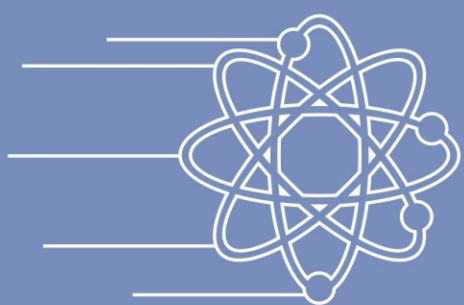




湖北省抗肿瘤
天然产物分子药理研究
国际科技合作基地

1

Introduction
平台简介



国际合作基地简介

抗肿瘤天然产物分子药理研究国际科技合作基地是2024年1月经湖北省科技厅认定的省级国际科技合作基地，依托长江大学医学部建设。合作基地聚焦天然产物在抗肿瘤分子药理、免疫逃逸及炎症等方向，融合药理学、毒理学、生物化学与分子生物学等相关学科，通过与新加坡国立大学、捷克赫拉德茨·克拉洛韦大学等海外知名高校开展长期稳定合作，搭建协同发展国际创新平台。

长江大学

抗肿瘤天然产物分子药理研究国际科技合作基地

International Science and Technology Cooperation Base for Molecular Pharmacology of Anticancer Natural products

2

技术团队

Technical Team



基地技术团队



汪献旺

教授，基地主任

1983年7月出生，长江大学教授，湖北省毒理学会理事，分子药理学专家，主持国家自然科学基金项目1项。



马兆武

副教授，基地常务副主任

1980年2月出生，长江大学副教授，肿瘤药理学专家，主持国家科技部项目1项，发表40余篇SCI收录论文，6篇入选ESI高被引论文。



吴庆华

教授

1981年出生，长江大学教授，分子毒理学专家，主持国家自然科学基金项目3项，入选斯坦福大学2023年“全球前2%顶尖科学家”榜单。



刘 莲

教授

1981年2月出生，长江大学附属荆州医院教授，药理与毒理学专家，主持国家自然科学基金项目1项。



龚 权

教授

教授，博士生导师，分子免疫药理学专家，主持国家自然科学基金项目2项，主要从事免疫学及临床检验诊断学研究。



Gautam Sethi

副教授

新加坡国立大学医学院药理学系副教授，连续入选科睿唯安"全球高被引科学家"名单。2019-2024年入选斯坦福大学2023年“全球前2%顶尖科学家”榜单（Oncology and carcinogenesis）



王凌志

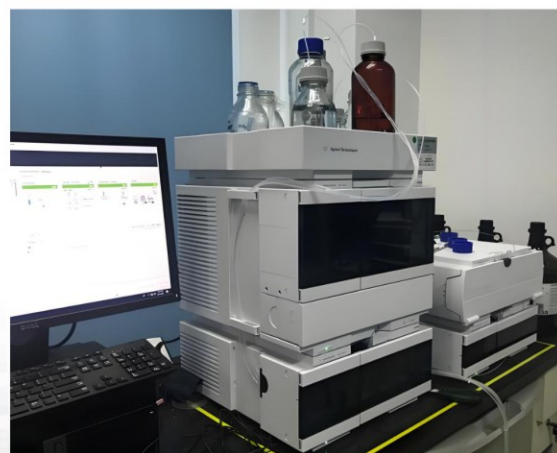
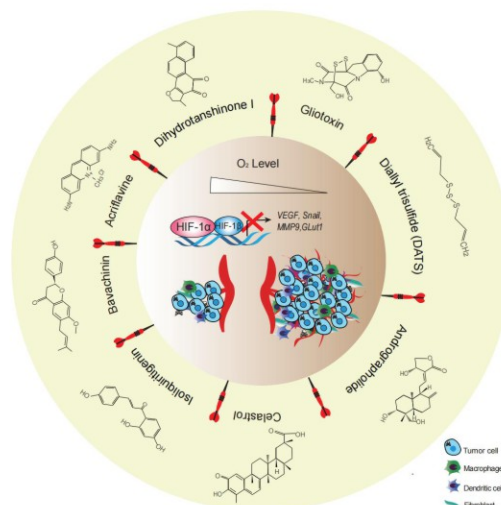
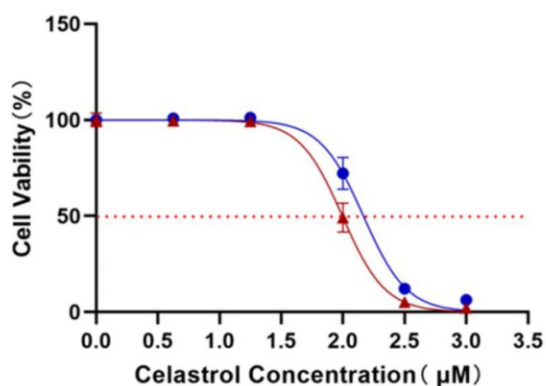
教授

新加坡国立大学（NUS）肺癌治疗与早期检测实验室首席研究员，H指数为60，入选斯坦福大学2023年“全球前2%顶尖科学家”榜单（Oncology and carcinogenesis）

3 研究方向 Research Direction



- 1.天然产物的抗肿瘤作用与分子机制研究
- 2.外泌体在肿瘤诊断、发生及转移的作用与机制研究
- 3.非编码RNA信号转导与疾病研究
- 4.基于类器官模型的敏感药物筛选实现肝癌的精准治疗



研究成果



6篇论文入选ESI高被引论文, 2篇论文入选ESI热点论文。



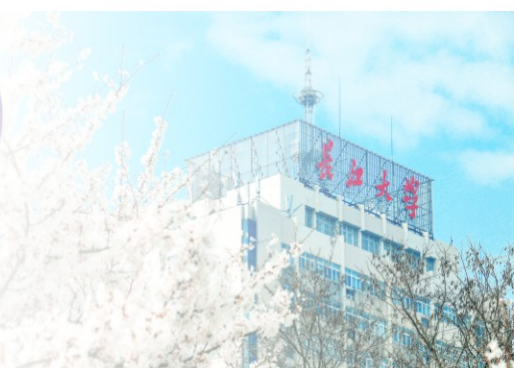
- 1 (Nano)platforms in bladder cancer therapy: Challenges and opportunities
Ashrafizadeh, M; Zarrak
Jan 2023 | BIOENGINEERING 2
Urological cancers are a human health due to its treatment of bladder cancer
View full text Free Pub

2 Targeting hypoxia-inducible factor-1, for cancer treatment: Recent advances in developing small-molecule inhibitors from natural compounds
Ma, ZW; Xiang, XQ; ...; Wang, LZ
May 2022 | SEMINARS IN CANCER THERAPEUTICS 102
Rapid progress in molecular cancer target discovery. As one of the coordinates the activity of many transcription factors, hypoxia-inducible factor-1 (HIF-1) is a key regulator of cellular response to hypoxia. HIF-1 is a heterodimer composed of a constitutively expressed subunit, HIF-1β, and an oxygen-labile subunit, HIF-1α. Under normoxic conditions, HIF-1α is hydroxylated and degraded. Upon hypoxia, HIF-1α is stabilized and translocates into the nucleus, where it forms a complex with HIF-1β. This complex then binds to hypoxia-response elements (HREs) in the promoter regions of target genes, leading to the transcription of hypoxia-inducible genes. HIF-1 is involved in a wide range of cellular processes, including cell proliferation, differentiation, and survival. In cancer, HIF-1 is often overexpressed, leading to increased tumor growth and resistance to therapy. Targeting HIF-1 is a promising strategy for cancer treatment. Recent advances in the development of small-molecule inhibitors of HIF-1 have shown promising results in preclinical studies. These inhibitors block the hydroxylation and degradation of HIF-1α, leading to its stabilization and activation. This, in turn, leads to the inhibition of HIF-1-mediated transcription and subsequent tumor growth. These findings suggest that targeting HIF-1 is a viable strategy for cancer treatment. Further studies are needed to optimize these inhibitors and evaluate their efficacy in clinical trials.

3 The potential role of exosomal circRNAs in the tumor microenvironment: insights into cancer diagnosis and therapy
Li, J; Zhang, G; ...; Ma, ZW
2022 | THERANOSTICS 66
Exosomes are multifunctional regulators of intercellular communication and pathological status of cancer patients. As exosomes with crucial regulatory roles in diverse biological processes, they have been widely studied in cancer diagnosis and therapy. Exosomal circRNAs, a type of non-coding RNA, have been found to be highly abundant in exosomes and play a crucial role in the tumor microenvironment. They can regulate gene expression, promote cell proliferation, and enhance tumor progression. Exosomal circRNAs have been found to be involved in various biological processes, including cell cycle regulation, DNA replication, and protein synthesis. They can also regulate the expression of various proteins, including those involved in cell growth, survival, and metastasis. Exosomal circRNAs have been found to be highly stable and can be easily detected in body fluids, making them potential biomarkers for cancer diagnosis and prognosis. Furthermore, exosomal circRNAs can be used as therapeutic targets. By targeting exosomal circRNAs, it is possible to inhibit tumor growth and improve patient outcomes. This review discusses the potential role of exosomal circRNAs in the tumor microenvironment and their applications in cancer diagnosis and therapy.

4 Resveratrol for cancer therapy: Challenges and future perspectives
Ren, BX; Kwah, MXY; ...; Goh, BC
Sep 1 2021 | CANCER LETTERS 229
Resveratrol (3,4',5-trihydroxy-trans-stilbene) has been expected to ameliorate cancer and foster breakthroughs in cancer therapy. Despite thousands of preclinical studies on the anticancer activity of resveratrol, little progress has been made in translational research and clinical trials. Most studies have focused on its anticancer effects, cellular mechanisms, a ... Show more
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5 合作交流 Academic Exchanges



国际合作基地承办国际学术会议、学术讲座，承办“捷克国家月”主题活动，入选中国—中东欧教育合作典型案例。





湖北省抗肿瘤天然产物分子 药理研究国际科技合作基地

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