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職稱：副教授

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

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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副教授。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。癌細胞經過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/副教授

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. Jian N., Ren H., Huang Y., **Ma L.**, Zhou Y., Yu L., Huang W. The tRNA landscape in cancer: from pathogenesis to therapeutic interventions. *Acta Biochim Biophys Sin (Shanghai)*. 2026, 58(6):1187-1212.
2. 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. *Isience*. 2025, 28(12): 114057.
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4. Jian N., Yu L., **Ma L.**, Zheng B., Huang W. BCG therapy in bladder cancer and its tumor microenvironment interactions. *Clinical Microbiology Reviews*. 2025, 38(2): e0021224
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6. Wang M.F., Li M., Yang Y., Chuang Y., Tsai C. Binder M. N., **Ma L.**, Lin S., Li H., Smith G. R., and Chi P. Mug20–Rec25–Rec27 binds DNA and enhances meiotic DNA break formation via phase-separated condensates. *Nucleic Acids Research*. *Nucleic Acids Research*. 2025, doi.org/10.1093/nar/gkaf123
7. Jiang C., Chen Z., Xiong H., Yang X., Liao W., Chen G., Huang C., Zhu G., Yu H.*, **Ma L.***. *Lycium barbarum* berry extract improves female fertility against aging-related oxidative stress in the ovary. *Food & Function*. 2024 Sep 30;15(19):9779-9795.
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10. 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.
11. 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.
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13. 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.
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15. Chen G., Zhu X., Li J., Zhang Y., Wang X., Zhang R., Qin X., Chen X., Wang J., Liao W., Wu Z., Lu L., Wu W., Yu H.*, **Ma L.***. Celastrol inhibits lung cancer growth by triggering histone acetylation and acting synergically with HDAC inhibitors. *Pharmacol Res*. 2022 Oct 3:106487.

16. 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. *Antioxid Redox Signal*. 2022, Nov 1. doi: 10.1089/ars.2021.0243. Online ahead of print.
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18. 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.#**, Milman N., Nambiar M. and Smith G.R.* Two separable functions of Ctp1 in the early steps of meiotic DNA double-strand break repair. *Nucleic Acids Research*, 2015 43(15): 7349-7359
21. **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。