

# 馬麗娟



**職稱：** 助理教授

**學院/部門：** 埃爾文·內爾博士生物物理與創新藥物實驗室  
中藥機制與質量全國重點實驗室

**電郵地址：** ljma@must.edu.mo

**電話：** (853) 88973537

**辦公室：** L507

**郵寄地址：** 澳門氹仔偉龍馬路，澳門科技大學 L507

生物化學與分子生物學博士，澳門科技大學埃爾文·內爾博士生物物理與創新藥物實驗室/中藥質量研究國家重點實驗室助理教授。2010年在廣州中山大學取得生物化學與分子生物學博士學位，隨後在香港科技大學生命科學部訪問學者，期間從事DNA複製起始與癌症的研究。之後在美國西雅圖Fred Hutchinson Cancer Research Center, Gerald Smith實驗室完成六年的博士後訓練，期間從事減數分裂同源重組的分子機制研究。馬麗娟博士專長于用現代分子生物學與細胞生物學的方法研究細胞週期調控，抗癌藥物作用靶點和機制。無論何種癌症，癌細胞都要經過DNA複製、細胞分裂，完成一個細胞週期，實現增殖。中藥來源的活性物質可阻斷有絲分裂的細胞週期，從而控制癌細胞增殖實現抗腫瘤效果。生殖細胞經過一個特殊的細胞週期——減數分裂，從而產生染色體數目減半的精子或卵子。這一過程的調控與不孕不育、生育力減退、出生缺陷等疾病密切相關。

課題組目前的研究興趣和方向為：**1.** 中藥來源的抗癌活性成分的作用機制。  
**2.** 女性生殖衰老發生的分子機制及藥物干預。

**教學科目：** 《生物化學與分子生物學》，《生物化學與分子生物學實驗》，《微生物與免疫學》，《藥理與臨床藥學 III—臨床藥理學與藥物治療學》

研究方向： 1. 中藥抗癌藥物的作用機制； 2. 女性生殖衰老和生育力保護。

**學歷：**

2003-2009 中山大學，生化與分子生物學，理學博士

1999-2003 山西師範大學，生物學，理學學士

**工作經歷：**

2017-今 澳門科技大學，助理教授

2011-2017 美國福瑞德·哈金森癌症研究中心（Fred Hutchinson Cancer Research Center） 博士後

2009-2011 香港科技大學 訪問學者

**发表文章（\*为通讯作者）：**

1. Wu W., Zhang R., Chen G., Chen Z., Lin Z., Chen Y., Li J., Liao W., Wang J., Wang X., Huang J., **Ma L.\***, Yu H. Sappanchalcone suppresses NSCLC by oxidative stress-driven DNA damage and ER stress activation through PIEZO1 modulation. *Science*. 2025, 28(12): 114057.
2. Zhong L., Lin X., Cheng X., Wan S., Hua Y., Nan W., Hu B., Peng X., Zhou Z., Zhang Q., Yang H., Noé F., Yan Z., Jiang D., Zhang H., Liu F., Xiao C., Zhou Z., Mou Y., Yu H., **Ma L.**, Huang C., Wong V.K.W., Chung S.K., Shen B., Jiang Z., Neher E., Zhu W., Zhang J., Hou P. Secondary structure transitions and dual PIP2 binding define cardiac KCNQ1-KCNE1 channel gating. *Cell Research*. 2025, 35(11):887.
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  9. Wang J., Lu L., He X., **Ma L.**, Chen T., Li G.\*, Yu H.\*. Identification of SULF1 as a Shared Gene in Idiopathic Pulmonary Fibrosis and Lung Adenocarcinoma. ***Zhongguo Fei Ai Za Zhi***. 2023 Sep 20;26(9):669-683.
  10. Qin X., Xie Z., Chen X., Wang X., **Ma L.\***. Network pharmacology and molecular docking-based study on exploring the potential mechanism of *Lycium barbarum* L: In the treatment of atherosclerosis. ***Medicine*** (Baltimore). 2023 Nov 3;102(44):e35734.
  11. Qin X., Zhang Y., Yu H., **Ma L.\***. Progress in the Study of Spindle Assembly Checkpoint in Lung Cancer. ***Zhongguo Fei Ai Za Zhi***. 2023 Apr 20;26(4):310-318.
  12. Li J., Wu Z., Chen G., Wang X., Zhu X., Zhang Y., Zhang .R, Wu W., Zhu Y., **Ma L.**, Yu H.\*. Formosanin C inhibits non-small-cell lung cancer progression by blocking MCT4/CD147-mediated lactate export. ***Phytomedicine***, 2023 Jan, 109:154618.
  13. Chen X., Li J., Zhang R., Zhang Y., Wang X., Leung E.L., **Ma L.**, Wong V.K.W.\*, Liu L.\*, Neher E.\*, Yu H.\*. Suppression of PD-L1 release from small extracellular vesicles promotes systemic anti-tumor immunity by targeting ORAI1 calcium channels. ***Journal of Extracellular Vesicles***, 2022. Dec;11(12):e12279.
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  15. Leung E.L.\*, Huang J., Zhang J., Zhang J., Wang M., Zhu Y., Meng Z., Yu H., Neher E., **Ma L.\***, Yao X.\*. Novel Anticancer Strategy by Targeting the Gut Microbial Neurotransmitter Signaling to Overcome Immunotherapy Resistance.

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17. Li J., Zhang Y., Chen X., **Ma L.**, Li P.\*, Yu H.\*. Protein phase separation and its role in chromatin organization and diseases. *Biomed Pharmacother*. 2021 Jun;138:111520
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20. **Ma L.**#, Zhai Y.#, Feng D., Chan T., Lu Y., Fu X., Wang J., Chen Y., Li J., Xu K., and Liang C.\*. Identification of Novel Factors Involved in or Regulating Initiation of DNA Replication by a Phenotypic Screen in *Saccharomyces cerevisiae*. *Cell Cycle*, 2010 9(21): 4399-410

#### 專利:

1. 抗腫瘤組合物及其應用。馬麗娟，于海杰，陳格爾。CN 114632159 A, 2023. 8 授權。

#### 產學研轉化:

1. 杞孕寶產品 2025.10 在澳門上市銷售。