrence. The 26<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Dec 2019)
126. Zhu Z, **Leung GK**. One-carbon metabolism contributes to the malignant phenotype of glioblastoma. The 26<sup>th</sup> Annual Scientific Meeting, The Hong Kong Neurosurgical Society. (Hong Kong, Dec 2019)
127. Chan SCS, **Leung GK**. Licensing examination information portal - how much to include. Ottawa Conference 2020. (Kuala Lumpur, Feb 2020)
128. Kiang KMY, S Sun, **Leung GKK**. Detection of loss of heterozygosity in GBM revealed the role of a tumor suppressive gene in regulating glioma progression and tumor recurrence. American Association of Cancer Research. (Atlanta, April 2021 (Virtual))
129. Kiang KMY, **Leung GKK**. The role of cytoskeleton protein adducin 3 in modulating epithelial-mesenchymal transition in glioblastoma. 47th Annual Meeting of Korean Cancer Association and the 7th International Cancer Conference. (Korea, June 2021 (Virtual))
130. Kiang KMY, **Leung GKK**. Targeting stress response in chemo-resistant glioblastoma using albumin-encapsulated nanoparticles. 2<sup>nd</sup> International Congress of Asian Oncology Society in Conjunction with the 48<sup>th</sup> Annual Meeting of Korean Cancer Association. (Korea, June 2022(Virtual))

## **B. Invited Lectures**

### Regional/International Meetings

1. 'The impact of trauma system on acute subdural haematoma.' The 4<sup>th</sup> Medical Symposium of the First Affiliated Hospital of Sun Yat-sen University of Medical Sciences. (Guangzhou, Dec 1999)
2. 'Development of trauma system in Hong Kong.' The 16<sup>th</sup> Asian Congress of Surgery & The 2007 Chinese Surgical Week. (Beijing, Oct 2007)
3. 'Trauma system and traumatic brain injury.' Conjoint Shenzhen, Hong Kong, Macau and Taiwan Neurosurgical Scientific Meeting. (Shenzhen, Nov 2008)
4. 'Minicase writing and problem-based learning.' Peking University Health Science Centre Education Symposium. (Beijing, Dec 2009)
5. 'An update on the management of traumatic brain injury.' Guangdong Provincial Neurotrauma Conference. (Peking University Shenzhen Hospital, Nov 2010)
6. 'Cord blood mononuclear cell transplant trial.' The 49<sup>th</sup> Meeting of the International Spinal Cord Society. (New Delhi, Oct 2010)
7. 'Current concepts in the management of post-traumatic syringomyelia.' The 49<sup>th</sup> Meeting of the International Spinal Cord Society. (New Delhi, Oct 2010)
8. 'Trauma system development in Hong Kong.' The 18<sup>th</sup> Asian Surgical Congress. (Cebu, Apr 2011)
9. 'Recurrent malignant glioma.' Current Trend in the Management of Malignant Glioma. (Taiwan, Sep 2011)
10. 'Outcome-based training in Surgery.' International College of Surgeons Medical Education Conference. (Macau, Dec 2011)
11. 'Clinical teaching and problem based learning.' Clinical Teaching Reform, Peking University Health Science Centre. (Beijing, Feb 2012)
12. 'Clinical trial of umbilical cord blood cell for spinal cord injury: protocol and surgery.' International Association of Neurorestoratology and the 9<sup>th</sup> Global College Neuroprotection and Neuroregeneration Conference. (Xian, May 2012)
13. 'Patient safety in clinical education.' The International Medical School of Jinan University. (Guangzhou, June 2012)
14. 'Acquired temozolomide resistance in glioblastoma.' Current Trend in the Management of Glioma. (Beijing, Oct 2012)
15. 'A proteomics approach in the translational studying of chemoresistance in malignant glioma.' Laboratory Seminar, The Macau University of Science and Technology. (Macau, Nov 2012)

16. 'To err is human - Patient safety education.' The Medical College of Jinan University, Guangzhou. (Guangzhou, Nov 2012)
17. 'Traumatic brain injury in Hong Kong.' The First Macau-Hong Kong Neurosurgical Symposium. (Macau, March 2013)
18. 'How effective is the tiered trauma cluster?' Singapore Trauma 2013. (Singapore, Apr 2013)
19. 'The role of decompressing craniectomy in traumatic brain injury.' Singapore Trauma 2013. (Singapore, Apr 2013)
20. 'Endoplasmic reticulum stress response in glioblastoma chemoresistance.' Taiwan Neuro-oncology Symposium 2013. (Taipei, Mar 2013)
21. 'Trauma system development - lessons learnt and the way forward.' Asian Surgical Congress 2013. (Singapore, July 2013)
22. 'Endoplasmic reticulum stress response in glioblastoma chemoresistance.' 2013 Current Trend in the Management of Malignant Glioma. (Mahidol University, Bangkok, Sept 2013)
23. 'Translational Research in neurosurgery at HKU.' Joint Symposium. Jinan University, Laboratory for Brain Function and Health. (Guangzhou, Oct 2013).
24. 'Traumatic brain injury in Hong Kong - history, development, system and translational research.' Tiantan Hospital Neurosurgical institute, Capital Medical University, Beijing (Jan 2014)
25. 'Trauma service in Hong Kong'. Global Emergency Medicine Conference, HKU Shenzhen Hospital (Shenzhen, Jun 2014)
26. 'Changing patient safety culture amongst undergraduates by working with the "Dark Force".' The 12th Asia Pacific Medical Education Conference. (Singapore, Feb 2015)
27. 'Management of traumatic brain injury – current status and development'. The 14th Asian Australasian Congress of Neurological Surgeons. (Jeju Island, Korea, Apr 2015)
28. 'Translational research in neuroprotectn against surgical brain injury ' National Neuroscience Institute. (Singapore, Feb 2015)
29. 'Traumatic brain injury guideline – an update'. Neurotrauma Workshop. Asian Australasian Society of Neurosurgical Surgeons. (Nepal, Oct 2015)
30. 'Update on the Management of Traumatic Brain Injury.' Global Emergency Medicine meeting 2015. (Shenzhen, Nov 2015)
31. 'Management of traumatic brain injury.' Annual Scientific Meeting of the Taiwan Neurosurgical Society. (Taipei, Dec 2015)
32. 'Prehospital trauma are in Hong Kong', Phnom Penh Conference on Essential and Emergency Surgery. (Phnom Penh, Mar 2016)
33. 'Neurotrauma Management: Towards the Next Decade - A Peek into the Future',

- Singapore Trauma Conference 2016. (Singapore, Apr 2016)
34. 'Trauma Master Class: Defining roles in the trauma system', Singapore Trauma Conference 2016. (Singapore, Apr 2016)
  35. 'Trends of Trauma Care in the Past Decade', Singapore Trauma Conference 2016. (Singapore, Apr 2016)
  36. 'Long non-coding RNA in brain and other cancers', Macau-Hong Kong Multidisciplinary Scientific Conference. (Macau, May 2016)
  37. 'Trauma care for the elderly - what is the right thing to do?' Biannual Sino-Asia-Pacific Medical Forum. (Macau, May 2016)
  38. 'Leukotomy - a historical and modern perspective of a Nobel Prize legacy', Faculty of Medicine, Jinan University. (Guangzhou, May 2016)
  39. 'An update on the evidence-based management of TBI', International Symposium on Neurotrauma and Mass Disaster Management (Surabaya, Aug 2016)
  40. 'The development of ATLS in China' The 4<sup>th</sup> China-US Trauma and Emergency Medicine Conference. (Shenzhen, Nov 2017)
  41. 'Geriatric trauma – limit and opportunities' Asian Surgical Congress. (Tokyo, Nov 2017)
  42. 'ATLS in Region XVI – the untold story' American College of Surgeons Global Symposium. (San Antonio, Mar 2018)
  43. 'Decompressive craniectomy versus craniostomy in traumatic brain injury' Neurotrauma 2018, Neurotrauma Society of India. (Lucknow, Aug 2018)
  44. 'Prehospital care for traumatic brain injury' Neurotrauma 2018, Neurotrauma Society of India. (Lucknow, Aug 2018)
  45. 'Current management of subdural haemorrhages' Neurotrauma 2018, Neurotrauma Society of India. (Lucknow, Aug 2018)
  46. 'Long non-coding RNAs in glioma - preclinical and translational perspectives' The 14th Asian-Oceanian International Congress in Skull Base Surgery. (Taichung, Sept 2018)
  47. 'The Enrichment Year at the University of Hong Kong'. QS Subject Focus Submit – Medicine. (Surabaya, Jan 2019)
  48. 'Hong Kong Academy of Medicine – Role in postgraduate training of doctors' Sino-Luso International Medical Forum. (Macau, Jan 2019)
  49. 'Assessment for medical humanities at the University of Hong Kong'. Sun Yat-Sen University Zhongshan School of Medicine Second Annual Meeting with the Association of Medical Education in Europe. (Guangzhou, April 2019).

50. 'Ensuring continued competency beyond fellowship training: experience from Hong Kong' International Association of Medical Regulatory Authorities (IAMRA) Symposium 2019 (Chicago, May 2019)
51. 'Career paths for senior physicians in the era of an ageing population' (Panelist) International Association of medical Regulatory Authorities (IAMRA) Symposium 2019 (Chicago, May 2019)
52. 'Advanced Trauma Life Support' Asian Collaboration for Trauma: Trauma Training in the Midst of a Global Pandemic. (Singapore (webinar), Feb 2021)
53. 'Neuroscience & biotechnology: personhood, autonomy & criminal responsibility' Bart's and the London International Neuroscience Conference 2021 (London (webinar), Apr 2021)
54. 'Overspecialisation vs. generalism in postgraduate training' Korean Academy of Medial Sciences 2023 Annual Congress (Seoul (webinar) June 2023)

### Local Meetings

1. 'Imaging in Neurosurgery.' Department of Anaesthesiology, Queen Mary Hospital. (Jul 2005)
2. 'Brainstem death.' Post-registration Certificate Course in Perioperative Nursing, Institute of Advanced Nursing Studies. (Jul 2005)
3. 'Brain metastasis.' Cancer Link. (Aug 2005)
4. 'Surgery for brain metastasis.' Hong Kong International Cancer Congress. (Nov 2006)
5. 'Stem cell therapy in neuron-regeneration.' The 4<sup>th</sup> Congress of Federation of Asian-Oceanian Neuroscience Societies (FAONS). (Nov 2006)
6. 'Brainstem death.' Post-registration Certificate Course in Perioperative Nursing, Institute of Advanced Nursing Studies. (May 2006)
7. 'Stem cells - from bench to bedside.' Annual Scientific Meeting. The Federation of Medical Societies of Hong Kong. (Jun 2006)
8. 'Cancer of brain and central nervous system.' Diploma in Oncology and Palliative Care for Health Care Professionals, HKU SPACE. (May 2008)
9. 'Tram-related motor vehicle crashes in Hong Kong.' Trauma Symposium 2008. Hospital Authority. (Nov 2008)
10. 'Updates on traumatic brain injury.' Annual Scientific Meeting, The Hong Kong College of Anesthesiologists. (Dec 2008)



11. 'Minimally invasive endoscopic surgery of anterior skull base.' The 15<sup>th</sup> Anniversary Congress, The Hong Kong Academy of Medicine. (Nov 2008)
12. 'MicroRNA and brain tumors.' Asian, Australasian, and Chinese Societies of Stereotactic and Functional Neurosurgery. (Jan 2009)
13. 'Spinal cord injury.' Public Lecture Series 2009, HKU. (Jun 2009)
14. 'An update on critical care of head injury.' Department of Anaesthesiology, Queen Mary Hospital (Jan 2009)
15. 'Traumatic brain injury in a developing trauma system in Hong Kong.' The 7<sup>th</sup> Annual Congress of Multidisciplinary Neurotraumatology. (Nov 2009)
16. 'Technical competency in neurosurgery.' The 7<sup>th</sup> Annual Congress of Multidisciplinary Neurotraumatology. (Nov 2009)
17. 'How to write a research paper.' Research Paper Writing Workshop, Hospital Authority. (Jan 2010)
18. 'Trauma services.' Symposium on Quality Improvement in Healthcare, Queen Mary Hospital. (Mar 2010)
19. 'Potential use of umbilical cord blood cells in neuro-regenerative therapy.' Annual Scientific Meeting, The Federation of Medical Societies of Hong Kong. (Jun 2010)
20. 'Exploring brain surgery.' The 12<sup>th</sup> Congress of the Life Underwriter Association (LUA). (Aug 2010)
21. 'State of the art treatment.' Current Trend in the Management of Malignant Gliomas: Translating Science Into Practice, Asia Pacific 2010. (Sep 2010)
22. 'Trauma system and traumatic brain injury.' The Royal College of Surgeons of Edinburgh and The College of Surgeons of Hong Kong Conjoint Scientific Congress. (Sep 2010)
23. 'Tumour of the central nervous system.' Diploma in Oncology and Palliative Care for Health Care Professionals, HKU SPACE. (Oct 2010)
24. '5-ALA-assisted resection of glioblastoma multiforme.' The 17<sup>th</sup> International Cancer Congress. (Nov 2010)
25. 'A promising therapy for spinal cord injury: umbilical cord blood and lithium combination to stimulate regeneration.' China Spinal Cord Injury Network Public Lecture. (Aug 2010)
26. 'Trauma service in Hong Kong.' Symposium on Trauma Surgery, The College of Surgeons of Hong Kong. (Jan 2011)

27. 'Neuroprotection for traumatic brain injury.' Commissioned Training in Trauma Care, Hospital Authority. (Jan 2011)
28. 'Endoscopic pituitary surgery - towards a minimally invasive approach.' Multi-specialty Medical Conference, Association of Private Medical Specialists of Hong Kong. (Apr 2011)
29. 'Endoscopic pituitary surgery.' The Hong Kong Surgical Forum. (Jul 2011)
30. 'How many trauma centres does Hong Kong need?' Kowloon Central Cluster Trauma Symposium 2011. (Sep 2011)
31. 'Combating temozolomide resistance in malignant glioma using a proteomics approach.' Brain 2012, Chinese University of Hong Kong. (Jan 2012)
32. 'Neurovascular trauma.' The Hong Kong Surgical Forum. (Jan 2012)
33. 'Neuroendoscopy.' Advances in Endoscopy 2012. (Mar 2012)
34. 'Endoscopic pituitary surgery.' The 41<sup>st</sup> Clinical Meeting of the Hong Kong Society of Minimal Access Surgery. (Apr 2012)
35. 'Managing haemostasis in brain tumor surgery.' Innovations in Surgical Techniques: Biological Solutions for Neurosurgical and Spinal Surgical Procedures Meeting (Sept 2012)
36. 'Endoscopic pituitary surgery – advantages, limitations and pitfalls.' The 7<sup>th</sup> International Huixia Congress of Endocrinology. (Dec 2012)
37. 'General structure of research paper.' Hospital Authority Research Paper Writing Workshop for High Surgical Trainees. (Dec 2012)
38. 'Introduction to research.' Research Training Workshop for Higher Surgical Trainees, The College of Surgeons of Hong Kong. (Mar 2013)
39. 'Endoscopic pituitary surgery.' Commissioned Training in 'Endoscopy-assisted neurosurgery', Hospital Authority. (Feb 2013)
40. 'Neurosurgeons' contributions in the management of cancer of the paranasal sinus.' Head and Neck Course, Department of Surgery, The University of Hong Kong. (June 2013)
41. 'Research planning and methodology.' Research Training Workshop for Higher Surgical Trainees, The College of Surgeons of Hong Kong. (Feb 2014)
42. 'Temozolomide resistance in malignant glioma – translational research and clinical perspectives.' The Hong Kong Neuro-oncological Society Symposium. (July 2014)
43. 'Management of traumatic brain injury – an update.' Commissioned Training in Intensive Care, Hospital Authority. (Jul 2014)

44. 'Patient safety in operating theatre.' Pre-conference programme, International Forum on Quality and Safety in Healthcare. (Hong Kong, Sept 2015)
45. 'Digital awakening - we can, but should we?' Hong Kong Surgical Forum. (Hong Kong, Oct 2015)
46. 'Haemoglobin-based oxygen carrier for cancer treatment' The 2nd International Conference on Phase 1 and early phase clinical trials. (Hong Kong 20 Nov 2015)
47. 'Research opportunities: Now and the future' Inaugural Research Talk, Asian Medical Students' Association Hong Kong. (Hong Kong, Nov 2015)
48. 'Potential roles of long non-coding RNA in glioblastoma multiforme'. *Brain* 2014 (H.K., Jan 2016)
49. 'Head transplant – are we ready?' Hong Kong Surgical Forum. (Hong Kong, Apr 2016)
50. 'Advances in the management of head injury in older people' The 12<sup>th</sup> International Symposium on Healthy Aging. (Hong Kong, Mar 2017)
51. 'Cross cultural perspectives on decision-making in Medicine and Surgery' The University of Chicago Center in Hong Kong. (Hong Kong, Mar 2017)
52. 'Medical curriculum design and assessment' Professional Exchange Programme, Institute of Professional Education, The Hong Kong Baptist Hospital. (Hong Kong, Jul 2017)
53. 'Advanced medical technology and the brain: Questions on personhood, patient autonomy and patient rights' Centre for Bioethics, Chinese University of Hong Kong. (Hong Kong, Sep 2017)
54. 'External ventricular drainage infection' Infection Control Courses, Hong Kong Academy of Medicine. (Hong Kong, Sep 2017)
55. 'Explore the World of Medicine - Brain death and transplantation ethics' Public Lecture Series, Li Ka Shing of Medicine, HKU. (Hong Kong, Nov 2017)
56. 'Corporate responsibilities and medico-legal principles in medical negligence' Administrative Medicine Round Table, Hospital Authority. (Hong Kong, 25 Nov 2017)
57. 'Brainstem death and non-heart-beating organ donation' Transplant Ethics: Looking Forward, The University of Chicago. (Hong Kong, Mar 2018)
58. 'Malpractice litigation in acute stroke care – where are we now?' The Hong Kong Stroke Society Scientific Meeting. (Hong Kong, Apr 2018)
59. 'Rapid automated computer evaluation of CT brain in acute ischaemic stroke and intracranial vessel occlusion'. Hospital Authority Convention 2018. (Hong Kong, May 2018)
60. 'Helmet legislation and injury prevention'. Hong Kong College of Orthopedic Surgeons Injury Prevention Conference. (Hong Kong, Aug 2018)
61. 'Medical professionalism: Yesterday's foundation for tomorrow's practice' HKU

- SPACE Executive Academy – Senior Health Executive Seminar. (Hong Kong, Jan 2019)
62. ‘Big data analytics: Opportunities and challenges’ Hong Kong Surgical Forum (Hong Kong, Jan 2019)
  63. ‘Competency-based approach and credentialing in postgraduate medical/dental training’ The Hong Kong College of Dental Surgeons, curriculum reform seminar. (Hong Kong, Jan 2019)
  64. ‘Traumatic brain injury in the elderly – limits & opportunities’ The Hospital Authority Commissioned Training - Enhancing Geriatric Trauma Management. (Hong Kong, Feb 2019)
  65. ‘Medical professionalism – a local view’. Hospital Authority 2019 2019. (Hong Kong, May 2019)
  66. ‘Criminalisation of medical error’. University of Chicago Conference on Ethical Issues with Advanced Technology. (Hong Kong, Mar 2019)
  67. ‘Basic concept of medical negligence for surgeons’ College of Surgeons of Hong Kong, CME Online Seminar. (Hong Kong Apr 2020)
  68. ‘Apologies: why are they important, and what are the concerns?’ Apology, Disclosure, Alternative Dispute resolution Seminar, Hong Kong Academy of Medicine. (Hong Kong, July 2020)
  69. ‘Advanced neurotechnology: Progress, personhood and primacy of the brain’ Hong Kong Student Association of Neuroscience. (Hong Kong, Aug 2020)
  70. ‘General principles of management of pituitary lesion’ Multiple-specialty Medical Mega Conference 2020. (Hong Kong Sep 2020)
  71. ‘Pituitary for endocrinologist: a contemporary perspective’ Endocrinology, Diabetes and Metabolism Hong Kong. (Hong Kong, Oct 2020)
  72. ‘Medical manslaughter in Hong Kong: How, Why, and Why Not’ Webinar: Gross Negligence Manslaughter: Should It Apply to Healthcare Professionals. Centre for Medical Ethics & Law, Faculty of Law, University of Hong Kong. (Hong Kong (webinar), Apr 2021)
  73. ‘Fundamental legal principles of medical negligence’ RCSEd/CSHK Conjoint Scientific Congress 2021. (Hong Kong, Sep 2021)
  74. ‘Endoscopic skull base surgery: advantages and limitations’ Asia-Pacific Neuroscience Student Congress and HKSAN 2nd Annual Conference 2021. (Hong Kong, Oct 2021)
  75. ‘Looking after each other: perspective from the Hong Kong Academy of Medicine’ Hospital Authority Convention 2021 (Hong Kong, May 2021)

76. 'An overview on gross negligence manslaughter from a clinician's perspective'. Hong Kong Academy of Law. (Hong Kong, Mar 2022).
77. 'When the nose doesn't know' College Oration 2022, Hong Kong College of Otorhinolaryngologists. (Hong Kong, Nov 2022)
78. 'An overview and case studies' Webinar on Medical manslaughter, Hong Kong Academy of Medicine. (Hong Kong, Feb 2023)
79. 'Criminalising medical errors: a healthcare professional's perspectives'. Hong Kong College of Health Service Executives, Dual Fellowship Program (Hong Kong, May 2023)
80. 'Criminalising medical errors: learning from lessons learnt' Hospital Authority Convention 2023. (Hong Kong, May 2023)
81. 'Hong Kong Academy of Medicine Best Practice Guidelines in genomic and genetic medicine' Embracing the Era of Genomic Medicine – a joint symposium of the HKAM and Hong Kong genome Institute. (Hong Kong, May 2023)
82. 'Advancement and controversies in clinical neuroscience'. The World of Medicine Conference 2023 (Hong Kong, July 2023)
83. 'An overview on gross negligence manslaughter from a clinician's perspective', Hong Kong Academy of Law (Hong Kong, Sep 2023).
84. 'My detours', Distinguished Lecture, department of Surgery, LKS Faculty of Medicine, The university of Hong Kong (Hong Kong, Oct 2023)
85. 'Medical manslaughter: lingering uncertainties and the role of expert witnesses', Annual Scientific Meeting, The Hong Kong College of Anaesthesiologists. (Hong Kong, Nov 2023)
86. 'Becoming and being a neurosurgeon', Student Surgical Association of Hong Kong (Hong Kong, Dec 2023).

## C. Research Grants

(PI, Principal Investigator; Co-I, Co-Investigator)

### External Peer-reviewed Competitive Grants as PI or Co-PI

- 2015 PI. Health and Medical Research Fund (HMRF), Food and Health Bureau, The Government of the HKSAR. (Project no: 02132536) (HK\$ 78,000) "Role of quercetin-3-rutinoside on chemosensitization of glioblastoma multiform to temozolomide." Completed .
- 2015 PI. Health and Medical Research Fund (HMRF), Food and Health Bureau, The Government of the HKSAR. (Project no: 02132186) (HK\$ 957,320) "Effects of progesterone versus dexamethasone on brain edema and inflammatory response following experimental brain resection." Completed.
- 2015 Co-PI. "Roles of exercise and stem cells in spinal cord injury recovery."("运动和干细胞在脊髓损伤修复中的作用").(2015). (RMB 2,000,000) Guangdong Province Forefront and Key Technological Innovation Special Fund (Guangdong-Hong Kong Joint Innovation Projects) (广东省前沿与关键技术创新专项资金项目 (粤港联合创新领域)), Guangdong Science and Technology Department, People's Republic of China. Completed.
- 2019 Co-PI. "Ultra-light and ultra-low-power MRI technologies for accessible healthcare." (2019) (Project no: R7003-19). (HK\$ 9,974,801) Research Impact Fund, Research Grant Council, Hong Kong. On-going.
- 2022 PI. General Research Fund (GRF) 2022-23. "Regulatory governance of AI in medicine in the Greater Bay Area."(Project no: 17624622)(HK\$554,741) On-going.

### External Non-competitive Grants as PI

- 2006 PI. Queen Mary Hospital Charitable Trust (HK\$50,000)(Ref: TRAS-06-01). Project: 'Survey on the utility of Traditional Chinese Medicine (TCM) in neurosurgical patients.' Completed.
- 2007 PI. Queen Mary Hospital Charitable Trust (HK\$50,000)(Ref: TRAS-06-03). Project: 'Health-related quality of life (HRQOL) in brain tumour patients.' Completed.
- 2008 PI. Queen Mary Hospital Charitable Trust (HK\$30,000)(Ref: TRAS-08-06). Project: 'Return to work as an outcome measure of trauma service – a single-centre pilot study.' Completed.
- 2010 PI. University Grant Council Matching Fund (HK\$45,000) (Ref: 0600554.52643.21700.400.01 and 20730466.52643.21700.400.01) Project: 'Potential use of microRNA-21 inhibitors in the modulation of

chemoresistance in glioblastoma cells.’ Completed.

### External Competitive Grants as Co-I

- 2007 Co-I. S.K. Yee Medical Foundation Grant (HK\$600,000)(Ref: 206112(U)). On ‘Use of somatostatin analogues in the management of acromegaly.’ Completed.
- 2012 Co-I. Intuitive Surgical Clinical Robotics Research Grant, Intuitive Surgical, Inc., U.K. (US\$50,000). Project: ‘The Da Vinci vs. conventional laparoscopy: examining benefits for the surgeon.’ Completed.
- 2013 Co-I. General Research Fund 2013-14 (HK\$378,595) (Project No: 748513) Project: ‘Using wireless electroencephalography (EEG) to investigate psychomotor efficiency of surgical specialists and trainees.’ Completed.
- 2013 Co-I. Innovative and Technology Fund (ITF) (HK\$933,110) (Project No: ITS/011/13) ‘Stroke and intracranial aneurysm: patient specific computational and phantom studies.’ Completed.
- 2014 Co-I. Innovative and Technology Fund Internship Programme (ITF) (HK\$150,387) (Project No: InP/008/14) ‘Stroke and intracranial aneurysm: patient specific computational and phantom studies.’ Completed .
- 2015 Co-I. Innovative Technology Fund (ITF/150/15). (HK\$1,271,957) “Fluid-structure interaction analysis of cerebral aneurysm: improved assessment of risk factors”. Completed .
- 2016 Co-I. General Research Fund 2016-17. (Project no.: 17656116) (HK\$ 472,022) “The neural bases of multi-task training for promoting automaticity of technical skills in surgery.” Completed.
- 2021 Co-I. Health and Medical Research Fund (HMRF), Food and Health Bureau, The Government of the HKSAR. (Project no: 08191986) (HK\$ 98,000) “Preclinical evaluation of albumin-encapsulated nanoparticles for the treatment of chemo-resistant glioblastoma through modulating ER stress response.” Completed.

### HKU Internal Grants

- 2005 PI. Seed Funding for Basic Research (HK\$80,000)(Ref: 200509161005). Project: ‘A prospective study on platelet functions in neurosurgical patients receiving aspirin.’ Completed.
- 2008 Co-I. Seed Funding for Basic Research (HK\$120,000)(Ref: 200803159002). Project: ‘Susceptibility-weighted and diffusion-tensor MR imaging in mild

- traumatic brain injury - a correlative study with cognitive clinical outcome.' Completed.
- 2010 Co-I. Small Project Funding (HK\$56,457)(Ref: 10401297.54831.21700.323.01). Project: 'Identification of therapeutic targets to combat glioblastoma drug resistance by proteomic profiling.' Completed.
- 2010 PI. Spinal Cord Injury Fund (HK\$521,340). Project: 'Safety and feasibility of umbilical cord blood cell transplant into injured spinal cord: an open-labeled, dose-escalating clinical trial.' Completed.
- 2011 Co-I. University Development Fund (HK\$500,000). Project: 'Functional magnetic resonance imaging presentation system.' Completed.
- 2011 PI. Small Project Funding (HK\$68,020)(Ref: 201007176176). Project: 'Self-assembling peptide nanofiber scaffold as a potential neuro-regenerative biomaterial in surgically induced brain injury.' Completed.
- 2011 PI. General Research Fund Incentive Award 2011-12 (HK\$21,000). Project: 'Self-assembling peptide nanofiber scaffold (SAPNS) as a novel biomaterial for the prevention and treatment of surgical brain trauma.' Completed.
- 2012 PI. General Research Fund Incentive Award 2012-13 (HK\$20,000)(Ref: HKU770812M). Project: 'Can hyperbaric oxygen resensitize chemoresistant glioblastoma multiforme to temozolomide?' Completed.
- 2013 Co-I. Seed Funding for Clinical Research. (HK\$50,000)(Ref: 201211159034). Project: 'Pilot study of in vivo proton magnetic resonance spectroscopy (MRS) in detecting recurrent glioblastoma multiforme following radiotherapy and temozolomide, and bevacizumab treatments.' Completed.
- 2013 Co-I. University Teaching and Development Grant (HK\$294,950) (Ref: 101000493.076769.20600.304.01) Project: 'Enhancing experiential learning in neurosciences through providing mobile multi-media resources.' On-going.
- 2013 PI. Special Allocation from Faculty Development Fund 2012-13 (HK\$500,000) Project: 'Teaching and research in neurosurgery.' On-going.
- 2014 PI. Small Project Funding (HK\$64,343) (Ref: 4002885.052643.21700.301.01) Project: 'Combined treatment of progesterone and minimally invasive haematoma aspiration in experimental haemorrhagic stroke.' Completed.
- 2014 Co-I. Theme-based Projects on Teaching and Learning (HK\$5,069,256) Project: 'Interprofessional team-based learning for health professional students.' Completed.
- 2016 PI. Seed Funding Programme for Basic Research (HK\$45,980)



(Ref:201511159146) Project: ‘Potential roles of cytoskeleton protein, adducing 3, in glioblastoma resistance and steaminess’. Completed.

- 2019 Co-I. Seed Funding Programme for Basic Research for Resubmission of GRF/ECS Proposals. (HK\$ 49,500) “Do cytoskeleton proteins regulate epithelial-mesenchymal transition and tumor invasion in malignant glioma?”
- 2021 PI. Seed Funding Programme for Basic Research (HK\$57,700)(Ref: 104006349.052643.21700.301.01) Project: ‘Molecular basis and therapeutic implications of metabolic adaption during hypoxia in glioblastoma’. Completed.
- 2021 PI. HKU Seed Fund for Basic Research (HK\$71,040) (Ref: 202011159048) Project: ‘Elucidating the role of folate enzyme MTHFD2 in regulating oxidative stress and chemoresistance in glioblastoma’. Completed.
- 2022 PI. HKU Seed fund for resubmission GRF. (HK\$69,000)(Ref: 1040006777.052643.21700.301/01) Project: ‘Molecular basis and therapeutic implications of metabolic adaptation during hypoxia in glioblastoma. On-going.
- 2023 PDF/RAP Scheme (47<sup>th</sup> Round) New Position. (Details pending.)

### Grant Review Board and Panel

- 2017-2021 Member, Research Fellowship Assessment Panel (RFAP), Food and Health Bureau, The Government of the Hong Kong Special Administrative Region.
- 2015-2022 Member, Grant Review Board, Health and Medical Research Fund, The Government of the Hong Kong Special Administrative Region.
- 2022-2024 Member & Chairperson. Grant Review Board, Health and Medical Research Fund, The Government of the Hong Kong Special Administrative Region.
- 2023-2025 Member, Research Council, Health Bureau, The Government of the Hong Kong Special Administrative Region.
- 2023-2025 Member, Assessment Panel, Enterprise Support Scheme (ESS), Innovation and Technology Fund, The Government of the Hong Kong Special Administrative Region.

### Ad hoc Grant Reviewer

- 2018 Neurological Foundation of New Zealand
- 2022 Medical Research Council, U.K.

## **D. Editorial Responsibilities**

2005-2010 Associate Editor, *Asian Journal of Surgery* (Elsevier).

2012-present Associate Editor, *Surgical Practice* (Wiley).

2015-present Review Editor, *Frontier in Neurosurgery* (Frontiers).

2020-present Associate Editor, *Frontiers in Surgery* (Frontiers).

### Invited reviewer (non-exhaustive):

- Neurosurgery
- Journal of Neurosurgery
- World Neurosurgery
- Journal of Neuro-oncology
- Child's Nervous System
- Brain Research
- Molecular Therapy
- Molecular Cancer Therapeutics
- Molecular Neurobiology
- Tumour Biology
- Molecular Pharmaceutics
- Head and Neck
- Cellular and Molecular Immunology
- Translational Cancer Research
- BMJ Open
- Hong Kong Medical Journal
- Surgical Practice
- Drug Design, Development and Therapy
- Stem Cell and Translational Medicine
- Medicolegal & Bioethics
- Scientific Report
- Clinical Ethics
- Brain Injury
- Journal of Neuroimmunology
- J Cellular & Molecular biology
- JAMA

## **E. Applied Research & Knowledge Transfer**

### International Multi-centered Clinical Trials

(PI, Principal Investigator; Co-I, Co-Investigator)

1. PI. 'Establishment of baseline and comparative infection rates for the Codman BACTISEAL™ external ventricular drainage (EVD) system – a Phase III international multicentered study.' (Protocol No: BAC-IN02-002). Completed.
2. PI. 'A registry for comparing catheter-related infection rates among various shunt systems in the treatment of hydrocephalus. An international multi-centered study.' (Protocol No: CRI-IN04-001). Completed.
3. Co-I. 'ImpACT-1: Implant for augmentation of cerebral blood flow trial.' study.' Completed.
4. PI. 'Umbilical cord mononuclear stem cell transplantation trial for spinal cord injury – A Phase I/II clinical study.' (Protocol No: CN-102b). Completed.
5. Co-I. 'AVAglio Study. A randomized, double blind, placebo controlled, multicentre Phase III trial of bevacizumab, temozolomide and radiotherapy followed by bevacizumab and temozolomide versus placebo, temozolomide and radiotherapy followed by placebo and temozolomide in patients with newly diagnosed glioblastoma.' (Protocol number: BO21990). Completed.
6. Co-I. 'CENTRIC study. Cilengitide in subjects with newly diagnosed glioblastoma multiforme and methylated MGMT gene promoter - a multicenter, open-label, controlled Phase III study, testing cilengitide in combination with standard treatment (temozolomide with concomitant radiation therapy, followed by temozolomide maintenance therapy) versus standard treatment alone.' (Protocol number: EMD 121974-011). Completed.
7. PI. 'CAPTAIN study. A randomized, double-blind, placebo-controlled trial to investigate safety and efficacy of Cerebrolysin in patients with traumatic brain injury.' (Protocol No: EVE-CN-0610). Completed.
8. PI. 'An exploratory clinical trial to assess treatment of chronic ischemic stroke with brain transplants of purified CD34+ umbilical cord blood stem cells.' (Protocol No: STEM-09-TW-01). Completed .

### Industrial Collaborations in Biomedical Sciences Research

- 2012                      PI and Member of Scientific Advisory Panel. Newai Limited, H.K. (HK\$1,500,000 funding). Project: 'The use of YQ23, an artificial oxygen carrier, for the treatment of chemoresistant tumours and ischaemic stroke.' Completed.

- 2013 PI and Scientific Advisor, Novogen Limited, New South Wales, Australia. (US\$60,590 funding). Project: 'Pre-clinical study on the anti-tumour effect of CS-6 in glioblastoma multiforme.' Completed.
- 2015 PI. Newai Limited, H.K. (HK\$1,035,000 funding). Project: 'Effects of a haemoglobin-based oxygen carrier, YQ23, on glioma stem cell growth and chemoresistance.' Completed.
- 2016 PI. NoxoPharm, Australia. Project: 'The efficacy of NOX-66 as a chemo- and radio-sensitizer for solid cancer' for the setting up of a Small and Medium Enterprise under the HKSAR Government InvestHK initiative. Completed.
- 2022 PI. Shanghai Wallaby Medical Technologies Co., Inc. "A retrospective, multi-center, single-group, target-value clinical study was conducted to evaluate the safety and efficacy of post-marketing P48 MW HPC and P64 MW HPC Flow Modulation Devices for endovascular treatment of intracranial aneurysms". On-going.
- 2022 PI. Shanghai Wallaby Medical Technologies Co., Inc. "Evaluation of pRESET (LITE) stent retriever for endovascular treatment in patients with acute ischemic stroke: safety and clinical outcome (ELEVATE)". On-going.

### Collaborations with External Institutions

- 2009-2010 International Cancer Genome Consortium (ICGC) in collaboration with the Chinese University of Hong Kong, and the University of Science and Technology, H.K.
- 2010-2015 Professor H. Xue, Division of Life Science, University of Science and Technology, H.K., on genomic sequencing study in glioblastoma.
- 2010-2012 Professor M.C. Lin, Division of Neurosurgery, Department of Surgery, Chinese University of Hong Kong, H.K., on miRNAs in glioblastoma.
- 2011-2014 Dr Y.C. Wang, Department of Physiology, Jinan University, Guangzhou, People's Republic of China, on the use of nanofibre peptide scaffold for neuro-regenerative therapy.
- 2011-2015 Member, China Spinal Cord Injury Network (ChinaSCINet). Involved in the design and execution of clinical trials of cell-based transplantation for spinal cord injury and stroke.
- 2012-2015 Dr S. Martin, Centre for Molecular Oncology, Barts Cancer Institute, University of London, U.K., on glioblastoma chemoresistance.
- 2012-2014 Dr Z.H. Jiang, Faculty of Chinese Medicine, Macau University of Science and Technology, Macau, on a lipidomics study of glioblastoma.

- 2014-2019 Dr Cesar S.C. Wong, Cancer Genomic and Bioinformatics, The Polytechnic University, on brain tumour genome sequencing.
- 2014-2018 International Traveling Faculty, Neurotrauma Committee, Asian Australasian Congress of Neurological Surgeons.
- 2016-2020 Professor Larry Chow, Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, on the development of flavonoid dimers in modifying ABC transporters for the treatment of glioblastoma.
- 2016-present Co-PI, Hong Kong Epigenomics Project, International Epigenomics Consortium. Invited to participate in the areas of glioma and brain tumour epigenomics study.
- 2017-present Dr Patty Chan, Department of Engineering, The University of Hong Kong, Hong Kong, on the development of a microsensor for the real-time detection of inflammatory markers for the brain.
- 2017-2021 PI. Hospital Authority. Project: 'Big data analysis – Rapid automated computer evaluation of computer tomography brain in acute ischaemic stroke and intracranial vessel occlusion.'
- 2019-present Dr K Chan. Department of Biomedical Engineering, City University of Hong Kong. Project: 'CEST MRI investigation in glioblastoma'.
- 2019-present Dr D. Raleigh. Departments of Radiation Oncology and Neurological Surgery, University of California San Francisco. Project: 'Gene expression profiling in meningioma'.

## **Teaching & Learning:**

### **A. Undergraduate Teaching at HKU**

#### Leadership Positions

- 2008-2016 Assistant Dean (Trainee & student affairs), HKU.
- 2016-2018 Assistant Dean (Admission), HKU.
- 2018-present Associate Dean (Teaching & Learning), HKU.
- 2010-2016 Co-Director, MBBS III/IV Programme, HKU.
- 2012-2018 Director, Centre for Education and Training, Department of Surgery, HKU.
- 2012-2019 Co-Director, Exchange of Best Practice Programme, Bau Institute of Medical and Health Sciences Education, HKU.
- 2022-Present Chairman, Board of Studies, School of Clinical Medicine.
- 2022-present Co-Director, Centre for Medical Ethics and law, HKU.

#### Primary Teaching Responsibilities

1. Whole class session in neuroanatomy for MBBS II.
2. Whole class sessions in neurosurgery for MBBS IV & V
3. Whole class sessions in medical law & ethics for MBBS IV & V
4. Tutorials in neurosurgery for MBBS VI.
5. Tutorials in Medical Ethics for MBBS I to VI.
6. Tutor in Medical Humanities and the Medical Law and Ethics Programmes
7. Bedside teaching in neurosurgery for MBBS VI to VI.

#### Curriculum Development and Innovation

- 2005 Introduction of simulation technology for OSCE.

- 2008 Introduction of procedure-based approach to the teaching of neuroanatomy, leading to the subsequent appointment of Honorary Assistant Professorship at the then Department of Anatomy.
- 2008 Introduction of the American College of Surgeons' *Trauma Evaluation Assessment and Management* course (a student version of the Advanced Trauma Life Support course) to the MBBS curriculum.
- 2009 Introduction of a Patient Safety module to the MBBS and nursing curricula.
- 2011 3+3+4 curriculum reform.
- 2013 Collaborator in the Teaching Development Fund Project: 'Enhancing experiential learning in neurosciences through providing mobile multimedia resources.'
- 2014 Member of the Working Group on a Theme-based Project: 'Inter-professional team-based learning for health professional students.'
- 2014 Establishing a collaboration with the Institute of Human Performance, HKU, on the modulation of neural activities related to surgical skill training.
- 2015 Initiating the establishment of an e-learning platform for clinical skills in Surgery.
- 2016 Introducing the use of bed-side ultrasonography as a core clinical skills in Surgery.
- 2016 Establishment of the 'Mui Chok Sing Prize in Clinical Neuroscience' for MBBS students.
- 2016 Reform of the Internship Training Curriculum.
- 2016 Introduction of an Assistant Internship Programme.
- 2017 Establishment of a HKU Postgraduate Fellowship in Neurosurgery
- 2018 Member of Curriculum Review Panel, Centre of Medical Law and Ethics, Faculty of Law, The University of Hong Kong.
- 2019 Modernisation of the MBBS Programme, The University of Hong Kong.
- 2021 MBBS 140 Curriculum Reform

### Other Undergraduate Teaching Positions

- 2005-2006 Assistant Coordinator, MBBS IV Senior Clerkship in Surgery.
- 2005-2009 Director, Elective Student Programme, Department of Surgery.

- 2005-2010    Coordinator, Clinical Skills & Interpersonal Skills Sub-committee.
- 2005-2010    Coordinator, MBBS I Assessment Subcommittee.
- 2005-2014    Coordinator, MBBS II Central Nervous System Block Planning Group.
- 2006-2010    Coordinator, MBBS I Introduction to Health & Disease Block Planning Group.
- 2006-2010    Member, Special Study Modules Sub-committee.
- 2006-2011    Supervisor, Medical Engineering Programme (Final Year Project).
- 2007-2010    Coordinator, MBBS III Junior Clerkship in Surgery.
- 2010-2016    Assessment Coordinator, MBBS III/IV Coordinating Sub-committee.
- 2010-present    Chairman, ad hoc Thesis Examination Committee for PhD studies.
- 2018-2019    Chairman, Medical Law and Ethics Programme.
- 2012-2016    Chief Examiner, MBBS III & V Summative Examination.
- 2012-present    Member, MBBS Curriculum Committee.
- 2013-2019    Member, Medical Humanities Programme.
- 2013-2019    Faculty Representative, Intensive Learning Opportunity Programme (ILOP).
- 2013-2017    Chairman, Summer Broadening Programme.
- 2015-present    General Advisor, Asian Medical Students' Association Hong Kong.
- 2018-2019    Chairman, Emergency Medicine Programme.
- 2023-2025    Member, Board of Academic Awards.



## **B. Postgraduate Teaching at HKU**

### Post-graduate Student Supervision

Master of Medical Sciences: 3

Master of Research in Medicine: 10

Master of Surgery: 4

Master of Philosophy: 1

Doctor of Philosophy: 12

1. Principal (and sole) Supervisor. Master of Medical Sciences (MMedSc) student (Dr. Benedict Taw). Thesis: 'Socio-economic impact of mild head injury in Hong Kong'. Completed in December 2008.
2. Principal Supervisor (with one co-supervisor). MPhil student (Mr. Steven Sin). Thesis: 'Chloride channels in glioma cell invasion'. Completed in August 2008.
3. Principal (and sole) Supervisor. Master of Medical Sciences (MMedSc) student (Dr Peter Y.M. Woo). Thesis: 'Clinical and angiographic risk factors for recurrent intracranial aneurysms treated by primary endovascular coil embolization: a multi-centre retrospective study in Hong Kong'. Completed in December 2010.
4. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Mr. Timothy Un). Thesis: 'Effects of dexamethasone and progesterone treatment on experimental brain injury induced by surgical electrocautery.' Completed in December 2012.
5. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Mr. James Zhang). Thesis: 'Adducin 3 and temozolomide resistance in glioblastoma multiforme.' Completed in December 2012.
6. Principal Supervisor (with one co-supervisor). PhD student (Ms Xiaoqin Zhang). Topic: Epigenomics molecular biology of malignant glioma. Completed in December 2015.
7. Principal (and sole) Supervisor. Master of Surgery (MS) student (Dr Jenny K.S. Pu). Topic: Treatment of malignant glioma. Completed in May 2016.
8. Principal (and sole) Supervisor, Master of Surgery (MS) student (Dr C.W. Siu). Topic: cerebrovascular diseases. Completed in August 2021.
9. Principal Supervisor (with one co-supervisor), PhD (part-time) student (Ms Karrie K.Y. Kiang). Topic: Lipid metabolism in glioblastoma chemoresistance. Completed in Jul 2019
10. Principal (and sole) Supervisor, Master of Medical Sciences (MMedSc) student (Mr Derek Lee). Topic: MicroRNA in glioblastoma chemoresistance. Completed in October 2014.

11. Principal Supervisor (with one co-supervisor), PhD (full-time) student (Dr Leo Ning Li). Topic: Oligodendrocyte precursor cell in spinal cord injury. Completed in August 2019.
12. Co-supervisor, PhD (full-time) student (John Chi Wang Ho). Topic: Long non-coding RNA in breast cancer. Completed in May 2019.
13. Principal Supervisor (without co-supervisor), Master of Surgery (MS) student (Dr Anderson C.O. Tsang. Topic: 'Endovascular treatment of intracerebral aneurysm'. Completed in September 2021.
14. Principal Supervisor (without co-supervisor), PhD (part-time) student (Dr Stephen Y Cheng). Topic: effect of progesterone in sensorimotor cortex ablation. Completed in 2023.
15. Principal Supervisor (with one co-supervisor). PhD (full-time) student (Dr Zhi Yuan Zhu). Topic: Potential role of long non-coding RNA in determining chemoresistance in glioblastoma. Completed in August 2021.
16. Principal Supervisor (with one co-supervisor). PhD (full-time) student (Dr Jin Lei). Topic: Chemoresistance in glioblastoma multiforme. Completed in November 2021.
17. Principal Supervisor (with one co-supervisor). PhD (full-time, transferred from MPhil) student (Ms Liu Jiaxin). Topic: Neuroprotection for intracerebral haemorrhage. Completed in December 2021.
18. Principal Supervisor (with one co-supervisor), PhD (full-time) student (Ms Yao Min). Topic: Spinal nerve root avulsion injury. Completed in July 2020.
19. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Ms Shin Shin Lee). Topic: 'Exploring possible treatments for intracerebral in rodent models'. Completed in 2023.
20. Principal Supervisor (with one co-supervisor). PhD (full-time, transferred from Master of Research in Medicine) student (Ms Anson Cho Kiu Ng). Topic: 'Neuroprotective effect of M30, a multifunctional brain permeable iron chelator, on intracerebral haemorrhage in mice model'. Completed in 2022.
21. Principal Supervisor (with one co-supervisor). Master of Surgery (MS)(part-time) student (Dr Ambrose Ho). Topic: 'Surgical management of hearing disabilities in nasopharyngeal carcinoma patients'. Completed in 2023.
22. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Mr Andrian Anderson Chan). Topic: 'The role of mast cell in intracerebral haemorrhage.' On-going.
23. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Ms Katrina C.W. Chau). Topic: 'The role of oligodendrocyte precursor cells in intracerebral haemorrhage.' On-going.

24. Principal Supervisor (with on co-supervisor). Master of Research in Medicine (MResMed) student (Mr Tsz Lung Lam). Topic: 'Role of vitamin D in intracerebral haemorrhage'. On-going.
25. Principal Supervisor (with on co-supervisor). PhD (full-time) student (Ms Candice Wan Jun Tang). Topic: 'Chemoresistance in glioblastoma'. On-going.
26. Principal Supervisor (with on co-supervisor). PhD (full-time) student (Ms Angela Cuiting Zhang). Topic: 'Immunological response in intracerebral haemorrhage'. On-going.
27. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Mr Trevis YH Chan). Topic: 'The role of CXCR3 in glioblastoma.' On-going.
28. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Ms Charmaine YY Hung). Topic: 'Novel treatment approach for chemoresistant malignant glioma'. On-going.
29. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Ms Alexia TC Ng). Topic: 'The effect of IL-10 on astrocytes in intracerebral hemorrhage'. On-going.
30. Principal Supervisor (with one co-supervisor). Master of Research in Medicine (MResMed) student (Mr Ethan CL Wong). Topic: 'Investigating the effect of IGF-IIR inhibition in malignant glioma'. On-going.

### Research Awards Obtained by Junior Staff under Supervision

1. Best Free Paper. Annual Scientific Meeting, The Hong Kong Neurosurgical Society, H.K. (2010) (Sun S, **Leung GKK**. Proteomic alterations associated with acquired temozolomide resistance in human malignant gliomas: the role of proly 4-hydroxylase, beta polypeptide.)
2. Best Free Paper. Annual Scientific Meeting, The Hong Kong Neurosurgical Society, H.K. (2011) (Tsang ACO, Leung KM, **Leung GKK**, Lui WM. Carotid blowout syndrome: ECIC bypass and endovascular management of ruptured radiation-related pseudoaneurysm innasopharyngeal cancer patients.)
3. Best Free Paper. Annual Scientific Meeting, The Hong Kong Neurosurgical Society, H.K.(2012) (Tsang ACO, Chow KW, Leung KM, **Leung GKK**. Computer fluid dynamicsstudy of intracerebral aneurysm after flow diverter treatment.)
4. Best Free Paper. The 5<sup>th</sup> World Conference of Intracerebral Haemorrhage cum the 20<sup>th</sup> Annual Scientific Meeting of the Hong Kong Neurosurgical Society, H.K. (2013) (Xu FF, Sun S, Ho ASW, Lee D, Kiang KMY, **Leung GKK**. The effects of progesterone versusdexamethasone on brain oedema and inflammatory responses following experimental brain resection.)

5. Best Resident Paper. The Advanced Trauma Life Support (ATLS) Region XVI Annual Meeting, American College of Surgeons. (2014) (Chow F, Wong HT, **Leung GKK**. Clinical parameters predicting in-hospital mortality in geriatric patients following severe trauma: a 15-year experience.)
6. Best Oral Poster. Annual Scientific Meeting, The Hong Kong Neurosurgical Society, H.K. (2014) (Zhang XQ, **Leung GKK**. Long non-coding RNA CRNDE regulates glioma growth via EGFR signaling pathway.)
7. Best Poster Award. Frontiers and Medical and Health Sciences Education 2016, H.K. (2016) (Vacek D, Wong S, **Leung GK**. What young doctors should learn about risk disclosure when informing patients waiting operations?)
8. Five PhD students have been awarded the HKU Postgraduate Fellowship in Neurosurgery in 2018.
9. Best Research Output Award 2021, Department of Surgery, LKS Faculty of Medicine.

#### Competitive Research Grants Obtained by Junior Staff under Supervision

1. Dr Frank Zhu, Post-doctoral Fellow. General Research Fund 2016-17. (Project no.: 17656116) (HK\$ 472,022) “The neural bases of multi-task training for promoting automaticity of technical skills in surgery.” Completed .
2. Dr Anderson Tsang, Clinical Assistant Professor. Health and Medical Research Fund, Research Fellowship Scheme 2016-17. (Project no.: 01150027) (HK\$ 1,129,905) “Emergency endovascular thrombectomy for acute ischaemic stroke patients in Hong Kong – a randomized controlled trial and prospective cohort study.” Completed.

#### Invited External Examiner

- |      |   |
|------|---|
| 2014 | External Examiner, PhD student (Mr Aden K.Y. Chan), Department of Pathology, Faculty of Medicine, Chinese University of Hong Kong (July 2014)     |
| 2018 | External Examiner, PhD Student (Ms Zhang Rui-qi Rikki), Department of Pathology, Faculty of Medicine, Chinese University of Hong Kong (July 2018) |

## C. Professional Training

### Major Contributions

- 2016-2024     Overseeing postgraduate training and credentialing at a territory-wide level as the Chairman of the Education Committee (and the Vice-President) of the Hong Kong Academy of Medicine until 2020, and as President from 2021 to 2024.
- 2015-present   International promulgation of the Advanced Trauma Life Support (ATLS) Programme as the Region XVI Chief of the American College of Surgeons.
- 2014-2019     Traveling Faculty of post-graduate courses in low-/middle-income countries on behalf of the Asian Australasian Congress of Neurological Surgeons.
- 2012-2016     Quality assurance for the Intercollegiate Board of Examination in Surgery with the Royal College of Surgeons of Edinburgh and the College of Hong Kong.
- 2012-2016     Neurosurgery Board, College of Surgeons of Hong Kong.
- 2015-present   Member, Global Neurosurgery Initiative.
- 2015-2018     Organizer and Examiner of the Licensing Examination of the Medical Council of Hong Kong.
- 2016-present   Member, Central Training and Development Committee, Hospital Authority.
- 2017-2020     Chairperson, Best Original Research by Trainees Award, Hong Kong Academy of Medicine.
- 2017-present   Examiner, Membership of the Hong Kong Intercollegiate Board of Surgical Colleges (MHKIBSC).
- 2018-present   Examiner, RCSEd/CSHK Joint Surgical Examination in Neurosurgery.
- 2017-2018     Supervisor, Cheng Yu Tung Fellowship, Dr Xu Hong-Wu (Senior Research Fellow).
- 2019-present   Member, International Academy for CPD Accreditation.
- 2021-2025     Member, Board of Directors, International Association of Medical Regulatory Authorities.
- 2023-present   Honorary Advisor, Hong Kong Association of Clinicians in Training.

## **Clinical and Administrative Services:**

### **A. Clinical Services**

#### Past/Present Leadership Positions

- 2007-2018 Director of Trauma Service, Queen Mary Hospital, H.K.
- 2008-2014 Chairman, Hospital Authority Central Committee (Trauma Service), H.K.
- 2012-2014 Deputy Chief of Service in Neurosurgery, Queen Mary Hospital, H.K.
- 2012-2017 Division Chief of Neurosurgery, Department of Surgery, HKU-Shenzhen Hospital, People's Republic of China.
- 2023-2025 Honorary Consultant, Centre for Neuromedicine, HKU-Shenzhen Hospital.
- 2012-2015 Co-chairman, Clinical Working Group in Neurosciences, Queen Mary Hospital Redevelopment Project, H.K.
- 2018-2020 Co-chairman, Clinical Working Group in Education and Training, Queen Mary Hospital Redevelopment Project, H.K.

#### Primary Clinical Service Responsibilities

1. Full-time clinical duties as Honorary Consultant Neurosurgeon at Queen Mary Hospital, H.K., in charge of pituitary surgery and endoscopic skull base surgery.
2. Management of trauma service at Queen Mary Hospital, Hong Kong (until 2018)
3. Steering of Queen Mary Hospital Redevelopment in the area of Clinical Neurosciences.
4. Service planning and development at the HKU-Shenzhen Hospital, and the Gleneagles Hospital Hong Kong. Establishment of systematised trauma services.

#### Other Clinical Service Positions

- 2005-2013 Honorary Associate Consultant in Neurosurgery, Queen Mary Hospital, H.K.
- 2012-2014 Deputy Chief of Service in Neurosurgery, Queen Mary Hospital, H.K.
- 2012-2015 Member, Clinical Service Plan for Intensive Care, Queen Mary Hospital, H.K.
- 2014-present Member, COC (Neurosurgery), Hospital Authority, H.K.

2019-2020 Member, HKEC Clinical Service Plan Consultation Work Group (Clinical Neuroscience), H.K.

## **B. University/Faculty/Department Administrative Services**

### Leadership Positions in Administrative Service

2018-present Associate Dean (Teaching & Learning), LKS Faculty of Medicine.  
2010-2013 Elected Member of the University Senate.  
2012-2018 Director, Centre of Education and Training, Department of Surgery.  
2022-2025 Co-Director, Centre of Medical Ethics and Law, HKU.

### Primary Administrative Responsibilities

1. Responsible for a wide range of duties in student affairs, admissions, assessment and curriculum development of all undergraduate programmes at LKS Faculty of Medicine, HKU.
2. Representing the Faculty in external affairs related to teaching and learning.
3. Policymaking at the Departmental Executive Committee level and the Faculty Deanery level.

### Other/Previous University Positions

2012-2013 Member, Disciplinary Committee.  
2012-2014 Member, Committee of Enquiry into Possible Good Cause.  
2012-present Voting Member, HKU Foundation.  
2013-2017 Member, Selection Panel, HKU Mentorship Programme.  
2019-present Member, Board of Academic Awards.

### Other/Previous Faculty Positions

2006-2016 Faculty Representative, Board of Faculty of Dentistry.  
2007-2015 Member, Committee on Public Lecture Series.

- 2008-2012 Member, Committee on Serena Yang Fellowship in Nursing Studies.
- 2008-2018 Member, Committee on Madam SH Ho Residence.
- 2008-2013 Scientific Member, Institutional Review Board.
- 2008-2011 Member, Board of Directors, Clinical Trial Centre.
- 2011-2013 Member, Editorial Board, Medical Faculty News.
- 2011-2013 Members, Faculty-based Crisis Management Team.
- 2012-2016 Faculty Coordinator, Central Internship Committee, Hospital Authority, H.K.
- 2013-2014 Deputy Chairman, Institutional Review Board.
- 2013-2016 Chairman, Selection Committee of Medical Loan Fund.
- 2013-2016 Director, Summer Broadening Programme.
- 2013-2016 Director, Well-being Committee.
- 2013-2016 Faculty Representative, Academic Advising Committee.
- 2014-2019 Faculty Representative, Grievances Panel for Students.
- 2014-2016 Faculty Representative, First Year Experience Committee.
- 2018-present Medical Faculty Human Resources Committee.

#### Other/Previous Departmental Positions

- 1999-2009 Chief Editor, Staff Newsletter.
- 2000-2002 Chief of Residents.
- 2006-2017 Member, Research Committee.
- 2011-2013 Director, Publicity Committee.
- 2016-present Executive Committee.



## C. Services in Professional Organizations and Societies

### Leadership Positions in Professional Bodies

- 2015-2017 Vice-president, Asian Surgical Association.
- 2015-2022 Region Chief (XVI), Advanced Trauma Life Support International, Committee on Trauma, American College of Surgeons.
- 2016-2022 Governor, The American College of Surgeons, China-Hong Kong Chapter.
- 2015-2016 Vice-chairperson, Education and Examination Committee, Hong Kong Academy of Medicine.
- 2016-2020 Chairperson, Education and Examination Committee, Hong Kong Academy of Medicine.
- 2016-2020 Vice-President (Education & Examinations), Hong Kong Academy of Medicine.
- 2020-2024 President, The Hong Kong Academy of Medicine.
- 2014-2019 Member & International Faculty, Neurotrauma Committee, Asian Australasian Congress of Neurological Surgeons.
- 2015-present Member, Global Neurosurgery Initiative.
- 2016-2020 Vice-president, Hong Kong Neurosurgical Society.
- 2016-2020 Member, Education and Accreditation Committee, The Medical Council of Hong Kong.
- 2016-2020 Member, Central Training and Development Committee, Hong Kong Hospital Authority.
- 2016-2022 Member, Executive Committee, Hong Kong Jockey Club Disaster Preparedness and Response Institute (HKJC DPRI).
- 2016-present Member, Advisory Committee, Hong Kong Jockey Club Innovative Learning Centre for Medicine (HKJC ILCM).
- 2017-present Council Member, The Hong Kong Scientist Association.
- 2019-present Co-Chairperson, Professionalism and Ethics Committee, Hong Kong Academy of Medicine.
- 2022-2024 Member, Board of Directors, International Association of Medical Regulatory Authorities (IAMRA)

## Primary Responsibilities in Professional Bodies

1. Overseeing quality assurance and international promulgation of the Advanced Trauma Life Support (ATLS) course within the Asian-Australasian region on behalf of the American College of Surgeons (2015-2022).
2. Organizing and conducting neurosurgical training in low-/middle-income countries on behalf of the Asian Australasian Congress of Neurological Surgeons (2014-2019)
3. Overseeing education and examination matters of all Specialty Colleges within the Hong Kong Academy of Medicine as well as the initiation of the professional credentialing programme in Hong Kong (2016-2024).
4. Overseeing training and promotion of medical professionalism and ethics on behalf of the Hong Kong Academy of Medicine (2019- present)
5. Policy-making within the neurosurgical and neuro-oncology societies in Hong Kong; organization of numerous scientific and educational events (2015-2020).

## Chairmanship/Membership in Organizing Committees of Scientific Conferences and Educational Events

1. Chairman. Commissioned Training, Hospital Authority, H.K. (2001, 2006, 2010, 2011, 2012, 2014).
2. Member. The 7th Annual Congress for the World Academy for Multidisciplinary Neuro-traumatology (2007).
3. Member. The 5th Asian Epilepsy Surgery Congress (2011).
4. Chairman. Annual Scientific Meeting, The Federation of Medical Societies of Hong Kong. (2010, 2011).
5. Member. The 5<sup>th</sup> World Conference of Intracerebral Haemorrhage (2013).
6. Chairman, Frontiers in Medical and Health Sciences Education – ‘From classroom to clinic: opportunities and challenges in e-learning’, HKU (2013).
7. Chairman, Medical Education Conference, Hong Kong Academy of Medicine. (2017).
8. Member, International Medical Education Leaders Forum, Hong Kong Academy of Medicine. (2017).
9. Chairman, Medical Education Conference, Hong Kong Academy of Medicine. (2018).
10. Chairman, Medical Ethics Conference, Hong Kong Academy of Medicine. (2019).
11. Chairman, Medical Education Conference, Hong Kong Academy of Medicine. (2019).

## Other Contributions to Professional Training

- 1996-2017 The College of Surgeons of Hong Kong.  
College Fellow (1996-present)  
Member, Neurosurgery Board (2006-2011)  
Member, Research Committee (2008-2017)  
Member, Examination Committee (2012-2015)  
Member, Neurosurgery Board (2014-2017)
- 2008-2015 Chief Examiner, Licentiate Examination in Surgery, The Hong Kong Medical Council.
- 2013 Research collaborations with Intuitive Surgical, Inc, U.K., on ‘The Da Vinci vs. conventional laparoscopy: Examining benefits for the surgeon.’
- 2014-2022 Course Director, Definitive Surgical Trauma Care, The International Association for Trauma Surgery and Intensive Care.
- 2014-present Examiner, Hong Kong Intercollegiate Board of Surgical Colleges Membership Examination in General Surgery and Neurosurgery.
- 2018-present Member, Credential Subcommittee, Licentiate Committee, The Medical Council of Hong Kong.
- 2018-2022 Member, Research and Education Working Group, International Association of Medical Regulatory Authorities (IAMRA).
- 2020-present Member, Executive Committee, Shenzhen Hong Kong Medical Specialists Training Centre.
- 2020-present Honorary Advisor, Hong Kong Student Association of Neuroscience.
- 2020-present Honorary Advisor, Hong Kong Academy of Nursing.
- 2023-present Honorary Advisor, Hong Kong Association of Clinicians in Training.

## Membership of Professional Societies

- 2006-present The Hong Kong Neurosurgical Society.
- 2008-present Member, International Society of Pituitary Surgeons (ISPS).
- 2008-present Member, Pituitary Society.
- 2009-2011 Executive Member, The Federation of Medical Societies of Hong Kong,
- 2010-present Member, Society of Neuro-Oncology (SNO).
- 2011-present Member, International Association of Neurorestoratology (IANR).

- 2011-present Member, China Spinal Cord Injury Network (ChinaSCINet).
- 2011-present Council Member, The Hong Kong Neuro-Oncology Society, H.K.
- 2012-present Member, Skull Base Surgery Committee, World Federation of Neurosurgical Societies.
- 2013-present Member, American Association of Neurological Surgeons.
- 2013-present Member, Congress of Neurological Surgeons.
- 2015-present Member, Examination Sub-committee of the Licentiate Committee of the Medical Council of Hong Kong.
- 2014-present Member, American Association for Cancer Research.
- 2016-2021 Member, International Injury Care Committee, American College of Surgeons.
- 2017-present Member, Mason Institute for Medicine, Life Sciences and the Law, University of Edinburgh.
- 2017-present Council Member, Hong Kong Scientist Association (香港科學工作者協會).

#### **D. Other Civic Responsibilities**

- 2015-2020 Member, Project Steering Committee on Standards for Ambulatory Facilities, Food & Health Bureau, The Government of the HKSAR.
- 2019-2022 Member, High Level Steering Committee on Antimicrobial Resistance, Food & Health Bureau, The Government of the HKSAR.
- 2020- 2023 Member, Advisory Committee for Regulatory Standards for Private Healthcare Facilities (Advisory Committee) under the Private Healthcare Facilities Ordinance (Cap. 633), Food & Health Bureau, The Government of the HKSAR.
- 2020-2021 Member, Hong Kong Fire Service Department Paramedic Development and Accreditation Advisory Committee, The Government of the HKSAR.
- 2021-2024 Hong Kong Convention Ambassadors, Hong Kong Tourism Board.
- 2021-2022 Member of Election Committee, Legislative Council General Election, The Government of the HKSAR.
- 2021-2022 Assessor, Enterprise Support Scheme Assessment Panel, Innovation and Technology Commission, Hong Kong.

- 2021-present Honorary Advisor, Hong Kong Museum of Medical Sciences.
- 2022-2024 Member. Committee on Promotion of Organ Donation, Food & Health Bureau, The Government of the HKSAR.
- 2010-present Medical Experts, The Hong Kong Law Society, H.K.
- 2010-2020 Member (Medical Sector), Friends of Bauhinia Foundation, H.K.
- 2010-2015 Rotary Club of Central, H.K.  
Member (2010-2015)  
Board Member (2011-2012)

~ End ~