

简 历

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教育经历

- 2007.9.1 – 2013.1.10 博士 清华大学, 生物学
联合培养: 香港中文大学 (2008.9 – 2013.1)
指导教师: 辛世文院士, 何军贤教授
毕业论文题目: 植物氮反应的蛋白质组学研究
答辩委员会: 谢道昕, 刘栋, 刘进元, 景海春, 郝东云, 何军贤, 种康 (主席)
- 2004.9 – 2007.7 硕士 吉林大学, 生物化学与分子生物学
指导教师: 郝东云教授
- 2000.9 – 2004.7 本科 吉林大学, 生物技术
毕业设计指导教师: 郝东云教授

研究经历

- 2013.10 至今 博士后研究员 (Postdoctoral Researcher) 瑞士洛桑联邦理工学院
指导教师 [Johan Auwerx](#) 教授: 欧洲分子生物学会院士 (EMBO member); 线粒体代谢与系统生物学领域专家 (Web of Science h-index: 116); *Nature* 杂志顾问, *Science*, *Cell* 等杂志编委; 2016 年瑞士最高科学奖 – 马塞尔·本努瓦奖 (Marcel Benoist Prize) 得主。
研究项目: 植物细胞线粒体逆境生物学及其与细胞核之间信号转导机制的研究
线粒体功能, 代谢类疾病以及衰老的系统遗传学研究
- 2008.9 – 2013.8 研究助理 (Research Assistant) 香港中文大学
指导教师 [辛世文](#) 教授: 中国工程院院士, 农业生物技术专家, 专注于提升稻米产量和营养成分。联合导师 [何军贤](#) 教授: 植物激素研究领域专家, 在对植物类固醇激素油菜素内酯 (Brassinosteroids, BRs) 信号转导调控研究中取得突破性进展。
研究项目: 植物氮信号转导的蛋白质组学与磷酸化蛋白质组学研究

课题申请训练

博士后研究期间参与多个项目申请书的撰写, 包括欧盟高级资助计划 (ERC advanced grant, 250 万欧元), 瑞士国家自然科学基金 (SNSF, 150 万瑞士法郎), 以及与谷歌, 强生, 礼来 (Eli Lilly), 阿斯泰来制药 (Astellas Pharma) 等高科技公司的合作项目。

学术活动

“Keystone Symposia” Plant Signaling: Molecular Pathways and Network Integration
Granlibakken Tahoe, Tahoe City, California, Jan 21-24, 2018

海报: Systems phytohormone responses to mitochondrial proteotoxic stress.

简 历

EPFL Life Sciences - EMBO Press Symposium 2017, Frontiers in Metabolism - From systems physiology to precision medicine

SwissTech Convention Center- EPFL, Lausanne, Switzerland, Oct 24-26, 2017 出席

3rd International SystemsX.ch Conference on Systems Biology

ETH Zurich, Switzerland, Sep 4-7, 2017

海报: Systems phytohormone responses to mitochondrial proteotoxic stress.

Life Sciences Switzerland LS2 Annual Meeting

Irchel Campus, University of Zurich, Switzerland, Feb 2-3, 2017

报告: Systems approach to understand the impact of genetics and diet on aging.

“Gordon Research Conference” Mitochondria & Chloroplasts

Mount Snow, West Dover, Vermont, Jun 19-24, 2016

海报: Ethylene signaling is involved in the plant retrograde response to mitochondrial stress.

LIMNA (Lausanne Integrative Metabolism and Nutrition Alliance) Symposiums

EPFL, Lausanne, Switzerland, 2014-2017 系列会议, 出席

审稿经历

ACS 杂志社 *Journal of Proteome Research*, *Journal of Agriculture and Food Chemistry*

并共同审阅 *Cell*, *Molecular Cell*, *PLOS Genetics* 等杂志论文以及国际基金申请书

发表论文

Web of Science 统计: h-index: **11**, 总引用数: **470**, 每篇平均引用数: **21**. (2017/12/30)

第一作者 (* 共同第一作者)

- [1] **Wang X** & Auwerx J. Systems phytohormone responses to mitochondrial proteotoxic stress. *Molecular Cell* 2017; 68: 540-51. (IF: 14.713)
- [2] Li H*, **Wang X***, Rukina D, Huang Q, Lin T, Sorrentino V, Zhang H, Sleiman MB, Arends D, McDaid A, Luan P, Ziari N, Velázquez-Villegas LA, Gariani K, Kutalik Z, Schoonjans K, Radcliffe RA, Prins P, Morgenthaler S, Williams RW, Auwerx J. An integrated systems genetics and omics toolkit to probe gene function. *Cell Systems* 2017 (In Press) (IF: 8.406)
- [3] **Wang X***, Ryu D*, Houtkooper RH, Auwerx J. Antibiotic use and abuse: a threat to mitochondria and chloroplasts with impact on research, health, and environment. *BioEssays* 2015; 37(10):1045-53. (IF: 4.441, cites: 10)
- [4] **Wang X***, Bian Y*, Cheng K, Gu LF, Ye M, Zou H, Sun SSM, He JX. A Large-scale protein phosphorylation analysis reveals novel phosphorylation motifs and phosphoregulatory networks in *Arabidopsis*. *Journal of Proteomics* 2013; 78:486-98. (IF: 3.914, cites: 38)
- [5] Wang YD*, **Wang X***, Ngai SM, Wong YS. Comparative proteomics analysis of selenium responses in selenium-enriched rice grains. *Journal of Proteome Research* 2013; 12:808-20. (IF: 4.268, cites: 11)
- [6] Wang YD*, **Wang X***, Wong YS. Generation of selenium-enriched rice with enhanced grain yield, selenium content and bioavailability through fertilisation with selenite. *Food Chemistry* 2013; 141:2385-93. (IF: 4.529, cites: 25)
- [7] **Wang X**, Bian Y, Cheng K, Zou H, Sun SSM, He JX. A comprehensive differential proteomic study of nitrate deprivation in *Arabidopsis* reveals complex regulatory networks of plant nitrogen responses. *Journal of Proteome Research* 2012; 11:2301-15. (IF: 4.268, cites: 37)

简 历

- [8] Wang YD*, **Wang X***, Wong YS. Proteomics analysis reveals multiple regulatory mechanisms in response to selenium in rice. *Journal of Proteomics* 2012; 75:1849-1866. (IF: 3.914, cites: 29)

其他论文 (* 共同第一作者)

- [9] Dahlmans D, Houzelle A, Andreux P, Jørgensen J A., **Wang X**, de Windt L J., Schrauwen P, Auwerx J, Hoeks J. An unbiased silencing screen in muscle cells identifies miR-320a, miR-150, miR-196b, and miR-34c as regulators of skeletal muscle mitochondrial metabolism. *Molecular Metabolism*. 2017; 6(11):1429-1442. (IF: 6.799)
- [10] Luo J, **Wang X**, Feng L, Li Y, He JX. The mitogen-activated protein kinase kinase 9 (MKK9) modulates nitrogen acquisition and anthocyanin accumulation under nitrogen-limiting condition in Arabidopsis. *Biochem Biophys Res Commun*. 2017; 487(3):539-544. (IF: 2.466, cites: 1)
- [11] Stein S*, Lemos V*, Xu P, Demagny H, **Wang X**, Ryu D, Jimenez V, Bosch F, Lüscher TF, Oosterveer MH, Schoonjans K. Impaired SUMOylation of nuclear receptor LRH-1 promotes nonalcoholic fatty liver disease. *Journal of Clinical Investigation*. 2017; 127(2):583-592. (IF: 12.784)
- [12] Greggio C*, Jha P*, Kulkarni SS*, Lagarrigue S, Broskey NT, Boutant M, **Wang X**, Conde Alonso S, Ofori E, Auwerx J, Cantó C, Amati F. Enhanced respiratory chain supercomplex formation in response to exercise in human skeletal muscle. *Cell Metabolism*. 2017; 25(2):301-311. (IF: 18.164, cites: 8)
- [13] Zhang H, Ryu D, Wu Y, Gariani K, **Wang X**, Luan P, D'Amico D, Ropelle ER, Lutolf MP, Aebersold R, Schoonjans K, Menzies KJ, Auwerx J. NAD⁺ repletion improves mitochondrial and stem cell function and enhances life span in mice. *Science*. 2016; 352(6292):1436-43. (IF: 37.205, cites: 78)
- [14] Jha P, **Wang X**, Auwerx J. Analysis of mitochondrial respiratory chain supercomplexes using blue native polyacrylamide gel electrophoresis (BN-PAGE). *Current Protocols in Mouse Biology*. 2016; 6(1):1-14. (cites: 10)
- [15] Ryu D*, Zhang H*, Ropelle ER*, Sorrentino V, Mázala DA, Mouchiroud L, Marshall PL, Campbell MD, Ali AS, Knowels GM, Bellemin S, Iyer SR, **Wang X**, Gariani K, Sauve AA, Cantó C, Conley KE, Walter L, Lovering RM, Chin ER, Jasmin BJ, Marcinek DJ, Menzies KJ, Auwerx J. NAD⁺ repletion improves muscle function in muscular dystrophy and counters global PARylation. *Science Translational Medicine*. 2016; 8(361):361ra139. (IF: 16.796, cites: 19)
- [16] Gariani K*, Menzies KJ*, Ryu D, Wegner CJ, **Wang X**, Ropelle ER, Moullan N, Zhang H, Perino A, Lemos V, Kim B, Park YK, Piersigilli A, Pham TX, Yang Y, Ku CS, Koo SI, Fomitchova A, Cantó C, Schoonjans K, Sauve AA, Lee JY, Auwerx J. Eliciting the mitochondrial unfolded protein response by nicotinamide adenine dinucleotide repletion reverses fatty liver disease in mice. *Hepatology*. 2016; 63(4):1190-204. (IF: 13.246, cites: 37)
- [17] Xu P, Oosterveer MH, Stein S, Demagny H, Ryu D, Moullan N, **Wang X**, Can E, Zamboni N, Comment A, Auwerx J, Schoonjans K. LRH-1-dependent programming of mitochondrial glutamine processing drives liver cancer. *Genes & Development*. 2016; 30(11):1255-60. (IF: 9.413, cites: 8)
- [18] Moullan N*, Mouchiroud L*, **Wang X**, Ryu D, Williams EG, Mottis A, Jovaisaite V, Frochaux MV, Quiros PM, Deplancke B, Houtkooper RH, Auwerx J. Tetracyclines disturb mitochondrial function across eukaryotic models: a call for caution in biomedical research. *Cell Reports*. 2015; 10(10): 1681–91. (IF: 8.282, cites: 55)
- [19] Jo YS*, Ryu D*, Maida A, **Wang X**, Evans RM, Schoonjans K, Auwerx J. Phosphorylation of the nuclear receptor corepressor 1 by protein kinase B switches its corepressor targets in the liver in mice. *Hepatology*. 2015; 62(5):1606-18. (IF: 13.246, cites: 10)

简 历

- [20] Stein S, Oosterveer MH, Mataka C, Xu P, Lemos V, Havinga R, Dittner C, Ryu D, Menzies KJ, **Wang X**, Perino A, Houten SM, Melchior F, Schoonjans K. SUMOylation-dependent LRH-1/PROX1 interaction promotes atherosclerosis by decreasing hepatic reverse cholesterol transport. *Cell Metabolism*. 2014; 20(4):603-13. (IF: 18.164, cites: 19)
- [21] Andreux PA, Mouchiroud L, **Wang X**, Jovaisaite V, Mottis A, Bichet S, Moullan N, Houtkooper RH, Auwerx J. A method to identify and validate mitochondrial modulators using mammalian cells and the worm *C. elegans*. *Scientific Reports*. 2014; 4:5285. (IF: 4.259, cites: 16)
- [22] Xi J, **Wang X**, Li S, Zhou X, Yue L, Fan J, Hao D. Polyethylene glycol fractionation improved detection of low-abundant proteins in two-dimensional electrophoresis analysis of plant proteome. *Phytochemistry* 2006, 67:2341-2348. (IF: 3.205, cites: 59)

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