

一、“心律失常”研究团队简介



广东省人民医院下属广东省心血管病研究所是我国最具影响力的心血管疾病研究中心之一，其心内科是国内首批心血管专业临床重点专科，“五个一科教兴医工程”实施专科，WHO 心血管病防治与培训研究合作中心。自 1991 年以来，已开展心律失常的导管消融治疗 30,000 余例，年手术量 3,400 余例。作为我国心律失常的技术高地之一，率先完成持续性房颤内外科杂交、外科术后复杂房速房扑及心外膜器质性室速等多种复杂心律失常疾病的治疗。心律失常团队在研课题共 17 项，其中，国家自然科学基金项目 2 项、广东省科技计划项目 1 项、广东省自然科学基金 2 项。荣获全国心血管疾病管理能力评估与提升工程（CDQI）卓越房颤中心，开展与心外科、检验科、急诊科、肾内科等兄弟科室的临床及研究合作。开展了心外膜房颤消融、马氏韧带酒精消融治疗房颤房扑等新技术。

现面海内外诚聘博士后人员 1 名，欢迎申请加入本团队！

二、合作导师介绍



吴书林

广东省人民医院心血管病学学科带头人，广东省心血管病研究所名誉所长主任医师、教授，硕士生、博士生和博士后合作导师；历任广东省心血管病研究所所长，广东省人民医院副院长

学术任职：广东省医院协会心血管疾病质控管理分会主任委员；中国生物医学工程学会心律分会常委、前任主任委员，美国心脏学院 Fellow (FACC)，欧洲心脏学会 Fellow (FESC)；美国心律学会 Fellow (FHRS)；中华心血管病杂志副总编辑；

研究方向：心脏起搏与电生理、心力衰竭、心肌病、高血压、心律失常生物、标志物与组学研究；

主要业绩：获广东省医药卫生科技进步二等奖，广东省政府科技进步二、三等奖和中华医学科技奖三等奖共 6 项。获国家实用新型专利 5 项，国家发明专利 3 项。主编和副主编著作 40 多部，在国内外学术刊物上发表论文 300 余篇。

三、课题组主要研究内容

在国家自然科学基金及省部级等多个项目支持下，研究包括：

- 1.心房颤动风险预测以及诊疗策略的精准化研究（广东省科技计划）
- 2.机械敏感性离子通道 Piezo1 通过促进 p300/B-catenin 相互作用导致衰老相关心房纤维化的机制研究（国自然）
- 3.m6A 修饰剪接型 x 盒结合蛋白 1 基因通过 Nod2-NF-KB 轴促进心肌纤维化的研究（国自然）
- 4.巨噬细胞移动抑制因子通过 A20/TRAF6-NF-KB 信号抑制心肌纤维化的机制研究（广东省自然科学基金）
- 5.CircHBRC4_041 编码蛋白阳断 TGase2-B-catenin 途径抑制心肌肥厚的作用机制研究（广东省自然科学基金）

四、合作导师代表性论著

1. 马长生，吴书林，刘少稳，韩雅玲（共同通讯）心房颤动诊断和治疗中国指南。中华心血管病杂志 2023 年 6 月第 51 卷第 6 期 Chin J Cardiol, June 2023, Vol. 51, No. 6
2. 杨新春，吴林，吴书林，马长生（共同通讯）抗心律失常药物临床应用中国专家共识。中华心血管病杂志 2023 年 3 月第 51 卷第 3 期 Chin J Cardiol, March 2023, Vol.51, No. 3
3. Li Q*, Fang Y*, Peng DW, Li LA, Deng CY, Yang H, Kuang SJ, Li QQ, Zhang MZ, Zeng P, Zhang QH, Liu Y, Deng H, Wei W, Xue YM#(2), Wu SL#(3), Rao F#(1). Sacubitril/valsartan reduces susceptibility to atrial fibrillation by improving atrial remodeling in spontaneously hypertensive rats.. Eur J Pharmacol. 2023 May12;175754. doi:

10.1016/j.ejphar.2023.175754. Epub ahead of print. PMID:37182595

4. Jiang J*, Huang J*, Deng H, Liao H, Fang X, Zhan X, Wu S#, Xue Y#.

Current status and time trends of lipid and use of statins among older adults in China-real world data from primary community health

institutions.. Front Public Health.2023 Apr 26;11:1138411. doi:

10.3389/fpubh.2023.1138411. PMID: 37181715; PMCID:PMC10169566

5. Wei HQ*, Liao Z, Liang Y, Fang X, Liao H, Deng H, Wei W, Huang Y, Liu Y,

LiuF, Lin W, Liang JJ, Xue Y, Wu S#, Zhan X#. Electrophysiological characteristics and long-term outcome of substrate-based catheter

ablation for left posterior fascicular ventricular tachycardia targeting fragmented antegrade Purkinje potentials during sinus rhythm..

Europace. 2023 Mar 30;25(3):1008-1014. doi:10.1093/europace/euac265.

PMID: 36610066; PMCID: PMC10062339

6. Jiang J*, Deng H*, Liao H, Fang X, Zhan X, Wei W, Wu S#, Xue Y#. An

ArtificialIntelligence-Enabled ECG Algorithm for Predicting the Risk of Recurrence inPatients with Paroxysmal Atrial Fibrillation after Catheter

Ablation. J ClinMed. 2023 Mar 1;12(5):1933. doi: 10.3390/jcm12051933.

PMID: 36902719; PMCID:PMC10003633

7. Gao XY*, Lai YY*, Luo XS, Peng DW, Li QQ, Zhou HS, Xue YM, Guo HM,

Zhao JF,Yang H, Kuang SJ, Wang ZY, Zhang MZ, Deng CY#, Wu SL#, Rao

F#. Acetyltransferase p300 regulates atrial fibroblast senescence and

age-related atrial fibrosis through p53/Smad3 axis.Aging Cell. 2023

Jan;22(1):e13743. doi:10.1111/accel.13743. Epub 2022 Dec 5. PMID: 36468256; PMCID: PMC9835568

8. Luo D*, Yang Z*, Zhang G, Shen Q, Zhang H, Lai J, Hu H, He J, Wu S#, Zhang C#. Machine learning in a real-world PFO study: analysis of data from multi-centers in China. *BMC Med Inform Decis Mak*. 2022 Nov 24;22(1):305. doi:10.1186/s12911-022-02048-5. PMID: 36434650; PMCID: PMC9694545.

9. Wei HQ*, Xue Y, Wu S, Fang X#. Case report: Three-dimensional printing as an educational tool for optimal lead positioning to left bundle branch pacing. *Front Cardiovasc Med*. 2022 Sep 15;9:973480. doi:10.3389/fcvm.2022.973480. PMID:36186972; PMCID: PMC9520357.

10. Ye F, Wang X, Wu S, Ma S, Zhang Y, Liu G, Liu K, Yang Z, Pang X, Xue L, Lu S, Zhong M, Li J, Yu H, Lou D, Cui D, Xie X, Wang J; FIRST Investigators. Sustained-Release Ivabradine Hemisulfate in Patients With Systolic Heart Failure. *J Am Coll Cardiol*. 2022 Aug 9;80(6):584-594. doi:10.1016/j.jacc.2022.05.027. PMID: 35926931.

11. Jiang J*, Deng H*, Liao H, Fang X, Zhan X, Wu S#, Xue Y#. Development and Validation of a Deep-Learning Model to Detect CRP Level from the Electrocardiogram. *Front Physiol*. 2022 May 30;13:864747. doi:10.3389/fphys.2022.864747. PMID: 35707008; PMCID: PMC9189881

12. He S*, Zhao F*, Liu X, Liu F, Xue Y, Liao H, Zhan X, Lin W, Zheng M, Jiang J, Li H, Ma X#, Wu S#, Deng H#. Prevalence of congenital heart

disease among school children in Qinghai Province.. *BMC Pediatr.* 2022 Jun 8;22(1):331. doi:10.1186/s12887-022-03364-5. PMID: 35672682; PMCID: PMC9175385

13. Ben H#, Changsheng M, Shulin W. 2019 Chinese expert consensus statement on left atrial appendage closure in patients with atrial fibrillation.. *Pacing ClinElectrophysiol.* 2022 Apr;45(4):535-555. doi: 10.1111/pace.14448. Epub 2022 Mar18. PMID: 35032332; PMCID: PMC9314806

14. Huang J*, Liu Y*, Huang S*, Ke G, Chen X, Gong B, Wei W, Xue Y, Deng H#, Wu S#. Research output of artificial intelligence in arrhythmia from 2004 to 2021: a bibliometric analysis.. *J Thorac Dis.* 2022 May;14(5):1411-1427. doi:10.21037/jtd-21-1767. PMID: 35693591; PMCID: PMC9186255

15. Fang Y*, Li Q*, Li X, Luo GH, Kuang SJ, Luo XS, Li QQ, Yang H, Liu Y, Deng CY, Xue YM#, Wu SL#, Rao F#. Piezo1 Participated in Decreased L-Type Calcium Current Induced by High Hydrostatic Pressure via CaM/Src/Pitx2 Activation in Atrial Myocytes. *Front Cardiovasc Med.* 2022 Feb 17;9:842885. doi:10.3389/fcvm.2022.842885. PMID: 35252406; PMCID: PMC8891577

16. Chen X*, Fu L, He J, Bai R, Zeng S, Liao H, Deng H, Xue Y, Wu S#, Liu Y#. A Frequent Observation of Wolff-Parkinson-White Syndrome and Fasciculoventricular Pathways in Patients With Danon Disease. *Circ J.*

2022 Jan 25;86(2):309-318. doi:10.1253/circj.CJ-21-0572. Epub 2021 Dec

23. PMID: 34937809

17. Wei W*, Fang X*, Shehata M, Wang X, Zhan X, Deng H, Liao H, Liao Z, Liu Y, XueY#, Wu S#. Administration of Adenosine Triphosphate Provides Additional Value OverProgrammed Electrophysiologic Study in Confirmation of Successful Ablation ofAtrioventricular Accessory Pathways. Front Cardiovasc Med. 2021 Nov 16;8:716400.doi: 10.3389/fcvm.2021.716400. PMID: 34869625; PMCID: PMC8635057

18. He SF*, Jiang JR, Liu FZ, Liao HT, Xue YM, Zheng MR, Li HX, Deng H#, Wu SL#.Prevalence and modifiable risk factors of degenerative valvular heart diseaseamong elderly population in southern China. J Geriatr Cardiol. 2021 Jul28;18(7):523-533. doi: 10.11909/j.issn.1671-5411.2021.07.003. PMID: 34404989;PMCID: PMC8352778

19. Hou T*, Ye L, Wu S#. Knockdown of LINC00504 Inhibits the Proliferation andInvasion of Breast Cancer via the Downregulation of miR-140-5p. Onco TargetsTher. 2021 Jul 2;14:3991-4003. doi: 10.2147/OTT.S294965. PMID: 34239305; PMCID:PMC8259944

20. He S*, Deng H*, Jiang J, Liu F, Liao H, Xue Y, Zheng M, Li H, Wu S#. TheEvolving Epidemiology of Elderly with Degenerative Valvular Heart Disease: TheGuangzhou (China) Heart Study. Biomed Res Int. 2021 Apr 23;2021:9982569. doi:10.1155/2021/9982569. PMID: 33981773; PMCID:

PMC8088353.

21. Wei W*, Sang C*, Zheng S*, Tung R, Wang X, Xue Y, Liang Y, Song S, Liu T, Long D, Liu Y, Dong J, Ma C#, Wu S#. Electrophysiological manifestations of rare supra-ventricular tachycardias with concealed nodo-ventricular fibers. *J Interv Card Electrophysiol*. 2021 Oct;62(1):31-38.

doi: 10.1007/s10840-020-00847-2. Epub 2020 Sep 17. PMID: 32939702

22. 吴书林. 木之折也必通蠹：致心律失常心肌病的防“折”与防“蠹”. *中华心血管病杂志*, 2021, 49(12):1169-1170.

DOI:10.3760/cma.j.cn112148-20210929-00836

23. Wei HQ*, Guo XG*, Sun Q, Yang JD, Xie HY, Cao ZJ, Chen YQ, Zhang S, Wu S#, Ma J#. Electrical isolation of the superior vena cava using second-generation cryoballoon in patients with atrial fibrillation. *J Cardiovasc Electrophysiol*. 2020 Jun;31(6):1307-1314.

doi: 10.1111/jce.14477. Epub 2020 Apr 11. PMID: 32250512.

24. Tang L*, Zhan X*, Zhang C, Fang X, Liao H, Liu F, Lin W, Huang Y, Huang T, Fei H, Wu S#, Xue Y#. Novel Strategy for Predicting Conduction Abnormalities During Transcatheter Closure of Perimembranous Ventricular Septal Defect in Adults. *Circ J*. 2020 Apr 24;84(5):776-785.

doi: 10.1253/circj.CJ-19-0664. Epub 2020 Mar 20. PMID: 32201412

25. Liu FZ*, Liao HT, Zhan XZ, Shehata M, Ehdai A, Chen QF, Wu SL#, Xue YM, Wang XZ. Inability to capture with increasing current strength: Is this near-field or far-field?? *J Cardiovasc Electrophysiol*. 2020

Apr;31(4):960-963. doi:10.1111/jce.14400. Epub 2020 Mar 9. PMID: 32077548

26. Lin WD*, Xue YM*, Liu FZ, Fang XH, Zhan XZ, Liao HT, Tse G, Wu SL#. Left atrial enlargement and non-paroxysmal atrial fibrillation as risk factors for left atrial thrombus/spontaneous Echo contrast in patients with atrial fibrillation and low CHADS-VASc score. *J Geriatr Cardiol.* 2020Mar;17(3):155-159. doi: 10.11909/j.issn.1671-5411.2020.03.001. PMID: 32280332;PMCID: PMC7118018.

27. 吴书林. 重视心房颤动的上游治疗. *中华心血管病杂志*, 2020, 48(12):993-994. DOI:10.3760/cma.j.cn112148-20201102-00875

28. Li X*, Xue YM*, Guo HM, Deng CY, Peng DW, Yang H, Wei W, Liu Y, Liu FZ, WangZY, Zhang MZ, Rao F#, Wu SL#. High hydrostatic pressure induces atrial electrical remodeling through upregulation of inflammatory cytokines. *Life Sci.* 2020 Feb1;242:117209. doi: 10.1016/j.lfs.2019.117209. Epub 2019 Dec 20. PMID: 31870776

29. Wang F*, Liu Y*, Liao H, Xue Y, Zhan X, Fang X, Liang Y, Wei W, Rao F, ZhangQ, Deng H, Lin Y, Liu F, Lin W, Zhang B#, Wu S#. Genetic Variants on SCN5A, KCNQ1, and KCNH2 in Patients with Ventricular Arrhythmias during Acute Myocardial Infarction in a Chinese Population. *Cardiology.* 2020;145(1):38-45. doi:10.1159/000502833. Epub 2019 Nov 21. PMID: 31751991

30. Wei W*, Shehata M, Wang X, Rao F, Zhan X, Guo H, Fang X, Liao H, Liu

J, Deng H, Liu Y, Xue Y#, Wu S#. Invasive therapies for patients with concomitant heart failure and atrial fibrillation.. Heart Fail Rev. 2019 Sep;24(5):821-829. doi:10.1007/s10741-019-09795-0. PMID: 31049749

31. Lin WD*, Deng H*, Guo P, Liu FZ, Chen RY, Fang XH, Zhan XZ, Liao HT, Huang WX, Liu Y, Wang F, Zheng MR, Liu HZ, Huang J, Wei W, Xue YM#, Wu SL#. High prevalence of hyperuricaemia and its impact on non-valvular atrial fibrillation: the cross-sectional Guangzhou (China) Heart Study.. BMJ Open. 2019 May 29;9(5):e028007. doi: 10.1136/bmjopen-2018-028007. PMID: 31147367; PMCID: PMC6549638

32. Liu Y*, Chen X*, Wang F, Liang Y, Deng H, Liao H, Zhang Q, Zhang B, Zhan X, Fang X, Shehata M, Wang X, Xue Y, Wu S#. Prevalence and clinical characteristics of Danon disease among patients with left ventricular hypertrophy and concomitant electrocardiographic preexcitation. Mol Genet Genomic Med. 2019 May;7(5):e638. doi: 10.1002/mgg3.638. Epub 2019 Mar 30. PMID: 30929317; PMCID: PMC6503070

33. Li T*, Xu Q, Zhan XZ, Xue YM, Liao HT, Li YF, Letsas KP, Wu SL#. Unique electrocardiographic pattern "w" wave in lead I of idiopathic ventricular arrhythmias arising from the distal great cardiac vein. BMC Cardiovasc Disord. 2019 Apr 15;19(1):90. doi: 10.1186/s12872-019-1064-9. PMID: 30987582; PMCID: PMC6466655

34. Liu FZ*, Lin WD*, Liao HT*, Peng J, Xue YM, Zhan XZ, Zhu JM, Yiu KH, Li YF, Tse HF, Shi L, Fang XH, Wu SL#. Mid-term outcomes of concomitant

left atrial appendage closure and catheter ablation for non-valvular atrial fibrillation: a multicenter registry. Heart Vessels. 2019 May;34(5):860-867. doi:10.1007/s00380-018-1312-4. Epub 2019 Jan 1. PMID: 30599061

35. Deng H*, Shantsila A, Guo P, Potpara TS, Zhan X, Fang X, Liao H, Liu Y, Wei W, Fu L, Xue Y, Wu S#, Lip GYH#. Sex-related risks of recurrence of atrial fibrillation after ablation: Insights from the Guangzhou Atrial Fibrillation Ablation Registry. Arch Cardiovasc Dis. 2019 Mar;112(3):171-179. doi:10.1016/j.acvd.2018.10.006. Epub 2019 Jan 22. PMID: 30683618

36. Zhan XZ*, Liu FZ*, Guo HM, Liao HT, Fang XH, Liu J, Deng H, Huang HL, Hai JJ, Tse HF, Li YQ, Xue YM#, Wu SL#. Characteristics, Mechanism and Long-Term Ablation Outcome of Atrial Tachycardias After Mitral Valvular Surgery and Concomitant Cox-MAZE IV Procedure. Int Heart J. 2019 Jan 25;60(1):71-77. doi:10.1536/ihj.18-117. Epub 2018 Dec 5. PMID: 30518718

五、博士后招收研究方向及基本要求

1. 研究方向及依托课题

研究方向：心脏起搏与电生理、心力衰竭、心肌病、高血压方向

依托课题：心房颤动风险预测以及诊疗策略的精准化研究（广东省科技计划）

2. 招收要求：性格开朗，刻苦勤劳，热爱专业，要有严谨的治学态度和良好的职业道德，身体健康。具有坚实的心血管病学理论基础和系统的专业

知识。

六、博士后相关待遇

1. 年薪 30 万起（税前，含五险一金）。
2. 另发住房补贴 4000 元/月。
3. 博士后启动经费 5 万元，中期考核合格者追加 3-5 万元科研经费。
4. 根据个人需要，可协助办理个人落户。
5. 鼓励并支持博士后申请各类博士后基金项目 and 人才计划，参加国际学术交流(境外交流项目)，助力青年人才成长和发展。
6. 鼓励并支持博士后独立申报国家、省部级基金以及广东省的各类博士后人才项目。
7. 申请国自然项目，通过审查立项，医院给予科研配套经费 5-10 万（根据医院政策实时调整），另按资助金额进行 1:1 进行配套，导师可另外提供丰厚科研经费。

七、博士后岗位职责

1. 参与心血管疾病的诊断和治疗，协助医生制定治疗方案和手术方案；
2. 开展临床研究，收集和分析数据，为临床决策提供科学依据；
3. 协助教授指导研究生，为他们提供心血管疾病研究和临床实践方面的指导和建议；
4. 参与学术交流活动，与同行进行深入讨论和合作，共同提高心血管疾病的诊治水平；
5. 遵守医学规范和职业道德，保证医疗质量和安全。

八、应聘材料

- 1.个人简历（含教育背景、科研背景、研究特长）；
- 2.学历证书、学位证书、获奖证书等复印件；
- 3.两名推荐人（包括博士生导师）的推荐信 2 封；
- 4.博士论文、代表性论文等学术成果证明材料复印件；
- 5.进站后工作设想（3000 字左右）。

九、联系方式

有意向者将应聘材料发送至如下邮箱，邮件主题请注明“博士后应聘”。

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