

## Jianmin Gao

Department of Chemistry  
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### **Education**

Ph.D.	07/2004	Chemistry, Stanford University, Stanford, CA
B.S.	07/1999	Chemistry, University of Science and Technology of China Hefei, Anhui, P.R.China

### **Professional Experience**

07/2013-present	Associate Professor of Chemistry Boston College, Chestnut Hill, MA
07/2007-06/2013	Assistant Professor of Chemistry Boston College, Chestnut Hill, MA
08/2004-07/2007	Postdoctoral Researcher with Professor Jeffery W. Kelly The Scripps Research Institute, La Jolla, CA
09/1999-07/2004	Ph.D. Thesis with Professor Eric T. Kool Stanford University, Stanford, CA
01/1998-06/1999	Undergraduate Researcher with Professor Qing-Xiang Guo University of Science and Technology of China, Hefei China

### **Honors**

- 2007, Smith Family Young Investigator  
Smith Family Foundation, The Medical Foundation, Boston, MA
- 2002-2004, Stanford graduate fellowship, General Wang Yaowu fellow  
Stanford University, Stanford, CA
- 1998, “Guo Mo-Ruo” scholarship-the best graduates of the year  
University of Science and Technology of China, Hefei, China
- 1997, Outstanding student award of first class  
University of Science and Technology of China, Hefei, China
- 1996, “Zhang Zhongzhi” scholarship-Award to outstanding chemistry majors  
University of Science and Technology of China, Hefei, China
- 1995, “GuoBao” scholarship-Outstanding freshman award  
University of Science and Technology of China, Hefei, China

**Teaching Activities**

- CHEM560, *Principles of Chemical Biology*, Fall 2007, 2008, 2009
- CHEM765, *Chemical Biology: Current Topics and Literature*, Fall 2009
- CHEM473, *Physical Chemistry for Biochemistry Majors*, Spring 2009, 2010, 2013
- CHEM582, *Advanced Topics in Biochemistry*, Fall 2010, 2012
- CHEM242 (now CHEM2242), *Honors Organic Chemistry II*, Spring 2011, 2014, 2015, 2016
- CHEM461 (now CHEM4465), *Introduction to Biochemistry*, Fall 2013, 2014, 2015, 2016, 2017

**Work in Progress** (undergrad coauthors underlined)

56. Michael A. Kelly, Kelly A. McCarthy, Kaicheng Li, Samantha Cambray, Azade S. Hosseini and **Jianmin Gao\***, "Expanding the scope of phage display with reversible covalent binding motifs," manuscript in preparation.
55. Kaicheng Li, Chelsea Weidman, and **Jianmin Gao\***, "Dynamic formation of imidazolidino boronate enables design of cysteine-responsive peptides," under review.

**Publications at Boston College** (undergrad coauthors underlined)

54. Samantha Cambray, Anupam Bandyopadhyay, and **Jianmin Gao\***, "Fluorogenic Diazaborine Formation of Semicarbazide with Designed Coumarin Derivatives," *Chem. Comm.*, **2017**, in press.
53. **Jianmin Gao\***, "Cation- $\pi$  lights up 'Halo'," *Biochemistry*, **2017**, 56, 5221-2.
52. Azade S. Hosseini\*, Christopher J. Pace, Adam A. Esposito and **Jianmin Gao\***, "Non-additive stabilization by halogenated amino acids reveals protein plasticity on a sub-angstrom scale," *Protein Science*, **2017**, 26, 2051-8.
51. Kaicheng Li and **Jianmin Gao\***, "Iminoboronate-mediated peptide cyclization with lysine homologues," *SynLett*, **2017**, 28, 1913-6.
50. Azade Hosseini, Wenjian Wang, Fredrik Haeffner,\* and **Jianmin Gao\***, "Metal-assisted Folding of Prolinomycin Allows Facile Design of Functional Peptides," *ChemBioChem*, **2017**, 18, 479-482.
49. Anupam Bandyopadhyay,# Samantha Cambray,# and **Jianmin Gao\***, "Fast diazaborine formation of semicarbazide enables facile labeling of bacterial pathogens," *J. Am. Chem. Soc.*, **2017**, 138, 871-8.
48. John W. Patrick, Breanna Zerfas, **Jianmin Gao** and David H. Russell\*, "Rapid capillary mixing experiments for the analysis of hydrophobic membrane complexes directly from aqueous lipid bilayer solutions," *Analyst*, **2017**, 142, 310-5.
47. Yan-Jiun Lee, M. J. Schmidt, Jeffery M. Tharp, Annemarie Weber, Amber L. Koenig, Hong Zheng, **Jianmin Gao**, Marcey L. Waters, Daniel Summerer\* and Wenshe R. Liu\*, "Genetically encoded fluorophenylalanines enable insights into the recognition of lysine trimethylation by an epigenetic reader," *Chem Commun.*, **2016**, 52, 12606-9.

46. Anupam Bandyopadhyay and **Jianmin Gao\***, "Targeting Biomolecules with Reversible Covalent Chemistry," *Curr. Opin. Chem. Biol.*, **2016**, *34*, 110-116.
45. **Jianmin Gao\*** and Azade S. Hosseini, "Current understanding of  $\pi$ - $\pi$  interactions and the applications in protein design," Chapter 21 – "*Non-covalent Interactions in the Synthesis and Design of New Compounds*" by the Wiley Publishing Group, **2016**, ISBN: 978-1-119-10989-1.
44. Anupam Bandyopadhyay, Samantha Cambray, and **Jianmin Gao\***, "Fast and Selective Labeling of N-terminal Cysteines via Boronic Acid-Accelerated Conjugation," *Chem. Sci.*, **2016**, *7*, 4589-4593.
43. Breanna Zerfas, Yecheon Joo, and **Jianmin Gao\***, "Gramicidin A mutants with antibiotic activity against both gram-positive and gram-negative bacteria," *ChemMedChem*, **2016**, *11*, 629-36.
42. Anupam Bandyopadhyay and **Jianmin Gao\***, "Iminoboronate-Based Peptide Cyclization That Responds to pH, Oxidation, and Small Molecule Modulators," *J. Am. Chem. Soc.* **2016**, *138*, 2098-101.
41. Anupam Bandyopadhyay and **Jianmin Gao\***, "Iminoboronate Formation Leads to Fast and Reversible Conjugation Chemistry of  $\alpha$ -Nucleophiles at Neutral pH," *Chem. Eur. J.*, **2015**, *21*, 14748-52.
40. Breanna Zerfas and **Jianmin Gao\***, "Recent Advances in Peptide Immunomodulators," *Curr. Top. Med. Chem.*, **2015**, *16*, 187-205.
39. Tao He, Anne Gershenson, Stephen J. Eyles, Yan-Jiun Lee, Wenshe R. Liu, Jiangyun Wang, **Jianmin Gao**, and Mary F. Roberts\*, "Fluorinated aromatic amino acids distinguish cation- $\pi$  interactions from membrane insertion," *J. Biol. Chem.*, **2015**, *290*, 19334-42.
38. Anupam Bandyopadhyay, Kelly A. McCarthy, Michael A. Kelly and **Jianmin Gao\***, "Targeting Bacteria via Iminoboronate Chemistry of Amine-Presenting Lipids," *Nat. Commun.*, **2015**, DOI: 10.1038/ncomms7561.
37. Anupam Bandyopadhyay and **Jianmin Gao\***, "Cancer-Targeting Peptides," eBook Chapter (Page 71-84) – "*Advances in the discovery and development of peptide therapeutics*" by the Future Science Group, **2015**, ISBN: 978-1-910419-01-4.
36. Ya-Juan Wang\*, Bamidele O. Tayo, Anupam Bandyopadhyay, Heming Wang, Tao Feng, Nora Franceschini, Hua Tang, **Jianmin Gao**, Yun Ju Sung, Robert C. Elston, Scott M. Williams, Richard S. Cooper, Ting-Wei Mu, Xiaofeng Zhu\* "The Association of the Vanin-1 N131S Variant with Blood Pressure is Mediated by Endoplasmic-Reticulum-Associated Degradation and Loss of Function," *PLoS Genetics* **2014**, doi:10.1371/journal.pgen.1004641.
35. Azade Hosseini, Hong Zheng and **Jianmin Gao\***, "Understanding Lipid Recognition by Protein-Mimicking Cyclic Peptides," *Tetrahedron* **2014**, *70*, 7632-8.
34. Fang Wang, Luoheng Qin, Patrick Wong and **Jianmin Gao\***, "Effects of Lysine Methylation on Gramicidin A Folding in Lipid Membranes," *Biopolymers: Peptide Science* **2013**, *100*, 656-61.

33. Lauren K. Regula, Richard Harris, Fang Wang, Jayne F. Koellhoffer, Chelsea D. Higgins, Kartik Chandran, **Jianmin Gao**, Mark E. Girvin, and Jonathan R. Lai\*, "Conformation and Lipid-Binding Properties of Peptides Corresponding to the Ebolavirus GP2 Membrane-Proximal External Region," *Biochemistry*, **2013**, *52*, 3393-404.
32. **Jianmin Gao\*** and Hong Zheng, "Recent Developments of Peptide-Based Markers of Membrane Lipids," *Future Med. Chem.* **2013**, *5*, 947-59.
31. Christopher Pace and **Jianmin Gao\***, "Exploring and Exploiting Polar- $\pi$  Interactions with Fluorinated Aromatic Amino Acids," *Acc. Chem. Res.* **2013**, *46*, 907-15.
30. Christopher Pace, Diane Kim and **Jianmin Gao\***, "Experimental Evaluation of CH- $\pi$  Interactions in a Protein Core," *Chem. Euro. J.* **2012**, *18*, 5832-6.
29. Yue Zhao and **Jianmin Gao\***, "Split Ligand for Lanthanide Binding: Facile Evaluation of Dimerizing Proteins," *Chem. Comm.* **2012**, *48*, 2997-9.
28. Luoheng Qin, Christopher Sheridan and **Jianmin Gao\***, "Synthesis of Tetrafluorinated Aromatic Amino Acids with Distinct Signatures in  $^{19}\text{F}$ -NMR," *Org. Lett.* **2012**, *14*, 528-31.
27. Fang Wang, Luoheng Qin, Christopher J. Pace, Patrick Wong, Ryan Malonis and **Jianmin Gao\***, "Solubilized Gramicidin A as Potential Systemic Antibiotics," *ChemBioChem* **2012**, *13*, 51-5.
26. Christopher Pace, Hong Zheng, Ruben Mylvaganam, Diane Kim and **Jianmin Gao\***, "Stacked Fluoroaromatics as Supramolecular Synthons for Programming Protein Dimerization Specificity," *Angew. Chem., Int. Ed.* **2012**, *51*, 103-7.
25. Hong Zheng, Fang Wang, Qin Wang and **Jianmin Gao\***, "Cofactor-Free Detection of Phosphatidylserine with Cyclic Peptides Mimicking Lactadherin," *J. Am. Chem. Soc.* **2011**, *133*, 15280-3.
24. Christopher Pace, Qiongying Huang, Fang Wang, Kanwal S. Palla, Amelia A. Fuller and **Jianmin Gao\***, "A FLAsH-tetracysteine Assay for Quantifying the Association and Orientation of Transmembrane  $\alpha$ -Helices," *ChemBioChem* **2011**, *12*, 1018-22.
23. Fang Wang, Luoheng Qin, Patrick Wong and **Jianmin Gao\***, "Facile Synthesis of Tetrafluorotyrosine and Its Application in pH Triggered Membrane Lysis," *Org. Lett.* **2011**, *13*, 236-9. *This paper is highlighted in the recent ACS virtual issue on Peptide Chemistry.*
22. Hong Zheng and **Jianmin Gao\***, "Highly Specific Heterodimerization Mediated by Quadrupole Interactions," *Angew. Chem., Int. Ed.* **2010**, *49*, 8635-9. *This article was rated as a Very Important Paper. See highlight by Kros et al. "Introducing Quadrupole Interactions into the Peptide Design Toolkit," Angew. Chem., Int. Ed. 2010, 49, 8570-2.*
21. Luoheng Qin, Julian Vastl and **Jianmin Gao\***, "Highly Sensitive Amyloid Detection Enabled by Thioflavin T Dimers," *Mol. Biosyst.* **2010**, *6*, 1791-5.
20. Hong Zheng, Kristofer Comeforo and **Jianmin Gao\***, "Expanding the Fluorous Arsenal: Tetrafluorinated Phenylalanines for Protein Design," *J. Am. Chem. Soc.* **2009**, *131*, 18-9.

### **Publications from Scripps**

19. **Jianmin Gao**, Daryl A. Bosco, Evan T. Powers, and Jeffery W. Kelly\*, “Localized Thermodynamic Coupling between Hydrogen Bonding and Microenvironment Polarity Significantly Stabilizes Proteins,” *Nat. Struct. Mol. Biol.* **2009**, *16*, 684-90.
18. Michelle R. Bunagan, **Jianmin Gao**, Jeffery W. Kelly\*, and Feng Gai\* “Probing the Folding Transition State Structure of the Villin Headpiece Subdomain via Sidechain and Backbone Mutagenesis,” *J. Am. Chem. Soc.* **2009**, *131*, 7470-6.
17. Marcus Jager, Songpon Deechongkit, Edward K. Koepf, Houbi Nguyen, **Jianmin Gao**, Evan T. Powers, Martin Gruebele, and Jeffery W. Kelly\*, “Understanding the Mechanism of  $\beta$ -sheet Folding from a Chemical and Biological Perspective,” *Biopolymers* **2008**, *90*, 751-8.
16. **Jianmin Gao** and Jeffery W. Kelly\*, “Towards Quantification of Protein Backbone-Backbone Hydrogen Bonding Energies: An Energetic Analysis of an Amide-to-Ester Mutation in an  $\alpha$ -Helix within a Protein,” *Protein Sci.* **2008**, 1096-101.
15. Yanwen Fu, **Jianmin Gao**, Jan Bieschke, Maria, A. Dendle, and Jeffery W. Kelly\*, “Amide-to-*E*-Olefin versus Amide-to-Ester Backbone H-Bond Perturbations: Evaluating the Repulsive Lone Pair-Lone Pair interaction for Extracting H-Bond Energies,” *J. Am. Chem. Soc.* **2006**, *128*, 15948-9.
14. Yan Zhang, Youngjun Kim, Nicolas Genoud, **Jianmin Gao**, Jeffery W. Kelly, Samuel L. Pfaff, Gordon N. Gill, Jack E. Dixon, and Joseph P. Noel\* “Determinants for Dephosphorylation of the RNA Polymerase II C-terminal Domain by Scp1,” *Mol. Cell.* **2006**, *24*, 759-70.

### **Publications from Stanford**

13. Sarah K. Jarchow-Choy, Andrew T. Krueger, Haibo Liu, **Jianmin Gao** and Eric T. Kool\*, “Fluorescent xDNA Nucleotides as Efficient Substrates for a Template-independent Polymerase,” *Nucleic Acids Res.* **2011**, *39*, 1586-94.
12. Haige Lu, Andrew T. Kruger, **Jianmin Gao**, Haibo Liu and Eric T. Kool\*, “Toward a Designed Genetic System with Biochemical Function: Polymerase Synthesis of Single and Multiple Size-Expanded DNA Base Pairs,” *Org. Biomol. Chem.* **2010**, *8*, 2704-10.
11. James C. Delaney, **Jianmin Gao**, Haibo Liu, Nidhi Shrivastav, John M. Essigmann\* and Eric T. Kool\*, “Efficient Replication Bypass of Size-expanded DNA Base Pairs in Bacterial Cells,” *Angew. Chem., Int. Ed.* **2009**, *48*, 4254-7.
10. James N. Wilson, **Jianmin Gao**, and Eric T. Kool\*, “Oligodeoxyfluorosides: Strong Sequence Dependence of Fluorescence Emission,” *Tetrahedron* **2007**, *63*, 3427-33.
9. Stephen R. Lynch, Haibo Liu, **Jianmin Gao**, and Eric T. Kool\*, “Toward a Designed, Functioning Genetic System With Expanded-size Base Pairs: Solution Structure of the 8-Base xDNA Double Helix,” *J. Am. Chem. Soc.* **2006**, *128*, 14704-11 (This work is featured in a Research Highlight in *Nature*, **2006**, *444*, 5 and highlighted in the News and Views in *Nature*, **2006**, *444*, 554-5) .
8. **Jianmin Gao**<sup>†</sup>, Haibo Liu<sup>†</sup>, and Eric T. Kool\*, “Assembly of the Complete Eight-Base Artificial Genetic Helix, xDNA, and Its Interaction with the Natural Genetic System,”

*Angew. Chem., Int. Ed.* **2005**, *44*, 3118-22. (†co first author. This paper is featured in *Chemical and Engineering News*, **2005**, *83*, 23.)

7. Haibo Liu, **Jianmin Gao**, and Eric T. Kool\*, "Helix-forming Properties of Size-expanded DNA (xDNA), an Alternative Four-base Genetic Form," *J. Am. Chem. Soc.* **2005**, *127*, 1396-402.
6. Haibo Liu, **Jianmin Gao**, and Eric T. Kool\*, "Size-expanded Analogues of dG and dC. Synthesis and Pairing Properties in DNA," *J. Org. Chem.* **2005**, *70*, 639-47.
5. **Jianmin Gao**, Soichiro Watanabe, and Eric T. Kool\*, "Modified DNA Analogues That Sense Light Exposure with Color Changes," *J. Am. Chem. Soc.* **2004**, *126*, 12748-9. (This work is featured in a Research Highlight in *Nature Methods* **2004**, *1*, 100-1.)
4. **Jianmin Gao**, Haibo Liu, and Eric T. Kool\*, "Expanded-Size Bases in Naturally Sized DNA: Evaluation of Steric Effects in Watson-Crick Pairing," *J. Am. Chem. Soc.* **2004**, *126*, 12748-9.
3. Haibo Liu, **Jianmin Gao**, Y. David Saito, Lystranne Maynard, Eric T. Kool\*, "Toward a New Genetic System with Expanded Dimensions: Size-expanded Analogues of Deoxyadenosine and Thymidine," *J. Am. Chem. Soc.* **2004**, *126*, 1102-9.
2. Haibo Liu, **Jianmin Gao**, Stephen Lynch, Y. David Saito, Lystranne Maynard, Eric T. Kool\*, "A Four-base-pair Genetic Helix with Expanded Size," *Science* **2003**, *302*, 868-71. (This paper is reported in *Chemical and Engineering News* **2003**, *81*, 3, highlighted in *Angew. Chem., Int. Ed.* **2004**, *43*, 1625-6, and featured in *ChemBioChem* **2004**, *5*, 765-7.)
1. **Jianmin Gao**, Christoph Strassler, Deborah Tahmasebi, and Eric T. Kool\*, "Libraries of Composite Polyfluors Built from Fluorescent Deoxyribosides," *J. Am. Chem. Soc.*, **2002**, *124*, 11590-1.

### **Presentations**

- Department of Chemistry, University of Massachusetts, Lowell, April 2018
- Department of Chemistry, Brown University, Mar. 2018
- Department of Chemistry, University of Vermont, Nov. 2017
- Symposium on Constrained Peptides and Macrocycles, Cambridge HealthTech Institute, Sept. 2017 in Boston
- American Chemical Society National Meeting, *Mid-Career Investigator Symposium*, Division of Biological Chemistry, Aug. 2017, Washington D.C.
- Department of Chemistry, Tsinghua University, Aug. 2017
- Department of Chemical Engineering, China University of Mining and Technology, Xuzhou China, Jul. 2017
- Department of Chemistry, University of Science and Technology of China, Hefei, China, Jul. 2017
- Dalian Institute of Chemical Physics, Dalian China, Jul. 2017
- School of Pharmacy, East China University of Science and Technology, Jul. 2017
- The iHuman Institute, ShanghaiTech, Jun. 2017
- Department of Chemistry, Fudan University, Jun. 2017
- National Key Laboratory of Bioorganic Chemistry, Shanghai Institute of Organic Chemistry, Jun. 2017

- 13th SINO-US Chemistry Professors Conference, Nantong, China, Jun. 2017
- Department of Chemistry, University of South Florida, Mar. 2017
- Gordon Conference on Antimicrobial Peptides, Ventura, Feb. 2017
- Department of Chemistry, Georgia State University, Apr. 2016
- Gordon Conference on Peptide Chemistry and Biology, Ventura, CA, Feb. 2016,
- PacifiChem, Advances in Peptide and Protein Chemistry, Dec. 2015
- Department of Chemistry, Delaware University, Dec. 2015
- Institute of Biophysics, Chinese Academy of Sciences, Beijing, China, Jun. 2015
- 11th SINO-US Chemistry Professors Conference, Soochow University, China, Jun. 2015
- Department of Biochemistry and Molecular Biophysics, Washing University, Apr. 2015
- Perkin Elmer, Boston, Mar. 2015
- Department of Physiology and Biophysics, Case Western University, Mar. 2015
- Department of Biochemistry, Brandeis University, Nov. 2014
- Department of Chemistry, MIT, Sept. 2014
- Invited speaker, Boston 30 Years of Novabiochem® Symposium, May 2014
- Invited speaker, the 23rd American Peptide Symposium, June 2013
- Department of Chemistry, University of Rhode Island, Mar. 2013
- Department of Biochemistry, Albert Einstein College of Medicine, Jan. 2013
- Special Chemistry Seminar, Department of Chemistry, Boston College, Oct. 2012
- Chemistry Seminar Series, University of Colorado, Boulder, Oct. 2012
- The Six International Peptide Engineering Meeting (PEM6), Emory University, Oct. 2012
- Chemistry Seminar Series, Colorado State University, Oct. 2012
- Chemistry Seminar Series, The Scripps Research Institute, Sept. 2012
- Biology Seminar Series, Department of Biology, Boston College, Sept. 2012
- American Chemical Society National Meeting, *Breakthroughs in Biological Chemistry*, Aug. 2012, Philadelphia, PA
- Bioorganic Chemistry Gordon Conference, Jun. 2012, Proctor Academy, NH
- Chemistry Seminar Series, Stanford University, May 2012
- Chemistry Seminar Series, University of California - Davis, May 2012
- Chemistry Seminar Series, Santa Clara University, May 2012
- Chemistry Seminar Series, University of Rochester, May 2012
- Chemistry Seminar Series, New York University, May 2012
- Chemistry Seminar Series, Florida State University, Apr. 2012
- Chemistry Seminar Series, University of Florida, Apr. 2012
- Chemistry Seminar Series, Tufts University, Apr. 2012
- Chemistry Seminar Series, Texas A&M University, Mar. 2012
- Mesilla Chemistry Workshop organized by Ken Houk, Marcey Waters and Bill Hase, Mar. 2011.
- ACS Fall National Meeting, Boston, Aug. 2010

### **Patents**

- **Jianmin Gao** and Hong Zheng, “*Cyclic lactadherin peptide mimetics and their uses*” International Application No. PCT/US12/39255, Filed on May 24, 2012; U.S. Patent No. 9,133,245, granted 9/15/2015

- **Jianmin Gao** and Hong Zheng, “*Novel cell-penetrating markers of apoptosis*” Provisional Patent Application U.S. Serial No. 61/642,678, filed on May 4, 2012; U.S. Patent No. 9,119,874, granted 9/1/2015
- **Jianmin Gao** and Fang Wang, “*Gramicidin A mutants that function as antibiotics with improved solubility and reduced toxicity*”, US Patent 9,243,037, granted 1/26/2016
- Eric T. Kool and **Jianmin Gao**, “*Fluorescent glycosides and methods for their use*”, PCT Int. Appl. (2004), WO2004019002, 2004.

### **Affiliations**

- American Chemical Society
- American Peptide Society
- Chinese-American Chemistry & Chemical Biology Professors Association (CAPA)

### **Current Collaborators**

- Prof. Tim van Opijnen, Boston College, Biology
- Prof. Eranthie Weerapana, Boston College, Chemistry
- Prof. Suzy Lapi, University of Alabama Medical Center, Radiology
- Prof. David Russell, Texas A & M University
- Prof. Jianguan Wang, Institute of Biophysics, Beijing China

### **Current Group Members**

- |                       |                              |                           |
|-----------------------|------------------------------|---------------------------|
| • Kelly McCarthy      | graduate student             | Stonehill College         |
| • Mike Kelly          | graduate student             | Lehigh University         |
| • Sam Cambray         | graduate student             | Villanova University      |
| • Kaicheng Li         | graduate student             | HuaZhong Univ. Sci. Tech. |
| • Wenjian Wang        | graduate student             | City Univ. Hong Kong      |
| • Chelsea Weidman     | graduate student             | Rochester Inst. Tech.     |
|                       |                              |                           |
| • Claire Ferguson     | undergraduate, class of 2018 |                           |
| • Nhat Minh Ho        | undergraduate, class of 2020 |                           |
| • Natalia Chmielewska | undergraduate, class of 2020 |                           |

### **Former Group Members and Current Positions**

- |                      |             |                                    |
|----------------------|-------------|------------------------------------|
| • Dr. Bandyopadhyay  | post-doc    | MIT, post-doc with Prof. Pentelute |
| • Dr. Xiuling Chi    | post-doc    | Kolltan Pharmaceuticals            |
| • Dr. Tao Ye         | Post-doc    | Abbvie Pharmaceuticals             |
| *****                |             |                                    |
| • Dr. Hong Zheng     | Ph.D., 2012 | Ra Pharmaceuticals, Cambridge, MA  |
| • Dr. Luoheng Qin    | Ph.D., 2012 | Eli Lilly R&D, Shanghai, China     |
| • Dr. Fang Wang      | Ph.D., 2012 | Amgen                              |
| • Dr. Chris Pace     | Ph.D., 2013 | Globaldata                         |
| • Dr. Yue Zhao       | Ph.D., 2015 | Jordi Labs                         |
| • Dr. Azade Hosseini | Ph.D., 2016 | Post-doc, MIT Chemistry            |



- Dr. Breana Zerfas      Ph.D., 2017                      Post-doc, Indiana, Medicinal Chemistry
- Kristen Demick        M.S., 2009                      High School Teacher, Melrose, MA
- Nanjiu Liu              M.S., 2011                      Nextcea, Inc.
- Lauren Blair            M.S., 2015                      Alnylam Pharmaceuticals
- \*\*\*\*\*
- Kevin Lebo              B.S., 2008                      John Hopkins, Biophysics Ph.D. Program
- Cassandra Abel        B.S., 2008                      Pharmaceutical industry
- Kristofer Comeforo   B.S., 2009                      Teach for America
- Julian Vastl             B.S., 2010                      Yale, Chemistry Ph.D. Program,  
*Beckman Scholar*
- Nicole Ciccolo        B.S., 2010                      Clinical Research Assistant at MGH  
*BC Sophomore Scholar*
- Ruben Mylvaganam    B.S., 2011                      Medical School, NYU
- Adrian Ong             B.S., 2011                      Medical School, SUNY Buffalo
- Christopher Sheridan B.S., 2012                      Boston College  
*Presidential Scholar*  
*Goldwater Fellowship*
- Patrick Wong         B.S., 2012                      Graduate School, Yale Immunology  
*Kozarich Fellowship*  
*Scholar of College*  
*McCarthy Prize in Natural Sciences*  
*NSF Pre-doctoral Fellowship*
- Diane Kim              B.S., 2012                      Masters in Medical Sciences, BU
- Ryan Malonis         B.S., 2013                      Research Assistant, NYU Medical School
- Chris Vaudo            B.S., 2014
- Jeremy Kaswer        B.S., 2014                      UConn Medcial School
- Adam Esposito        B.S., 2014                      Moderna Therapeutics
- Hak Kim                B.S., 2014                      Master program in education, Boston College
- Alex Truglio            B.S., 2015                      Analyst at GfK Market Access Consulting
- Yechaan (Eric) Joo    B.S., 2015                      Research Assistant at Harvard Med School
- Sara Daley             B.S., 2015                      Graduate student, Princeton Chemistry
- Renee Zhang          B.S., 2015                      Masters in Biotech, Johns Hopkins Univ.
- Gabrielle Jude        Class of 2017                    Boston College
- Elise Hon                Class of 2018                    Boston College
- Kyung Wong Seo      B.S., 2017                      Princeton University
- Irene Kim              B.S., 2017                      Samsung, Korea

### **Departmental Services**

- Director of Graduate Studies in Chemistry, 2013-
- Organizer, Chemical Biology seminar program 2007-
- Organizer, Novartis Symposium in Chemical Biology, Boston College, 2011-
- Organizer, The University Lecture Series by Prof. Dennis Dougherty, 2013
- Organizer, The University Lecture Series by Prof. Jay Keasling, 2009
- Faculty Organizer, Graduate Student Symposium 2010

- Co-chair of the Faculty Search Committee, 2009, 2011, 2012, 2014, 2015, 2016
- Member, Graduate Admissions Committee, 2007-2010
- Member, Ph.D. thesis defense committee of over 20 students: Dr. Allen Horhota, Dr. Yanling Wang, Dr. Carl Christianson, Dr. Wei Chen, Dr. Paul Widboom, Dr. Jay West, Dr. Heather Cooke, Dr. Elisa Shielding, Dr. Tim Montavon, Dr. Ye Liu, Dr. Joe Arico, Dr. Mingming Pu, Dr. Xiaomeng Shi, Dr. Kerry Salandria, Dr. Su Guo, Dr. Qin Wang, Dr. Wenyue Guo, Dr. Ayan Pal, Dr. Chris Theile, Dr. Becca Goldstein, Dr. Jingfei Cai, Dr. Yang Wei, Dr. Greg Cockrell, Dr. Heather Conductor, Dr. Jiongjia Cheng, Dr. Qiongying Huang, Dr. Eric Hardter, Dr. Nick Pace, Dr. Tao He, Dr. Yue Zhao, Dr. D. Alex Shannon, Dr. Shalise Couvertier, Dr. Yani Zhou, Dr. Julie Martell
- Member, Ph.D. thesis defense committee outside of BC: Dr. Zhao Liu (Tufts Univ.), Justin Quartararo (Tufts Univ.)
- Member, M.S. thesis defense committee of 4 students: Ms. Jessica Chow, Ms. Ming Chan, Ms. Jessica Martinez, Ms. Alena Carlson, Ms. Yunan Zheng

### **External Services**

- **Member**, Nomination Committee of the American Peptide Society, 06/2017-
- **Communication Director**, CAPA, 07/2016-
- **Member**, Travel Award Committee, the 24<sup>th</sup> American Peptide Society Meeting, 2015
- **Member**, Scientific Committee of the 23<sup>rd</sup> American Peptide Society Meeting, 2013
- **Manuscript Reviewer**  
*Proceedings of National Academy of Sciences, Accounts of Chemical Research, Analytical Chemistry, Journal of the American Chemical Society, Organic Letters, Biochemistry, ACS Chemical Biology, ACS Neuroscience, Biomacromolecules, Bioconjugate Chemistry, Journal of Physical Chemistry, Angewante Chemie, ChemBioChem, Biopolymers: Peptide Science, Organic & Biomolecular Chemistry, Molecular Biosystems, Protein Sciences, Tetrahedron, Bioorganic and Medical Chemistry, Bioorganic and Medical Chemistry Letters, Journal of Immunological Methods, Assays and Drug Development Technologies, Future Medicinal Chemistry Amino Acids, Science China*
- **Grant Reviewer and Panelist**  
*National Science Foundation, Divisions of Chemistry (CHE) and Divisions of Molecular Cell Biology (MCB); ACS Petroleum Research Fund; Research Corporation, Cottrell College Science Award*