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個人學術簡介

吳強博士於 1990 年本科畢業於華中農業大學園藝系。 1992-1995 年就讀于武漢大學生命科學院遺傳系，獲碩士學位。1998-2003 年在新加坡國立大學生物科學系攻讀博士學位。2003-2006 年在新加坡基因組研究院從事博士後研究工作。導師是知名幹細胞專家 Prof Huck Hui Ng。2006 年至 2008 年，在劍橋大學 Prof Magdalena Zernicka-Goetz 的實驗室擔任 Research associate。2009 年被聘為新加坡國立大學生物化學系助理教授。2017 年加入澳門科技大學擔任副教授。2025 年七月晉升為教授。

目前的主要研究方向是幹細胞生物學，表觀遺傳學以及藥物生物学。自 2009 年成為獨立 PI 以來，我的實驗室專注於利用分子細胞學方法，高通量分析法和其他分子細胞方法尋找和分析新的幹細胞多能性的調節因子 （包括新的遺傳因子和表觀遺傳因子）。我們實驗室成功發現了三個鋅指蛋白 （Zfp322a， Patz1 和 Zfp553）和兩個組蛋白精氨酸甲基轉移酶 （Prmt4，Prmt6）。近年来我們還專注於染色質因子（NPAC，JMJD6 及 BRD9）在幹細胞多能性維持和重編程的作用的研究並取得了一些進展。我們的長期研究目標是利用幹細胞開展對幹性維持，分化機理，疾病模型，藥物篩選的研究。吳強博士已經發表了 63 篇研究和綜述論文。這其中包括有重大學術貢獻和突破性的一篇幹細胞論文 （Nature Genetics 2006）和一篇癌細胞論文（Cell 2006）。總的論文被引用次數近 6000 次。還受邀擔任 Stem Cell Reviews and Reports, PLoS ONE，Stem Cells International，Frontiers in Cell and Developmental Biology，Heliyon, Current Gene Therapy 等雜誌的學術編輯。也被多次受邀擔任國家自然科學基金重點項目，英國 Medical Research Council (MRC), 新加坡 Biomedical Research Council (BMRC) 等科研項目的評審。

教育背景

1998-2003　National University of Singapore/博士學位

1992-1995　武漢大學生命科學院/碩士學位

1986-1990　華中農業大學園藝系/學士學位

工作經歷

2025 至今　澳門科技大學中藥質量研究國家重點實驗室/教授

2017-2025　澳門科技大學中藥質量研究國家重點實驗室/副教授

2009-2017　Department of Biochemistry, National University of Singapore/Assistant professor

2006-2008　The Gurdon Institute, University of Cambridge/Research associate

(Advisor: Prof Magdalena Zernicka-Goetz)

2003-2006　Genome Institute of Singapore/Postdoctoral fellow

(Advisor: Prof Ng Huck Hui)

2002-2003　National University of Singapore/Research assistant

(Supervisor: Dr. Philippa Melamed)

1996-1998　武漢市科學技術委員會/副主任科員

1995-1996　同濟醫科大學/助理講師

1990-1992　武漢市青菱園藝場/科技副場長

研究方向

幹細胞生物學及其應用，表觀遺傳學，基因調控， 中藥藥理，腫瘤生物學。

學術兼職

Academic editor of *PLoS ONE* (July 2010-present)

Guest editor of *Stem Cells International* (2015)

Lead guest editor of *Stem Cells International* (2016-2017, 2020)

Academic Editor of *Frontiers in Cell and Developmental Biology* (from 2021)

Academic editor of *Stem Cell Review and Reports* (from 2021)

Section editor of *Current Gene Therapy* (from 2021)

Section editor of *Heliyon* (Genetics section) (from 2021)

教學科目

研究生課程：藥理實驗方法學；現代生物技術學；中藥研究進展；高等藥學實驗方法學。

本科生課程：藥理與臨床藥學及毒理學與安全用藥；生物化學及分子生物學；分子藥理學（課程統籌）。

大學通識課程：生命科學（課程統籌）。

已發表論文（共 63 篇，引述次數近 6,000. H-index 23）

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2. Qian Y and **Wu Q#.** The Multifaceted Roles of Zinc Finger Proteins in Pluripotency and Reprogramming. ***International Journal of Molecular Sciences***. 2025, 26(11), 5106.

3. Fu L, Zhou Y, Xu L, Hu YOO, Chen S, Wang M, Jiang X, Zheng M, **Wu Q#,** Fu J#. The influence and association of blood on transfer catheter and vaginal microbiota on pregnancy outcomes in frozen-embryo transfer cycles. ***Journal of Reproductive Immunology***. 2025 Jun;169:104530

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5. Li X, Khan I, Han R, Huang G, Xia W, Yin L, Leong WK, Su L, Law BY, Wong VKW, **Wu Q**, Guo X, Hsiao WLW. Gynostemma pentaphyllum saponins shield mice from peanut allergy by modulation of gut microbiota: A novel approach for peanut allergy management. ***Phytomedicine***. 2024 Dec;135:156101.

6. Qian Y, Ye Y, Zhang W, **Wu Q#.** Npac Regulates Pre-mRNA Splicing in Mouse Embryonic Stem Cells. ***International Journal of Molecular Sciences***. 2024 Sep 27;25(19):10396.

7. Le M, Lu W, Tan X, Luo B, Yu T, Sun Y, Guo Z, Huang P, Zhu D, **Wu Q**, Ganesan A, Wen S. Design, Synthesis, and Biological Evaluation of Potent EZH2/LSD1 Dual Inhibitors for Prostate Cancer. ***Journal of Medicinal Chemistry***. 2024 Sep 12;67(17):15586-15605.

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9. Ma X, Dai L, Tan C, Li J, He X, Wang Y, Xue J, Huang M, Ren J, Xia Y, Wu Q, Zhao H, Chan WY, Feng B. β-catenin mediates endodermal commitment of human ES cells via distinct transactivation functions. ***Cell & Bioscience***. 2024 Jul 24;14(1):96.

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11. Fu L, **Wu Q**#, Fu J#. Exploring the biological roles of DHX36, a DNA/RNA G-quadruplex helicase, highlights functions in male infertility: A comprehensive review. ***International Journal of Biological Macromolecules.*** 2024 May;268(Pt 2):131811.

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21. Huang M, **Wu Q**#, Jiang ZH#. Epigenetic Alterations under Oxidative Stress in Stem Cells. ***Oxidative Medicine and Cellular Longevity*** 2022 Aug 29;2022:6439097.

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