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EDUCATION

1989-1993	Ph.D., Queen's University, Belfast, with Professor Tony McKervey
1983-1986	M.Sc., East China University of Science & Technology
1979-1983	B.Sc., East China University of Science & Technology

PROFESSIONAL EXPERIENCE

2015-	Professor & Senior PI, Peking University Shenzhen Graduate School
2002-2015	Deputy Director of Institute of Materia Medica, Associate Professor, Hong Kong Polytechnic University Hong Kong Polytechnic University
1998-2002	Research Assistant Professor, The Hong Kong of University
1994-1998	ROPA Fellow, Nottingham University, with Professor Gerry Pattenden
1993-1994	Postdoctoral Fellow, Queen's University, Belfast, with Professor Tony McKervey
1986-1989	Lecturer, East China University of Science & Technology

HONORS AND AWARDS

2015	Fellow of the Royal Society of Chemistry, 2015
2014	Xiaoyu Hu Memorial Award
2012	WuXi PharmaTech Life Science and Chemistry Award
2012	Asian Core Program Lectureship Award 2012 (To deliver lectures in Japan)
2012	Asian Core Program Lectureship Award 2012 (To deliver lectures in Beijing)
1994-1998:	ROPA Fellowship (Engineering and Physical Sciences Research Council, U.K.)
1991	Prize Winner of "The Pfizer Organic Chemistry Poster Symposium"

PROFESSIONAL SERVICE

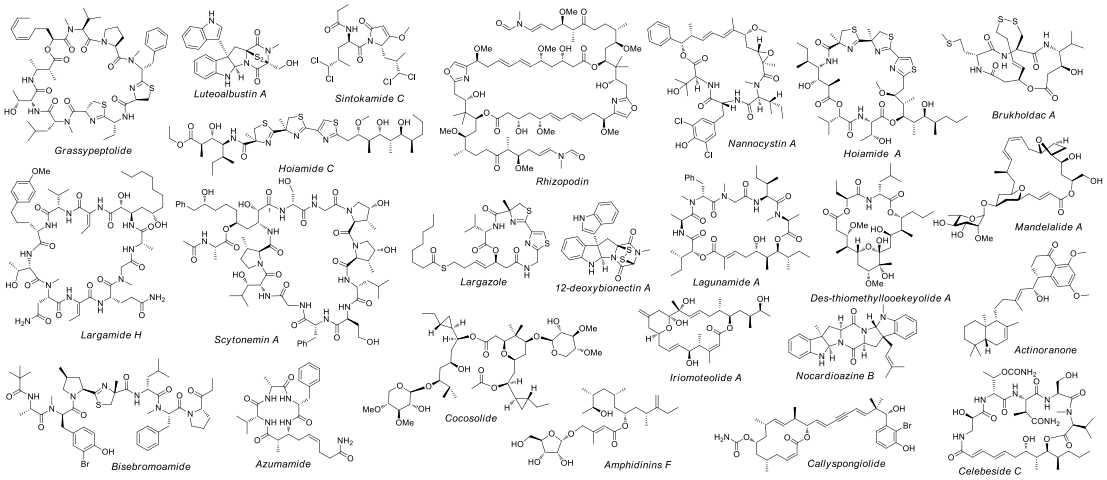
- Associate Editor (2013-2017) "Frontiers in Chemical Biology"
- Member of Senior Editorial Board of "American Journal of Cancer Research",
- Member of Editorial Board of "Journal of Pharmaceutics".
- Member of Editorial Board of "Dataset Papers in Sciences",
- Member of Editorial Board of "Natural Products Chemistry & Research"
- Member of Editorial Board of "Chemical Biology Letters"

RESEARCH INTEREST

Our research interests span the disciplines of natural product synthesis, chemical biology, synthetic biology and drug discovery, which include the discovery and development of new

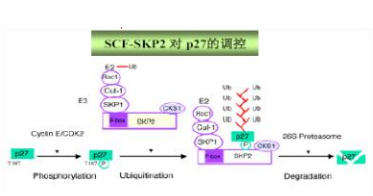
agents of medicinal value through major advances in chemical synthesis and biosynthesis. Currently, we are working in two main areas:

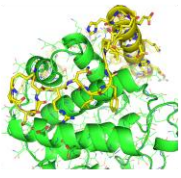
(1) **Synthesis and Biological Evaluation of Natural Products and Their Analogues.** Natural products have provided considerable value to the pharmaceutical industry over the past half century. In particular, the therapeutic area of oncology has benefited from numerous drug classes derived from natural product sources. Synthesis of natural products and their analogues has been a key tool in drug discovery and development. The synthesis allows verification of primary structure proposed on the basis of studies of natural product, and presents opportunities to modify the structure, with the ultimate aim of improving activity or physicochemical/biological properties of the lead molecule. Synthesis is also crucial in the establishment of structure-activity relationships since the ability to make analogues of the lead compound chemically and/or biochemically is a prerequisite of drug discovery. We have been particularly devoting to the exploration of natural-products-based drug discovery. The larger part of our research program is dedicated to the training and research in chemical synthesis, biosynthesis and biological evaluation of natural products with known biological activities. Structures of some completed molecules are shown below:



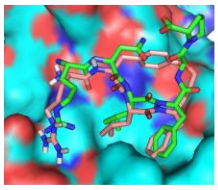
(2) **Design and Syntheses of Novel Small Molecule Bioprobes and Drugs.**

Protein–protein interactions play a key role in most biological processes, and offer attractive opportunities for therapeutic intervention. The targeted manipulation of protein-protein interactions with the use of small molecules is rapidly gaining importance in the development of biological tools for dissecting living processes on a molecular level and for the discovery of conceptually novel drugs. Our research centers on rationally designed molecular probes / drug candidates, and their application to biological problems, especially in cancer biology and neurodegenerative disorders.

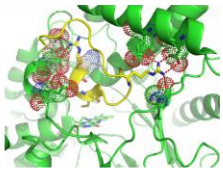




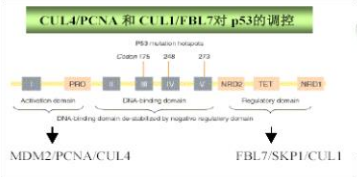
The rigid coil RNLFGP motif of p27 binds a shallow cyclin-A groove

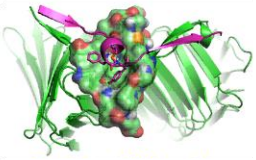


Surrogate binds with the cyclin-A groove (salmon)

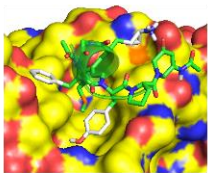


The interactions between the substrate-like peptide inhibitors and LSD1

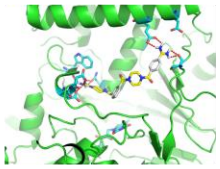




The structure of PIP-box peptide binding with PCNA



The interactions between PIP-m41 & PCNA



The interactions between de novo designed small molecule inhibitors and LSD1

SELECTED PUBLICATION

1. Yan, J.; Cheng, Y.; Chen, J.; Ratnayake, R.; Dang, L. H.; Luesch, H.; Guo, Y.; Ye, T. "Total Synthesis of Asperphenins A and B" *Org. Lett.* **2018**, *20*, 6170-3
2. Cheng, Y.; Tang, S.; Guo, Y.; Ye, T. "Total Synthesis of Anti-tuberculosis Natural Products Ilamycins E1 and F" *Org. Lett.* **2018**, *20*, 6166-9;
3. Wang, L.; Wu, F.; Jia, X.; Xu, Z.; Guo, Y.; Ye, T. "Studies toward the Synthesis of Iriomoteolide-2a: Construction of the C(6)−C(28) Fragment" *Org. Lett.* **2018**, *20*, 2213-16.
4. Chen, K.; Xu, Z.; Ye, T. "Total Synthesis of Amphidinins E, F and *epi*-Amphidinin F" *Org. Chem.Front.* **2018**, *5*, 629-32.
5. Li, L.; Tang, M.; Tang, S.; Gao, S.; Soliman, S.; Hang, L.; Xu, W.; Ye, T.; Watanabe, K.; Tang, Y. "Genome Mining and Assembly-Line Biosynthesis of the UCS1025A Pyrrolizidinone Family of Fungal Alkaloids" *J. Am. Chem. Soc.* **2018**, *140*, 2067-71.
6. Lei, H.; Wang, L.; Xu, Z.; Ye, T. "Regio- and Stereospecific Construction of 3a-(1H-Indol-3-yl)pyrrolidinoindolines and Application to the Formal Syntheses of Gliocladins B and C" *Org. Lett.* **2017**, *19*, 5134-37.
7. Guo, Y.; Zhao, M.; Xu, Z.; Ye, T. "Total Synthesis and Stereochemical Assignment of Actinoranone" *Chem. Eur. J.* **2017**, *23*, 3572–3576.
8. Liao, L.; Zhou, J.; Xu, Z.; Ye, T. "Concise Total Synthesis of Nannocystin A" *Angew. Chem. Int. Ed.* **2016**, *55*, 13263-13266.
9. Zhou, J.; Gao, B.; Xu, Z.; Ye, T. "Total Synthesis and Stereochemical Assignment of Callyspongiolide" *J. Am. Chem. Soc.* **2016**, *138*, 6948-6951.
10. Gunasekera, S. P.; Li, Y.; Ratnayake, R.; Luo, D.; Lo, J.; Reibenspies, J. H.; Xu, Z.; Clare-Salzler, M. J.; Ye, T.; Paul, V. J.; Luesch, H. "Discovery, Total Synthesis and Key Structural Elements for the Immunosuppressive Activity of Cocosolide, a Symmetrical Glycosylated Macrolide Dimer from Marine Cyanobacteria" *Chem. Eur. J.* **2016**, *22*, 8158-8166.
11. Liu, J.; Wang, L.; Zhang, J.; Xu, Z.; Ye, T. "The total synthesis and stereochemical assignment of scytonemin A" *Chem. Commun.*, **2016**, *52*, 1002-1005.
12. Qu, S.; Chen, Y.; Wang, X.; Chen, S.; Xu, Z.; Ye, T. "Total Synthesis of Largamide B" *Chem. Commun.* **2015**, *51*, 2510-2513.
13. Lei, H.; Yan, J.; Yu, J.; Liu, Y.; Wang, Z.; Xu, Z.; Ye, T. "Total Synthesis and Stereochemical Reassignment of Mandelalide A" *Angew. Chem. Int. Ed.* **2014**, *53*, 6533-6537.
14. Zhang, X.; Lu, F.; Wang, J.; Yin, F.; Xu, Z.; Qi, D.; Wu, X.; Cao, Y.; Liang, W.; Liu, Y.; Sun, H.; Ye, T.; Zhang, H. "Pluripotent Stem Cell Protein Sox2 Confers Sensitivity towards LSD1 Inhibition in Cancer Cell", *Cell Reports*, **2013**, *5*, 445-457.
15. Song, L.; Liu, J.; Gui, H.; Hui, C.; Zhou, J.; Guo, Y.; Zhang, P.; Xu, Z.; Ye, T. "Synthesis of the Macrocyclic Core of Rhizopodin" *Chem. Asian J.* **2013**, *8*, 2955-2959.
16. Liu, H.; Liu, Y.; Wang, Z.; Xing, X.; Maguire, A. R.; Luesch, H.; Zhang, H.; Xu, Z.; Ye,

T. “Total Synthesis and Biological Evaluation of Grassypeptolide A” *Chem. Eur. J.* **2013**, *19*, 6774-6784.

17. Long, B.; Tang, S.; Chen, L Qu, S.; Chen, B.; Liu, J.; Maguire, A. R.; Wang, Z.; Liu, Y.; Zhang, H.; Xu, Z.; Ye, T. “Total Synthesis of Padanamides A and B” *Chem. Commun.* **2013**, *49*, 2977-2979.
18. Dai, L.; Chen, B.; Lei, H.; Wang, Z.; Liu, Y.; Xu, Z.; Ye, T. “Total Synthesis and Stereochemical Revision of Lagunamide A” *Chem. Commun.* **2012**, *48*, 8697-8699.
19. Wang, M.; Feng, X.; Cai, L.; Xu, Z.; Ye, T. “Total Synthesis and Absolute Configuration of Nocardioazine B” *Chem. Commun.* **2012**, *48*, 4344 - 4346.
20. Wang, J.; Lu, F.; Ren, Q.; Sun, H.; Xu, Z.; Lan, R.; Liu, Y.; Ward, D.; Quan, J.; Ye, T.; Zhang, H. “Novel Histone Demethylase LSD1 InhibitorsSelectively Target Cancer Cells with Pluripotent Stem Cell Properties” *Cancer Research*, **2011**, *71*, 7238-7249.
21. Wang, L.; Xu, Z.; Ye, T. “Total Synthesis of Hoiamide C” *Org. Lett.* **2011**, *13*, 2506-2509.
22. Liu, Y.; Wang, Z.; Kwong, S.; Lui, E. L. H.; Friedman, S. L.; Li, F.; Lam, R. W. C.; Zhang, G. C.; Zhang, H.; Ye, T.; “Inhibition of PDGF, TGF-β and Abl Signaling and Reduction of Liver Fibrosis by the Small Molecule Bcr-Abl Tyrosine Kinase Antagonist Nilotinib” *J. Hepatology*, **2011**, *55*, 612-625.

Book: “Modern Catalytic Methods for Organic Synthesis with Diazo Compounds: From Cyclopropanes to Ylides” (652 pages), Doyle, M. P.; McKervey, M. A.; Ye, Tao, John Wiley & Sons, Inc., New York. **1998**