

何亚文简历

一、个人信息：

姓名：何亚文（HE YAWEN）；

国籍：新加坡；

职称：长聘教授（Tenured Professor）；

联络方式：上海交大学生命科学技术学院，微生物群体感应与合成生物学研究室，生物药理学楼 4-303 室；电话：86-13564385795；邮箱：yawenhe@sjtu.edu.cn

二、教育/工作经历：

1992 年毕业于华中师范大学生物系；1995 年于中国科学院华南植物研究所获植物生理学硕士学位；1995-1997 年在中国科学院华南植物研究所工作，任助理研究员；1997 年 9 月赴新加坡国立大学(National University of Singapore, NUS) 留学，1999 年 9 月获植物学硕士学位；1999 年 12 月加入新加坡分子农业生物学院 (Institute of Molecular Agrobiology)，任 Assistant Research Officer；2002 年加入新加坡分子与细胞生物研究院 (Institute of Molecular and Cell Biology, IMCB)，任 Junior Research Fellow；2006 年获 NUS-IMCB 联合培养理学博士学位（研究型）；2007 年任分子与细胞生物研究院 Research Fellow。2010 年 6 月加入上海交大学生命科学与技术学院，微生物群体感应与合成生物学研究室主任，微生物代谢国家重点实验室和代谢与发育国际合作联合实验室独立 PI，上海交通大学-上海农乐生物农药与生物肥料联合研发中心主任。

三、研究方向：

- 1. 植物病原黄单胞菌群体感应与感应退出的分子机理与调控网络：**黄单胞菌怎样通过合成、分泌和感应 DSF 家族信号分子，感应群体密度，调控基因表达的信号途径和调控网络；群体感应退出机制；在黄单胞菌侵染过程中，寄主植物如何调控入侵病原菌的群体感应机制。
- 2. 天然代谢产物农药研发与植物病害生物防治：**系统鉴定植物根际促生菌天然抑菌代谢产物的结构和生物合成机制；利用合成生物学技术提高代谢物的产量，研发新型天然代谢产物农药；筛选能诱导植物产生免疫抗性的动植物和微生物代谢产物，以模式微生物为底盘细胞，构建高效细胞工厂，开发新型植物免疫诱抗剂；
- 3. 中药材仿野生栽培与产品开发创新：**中医药是中华文明的文化瑰宝，中草药是中医药的根本。自古以来，中华子民都是依靠野生中草药，尤其是深山老林中多年生中草药，治疗疾病和保健养生。随着人口的激增和生活方式的改变，野生中药材资源远远满足不了需求。中草药仿野生栽培技术以及中草药专用的生物农药、

生物肥料和免疫诱抗剂研发。结合现代微生物发酵技术和现代食品加工技术，开发基于传统中医药的新产品。

四、研究成果

1. 国际期刊论文 (下划线代表通讯作者; *代表共同第一作者; #代表共同通讯作者)

- Song K, Li RF, Cui Ying, Chen Bo, Zhou Lian, Han WY, Jiang BL#, and **He Ya-Wen**#. The phytopathogen *Xanthomonas campestris* senses and effluxes salicylic acid via a sensor HepR and an RND family efflux pump to promote virulence in host plants. **mLife**. 2024 (in press).
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- Fang YL, Cui Y, Zhou L, Thawai C, Naqvi TA, Zhang HY, **He Ya-Wen**. H-NS family protein MvaU downregulates phenazine-1-carboxylic acid (PCA) biosynthesis via binding to an AT-rich region within the promoter of the phz2 gene cluster in the rhizobacterium *Pseudomonas* strain PA1201. **Synthetic and Systemic Biotechnology**. 2021, 6(4): 262-271.
- Hui ML, Tan LT, Letchumanan V, **He Ya-Wen**, Fang CM, Chan KG, Law JW, Lee LH. The Extremophilic Actinobacteria: From Microbes to Medicine. **Antibiotics (Basel)**. 2021 Jun 8;10(6):682.

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2. 中文期刊论文/综述

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