

## CURRICULUM VITAE

### Xiangshu Xiao

Associate Professor  
Department of Physiology and Pharmacology  
Oregon Health & Science University  
Portland, OR 97239  
Phone: (503) 494-4748 E-mail: xiaoxi@ohsu.edu

### Professional Experience

.....  
July 2014-present Associate Professor Program in Chemical Biology, Department of Physiology and Pharmacology, Oregon Health & Science University, Portland, OR

Aug. 2007-June 2014 Assistant Professor Program in Chemical Biology, Department of Physiology and Pharmacology, Oregon Health & Science University, Portland, OR

Jul. 2005-Jul. 2007 Post-doctoral Fellow, Chemical Biology, University of Texas Southwestern Medical Center, Dallas, Texas

Advisor: Prof. Thomas Kodadek

Research Focus: Development of Artificial Transcription Activators.

### Education

.....  
Aug. 2001-Jun. 2005 Ph.D., Medicinal Chemistry, Purdue University, West Lafayette, Indiana

Advisor: Prof. Mark Cushman

Dissertation: Chemistry and Biology of Topoisomerase I Inhibitors: Indenoisoquinolines and Camptothecins.

Sep. 1998-Jun. 2000 M.Sc., Organic Chemistry, Shanghai Institute of Materia Medica, Chinese Academy of Sciences, Shanghai, China

Advisor: Prof. Donglu Bai

Thesis: Studies on the Total Synthesis of Macrolactin A and its Analogs

Sep. 1994-Jun. 1998 B.Sc., Medicinal Chemistry, Beijing Medical University, Beijing, China

Advisor: Prof. Lihe Zhang

Thesis: Synthesis of Isonucleosides.

### Ad Hoc Reviewer

.....  
Journal Reviewer: *Journal of the American Chemical Society*, *Journal of Medicinal Chemistry*, *Journal of Organic Chemistry*, *ACS Chemical Biology*, *European Journal of Medicinal Chemistry*, *Chemical Research in Toxicology*, *Journal of Molecular Structure*:

*THEOCHEM, Bioorganic & Medicinal Chemistry Letters, Protein & Peptide Letters, Journal of Oncology, Neuroendocrinology, PLOS One, Tumor Biology*

*Grant Reviewer:*

*2008-2010: Alzheimer's Association,*

*2009-2010: Maryland Industrial Partnerships program*

*2012: DOD BCRP study section*

### Editorial Boards

.....  
*Journal of Cancer Science & Therapy* Editorial Board 2010-present  
*Journal of Cancer Research and Therapeutic Oncology* 2013-present

### Membership

.....  
*American Association of Cancer Research*

*American Chemical Society*

*American Society for Pharmacology and Experimental Therapeutics*

*Sigma Xi Scientific Society*

### Award

.....  
1995-1997 Excellent Student Scholarship, Beijing Medical University.

1998 Excellent Undergraduate Research Thesis.

2001 Yongling Liu Scholarship, Shanghai Institute of Materia Medica, Chinese Academy of Sciences

2004 Outstanding Research Thesis, Shanghai

2005 Travel Grant Award, Division of Medicinal Chemistry, American Chemical Society.

2006 Sigma Xi Postdoctoral Research Competition Award (UT Southwestern)

2009 OHSU Technology Innovation Award

2010 Oregon BIRCWH Scholar (declined due to concurrent RO1 funding)

2014 OHSU TTBD Award

### Publications (\* denotes corresponding author)

- .....
1. Li, B. X.; Xie, F.; Fan, Q.; Barnhart, K. M.; Moore, C. E.; Rheingold, A. L.; **Xiao, X.\*** "Novel Type of Prodrug Activation through a Long-range *O,N*-Acyl Transfer: a Case of Water-Soluble CREB Inhibitor" *ACS Med. Chem. Lett.*, **2014**, 5, 1104-1109.
  2. Xie, F.; Li, B. X.; Alkayed, N. J.; **Xiao, X.\*** "Synthesis of 14,15-EET from Arachidonic Acid Using Urea-Hydrogen Peroxide as the Oxidant" *Synthetic Commun.*, **2014**, in press

3. Xie, F.; Li, B. X.; Broussard, C.; **Xiao, X.\*** “Identification, Synthesis and Evaluation of Substituted Benzofurazans as Inhibitors of CREB-mediated Gene Transcription” *Bioorg. Med. Chem. Lett.* **2013**, *23*, 5371-5375.
4. Chen, J.; Kassenbrock, A.; Li, B. X.; **Xiao, X.\*** “Discovery of a Potent Antitumor Agent through Regioselective Mono-*N*-acylation of 7*H*-Pyrrolo[3,2-*f*]quinazoline-1,3-diamine” *MedChemComm*, **2013**, *4*, 1275-1282.
5. Xie, F.; Li, B. X.; **Xiao, X.\*** “Synthesis and Evaluation of an *O*-Aminated Naphthol AS-E as a Prodrug of CREB-mediated Gene Transcription Inhibition” *Lett. Org. Chem.*, **2013**, *10*, 380-384.
6. Nelson, J. W.; Subrahmanyam, R. M.; Summers, S. A.; **Xiao, X.**; Alkayed, N. J.\* “Soluble Epoxide Hydrolyase Dimerization is Required for Hydrolyase Activity” *J. Biol. Chem.* **2013**, *288*, 7697-703.
7. Li, B. X.; Yamanaka, K.; **Xiao, X.\*** “Structure-activity Relationship Studies of Naphthol AS-E and Its Derivatives as Anticancer Agents by Inhibiting CREB-mediated Gene Transcription” *Bioorg. Med. Chem.* **2012**, *20*, 6811-6820.
8. Jiang, M.; Li, B. X.; Xie, F.; Delaney, F.; **Xiao, X.\*** “Design, Synthesis and Biological Evaluation of Conformationally Constrained Analogs of Naphthol AS-E as Inhibitors of CREB-mediated Gene Transcription” *J. Med. Chem.*, **2012**, *55*, 4020-4024.
9. **Xiao, X.\*** Li, B. X.; Mitton, B.; Ikeda, A.; Sakamoto, K. M. “Targeting CREB for Cancer Therapy: Friend or Foe” *Current Cancer Drug Targets*, **2010**, *10*, 384-391.
10. Li, B. X.; **Xiao, X.\*** “Discovery of a Small Molecule Inhibitor of KIX-KID Interaction” *ChemBioChem* **2009**, *10*, 2721-2724.
11. Lim, H.; Reddy, M. M.; **Xiao, X.**; Wilson, J.; Wilson, R.; Connell, S.; Kodadek, T.\* “Rapid Identification of Improved Protein Ligands Using Peptoid Microarrays” *Bioorg. Med. Chem. Lett.* **2009**, *19*, 3866-3869.
12. Lee, J.; Yu, P.; **Xiao, X.**; Kodadek, T.\* “A general system for evaluating the efficiency of chromophore-assisted light inactivation (CALI) of proteins reveals Ru(II) tris-bipyridyl as an unusually efficient warhead” *Mol. BioSyst.*, **2008**, *4*, 59-65.
13. **Xiao, X.**; Yu, P.; Lim, H.; Sikder, D.; Kodadek, T.\* “Design and Synthesis of a Cell Permeable Synthetic Transcription Factor Mimic” *J. Comb. Chem.*, **2007**, *9*, 592-600.
14. **Xiao, X.**; Yu, P.; Lim, H.; Sikder, D.; Kodadek, T.\* “A Cell-Permeable Synthetic Transcription Factor Mimic” *Angew. Chem. Int. Ed.*, **2007**, *46*, 2865-2868. (This is a **VIP paper** and highlighted in *Chemical & Engineering News*, **2007**, 85 (8), pp34 and *Nature*, **2007**, *446*, pp472 and *ChemBiochem* **2007**, *8*, 1095).
15. Alluri, P.; Liu, B.; Yu, P.; **Xiao, X.**; Kodadek, T.\* “Isolation and Characterization of Coactivator-binding Peptoids from a Combinatorial Library” *Mol. BioSyst.* **2006**, *2*, 568-579.
16. **Xiao, X.**; Morrell, A.; Fanwick, P.; Cushman, M.\* “On the Mechanism of Conversion of 4-Carboxy-3,4-dihydro-3-phenyl-1(2*H*)-isoquinolones to Indeno[1,2-*c*]isoquinolines by Thionyl Chloride” *Tetrahedron*, **2006**, *62*, 9705-9712.

17. **Xiao, X.**; Antony, S.; Pommier, Y.; Cushman, M.\* “Total Synthesis and Biological Evaluation of 22-Hydroxyacuminatine” *J. Med. Chem.* **2006**, *49*, 1408-1412.
18. **Xiao, X.**; Cushman, M.\* “Effect of E-ring Modifications in Camptothecin on Topoisomerase I Inhibition: A Quantum Mechanics Treatment” *J. Org. Chem.* **2005**, *70*, 9584-9587.
19. Li, S.; **Xiao, X.**; Yan, X.; Liu, X.; Xu, R.; Bai, D.\* “A Convergent and Stereoselective Synthesis of a *seco*-Precursor of Macrolactin A” *Tetrahedron* **2005**, *61*, 11291-11298.
20. **Xiao, X.**; Li, S.; Yan, X.; Liu, X.; Xu, R.; Bai, D.\* “Synthesis of a *seco*-Precursor and Analogues of Macrolactin A” *Chem. Lett.* **2005**, *34*, 906-907.
21. **Xiao, X.**; Cushman, M.\* “A Facile Method to Transform trans-4-Carboxy-3,4-dihydro-3-phenyl-1(2*H*)-isoquinolones to Indeno[1,2-*c*]isoquinolines” *J. Org. Chem.* **2005**, *70*, 6496-6498.
22. **Xiao, X.**; Cushman, M.\* “An ab initio Quantum Mechanics Calculation that Correlates with Ligand Orientation and DNA Cleavage Site Selectivity in Camptothecin-DNA-Topoisomerase I Ternary Cleavage Complexes” *J. Am. Chem. Soc.* **2005**, *127*, 9960-9961.
23. **Xiao, X.**; Miao, Z.; Antony, S.; Pommier, Y.; Cushman, M.\* “Dihydroindenoisoquinolines Function as Prodrugs of Indenoisoquinolines” *Bioorg. Med. Chem. Lett.* **2005**, *15*, 2795-2798.
24. **Xiao, X.**; Antony, S.; Pommier, Y.; Cushman, M.\* “On the Binding of Indeno[1,2-*c*]isoquinolines in the DNA-Topoisomerase I Cleavage Complex” *J. Med. Chem.* **2005**, *48*, 3231-3238.
25. **Xiao, X.**; Antony, S.; Kohlhagen, G.; Pommier, Y.; Cushman, M.\* “Novel Autoxidative Cleavage Reaction of 9-Fluoredenes Discovered during the Synthesis of a Potential DNA-Threading Indenoisoquinoline” *J. Org. Chem.* **2004**, *69*, 7495-7501.
26. **Xiao, X.**; Fanwick, P. E.; Cushman, M.\* “Synthesis, Crystal Structure and Conversion of the Polycyclic Trisanhydrotetramer of *o*-Aminobenzaldehyde to Cu(TAAB)<sup>2+</sup>” *Syn. Comm.* **2004**, *34*, 3901-3907.
27. **Xiao, X.**; Antony, S.; Kohlhagen, G.; Pommier, Y.; Cushman, M.\* “Design, Synthesis, and Biological Evaluation of Cytotoxic 11-Aminoalkenylindenoisoquinoline and 11-Diaminoalkenylindenoisoquinoline Topoisomerase I Inhibitors” *Bioorg. Med. Chem.* **2004**, *12*, 5147-5160.
28. Nagarajan, M.; **Xiao, X.**; Antony, S.; Kohlhagen, G.; Pommier, Y.; Cushman, M.\* “Design, Synthesis, and Biological Evaluation of Indenoisoquinoline Topoisomerase I Inhibitors Featuring Polyamine Side Chains on the Lactam Nitrogen” *J. Med. Chem.* **2003**, *46*, 5712-5724.
29. Fox, B. F.; **Xiao, X.**; Antony, S.; Kohlhagen, G.; Pommier, Y.; Staker, B. L.; Stewart, L.; Cushman, M.\* “Design, Synthesis, and Biological Evaluation of Cytotoxic 11-Alkenylindenoisoquinoline Topoisomerase I Inhibitors and Indenoisoquinoline-Camptothecin Hybrids” *J. Med. Chem.* **2003**, *46*, 3275-3282.
30. Xia, Y.; **Xiao, X.**; He, X.; Bai, D.\* “The Unexpected Reductive Product of  $\delta$ -Alkoxyenal by Sodium Borohydride in Methanol with Trace Magnesium Methoxide” *Chin. Chem. Lett.* **2002**, *13*, 809-810.

31. **Xiao, X.**; Bai, D.\* “An Efficient and Selective Method for Hydrolysis of Acetonides” *Synlett* **2001**, 535-537.
32. Li, S.; Xu, R.; **Xiao, X.**; Bai, D.\* “A Stereoselective Synthesis of the C3-C13 and C14-C24 Fragments of Macrolactin A” *Chin. J. Chem.* **2000**, *18*, 910-923.

#### **Patent**

---

1. **Xiao, X.**; Li, B. X. “Naphthamides as Anticancer Agents” International Patent Number WO 2010048302 (licensed to Transmed Oncology, Inc.) (notice of allowance from USPTO was issued on 9/27/2013).
2. **Xiao, X.**; Li, B. X.; Xie, F. “Pharmaceutical Compositions Comprising Naphthamides” PCT/US12/63361 (filed on 11/2/2012).
3. **Xiao, X.**; Chen, J.; Li, B. X. “Pyrroloquinazoline Compounds” PCT/US14/43265 (filed on 06/19/2014).