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教學科目: 生物化學; 現代生物技術; 藥理實驗方法學; 中藥學研究進展; 臨床藥理學; 專業英語

研究方向: 中藥藥理學; 分子藥理學; 利用組學技術作創新藥物研究; 天然產物治療癌症的分子機制研究; 肺癌的耐藥機制研究; 天然產物混合治療及其協同效應研究

梁麗嫻博士, 現為澳門科技大學中藥品質研究國家重點實驗室副教授, 澳門藥物及健康應用研究院助理院長。研究方向為肺癌靶向治療的中藥新藥研究。研究成果發表在 Briefings in Bioinformatics, Antioxidants and redox signaling, Oncogene, Leukemia, Scientific Reports, Molecular Cancer Research, Cancer 等刊物上。她是藥理學雜誌《藥理學研究》(Pharmacological Research) 的編委, 共獲得國際專利 14 項, 研究獲得澳門科學技術發展基金及中華人民共和國科學技術部與科學技術發展基金聯合科研資助專案等多項資助。

梁博士於 2001 年在香港中文大學分子生物技術學系取得學士學位, 並於 2003 年及 2006 年同校生物化學系及醫學院生理系分別取得碩士及博士學位, 隨後於香港大學李嘉誠醫學院病理學系及香港浸會大學中醫學學院當博士後研究員, 從事關於肺癌的博士後研究工作。梁博士就讀博士及當博士後研究員期間, 曾獲取獎項到加拿大及美國從事研究工作。在香港大學工作期間, 梁博士發表了多篇有關肺癌標靶治療、混合治療以及致肺癌基因研究。在澳門科技大學, 梁麗嫻博士的研究工作主要關於中醫藥抗癌及抗炎的分子機理研究以及利用蛋白質組學技術平臺進行中藥開發。另一研究方向則為中藥混合治療及中藥多靶點特性

對抗癌及抗炎藥物創新發現的研究。

學歷

2006.07 香港中文大學 / 博士學位
2003.08 香港中文大學 / 碩士學位
2001.08 香港中文大學 / 學士學位

工作履歷

2015.9-Present 澳門科技大學澳門藥物及健康應用研究院 / 副教授
湖北省太和醫院 / 訪問教授
2017.10-Present 廣州醫科大學附屬第一醫院 / 兼職教授
2017.11-Present 項目顧問 / Janssen Pharmaceuticals Inc (強生製藥公司)
2013.7-2015.8 澳門科技大學澳門藥物及健康應用研究院 / 助理院長
2011.9-2013.6 澳門科技大學澳門藥物及健康應用研究院 / 助理教授
2011.3-2011.8 香港浸會大學中醫藥學院 / 博士後研究員
2006.7-2011.3 香港大學病理學系 / 博士後研究員

榮譽獎項

2015 年獲教育部高等學校自然科學類一等獎
2014 年獲澳門科學技術自然科學類二等獎
2013 年獲中銀學術研究優秀獎

學術成果

SCI 期刊論文：(*Corresponding author)

1. Fan XX[#], Pan HD[#], Guo RJ, **Leung EL*** & Liang Liu*. Novel therapeutic strategy for cancer and autoimmune conditions: Modulating cell metabolism and redox capacity. **Pharmacology and Therapeutics (IF 11.127)** 2018 Jun 25. pii: S0163-7258(18)30112-8. doi: 10.1016/j.pharmthera.2018.06.010.
2. Wang YW, Lai HL, Fan XX, Luo LX, Duan FG, Jiang ZB, Wang QQ, **Leung EL***, Liu L*, Yao XJ*. Gossypol inhibits non-small cell lung cancer cells proliferation by targeting EGFR L858R/T790M. **Frontier in Pharmacology**. 2018 Jul 9;9:728. doi: 10.3389/fphar.2018.00728. eCollection 2018.
3. Wei CL, Yang LS, Imani S, Fu SY, Lv Hongbin, Li YM, Chen R, **Leung EL*** & Fu JJ*. Novel homozygous variant of GPR98 causes usher syndrome type IIC in a consanguineous Chinese family by next generation sequencing. **BMC Medical Genetics**. 2018 Jun 11;19(1):99. doi: 10.1186/s12881-018-0602-0.
4. Li RZ[#], Fan XX[#], Duan FG, Jiang ZB, Pan HD, Luo LX, Zhou YL, Li Y, Yao YJ, **Leung EL*** & Liu L*. Proscillaridin A induces apoptosis and suppresses non-small cell lung cancer tumor growth via calcium-induced DR4 up-regulation. **Cell Death Dis**. 2018 Jun 13;9(6):696. doi: 10.1038/s41419-018-0733-4.
5. Li RZ, Fan XX, Shi DF, Zhu GY, Wang YW, Luo LX, Pan HD, Yao XJ*, **Leung EL*** & Liu L*. Identification of a new Pyruvate kinase M2 isoform (PKM2) activator for the

- treatment of non-small cell lung cancer (NSCLC). **Chemical Biology & Drug Design**. 2018 Jun 21. doi: 10.1111/cbdd.13354. [Epub ahead of print]
- Dai X, Li RZ, Jiang ZB, Wei CL, Luo LX, Yao XJ, Li GP* & **Leung EL***. Honokiol inhibits proliferation, invasion and induces apoptosis through targeting Lyn kinase in human lung adenocarcinoma cells. **Frontier in Pharmacology** 2018 May 28;9:558. doi: 10.3389/fphar.2018.00558. eCollection 2018.
 - Wang QQ, Xu JH, Li Y, Huang JM, Jiang ZB, Wang YW, Liu L*, **Leung EL*** and Yao XJ*. Identification of a novel protein arginine methyltransferase 5 inhibitor in non-small cell lung cancer by structure-based virtual screening. **Frontier in Pharmacology** 2018 Mar 1;9:173. doi: 10.3389/fphar.2018.00173. eCollection 2018.
 - Leung EL#**, Luo LX#, Liu ZQ, Wong VKW, Lu LL, Xie Y, Zhang N, Qu YQ, Fan XX, Li Y, Huang M, Xiao DK, Huang J, Zhou YL, He JX, Ding J, Yao XJ, Ward DC, Liu L. [Inhibition of KRAS-dependent lung cancer cell growth by deltarasin: blockage of autophagy increases its cytotoxicity](#). **Cell Death Dis**. 2018 Feb 13;9(2):216. doi: 10.1038/s41419-017-0065-9. (# co-first author)
 - Su X, Li T, Liu Z, Huang Q, Liao K, Ren R, Lu L, Qi X, Wang M, Chen J, Zhou H, **Leung EL**, Pan HD, Liu J, Wang H, Huang L, Liu L. Licochalcone A activates Keap1-Nrf2 signaling to suppress arthritis via phosphorylation of p62 at serine 349. **Free Radic Biol Med** 2018;115:471-483.
 - Liu XY, Yang KY, Wang MQ, Kwok JS, Zeng X, Yang Z, Xiao XJ, Lau CP, Li Y, Huang ZM, Ba JG, Yim AK, Ouyang CY, Ngai SM, Chan TF, **Leung EL**, Liu L, Liu ZG, Tsui SKW. High-quality assembly of *Dermatophagoides pteronyssinus* genome and transcriptome reveals a wide range of novel allergens. **J Allergy Clin Immunol** 2018;2 (17):33013-33010.
 - Fan XX#, **Leung EL#**, Xie Y, Liu ZQ, Zheng YF, Yao XJ, Lu LL, Wu JL, He JX, Yuan ZW, Fu JJ, Wei CL, Huang J, Xiao DK, Luo LX, Jiang ZB, Zhou YL, Kam RK, Liu L. Suppression of Lipogenesis via Reactive Oxygen Species-AMPK Signaling for Treating Malignant and Proliferative Diseases. **Antioxid Redox Signal** 2018;28 (5):339-357. (Selected as cover story)
 - Dai X, Li GP, Yang XQ, Wang XY, Wu J, **Leung EL***. Effects of Lyn kinase on EGFR signaling pathway in lung adenocarcinoma. **China Oncology** 2018, 28(01): 9-16.
 - Zong XX, Yan G Y, Wu JL, **Leung EL**, Zhou H, Li N, Liu L. New C 19 -diterpenoid alkaloids from the parent roots of *Aconitum carmichaelii*. **Tetrahedron Lett** 2017;58 (16):1622-1626.
 - Zhou H, Liu JX, Luo JF, Cheng CS, **Leung EL**, Li Y, Su XH, Liu ZQ, Chen TB, Duan FG, Dong Y, Zuo YH, Li C, Lio CK, Li T, Luo P, Xie Y, Yao XJ, Wang PX, Liu L. Suppressing mPGES-1 expression by sinomenine ameliorates inflammation and arthritis. **Biochem Pharmacol** 2017;142:133-144.
 - Yang N, Leung EL, Liu CB, Li L, Eguether T, Yao XJ, Jones E, Norris D, Liu A, Clark R, Roop DR, Pazour GJ, Shroyer KR, Chen J. INTU is essential for oncogenic Hh signaling through regulating primary cilia formation in basal cell carcinoma. **Oncogene** 2017;36 (35):4997-5005.
 - Xie C, Li LL, Fan XX, Li Y, Wei CL, Liu L*, **Leung EL***, Yao XJ*. Identification of a New Potent Inhibitor Targeting KRAS in Non-small Cell Lung Cancer Cells. **Front Pharmacol** 2017;8:823.
 - Wong VKW, Zeng W, Chen J, Yao XJ, **Leung EL**, Wang QQ, Chiu P, Ko BCB, Law BYK. Tetrandrine, an Activator of Autophagy, Induces Autophagic Cell Death via PKC-alpha Inhibition and mTOR-Dependent Mechanisms. **Front Pharmacol**

2017;8:351.

18. Wang QQ, Li Y, Xu JH, Wang YW, **Leung EL***, Liu L*, Yao XJ*. Selective inhibition mechanism of RVX-208 to the second bromodomain of bromo and extraterminal proteins: insight from microsecond molecular dynamics simulations. **Sci Rep** 2017;7 (1):8857.
19. Pinz K, Yakaboski E, Jares A, Liu H, Firor A, Chen K, Wada M, Salman H, Tse W, Hagag N, Lan FS, **Leung EL**, Jiang S, Ma YP. Targeting T-cell malignancies using anti-CD4 CAR NK-92 cells. **Oncotarget** 2017;8 (68):112783-112796.
20. Petrov J, Wada M, Pinz K, Yan L, Chen K, Chen X, Liu H, Shuai X, **Leung EL**, Salman H, Hagag H, Liu F, Jiang X, Ma YP. Compound CAR T-cells as a double-pronged approach for treating acute myeloid leukemia. **Leukemia** 2018 Feb 25. doi: 10.1038/s41375-018-0075-3. [Epub ahead of print]
21. Luo LX, Li Y, Niu YZ, Fan XX, Xu JH, Liu L*, **Leung EL***, Yao XJ*. Identification of a potent kinase inhibitor targeting ALK fusion proteins in non-small cell lung cancer. **Med Chem Comm** 2017
22. Luo LX, Li Y, Liu ZQ, Fan XX, Duan FG, Li RZ, Yao XJ*, **EL* Leung**, Liu L* . Honokiol Induces Apoptosis, G1 Arrest, and Autophagy in KRAS Mutant Lung Cancer Cells. **Front Pharmacol** 2017;8:199.
23. Luo LX, Fan XX, Li Y, Peng X, Ji YC, Hsiao WW, Liu L*, **Leung EL***, XJ* Yao. Identification of mitoxantrone as a new inhibitor of ROS1 fusion protein in non-small cell lung cancer cells. **Med Chem Commun** 2017;8 (3):621-624.
24. Lu LL, Lv SD, Ji L, Chen B, Liu S, Lei C, Liu X, Qi X, Wang Y, **Leung EL**, Wang H, Zhang L, Yu X, Liu ZQ, Wei Q. Histone methyltransferase KMT2D sustains prostate carcinogenesis and metastasis via epigenetically activating LIFR and KLF4. **Oncogene** 2017
25. Li Y#, **Leung EL#**, Pan HD, Yao XJ, Huang QC, Wu M, Xu T, Wang YW, Cai J, Li RZ, W Liu, Liu L. Identification of potential genetic causal variants for rheumatoid arthritis by whole-exome sequencing. **Oncotarget** 2017;8 (67):111119-111129.
26. Li XG, Tang S, Wang QQ, **Leung EL**, Jin HY, Huang YZ, Liu J, Geng MY, Huang M, Yuan ST, Yao XJ, Ding J. Identification of Epigallocatechin-3- Gallate as an Inhibitor of Phosphoglycerate Mutase 1. **Front Pharmacol** 2017;8:325.
27. Li X, Fan XX, Jiang ZB, Loo WTY, Yao XJ, **Leung EL***, Chow LWC*, Liu L*. Shikonin inhibits gefitinib-resistant non-small cell lung cancer by inhibiting TrxR and activating the EGFR proteasomal degradation pathway. **Pharmacol Res** 2017;115:45-55.
28. **Leung EL***, E Clementi, Wong FW. Advanced technologies charting a new path for traditional Chinese medicine drug discovery. **Pharm Res** 2017;117:65-66.
29. Law BY, Gordillo-Martínez F, Qu YQ, Zhang N, Xu SW, Saul Coghi P, Mok SW, Guo JR, Zhang W, **Leung EL**, Fan XX, Wu AG, Chan WK, Yao XJ, Wang JR, Liu L, Wong VK. Thalidezine, a novel AMPK activator, eliminates apoptosis-resistant cancer cells through energy-mediated autophagic cell death. **Oncotarget** 2017;8 (18):30077-30091.
30. Chen X, Xie C, Fan XX, Jiang ZB, Wong VKB, Xu JH, Yao XJ*, Liu L*, **Leung EL***. Novel direct AMPK activator suppresses non-small cell lung cancer through inhibition of lipid metabolism. **Oncotarget** 2017;8 (56):96089-96102.
31. Chen K, Wada M, Pinz K, Liu H, Shuai X, Chen X, Yan LL, Petrov J, Salman H, Senzel L, **Leung EL**, Jiang X, Ma YP. A compound chimeric antigen receptor

strategy for targeting multiple myeloma. **Leukemia** 2018 Feb;32(2):402-412. doi: 10.1038/leu.2017.302. Epub 2017 Sep 27.

32. Chen K, Wada M, Pinz K, Liu H, Lin KW, Jares A, Firor A, Shuai X, Salman H, Golightly M, Lan FS, Senzel L, **Leung EL**, X Jiang, Ma YP. Preclinical targeting of aggressive T-cell malignancies using anti-CD5 chimeric antigen receptor. **Leukemia** 2017;31 (10):2151-2160.
33. Zhang YZ#, Chen X#, Fan XX, He JX, Huang J, Xiao DK, Zhou YL, Zheng SY, Xu JH, Yao XJ, Liu L*, **Leung EL***. Compound Library Screening Identified Cardiac Glycoside Digitoxin as an Effective Growth Inhibitor of Gefitinib-Resistant Non-Small Cell Lung Cancer via Downregulation of alpha-Tubulin and Inhibition of Microtubule Formation. **Molecules** 2016;21 (3):374.
34. Yu J, Zhang Y, **Leung LH**, Liu L, Yang F, Yao XJ. Efficacy and safety of angiogenesis inhibitors in advanced gastric cancer: a systematic review and meta-analysis. **J Hematol Oncol** 2016;9 (1):111.
35. Xu SW, Law BY, Mok SW, **Leung EL**, Fan XX, Coghi PS, Zeng W, Leung CH, Ma DL, Liu L, Wong VKB. Autophagic degradation of epidermal growth factor receptor in gefitinib-resistant lung cancer by celastrol. **Int J Oncol** 2016;49 (4):1576-1588.
36. Wong VK#, Law YK#, Yao XJ, Chen X, Xu SW, Liu L*, **Leung EL***. Advanced research technology for discovery of new effective compounds from Chinese herbal medicine and their molecular targets. **Pharmacol Res** 2016;111:546-555.
37. Wong VK, Dong H, Liang X, Bai LP, Jiang ZH, Guo Y, Kong AN, Wang R, Kam RK, Law BY, Hsiao WW, Chan KM, Wang J, Chan RW, Guo J, Zhang W, Yen FG, Zhou H, **Leung EL**, Yu Z, Liu L. Rh2E2, a novel metabolic suppressor, specifically inhibits energy-based metabolism of tumor cells. **Oncotarget** 2016;7 (9):9907-9924.
38. Wang MF#, Li RZ#, Li Y, Cheng XQ, Yang J, Chen W, Fan XX, Pan HD, Yao XJ, RT XQ, Liu L*, **Leung EL***, Tang YJ*. Clinical statistics analysis on the characteristics of pneumoconiosis of Chinese miner population. **J Thorac Dis** 2016;8 (8):2203-2211.
39. Liang Y, Wu JL, Li X, Guo MQ, **Leung EL**, Zhou H, Liu L, Li N. Anti-cancer and anti-inflammatory new vakognavine-type alkaloid from the roots of *Aconitum carmichaelii*. **Tetrahedron Lett** 2016;57 (52):5881-5884.
40. Liang Y, Wu JL, **Leung EL**, Zhou H, Liu ZQ, Yan GY, Liu Y, Liu L*, Li N*. Identification of Oxygenated Fatty Acid as a Side Chain of Lipo-Alkaloids in *Aconitum carmichaelii* by UHPLC-Q-TOF-MS and a Database. **Molecules** 2016;21 (4):437.
41. **Leung EL**, Fan XX, Wong MP, Jiang ZH, Liu ZQ, Yao XJ, Lu LL, Zhou YL, Yau LF, Tin PC, Liu L. Targeting Tyrosine Kinase Inhibitor-Resistant Non-Small Cell Lung Cancer by Inducing Epidermal Growth Factor Receptor Degradation via Methionine 790 Oxidation. **Antioxid Redox Signal** 2016;24 (5):263-279. **(Selected as cover story)**
42. Jiang ZB#, Huang J#, Xie C, Li X, Liu L, He J, Pan H, Huang L, Fan XX, Yao XJ, Xie Y, Li N, Liu L, He JX*, **Leung EL***. Combined use of PI3K and MEK inhibitors synergistically inhibits lung cancer with EGFR and KRAS mutations. **Oncolo Rep** 2016;36 (1):365-375.
43. Huang J#, Fan XX#, He JX, Pan H, Li RZ, Huang LY, Jiang ZB, Yao XJ, Liu L, **Leung EL***, He JX*. SCD1 is associated with tumor promotion, late stage and poor survival in lung adenocarcinoma. **Oncotarget** 2016;7 (26):39970-39979.
44. Chan CM, Chu H, Zhang AJ, **Leung EL**, Sze KH, Kao RY, Chik KK, To KK, Chan JW, Chen H, Jin DY, L Liu, Yuen KY*. Hemagglutinin of influenza A virus binds

specifically to cell surface nucleolin and plays a role in virus internalization. **Virology** 2016;494:78-88.

45. Yuan ZW, **Leung EL**, Fan XX, Ma WZ, Liu L, Xie Y. Quantitative evaluation of berberine subcellular distribution and cellular accumulation in non-small cell lung cancer cells by UPLC-MS/MS. **Talanta** 2015;144:20-28.
46. Yang ZF#, **Leung EL**#, Liu L, ZH Jiang, Zhong NS*. Developing influenza treatments using traditional Chinese medicine. **Science** 2015;347 (6219):S35-S37.
47. Wang R, Zhang CY, Bai LP, Pan HD, Shu LM, Kong AN, **Leung EL**, Liu L, Li T. Flavonoids derived from liquorice suppress murine macrophage activation by up-regulating heme oxygenase-1 independent of Nrf2 activation. **Int Immunopharmacol** 2015;28 (2):917-924.
48. Lu LL, Liu XH, **Leung EL**, Wang Y, Shi J, Hu M, Liu L, Liu ZQ. The bioavailability barrier and personalized traditional Chinese medicine. **Science** 2015;350 (6262):S79-S81.
49. Liu L, Liu L, **Leung EL**, Cooney AJ, Chen C, Rosengart TK, Ma YP, Yang JC. Knockdown of SALL4 Protein Enhances All-trans Retinoic Acid-induced Cellular Differentiation in Acute Myeloid Leukemia Cells. **J Biol Chem** 2015;290 (17):10599-10609.
50. Li T, Wong VK, Jiang ZH, Jiang SP, Liu Y, Wang TY, Yao XJ, Su XH, Yan FG, Liu J, **Leung EL**, Yi XQ, Wong YF, Zhou H, Liu L. Mutation of cysteine 46 in IKK-beta increases inflammatory responses. **Oncotarget** 2015;6 (31):31805-31819.
51. Gu WY, Li N*, **Leung EL**, Zhou H, Luo GA, L Liu, Wu JL*. Metabolites software-assisted flavonoid hunting in plants using ultra-high performance liquid chromatography-quadrupole-time of flight mass spectrometry. **Molecules** 2015;20 (3):3955-3971.
52. Gu WY, Li N, **Leung EL**, Zhou H, Yao XJ, Liu L, Wu JL. Rapid identification of new minor chemical constituents from Smilacis Glabrae Rhizoma by combined use of UHPLC-Q-TOF-MS, preparative HPLC and UHPLC-SPE-NMR-MS techniques. **Phytochem Anal** 2015;26 (6):428-435.
53. Fan XX, Yao XJ, Xu SW, Wong VKW, He JX, Ding J, Xue WW, Mujtaba T, Michelangeli F, Huang M, Huang J, Xiao DK, Jiang ZB, Zhou YL, Kam R.K., Liu L*, **Leung EL***. (Z)3,4,5,4'-trans-tetramethoxystilbene, a new analogue of resveratrol, inhibits gefitinb-resistant non-small cell lung cancer via selectively elevating intracellular calcium level. **Sci Rep** 2015;5:16348.
54. **Leung EL**, Wong VK, Jiang ZH, T Li, Liu L*. Integrated network-based medicine: The role of traditional Chinese medicine in developing a new generation of medicine. **Science** 2014;346 (6216):S16-17.
55. Fan XX, Li N, Wu JL, Zhou YL, He JX, Liu L, **Leung EL***. Celastrol induces apoptosis in gefitinib-resistant non-small cell lung cancer cells via caspases-dependent pathways and Hsp90 client protein degradation. **Molecules** 2014;19 (3):3508-3522.
56. Wu JL, **Leung EL**, Zhou H, L Liu, Li N. Metabolite analysis of toosendanin by an ultra-high performance liquid chromatography-quadrupole-time of flight mass spectrometry technique. **Molecules** 2013;18 (10):12144-12153.
57. Wang TY, Zhou H, Wong YF, Wu PK, Hsiao WL, **Leung EL**, Liu L. The Predicted Proteomic Network Associated with the Antiarthritic Action of Qingfu Guanjieshu in Collagen-II-Induced Arthritis in Rats. **Evid Based Complement**

Alternat Med 2013;2013:582493.

58. **Leung EL**, Cao ZW, Jiang ZH, Zhou H, Liu L. Network-based drug discovery by integrating systems biology and computational technologies. **Brief Bioinform** 2013;14 (4):491-505.
59. Wong DW, **Leung EL**, Wong SK, Tin VP, Sihoe AD, Cheng LC, Au JS, Chung LP, Wong MP. A novel KIF5B-ALK variant in nonsmall cell lung cancer. **Cancer** 2011;117 (12):2709-2718.
60. Liu L, **Leung ELH**, Tian XY. PERSPECTIVE The clinical trial barriers. **Nature** 2011;480 (7378):S100-S100.
61. **Leung EL**, Wong JC, Johlfs MG, Tsang BK, Fiscus RR. Protein kinase G type Ialpha activity in human ovarian cancer cells significantly contributes to enhanced Src activation and DNA synthesis/cell proliferation . **Mol Cancer Res** 2010;8 (4):578-591.
62. **Leung EL**, Fiscus RR, Tung JW, Tin VP, Cheng LC, Sihoe AD, Fink LM, Ma Y, Wong MP. Non-small cell lung cancer cells expressing CD44 are enriched for stem cell-like properties. **PLoS One** 2010;5 (11):0014062.
63. Wong DW, **Leung EL**, So KK, Tam IY, Sihoe AD, Cheng LC, Ho KK, Au JS, Chung LP, Pik Wong M. The EML4-ALK fusion gene is involved in various histologic types of lung cancers from nonsmokers with wild-type EGFR and KRAS. **Cancer** 2009;115 (8):1723-1733.
64. Tam IY, **Leung EL**, Tin VP, Chua DT, Sihoe AD, Cheng LC, Chung LP, Wong MP. Double EGFR mutants containing rare EGFR mutant types show reduced in vitro response to gefitinib compared with common activating missense mutations. **Mol Cancer Ther** 2009;8 (8):2142-2151.
65. **Leung EL**, Tam IY, Tin VP, Chua DT, Sihoe AD, Cheng LC, Ho JC, Chung LP, Wong MP. SRC promotes survival and invasion of lung cancers with epidermal growth factor receptor abnormalities and is a potential candidate for molecular-targeted therapy. **Mol Cancer Res** 2009;7 (6):923-932.
66. Gai H, **Leung EL**, Costantino PD, Aguila JR, Nguyen DM, Fink LM, Ward DC, Ma Y. Generation and characterization of functional cardiomyocytes using induced pluripotent stem cells derived from human fibroblasts. **Cell biology international** 2009;33 (11):1184-1193.
67. **Leung EL**, Fraser M, Fiscus RR, Tsang BK. Cisplatin alters nitric oxide synthase levels in human ovarian cancer cells: involvement in p53 regulation and cisplatin resistance. **Br J Cancer** 2008;98 (11):1803-1809.

出版物:

1. Ahmed Y. Ali, Lee Farrand, Ji Young Kim, Sanguine Byun, Elaine Lai-Han Leung, Hyong Joo Lee and Benjamin K. Tsang. Chapter for "New Perspectives in Chemoresistant Ovarian Cancer", *Ovarian Toxicology*. 2012 (Accepted)
2. Ronald R. Fiscus, Elaine L. Leung, Janica C. Wong and Mary G. Johlfs. Chapter for " Ovarian Cancer/Book 1 ", ed. Samir Farghaly, INTECH Open Access Publisher, Rijeka, Croatia, Accepted – August 16, 2011, Scheduled Publication – October 2011. Nitric oxide/protein kinase G-Ia promotes c-Src activation, proliferation and chemoresistance in ovarian cancer

專利:

1. A novel treatment of Gefitinib-resistant non-small-cell lung cancer using sanguinarine. **Leung EL**, Fan XX, Liu L. (US patent provisional filed; Australia patent awarded for 8 years-2014100435)
2. The new application of an alkaloid derived from a Chinese herbal for treatment of cancer by inhibiting cholesterol synthesis and fatty acid oxidation. **Leung EL**, Fan XX, Liu L, Wu JL. (US patent provisional filed; Australia patent awarded for 8 years-2014100831)
3. Methods for Novel Drug Discovery, Treatment and Selective Targeting for Gefitinib-Resistant Non-Small-Cell Lung Cancer Harboring T790M Mutation. **Leung EL**, Liu L and Fan XX (US patent awarded-US 9439898 B2; Australia patent awarded for 8 years-2014100614)
4. The application of (Z) 3,4,5,4'-tetramethoxystilbene (TMS) in Gefitinib-resistant non-small-cell lung cancer cells. **Leung EL**, Fan XX, Liu L and Jiang ZB (US patent-awarded-9597299; Australia patent awarded for 8 years-2015100187)
5. Oncogene ROS1 kinase inhibitor. Yao XJ, **Leung EL**, Luo LX, Zhou YL and Liu L. (US patent awarded-9526722B1; Australia patent awarded for 8 years-2015100840)
6. Identification of new AMPK activator for treatment of lung cancer. **Leung EL**, Yao XJ, Wong VKW, Liu L and Chen X (US patent awarded-US 9364469 B1; Australia patent awarded for 8 years- 2015101612)
7. Identification of New Chemical Structure as AMPK Activator for Treatment at EGFR^{L858R/T790M} Double Mutation Non-Small Cell Lung Cancer. (Method to treat lung cancer) Liu L, **Leung EL**, Yao XJ, Wong VKW and Chen Ci (US patent awarded- Patent No. 9,855,250 B1)
8. Identification of new role of mitoxantrone as a direct ROS1 oncogenic kinase inhibitor. Yao XJ, **Leung EL**, Luo LX, Hsiao WL and Liu L (US patent awarded for 8 years-US 9522125 B1; Australia patent awarded for 8 years- 2015101712)
9. C498-0065, a novel ROS1 inhibitor, demonstrates potent inhibition activity against ROS1 fusion oncokinase. Yao XJ, **Leung EL**, Luo LX and Liu L (US patent awarded-9782400B2; Australia patent awarded for 8 years- 2015101598)
10. PDEd inhibitor for the treatment of cancer. Yao XJ, **Leung EL**, Luo LX and Liu L (US patent awarded US 2017/0135979A1; Australia patent awarded for 8 year-2015101666)
11. ALK kinase inhibitor and its use. Yao XJ, **Leung EL**, Luo LX and Liang L (US patent filed; Australia patent awarded for 8 year- 2016101467)
12. Hydroxynaphthoquinone compounds (shikonin) for treating of non-small cell lung cancer. Liu L, **Leung EL**, Li X, Fan XX (US patent awarded 15/186,795; Australia patent awarded for 8 year- 2016100891)
13. Methods for treating lung cancer (PKM2 activator). Liu L, **Leung EL**, Yao XJ and Li RZ (US patent awarded-9744145, Australia patent awarded for 8 year- 2017100105)
14. Methods of identifying a gene associated with a disease or pathological condition of the disease. Liu L, **Leung EL**, Yao XJ, Li Y and Pan HD.(US Patent No. 15/647,414 filed on 12 July 2017; Australia patent awarded for 8 year-2017100960)
15. Bufadienolide for treatment of non-small cell lung cancer. Liu L, **Leung EL**, Yao XJ, Li RZ and Fan XX. (US patent field, Australia awarded for 8 years-2017100644)

16. Method for treating cancer (BPTF small molecule). **Leung EL**, Xiao XJ, Liu L, Xu JH, Li Y and Wang QQ (US patent filed, Australia patent awarded for 8 years-2018100077)
17. Method of treating cancer (PRMT5). Yao XJ, **Leung EL**, Liu L, Wang QQ, Xu JH & Li Y. (US patent filed, Australia patent awarded for 8 years-2018100078)
18. Method of treating cancer (KRAS SOS inhibitor 1). Yao XJ, **Leung EL**, Liu L, Fan XX, Xie C. (US patent awarded 15/84046).
19. Method of treating lung cancer (KRAS SOS inhibitor 2). Yao XJ, **Leung EL**, Liu L, Fan XX, Xie C. (US patent awarded 15/84047)
20. Combinational treatment of Ras-positive diseases with PDE delta inhibitor and direct autophagy inhibitor. Liang Liu, Ward DC, **Leung EL**, Yao XJ, Wong VKW, Luo LX. (US patent awarded US9861623B1)