

Contact Information: Department of Chemistry, The University of Hong Kong, Hong Kong, China. xuechenl@hku.hk, Tel: 852-22194992

Academic Experience:

7/2014-present: Associate Professor (with early tenure), The University of Hong Kong

7/2009-6/2014: Assistant Professor, The University of Hong Kong

2/2007-6/2009: Research Scholar, Memorial Sloan-Kettering Cancer Center/Columbia University, New York, Professor Samuel Danishefsky

Education:

7/2003-12/2006 Ph.D. Harvard University, Cambridge, Massachusetts, USA
(Professor Daniel Kahne)

8/2000-6/2003 M.Sc. University of Alberta, Edmonton, Canada
(Professor Ole Hindsgaul)

9/1995-6/1999 B.Sc. Nankai University, Tianjin, P.R. China

Journal Editorial/Advisory Board Membership:

Associate Editor, *Frontiers in Chemical Biology*, 2013-present

Organizing Committee, *Asian Communications of Glycobiology and Glycotechnology*

Awards:

Shandong Taishan Scholar in Pharmacy 2012

Wuxi PharmaTech Life Science and Chemistry-Scholar Award 2013

Outstanding Young Research Award, the University of Hong Kong 2014

Asian Core Program Lectureships, 2015

Major research contribution:

Pioneer in the development of Serine/Threonine Ligation (STL) in synthetic protein chemistry, which has been selected by Faculty 1000prime (2013), and The Cutting Edge of Chemistry by Thomson Reuters (2013, October); Development of phthalimidine-mediated native protein modification (patent: US 14/727,163; CN201510236410.0); Development of the first total synthesis of daptomycin and engaged in the development of daptomycin-based next-generation antibiotics with Cubist.

Patents:

- 1) Native chemical ligation at serine and threonine sites, US 13/389,202; China CN200980160726
- 2) Daptomycin analogues and a method for the preparation of daptomycin or a daptomycin analogues, US 14/073,399
- 3) A method and reagents for the preparation of peptide/protein conjugates (US 14/727,163, CN201510236410.0) (2015)
- 4) Staple helical peptides and method of synthesis, US 62/261,395 (2015)
- 5) New antibacterial cyclic lipopeptides (pending) (2016)

Publications (independent)

- 63) Liu, M.; Li, M. D.; Huang, J.; Li, T.; **Li, X.**; Phillips, D. L. *Sci. Rep.* **2016**. Doi: 10.1038/srep21606.
- 62) Jin, K.; Li, S.; Li, X.; Zhang, J., Xu, W.*; **Li, X.*** *Bioorg. Med. Chem.* **2015**, *15*, 4728.
- 61) Du, L.; Li, M-D.; Zhang, Y.; Xue, J.; Zhang, X.; Zhu, R.; Cheng, S.; **Li, X.**; Phillips, D. L.* *J. Org. Chem.* **2015**, *15*, 7340.
- 60) Tung, C. L.; Wong, C. T. T.; **Li, X.*** *Org. Biomol. Chem.* **2015**, *13*, 6922.
- 59) Lee, C. L.; Lam, Y. H.; **Li, X.*** *Nat. Prod. Rep.* (invited) **2015**, *32*, 1274-1279.
- 58) Chow, H. Y.; **Li, X.*** *Tetrahedron Lett.* (invited Digest), **2015**, *55*, 5525.
- 57) Lee, P.; Li, T.; Zhu, G.; **Li, X.*** *J. Pept. Sci.* (invited) **2015**, *7*, 593.
- 56) Wang, S.; Liu, K.; Seneviratne C. J.; **Li, X.**; Cheung, G. S.; Jin, L.; Chu, C. H.; Zhang, C. *Biomed Rep.* **2015**, *5*, 697.
- 55) Guo, J.; Xu, C.; **Li, X.***; Chen, S.* *PLOS One* **2014**, DOI: 10.1371/journal.pone.0114124.
- 54) Lee, C. L.; **Li, X.*** *Curr. Opin. Chem. Biol.* (invited) **2014**, *22*, 108.
- 53) Peng, P.; Liu, H.; Gong, J.; Nicholls, J. M.; **Li, X.*** *Chem. Sci.* **2014**, *5*, 3634.
- 52) Liu, H.; **Li, X.*** *Tetrahedron Lett.* **2014**, *55*, 5525.
- 51) Lam, H. Y.; **Li, X.*** *Chem. Rec.* (invited) **2014**, *6*, 1086.
- 50) Xu, C.; **Li, X.*** book chapter, *Glycoscience: Biology and Medicine*, **2014**
- 49) Liu, H.; **Li, X.*** *J. Org. Chem.* **2014**, *79*, 5834.
- 48) Lam, H. Y., **Li, X.*** *Synlett* (invited) **2014**, *25*, 1339.
- 47) Wong, C. T.; Lam, H. Y.; **Li, X.*** *Tetrahedron* (invited) **2014**, *70*, 7770.
- 46) Zhang, Y.; Farrants, H.; **Li, X.*** *Chem. Asian J.* (invited) **2014**, *9*, 1752.
- 45) Wong, C. T.; Li, T.; Lam, H. Y., Zhang, Y.; **Li, X.*** *Front. Chem. Biol.* **2014**, doi: 10.3389/fchem.2014.00028.
- 44) Liu, H.; **Li, X.*** *Org. Biomol. Chem.* (invited perspective) **2014**, *12*, 3768.
- 43) Tung, C. L.; Lam, H. Y.; Xu, J.; **Li, X.*** *Chem. Commun.* **2014**, *50*, 5298.
--- *The Emerging Investigators 2014 issue*
- 42) Yang, C.; **Li, X.**; Rong, J. *Chin. Med.* **2014**. doi: 10.1186/1749-8546-9-23
- 41) Yang, C.; Zhao, J.; Cheng, Y.; **Li, X.**; Rong, J. *Biomed. Res. Int.* **2014**, doi: 10.1155/2014/306857
- 40) Wong, C. T. T. ; Lam, H. Y.; **Li, X.*** *Org. Biomol. Chem.* **2013**, *11*, 7616.

- 39) Wong, C. T. T.; Lam, H. Y.; Song, T.; Chen, G.*; **Li, X.*** *Angew. Chem. Int. Ed.* **2013**, *52*, 10212.
---Highlighted by Society of Chemical Industry-Biomedical highlights;
selected for Synfacts
- 38) Zhang, Y.; Li, T.; **Li, X.*** *Org. Biomol. Chem.* **2013**, *11*, 5584.
- 37) Xu, C.; Lam, H. Y.; Zhang, Y.; **Li, X.*** *Chem. Commun.* **2013**, *49*, 6200.
- 36) Lam, H. Y.; Zhang, Y.; Liu, H.; Xu, J.; Wong, C. T.; Xu, C.; **Li, X.*** *J. Am. Chem. Soc.* **2013**, *135*, 6272. Total Synthesis of Daptomycin by Cyclization via a Chemoselective Serine Ligation.
---Selected by the Chemical Record
- 35) Zhang, Y.; Xu, C.; Lam, H. Y.; Lee, C. L.; **Li, X.*** *Proc. Natl. Acad. Sci. USA*, **2013**, *110*, 6657. Protein chemical synthesis by serine and threonine ligation.
---Selected by Faculty1000 prime
- 34) Wong, C. T. T.; Tung, C. L.; **Li, X.*** *Mol. Biosyst.* **2013**, *9*, 826.
- 33) Li, M.; Su, T.; Ma, J.; Liu, H.; **Li, X.**; Phillips, D. L.* *Chem. Eur. J.* **2013**, *19*, 11241.
- 32) Xu, C.; Bai, B.; Fan, P.; Cai, Y.; Huang, B.; Law, I, K.; Liu, L.; Xu, A.; Tung, C.; **Li, X.**; Siu, F. M.; Che, C. M.; Vanhoutte, P. M.; Wang, Y.* *Am. J. Transl. Res.* **2013**, *5*, 412.
- 31) Zhang, J.; Zhang, L.; **Li, X.**; Xu, W.*. *Curr. Med. Chem.* **2012**, *13*, 2038.
- 30) Zhang, Y.; Lee, C. L.; Liu, H.; **Li, X.*** *Org. Lett.* **2012**, *14*, 5146.
- 29) Liu, H.; **Li, X.*** *Tetrahedron Lett.* **2012**, *53*, 6957.
- 28) Gong, J.; Liu, H.; **Li, X.*** *Carbohydr. Res.* **2012**, *361*, 91.
- 27) **Li, X.*** *Chem. Asian J.* **2011**, *6*, 2606..
- 26) Zhang, Y.; Xiao, M.; Horiyama, T.; Zhang, Y.; **Li, X.**; Nishino, K.; Yan, A. *J. Biol. Chem.* **2011**, *286*, 26576.
- 25) Xu, C.; Liu, H.; **Li, X.*** *Carbohydr. Res.* **2011**, *346*, 1149.
- 24) **Li, X.***; Lam, H. Y.; Zhang, Y.; Chan, C. K. *Org. Lett.* **2010**, *12*, 1724.

Publications (prior to HKU)

- 23) Wilson, R. M.; Stockdill, J. L.; Wu, X.; **Li, X.**; Vadola, P. A.; park, P. K.; Wang, P.; Danishefsky, S. J. *Angew. Chem. Int. Ed.* **2012**, *51*, 2834
- 22) Wang, P.; **Li, X.**; Zhu, J.; Chen, J.; Yuan, Y. Wu, X.; Danishefsky, S. J. *J. Am. Chem. Soc.* **2011**, *133*, 1597
- 21) Rao, Y.; **Li, X.**; Nagorny, P.; Hayashida, J. Danishefsky, S. J. *Tetrahedron Lett.* **2009**, *50*, 6684.
- 20) Rao, Y.; **Li, X.**; Danishefsky, S. J. *J. Am. Chem. Soc.* **2009**, *131*, 12924.
- 19) Nagorny, P.; Fasching, B.; **Li, X.**; Chen, G.; Aussedate, B.; Danishefsky, S. J. *J. Am. Chem. Soc.* **2009**, *131*, 5792.
- 18) Wu, X.; Yuan, Y.; **Li, X.**; Danishefsky, S. J. *Tetrahedron Lett.* **2009**, *50*, 4666.

- 17) Yuan, Y.; Zhu, J.; **Li, X.**; Wu, X.; Danishefsky, S. J. *Tetrahedron Lett.* **2009**, 50, 2329.
- 16) Wu, X.; **Li, X.**; Danishefsky, S. J. *Tetrahedron Lett.* **2009**, 50, 1523.
- 15) **Li, X.**; Yuan, Y.; Kan, C.; Danishefsky, S. J. *J. Am. Chem. Soc.* **2008**, 130, 13225.
- 14) **Li, X.**; Yuan, Y.; Berkowitz, W. F.; Todaro, L. J.; Danishefsky, S. J. *J. Am. Chem. Soc.* **2008**, 130, 13222.
- 13) **Li, X.**; Danishefsky, S. J. *Nature Protocols* **2008**, 3, 1666.
- 12) Jones, G. O.; **Li, X.**; Hayden, A. D.; Houk, K. N.; Danishefsky, S. J. *Org. Lett.* **2008**, 10, 4093.
- 11) **Li, X.**; Danishefsky, S. J. *J. Am. Chem. Soc.* **2008**, 130, 5446.
- 10) Taylor, J. G.; **Li, X.**; Oberthur, M.; Zhu, W.; Kahne, D. *J. Am. Chem. Soc.* **2006**, 128, 15084.
- 9) Gennadios, H. A.; Whittington, D. A.; **Li, X.**; Fierke, C. A.; Christianson, D. A. *Biochemistry* **2006**, 45, 7940.
- 8) **Li, X.**; McClerren, A. L.; Raetz, C. R. H.; Hindsgaul, O. *J. Carbohydr. Chem. (invited paper, special issue in memoriam Jacques van Boom)* **2005**, 24, 583.
- 7) Coggins, B. E.; McClerren, A. L.; Jiang, L.; **Li, X.**; Rudolph, J.; Hindsgaul, O.; Raetz, C. R. H.; Zhou, P. *Biochemistry* **2005**, 44, 1114.
- 6) Coggins, B. E.; **Li, X.**; Hindsgaul, O.; Raetz, C. R. H.; Zhou, P. *J. Biomol. NMR* **2004**, 82, 201.
- 5) Coggins, B. E.; **Li, X.**; McClerren, A. L.; Hindsgaul, O.; Raetz, C. R. H.; Zhou, P. *Nature Struct. Biol.* **2003**, 10, 645.
- 4) **Li, X.**; Uchiyama, T.; Raetz, C. R. H.; Hindsgaul, O. *Org. Lett.* **2003**, 5, 539.
- 3) Liu, L.; Li, C.; **Li, X.**; Yuan, Z.; An, Y.; He, B. *J. Appl. Polym. Sci.* **2001**, 80, 1976.
- 2) Wu, Q.; Li, C.; **Li, X.**; Li, Y. *Spectrosc. Spect. Anal.* **2001**, 21, 778.
- 1) Wu, Q.; Li, C.; **Li, X.** *Chem. J. Chinese U.* **2001**, 22, 2123.

Funding

Collaborative Research Fund of the Research Grants Council of Hong Kong 2016-2018
 General Research Fund of the Research Grants Council of Hong Kong 2014-2017
 Health and Medical Research Fund of Hong Kong 2013-2015
 General Research Fund of the Research Grants Council of Hong Kong 2013-2016
 Early Career Scheme of the Research Grants Council of Hong Kong 2012-2015
 General Research Fund of the Research Grants Council of Hong Kong 2011-2014
 Peacock Program-Project Development Fund of Shenzhen 2012-2014

◆ Invited lectures and keynote speeches at conferences

- 22) Pacificchem **2015**, December 15-20, Hawaii, USA
- 21) 7th International Peptide Symposium, 2015, December 9-11, Singapore
- 20) 10th International Conference on Cutting-Edge Organic Chemistry in Asia, 2015, November 2-5, Kaohsiung, Taiwan
- 19) Beijing Symposium 2015, October 24-25, Beijing
- 18) 24th American Peptide Symposium, **2015**, June 20-25, Orlando, USA
- 17) The 6th Chemical Protein Synthesis Meeting, **2015**, June 16-19, St. Augustine, Florida
- 16) The 249th ACS National Meeting & Exposition (CARB Division), **2015**, March 22-26, 2015, Denver, USA
- 15) The 8th Singapore International Chemical Conference, **2014**, Dec 14-17, Singapore

- 14) 13th Chinese International Peptide Symposium, **2014**, June 30-July 4, Datong, China
- 13) Asia-Canada Glycoscience Satellite Meeting, **2014**, May 31-June 1, Vancouver, Canada
- 12) 4th Asian-Pacific International Peptide Symposium, **2013**, November 6-8, Osaka, Japan (Principal speaker);
- 11) 4th Modern Solid Phase Peptide Synthesis & its applications symposium, **2013**, November 2-4, Kobe, Japan (Keynote speaker);
- 10) First Sino-US Symposium on Peptide and Protein Science, **2013**, September 15-17, Xi'an, China;
- 9) The 1st Asian Conference for "MONODUKURI" Strategy by Synthetic Organic Chemistry (ACMS), **2013**, July 17-19, Okinawa, Japan;
- 8) The 9th Sino-US Chemistry Professor Conference, **2013**, July 12-14, Chengdu, China;
- 7) The 7th International Conference on Cutting-Edge Organic Chemistry in Asia, **2012**, December, Singapore;
- 6) The 1st Asian Chemical Biology Initiative Meeting, **2012**, February 24-27, Hanoi, Vietnam;
- 5) The 3rd Asian Communications of Glycobiology and Glycotechnology, **2011**, October 27-29, Shanghai, China;
- 4) The 1st Symposium on "New Frontiers in Organic Chemistry; Towards Cleaner, Greener Chemical Processes, **2011**, September, 1-4, Beijing, China;
- 3) The 7th Sino-US Chemistry Professors Conference, **2011**, June 28-30, Guiyang, China;
- 2) The 11th Chinese International Peptide Symposium, **2010**, July 5-8, Lanzhou, China;
- 1) The 6th Sino-US Chemistry Professors Conference-Organic Chemistry & Chemical Biology, **2010**, June 15-17, Hangzhou, China;