个 人 简 历

刘文　博士
中国科学院研究员
生命有机国家重点实验室副主任
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研究方向

- ✧ 复杂天然产物的生物合成（遗传学、生物化学和化学）研究员。
- ✧ 以产量提高和结构多样性为目的组合生物合成研究。
- ✧ 以基因组扫描为手段的新型天然产物发现研究。

工作经历

- ✧ 2003 年 8 月至今：入选中国科学院“百人计划”，上海有机化学研究所，研究员
- ✧ 2001 年 9 月至 2003 年 7 月：美国威斯康星大学麦迪逊分校药学院，研究助理
- ✧ 2000 年 9 月至 2001 年 8 月：美国加州大学戴维斯分校化学系，博士后

教育背景

- ✧ 1994 年 9 月至 2000 年 8 月：中国协和医科大学（中国医学科学院）获硕士（1997 年）、博士学位（2000 年，美国加州大学戴维斯分校化学系联合培养），导师：李元教授、沈奔教授。
- ✧ 1988 年 9 月至 1992 年 7 月：四川大学生物工程系，获学士学位。

主要获奖情况

- ✧ 2017 年国家“万人计划”科技创新领军人才；
- ✧ 2017 年中国科学院优秀导师奖；
- ✧ 2017 年工业生物技术年度创新先锋奖；
- ✧ 2015 年谈家桢生命科学创新奖；
- ✧ 2015 年科技部中青年科技创新领军人才；
- ✧ 2015 年国家百千万人才工程“有突出贡献中青年专家”；
- ✧ 2013 年日本化学会“Distinguished Lectureship Award”获得者 7；
- ✧ 2013 年上海市优秀学术带头人；
- ✧ 2012 年上海市领军人才；
- ✧ 2012 年中国科学院优秀研究生指导教师；
- ✧ 2011 年中国科学院优秀导师奖；
- ✧ 2010 年国务院政府特贴获得者；
- ✧ 2010 年中国药学会-赛诺菲安万特青年生物奖；

- ✧ 2010 年明治乳业生命科学奖（优秀奖）；
- ✧ 2009 年中科院“百人计划”终期评估“优秀”入选者；
- ✧ 国家自然科学基金委 2005 年度“杰出青年基金”获得者；
- ✧ 上海市科学技术委员会 2005 年度“启明星计划”、2009 年“启明星追踪计划”和“浦江人才计划”入选者

学术任职

- ✧ Cell 杂志子刊《Cell Chemical Biology》编委；
- ✧ 英国皇家化学会《Natural Product Reports》编委；
- ✧ 《Synthetic and Systems Biotechnology》编委；
- ✧ 中国微生物学会分子微生物学与生物工程专业委员会委员；
- ✧ 中国微生物学会分子生物学专业委员会委员；
- ✧ 中国医药生物技术协会酶工程与发酵工程专业委员会常务委员；
- ✧ 中国化学会化学生物学专业委员会委员

代表性论文

1. Zhang, D.; Tang, Z.; **Liu, W.**, Biosynthesis of lincosamide antibiotics: reactions associated with degradation and detoxification pathways play a constructive role. ***Accounts of Chemical Research*** 2018, accepted.
2. Zheng, Q.; Gong, Y.; Guo, Y.; Zhao, Z.; Wu, Z.; Zhou, Z.; Chen, D.; Pan, L.*; **Liu, W.***, Structural insights into a flavin-dependent [4+2] cyclase that catalyzes *trans*-decalin formation in pyrroindomycin biosynthesis. ***Cell chemical biology*** 2018, doi: 10.1016/j.chembiol.2018.03.007.
3. Wang, M.; Chen, D.; Zhao, Q.; **Liu, W.**, Isolation, structure elucidation, and biosynthesis of a cysteate-containing nonribosomal peptide in *Streptomyces lincolnensis*. ***Journal of Organic Chemistry*** 2018, doi: 10.1021/acs.joc.8b00044.
4. Li, J.; Li, Y.; Niu, G.; Guo, H.; Qiu, Y.; Lin, Z..; **Liu, W.***; Tan, H.*, NosP-Regulated Nosiheptide Production Responds to Both Peptidyl and Small-Molecule Ligands Derived from the Precursor Peptide. ***Cell chemical biology*** 2018, **25**, 143-153.
5. Qiu, Y.; Du, Y.; Zhang, F.; Liao, R.; Zhou, S.; Peng, C.; Guo, Y.; **Liu, W.**, Thiolation Protein-Based Transfer of Indolyl to a Ribosomally Synthesized Polythiazolyl Peptide Intermediate during the Biosynthesis of the Side Ring System of Nosiheptide. ***Journal of the American Chemical Society***, 2017, 139, 18186-18189.
6. Lin, Z.; Ji, J.; Zhou, S.; Zhang, F.; Wu, J.; Guo, Y.; **Liu, W.**, Processing 2-Methyl-l-Tryptophan through Tandem Transamination and Selective Oxygenation Initiates Indole Ring Expansion in the Biosynthesis of Thiostrepton. ***Journal of the American Chemical Society*** 2017, **139**, 12105-12108.
7. Zhong, G.; Zhao, Q.; Zhang, Q.; **Liu, W.**, 4-Alkyl-L-(dehydro)proline biosynthesis in Actinobacteria involves *N*-terminal nucleophile-hydrolase activity of γ-glutamyltranspeptidase homolog for C-C bond cleavage. ***Nature Communications***, 2017, **8**, 16109.
8. Chen, M.; Liu, J.; Duan, P.; Li, M.; **Liu, W.**, Biosynthesis and molecular engineering of templated natural products. ***National Science Review***, 2017, doi: 10.1093/nsr/nww045.

9. Lin, Z.; He, Q.; **Liu, W.**, Bio-inspired Engineering of Thiopeptide Antibiotics advances the Expansion of Molecular Diversity and Utility. ***Current Opinion in Biotechnology*** 2017, **48**, 210-219.
10. Chen, M.; Zhang, Y.; Du, Y.; Zhao, Q.; Zhang, Q.; Wu, J.; **Liu, W.**, Enzymatic Competition and Cooperation Branch the Caerulomycin Biosynthetic Pathway toward Different 2,2'-bipyridine members. ***Organic & Biomolecular Chemistry*** 2017, **15**, 5472-5475.
11. Chen, M.; Pang, B.; Du, Y.; Zhang, Y.; **Liu, W.**, Characterization of the Metallo-dependent Amidohydrolases Responsible for "auxiliary" Leucinyl Removal in the Biosynthesis of 2,2'-bipyridine Antibiotics. ***Synthetic and Systems Biotechnology*** 2017, **2**, 137-146.
12. Zheng, Q.; Fang, H.; **Liu, W.**, Post-translational modifications involved in the biosynthesis of thiopeptide antibiotics. ***Organic & Biomolecular Chemistry*** 2017, **15**, 3376-3390.
13. Li, X.; Zheng, Q.; Yin, J.; **Liu, W.***; Gao, S.*, Chemo-enzymatic Synthesis of Equisetin. ***Chemical Communications*** 2017, **53**, 4695-4697
14. Zheng, Q.#; Wu, Z.#; Sun, P.#; Chen, D.; Tian, Z.; **Liu, W.**, A linear hydroxymethyl tetramate undergoes an acetylation–elimination process for exocyclic methylene formation in the biosynthetic pathway of pyrroindomycins. ***Organic & Biomolecular Chemistry*** 2017, **15**, 88-91.
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20. Lin, Z.; Chen, D.; **Liu, W.**, .Biosynthesis-based artificial evolution of microbial natural products, ***SCIENCE CHINA Chemistry*** 2016, **59**, 1175-1189
21. Zheng, Q.; Guo, Y.; Yang, L.; Zhao, Z.; Wu, Z.; Zhang, H.; Liu, J.; Cheng, X.; Wu, J.; Yang, H.; Jiang, H.; Pan, L.; **Liu, W.**, Enzyme-dependent [4+2] cycloaddition depends on lid-like interaction of the N-terminal sequence with the catalytic core in PyrI4. ***Cell Chemical Biology*** 2016, 23, 352-360 (**Featured Article**).
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production in an industrial Saccharopolyspora erythraea strain. ***Applied and Environmental Microbiology*** 2011, **77** (21), 7508-7516.

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