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EDUCATION AND PROFESSIONAL POSITIONS

- 2017-present Glen H. Elder, Jr., Distinguished Professor
- 2015-present Vice Chair for Education
- 2014-2019 Gordon and Bowman Gray Distinguished Term Professor, UNC Chapel Hill
- 2009-present Professor of Chemistry, UNC Chapel Hill
- 2008-2012 Vice Chair of Undergraduate Studies
- 2005-2009 Associate Professor of Chemistry, UNC Chapel Hill
- 1999-2005 Assistant Professor of Chemistry, UNC Chapel Hill
- 1997-1999 NIH Postdoctoral Fellow, Columbia University
Advisor: Professor Ronald Breslow
- 1997 Ph.D., Organic Chemistry, The University of Chicago
Advisor: Professor William D. Wulff
- 1996 M.S., Organic Chemistry, The University of Chicago
Advisor: Professor William D. Wulff
- 1992 B. A., Chemistry, The University of California at San Diego
Advisor: Professor Charles L. Perrin
- 1991 NSF Undergraduate Research Fellow, Columbia University
Advisor: Professor Gerard Parkin

AWARDS and MEMBERSHIPS

- UNC University Award for the Advancement of Women, 2018
- Elected Fellow, AAAS, 2017
- NC ACS Local Section Distinguished Lecturer Award, 2015
- Mary Turner Lane Award from the Association for Women Faculty and Professionals (AWFP), given for improving the lives of women at UNC, 2015
- Tanner Teaching Award, 2014
- Alfred P. Sloan Fellowship, 2004-2006
- NSF Career Award, 2001-2006
- NIH Postdoctoral Fellowship, 1997-1999
- ACS Organic Division Research Fellow, sponsored by John Wiley & Sons, 1995-1996
- GAANN Fellow, 1992-1993
- Phi Beta Kappa, 1992
- Howard Hughes Honors Research Fellow, UCSD, 1991
- NSF REU Fellow, Columbia University, 1991
- Memberships: American Chemical Society, American Peptide Society, AAAS

PROFESSIONAL ACTIVITIES

- President, American Peptide Society, 2017-2019
- President-Elect, American Peptide Society, 2015-2017
- Editorial Advisory Board Member, *Journal of the American Chemical Society*, 2014-2020

- Co-Chair, 2013 American Peptide Society Meeting (with David Lawrence, UNC Dept of Chemistry)
- Guest Editor, *Accounts of Chemical Research*, “Aromatic Interactions in Chemistry and Biology”, April 2013 issue.
- Faculty Advisor, UNC WISE (Women in Science and Engineering) graduate student organization, 2013-present
- Section Editor, “Supramolecular Chemistry: From Molecules to Nanomaterials”, John Wiley and Sons, 2012.
- Co-Organizer, 2011 Mesilla Chemistry Workshop on “Aromatic Interactions in Chemistry and Biology”(with Ken Houk, UCLA Dept of Chemistry)
- UNC WOWS Scholar (Working on Women in Science), 2011-2013
- Guest Editor, *Current Opinion in Chemical Biology*, December 2009 issue.
- Advisory Board Member, International Symposia on Macrocyclic and Supramolecular Chemistry (ISMSC), 2008 – 2015
- Mentor, TANDEMplusIDEA, international mentoring program for female scientists, 2007 - 2009
- Co-chair, International Symposium on Dynamic Combinatorial Chemistry, November, 2007
- Board of Directors, Mesilla Chemistry Workshop, July 2006 – present
- Mentor, ACS Project Seed 2002-2012

PEER REVIEWED PUBLICATIONS AT UNC (* indicates corresponding author)

1. Effrat L. Fayer, William M. Gilliland Jr, J. Michael Ramsey, Nancy L. Allbritton and **Marcey L. Waters***, “N-Gemini peptides: cytosolic protease resistance via N-terminal dimerization of unstructured peptides” *Chem. Commun.* **2018**, 54, 204-7, DOI: [10.1039/C7CC06819K](https://doi.org/10.1039/C7CC06819K)
2. Lauren E. St Louis, Taylitz M. Rodriguez, **Marcey L. Waters***, “A study of 2-component i, i+3 peptide stapling using thioethers” *Bioorg. Med. Chem.* **2018**, 26, 1203-5, DOI: 10.1016/j.bmc.2017.10.037.
3. Stefanie A. Baril, Amber L. Koenig, Mackenzie W. Krone, Katherine I. Albanese, Qixin Cyndi He, Ga Young Lee, Kendall N. Houk, **Marcey L. Waters***, Eric M. Brustad*, “Investigation of Trimethyllysine Binding by the HP1 Chromodomain via Unnatural Amino Acid Mutagenesis”, *J. Am. Chem. Soc.*, **2017**, 139, 17253–6, DOI: 10.1021/jacs.7b09223
4. Kaiulani M. Houston, Adam T. Melvin, Gregory S. Woss, Effrat L. Fayer, **Marcey L. Waters***, and Nancy L. Allbritton*, “Development of beta-Hairpin Peptides for the Measurement of SCF-Family E3 Ligase Activity in Vitro via Ornithine Ubiquitination”, *ACS Omega*, **2017**, 2, 1198-1206.
5. Isaiah N. Gober, **Marcey L. Waters***, “Optimization of a synthetic receptor for dimethyllysine using a biphenyl-2, 6-dicarboxylic acid scaffold: insights into selective recognition of hydrophilic guests in water”, *Org. Biomol. Chem.* **2017**, 15, 7789-7795, DOI: 10.1039/C7OB01921A
6. Brendan C. Peacor, Christopher M. Ramsay, **Marcey L. Waters***, Fluorogenic sensor platform for the histone code using receptors from dynamic combinatorial libraries”, *Chem. Sci.* **2017**, 8, 1422-1428; DOI: 10.1039/c6sc03003c
7. Mee-Kyung Chung, Peter S. White, Stephen J. Lee, Michel R. Gagné*, **Marcey L. Waters***, “Investigation of a Catenane with a Responsive Noncovalent Network: Mimicking Long Range Responses in Proteins” *J. Am. Chem. Soc.*, **2016**, 138, 13344–13352; DOI: 10.1021/jacs.6b07833
8. Isaiah N. Gober and **Marcey L. Waters***, “Supramolecular Affinity Labeling of Histone Peptides Containing Trimethyllysine and Its Application to Histone Deacetylase Assays”, *J. Am. Chem. Soc.*, **2016**, 138, 9452-9; <http://dx.doi.org/10.1021/jacs.6b02836>
9. Yan-Jiun Lee, Moritz J Schmidt, Jeffery M Tharp, Annemarie Weber, Amber L Koenig, Hong Zheng, Jianmin Gao, **Marcey L Waters**, Daniel Summerer, Wenshe R Liu*, “Genetically encoded fluorophenylalanines enable insights into the recognition of lysine trimethylation by an epigenetic reader”, *Chem. Commun.* **2016**, 52, 12606-12609.

10. Mee-Kyung Chung, Stephen J. Lee, **Marcey L. Waters***, and Michel R. Gagné*, “Tetrameric psuedo-peptide receptors with allosteric properties” *Chem. Commun.* **2016**, 52, 8103-6.
11. Adam T. Melvin, Lukas D. Dumberger, Gregery S. Woss, **Marcey L. Waters***, Nancy L. Allbritton*, “Identification of a p53-based portable degron based on the MDM2-p53 binding region”, *Analyst*, **2016**, 141, 570-578.
12. Nicholas K. Pinkin, Ina Liu, Jessicca D. Abron, **Marcey L. Waters***, “Secondary binding interactions in a synthetic receptor for trimethyllysine”, *Chem. Eur. J.*, **2015**, 21, 17981-7; DOI: 10.1002/chem.201502302.
13. Nicholas K. Pinkin, Amanie N. Power and **Marcey L. Waters***, “Late stage modification of receptors identified from dynamic combinatorial libraries”, *Org. Biomol. Chem.* **2015**, 10939-45; DOI: 10.1039/c5ob01649e
14. Robyn J. Eisert, Sarah A. Kennedy, **Marcey L. Waters***, “Investigation of β -Sheet Interactions Between HP1 Chromodomain and Histone 3”, *Biochemistry*, **2015**, 54, 2314-2322. DOI: 10.1021/acs.biochem.5b00024.
15. J. E. Beaver,† B. C. Peacor,† J. V. Bain, L. I. James and **M. L. Waters***, “Contributions of pocket depth and electrostatic interactions to affinity and selectivity of receptors for methylated lysine in water”, *Org. Biomol. Chem.*, **2015**, 13, 3220-3226, DOI: 10.1039/C4OB02231A
16. M. Matsumoto, S. J. Lee, **M. L. Waters***, M. R. Gagné*, “A Catalyst Selection Protocol That Identifies Biomimetic Motifs from β -Hairpin Libraries”, *J. Am. Chem. Soc.*, **2014**, 136, 15817-20.
17. M. Matsumoto, S. J. Lee, M. R. Gagné* **M. L. Waters***, “Cross-strand histidine–aromatic interactions enhance acyl-transfer rates in β -hairpin peptide catalysts”, *Org. Biomol. Chem.*, **2014**, 12, 8711-18.
18. N. K. Pinkin, **M. L. Waters***, “Development and mechanistic studies of an optimized receptor for trimethyllysine using iterative redesign by dynamic combinatorial chemistry”, *Org. Biomol. Chem.*, **2014**, 7059-67, DOI: 10.1039/C4OB01249F
19. D. M. Ryan, M. K. Coggins, J. J. Concepcion, D. L. Ashford, Z. Fang, L. Alibabaei, D. Ma, T. J. Meyer, **M. L. Waters***, “Synthesis and Electrocatalytic Water Oxidation by Electrode-Bound Helical Peptide Chromophore–Catalyst Assemblies”, *Inorg. Chem.*, **2014**, 53, 8120–8128; DOI: 10.1021/ic5011488
20. S. E. Bettis, D. M. Ryan, M. K. Gish, L. Alibabaei, T. J. Meyer, **M. L. Waters**, J. M. Papanikolas, “Photophysical Characterization of a Helical Peptide Chromophore-Water Oxidation Catalyst Assembly on a Semiconductor Surface Using Ultrafast Spectroscopy” *J. Phys. Chem. C*, **2014**, 118, 6029-37.
21. S. Bezer, M. Matsumoto, M. W. Lodewyk, S. J. Lee; D. J. Tantillo, M. R. Gagné, **M. L. Waters***, “Identification and Optimization of Short Helical Peptides with Novel Reactive Functionality as Catalysts for Acyl Transfer by Reactive Tagging”, *Org. Biomol. Chem.*, **2014**, 12, 1488-94; DOI: 10.1039/c3ob41421c
22. A. T. Melvin, G. S. Woss, J. H. Park, L. D. Dumberger, **M. L. Waters**, N. L. Allbritton, “A Comparative Analysis of the Ubiquitination Kinetics of Multiple Degrons to Identify an Ideal Targeting Sequence for a Proteosome Reporter”, *PLOS One*, **2013**, 8, Article number e78082.
23. A. T. Melvin, G. S. Woss, J. H. Park, **M. L. Waters**, N. L. Allbritton, “Measuring Activity in the Ubiquitin-Proteosome System: From Large Scale Discoveries to Single Cell Analysis”, *Cell Biochem and Biophys*, **2013**, 67, 75-89.
24. S. Yang, A. Proctor, L. L. Cline, K. Houston, **M. L. Waters**, N. L. Allbritton, “ β -Turn Peptides Promote Stability of Peptide Substrates for Kinases within the Cytosolic Environment”, *Analyst*, **2013**, 138, 4305-11.

25. D. Ma, S. Bettis, K. Hanson, M. Minakova, L. Alibabaei, W. Fondrie, D. Ryan, G. Papoian, T.J. Meyer, **M. L. Waters***, J. Papanikolas*, "Interfacial Energy Conversion in Ru(II) Polypyridyl-Derivatized Oligoproline Assemblies on TiO₂", *J. Am. Chem. Soc.*, **2013**, *135*, 5250–5253.
26. L. I. James, J. E. Beaver, N. W. Rice, **M. L. Waters***, "A Synthetic Receptor for Asymmetric Dimethylarginine", *J. Am. Chem. Soc.*, **2013**, *135*, 6450–6455.
27. J. H. Park, M. L. **Waters***, "Positional effects of click cyclization on β -hairpin structure and function", *Org. Biomol. Chem.*, **2013**, *11*, 69-77.
28. D. J. Wilger, S. E. Bettis, C. K. Materese, M. Minakova, G. A. Papoian*, J. M. Papanikolas*, **M. L. Waters***, "Tunable Energy Transfer Rates via Control of Primary, Secondary, and Tertiary Structure of a Coiled Coil Peptide Scaffold", *Inorg. Chem.* **2012**, *51*, 11324–11338; (highlighted on the cover).
29. M.-K. Chung, P. S. White, S. J. Lee, **M. L. Waters***, M. R. Gagné*, "Self-Assembled Multi-Component Catenanes: Structural Insights into an Adaptable Class of Molecular Receptors and [2]-Catenanes", *J. Am. Chem. Soc.* **2012**, *134*, 11415–11429; DOI: 10.1021/ja302345n.
30. M.-K. Chung, S. J. Lee, **M. L. Waters***, M. R. Gagné*, "Self-Assembled Multi-Component Catenanes: The Role of Multivalency and Cooperativity on Structure and Stability", *J. Am. Chem. Soc.* **2012**, *134*, 11430–11443; DOI: 10.1021/ja302347q.
31. Hanson, K.; Wilger, D. J.; Jones, S. T.; Harrison, D. P.; Bettis, S. E.; Luo, H.; Papanikolas, J. M.; **Waters, M. L.**; Meyer, T. J. "Electron Transfer Dynamics of Peptide-Derivatized Ru(II)-polypyridyl Complexes on Nanocrystalline Metal Oxide Films." *Peptide Science*. **2012**, *100*, 25-37.
32. D. J. Wilger, J. H. Park, R. M. Hughes, M. E. Cuellar, and **M. L. Waters***, "Induced Fit Binding of a Polyproline Helix by a β -Hairpin Peptide", *Angew. Chem*, **2011**, *50*, 12201-4.
33. R. J. Eisert, **M. L. Waters***, "Tuning HP1 \square Chromodomain Selectivity for Di- and Trimethyl Lysine", *ChemBiochem* **2011**, *12*, 2786-90 (selected as a "hot article").
34. A. L. Stewart, J. H. Park, **M. L. Waters***, "Redesign of a WW Domain Peptide for Selective Recognition of ssDNA", *Biochemistry*, **2011**, *50*, 2575-2584.
35. M.-K. Chung, K. Severin, S. J. Lee, **M. L. Waters**, M. R. Gagné*, "Constitutionally selective amplification of multi-component 84-membered macrocyclic hosts for (-)-cytidine•H⁺", *Chemical Science*, **2011**, *2*, 744-747.
36. A. J. Riemen, **M. L. Waters***, "Positional Effects of Phosphoserine on β -Hairpin Stability", *Org. Biomol. Chem.*, **2010**, *8*, 5411-5417.
37. A. J. Riemen, **M. L. Waters***, "Dueling Post-Translational Modifications Control Folding and Unfolding of a β -Hairpin Peptide", *J. Am. Chem. Soc.* **2010**, *132*, 9007-9013.
38. S. Ghosh, L. A. Ingerman, A. G. Frye, S. J. Lee, M. R. Gagné*, **M. L. Waters***, "Dynamic Cyclic Thiopeptide Libraries From Thiol-Thioester Exchange", *Org Lett*, **2010**, *12*, 1860-1863.
39. L. A. Ingerman, M. E. Cuellar, **M. L. Waters***, "A Small Molecule Receptor that Selectively Recognizes Trimethyl Lysine in a Histone Peptide with Native Protein-like Affinity", *Chem. Commun.*, **2010**, *46*, 1839-41 (selected as a "hot article").
40. A. J. Riemen, **M. L. Waters***, "Controlling Peptide Folding with Repulsive Interactions between Phosphorylated Amino Acids and Tryptophan", *J. Am. Chem. Soc.*, **2009**, *131*, 14081–14087.
41. L. L. Cline, **M. L. Waters***, "Design of a β -Hairpin Peptide-Intercalator Conjugate for Simultaneous Recognition of Single Stranded and Double Stranded Regions of RNA", *Org. Biomol. Chem.*, **2009**, *7*, 4622-30 (selected for a feature in *Highlights in Chemical Biology*).

42. L. L. Cline, **M. L. Waters***, "The Structure of Well-folded β -Hairpin Peptides Promotes Resistance to Peptidase Degradation", *Peptide Science*, **2009**, 92, 502-507.
43. A. R. Riemen, **M. L. Waters***, "Design of Highly Stabilized β -Hairpin Peptides through Cation- π Interactions of Lysine and N-Methyllysine with an Aromatic Pocket", *Biochemistry* **2009**, 48, 1525-31.
44. A. L. Stewart, **M. L. Waters***, "Structural Effects on DNA Recognition by a Designed β -Hairpin", *ChemBiochem*, **2009**, 10, 539-544.
45. L. A. Ingerman, **M. L. Waters***, "Photoswitchable Dynamic Combinatorial Libraries: Coupling Azobenzene Photoisomerization with Hydrazone Exchange", *J. Org. Chem.* **2009**, 74, 111-117.
46. Z. R. Laughrey, S. E. Kiehna, A. J. Riemen, **M. L. Waters***, "Carbohydrate- π Interactions: What Are They Worth?", *J. Am. Chem. Soc.* **2008**, 130, 14625-14633.
47. A. J. Riemen, **M. L. Waters***, "Stabilization of the N-Terminal β -Hairpin of Ubiquitin by a Terminal Hydrophobic Cluster", *Peptide Science*, **2008**, 90, 394-398 (*for the Merrifield Memorial Issue*).
48. S. E. Kiehna, Z. R. Laughrey, **M. L. Waters***, "Evaluation of a Carbohydrate- π Interaction in a Peptide Model System", *Chem. Commun.*, **2007**, 4026-4028 (*selected as a "hot article"*).
49. S. E. Kiehna, Z. R. Laughrey, **M. L. Waters***, "Folding Induced CO₂-Soluble Peptides", *Chem. Commun.*, **2007**, 4297-4298.
50. R. M. Hughes, K. R. Wiggins, S. Khorasanizadeh, **M. L. Waters***, "Molecular Recognition of Trimethyllysine by Chromodomain Is Not Just the Hydrophobic Effect", *Proc. Natl. Acad. Sci., USA*, **2007**, 104, 11184-11188.
51. R. M. Hughes, M. L. Benschoff, **M. L. Waters***, "Effects of Chainlength and N-Methylation on a Cation- π Interaction in a β -Hairpin Peptide", *Chem. Eur. J.*, **2007**, 5753-5764.
52. R. M. Hughes, **M. L. Waters***, "Effects of Lysine Acylation in a β -Hairpin Peptide: Comparison of an Amide- π and a Cation- π Interaction", *J. Am. Chem. Soc.*, **2006**, 128, 13586-13591.
53. R. M. Hughes, **M. L. Waters***, "Arginine Methylation in a β -Hairpin Peptide: Implications for Arg- π Interactions, ΔC_p° , and the Cold Denatured State", *J. Am. Chem. Soc.*, **2006**, 128, 12735-12742.
54. D. G. Barrett, C. M. Minder, M. U. Mian, S. J. Whittington, W. J. Cooper, K. M. Fuchs, A. Tripathy, **M. L. Waters**, T. P. Creamer, G. J. Pielak, "Pressure Perturbation Calorimetry of Helical Peptides", *Proteins-Structure Function and Bioinformatics* **2006**, 63, 322-326.
55. W. J. Cooper, **M. L. Waters***, "Turn Residues in β -Hairpin Peptides as Points for Covalent Modification", *Org. Lett.*, **2005**, 7, 3825-3828.
56. R. M. Hughes, **M. L. Waters***, "Influence of N-Methylation on a Cation- π Interaction Produces a Remarkably Stable β -Hairpin Peptide", *J. Am. Chem. Soc.*, **2005**, 127, 6518-9.
57. S. M. Butterfield, W. J. Cooper, **M. L. Waters***, "Minimalist Protein Design: a β -Hairpin Peptide that Binds ssDNA", *J. Am. Chem. Soc.*, **2005**, 127, 24-25.
58. S. M. Butterfield, M. M. Sweeney, **M. L. Waters***, "Recognition of Nucleotides with Model β -Hairpin Receptors: Investigation of Critical Contacts and Recognition Selectivity", *J. Org. Chem.*, **2005**, 70, 1105 - 1114 (*highlighted on the cover of issue 4*).
59. C. D. Tatko, **M. L. Waters***, "Effect of Halogenation on Edge-Face Aromatic Interactions in a β -Hairpin Peptide: Enhanced Affinity with Iodo-Substituents", *Org. Lett.*, **2004**, 6, 3969-3972.
60. M. J. Rashkin, R. M. Hughes N. T. Calloway, **M. L. Waters***, "Orientation and Alkylation Effects on Cation- π Interactions", *J. Am. Chem. Soc.* **2004**, 126, 13320-13325.

61. C. D. Tatko, **M. L. Waters***, "Investigation of the Nature of the Methionine- π Interaction in a β -Hairpin peptide Model System", *Protein Science*, **2004**, 13, 2515-2522.
62. C. D. Tatko, **M. L. Waters***, "Comparison of C-H $\cdots\pi$ and Hydrophobic Interactions in a β -Hairpin Peptide: Impact on Stability and Specificity", *J. Am. Chem. Soc.*, **2004**, 126, 2028-2034.
63. S. M. Butterfield, C. M. Goodman, V. M. Rotello, **M. L. Waters***, "A Peptide Flavoprotein Mimic: Flavin Recognition and Redox Potential Modulation in Water Using a Designed β -Hairpin" *Angew. Chem. Int. Ed.*, **2004**, 43, 724-727.
64. C. D. Tatko, **M. L. Waters***, "The Geometry and Efficacy of Cation- π Interactions in Diagonal Positions of a Designed β -Hairpin", *Protein Science*, **2003**, 12, 2443-2452.
65. S. E. Kiehna, **M. L. Waters***, "Sequence Dependence of β -Hairpin Structure: Comparison of a Salt Bridge and an Aromatic Interaction", *Protein Science*, **2003**, 12, 2657-2667.
66. S. M. Butterfield, **M. L. Waters***, "A Rationally Designed β -Hairpin Peptide for Molecular Recognition of ATP in Water", *J. Am. Chem. Soc.*, **2003**, 125, 9580-9581.
67. L. K. Tsou, C. D. Tatko, **M. L. Waters***, "A Simple Cation- π Interaction Between a Phenyl Ring and a Protonated Amine Stabilizes an α -Helix in Water", *J. Am. Chem. Soc.*, **2002**, 124, 14917-14921.
68. S. M. Butterfield, P. R. Patel, **M. L. Waters***, "Contribution of Aromatic Interactions to α -Helix Stability", *J. Am. Chem. Soc.*, **2002**, 124, 9751-9755.
69. C. D. Tatko, **M. L. Waters***, "Selective Aromatic Interactions in β -Hairpin Peptides", *J. Am. Chem. Soc.*, **2002**, 124, 9372-9373.
70. M. J. Rashkin, **M. L. Waters***, "Unexpected Substituent Effects in Offset $\pi\cdots\pi\cdots\pi$ Stacked Interactions in Water", *J. Am. Chem. Soc.*, **2002**, 124, 1860-1861.

REVIEW ARTICLES and EDITORIALS AT UNC

71. **M. L. Waters**, "Post-Translational Modifications: Bonds that Bind", *Nat. Chem. Bio.* **2016**, 12, 768-9.
72. **M. L. Waters**, "From supramolecular chemistry to the nucleosome: studies in biomolecular recognition", *Beilstein J. Org. Chem.* **2016**, 12, 1863-1869
73. J. E. Beaver and **M. L. Waters***, "Molecular Recognition of Lys and Arg Methylation", *ACS Chem Bio*, **2016**, 11, 643-653.
74. **M. L. Waters**, "Aromatic Interactions", *Acc. Chem. Res.*, **2013**, 46, 873.
75. **M. L. Waters**, Daniel H. Appella, "Mimicking Nature: from Fundamentals to Applications", *Curr. Opin. Chem. Biol.* **2009**, 13, 641-2.
76. E. T. Kool, **M. L. Waters**, "The Model Student: What model systems can teach us about Biology", *Nat. Chem. Biol.*, **2007**, 3, 70-73.
77. R. M. Hughes, **M. L. Waters***, "Model Systems for β -Hairpins and β -Sheets", *Curr. Opin. Struct. Biol.*, **2006**, 514-524.
78. W. J. Cooper, **M. L. Waters***, "Molecular Recognition with Designed Peptides and Proteins", *Curr. Opin. Chem. Biol.*, **2005**, 9, 627-631.
79. **M. L. Waters***, "Aromatic Interactions in Peptides", *Biopolymers, Peptide Science*, **2004**, 76, 435-445.
80. **M. L. Waters***, "Aromatic Interactions in Model Systems", *Curr. Opin. Chem. Biol.*, **2002**, 6, 736-741.

PUBLICATIONS prior to UNC

81. **M. L. Waters**, M. E. Bos, W. D. Wulff, "Mechanistic Studies on the Reaction of Fischer Carbene Complexes with Alkynes. Does the Alkyne Insertion Intermediate form Irreversibly?" *J. Am. Chem. Soc.*, **1999**, *121*, 6403-6413.
82. **M. L. Waters**, T. A. Brandvold, L. Isaacs, W. D. Wulff, A. L. Rheingold "Stereo-electronic Effects on Product Formation from the E- and Z-Isomers of η^1 , η^3 -Vinyl Carbene Complexed Intermediates in the Reactions of Fischer Carbene Complexes with Alkynes." *Organometallics*, **1998**, *17*, 4298-4308.
83. W. A. Howard, T. M. Trnka, **M. Waters**, G. Parkin, "Terminal Chalcogenido Complexes of Zirconium: Synthesis and Reactivity of Cp*Zr(E)(NC₅H₅) (E = O, S, Se, Te)." *J. Organomet. Chem.* **1997**, *528*, 95-121.
84. S. Chamberlin, **M. L. Waters**, W. D. Wulff, "Contrasteric Regiochemical Incorporation of Stannylacetylenes in the Benzannulation Reaction." *J. Am. Chem. Soc.* **1994**, *116*, 3113-3114.
85. W. A. Howard, **M. Waters**, G. Parkin, "Terminal Zirconium Oxo Complexes: Synthesis, Structure, and Reactivity of $(\eta^5\text{-C}_5\text{Me}_4\text{R})_2\text{Zr}(\text{O})(\text{NC}_5\text{H}_4\text{R}')$." *J. Am. Chem. Soc.* **1993**, *115*, 4917-4918.

BOOK CHAPTERS

86. Amber L. Koenig and **Marcey L. Waters**, "Cation- π Interactions in Biomolecular Recognition", in *Aromatic Interactions: Frontiers in Knowledge and Application*, Darren W. Johnson and Fraser Hof, Eds., Royal Society of Chemistry, 214-237, **2017**.
87. **M. L. Waters**, "The Role of Aromatic Interactions in Biomolecular Recognition: Contributions to Affinity and Specificity", *Beilstein Workshop Proceedings*, 2008.
88. **M. L. Waters**, W. D. Wulff, "The Synthesis of Phenols and Quinones via Fischer Carbene Complexes", in *Organic Reactions*, Denmark, S. E., Ed.; John Wiley and Sons, Vol. 70, 2008.

INVITED LECTURES (2013-2018)

2018

- *Keynote Speaker*, Bordeaux Symposium on Foldamers, Bordeaux, France, Sept 24-26, 2018
- *ACS meeting*, Boston, MA, Aug 2018
- *Genetic Code Expansion Workshop*, Corvallis, OR, Aug 9-11, 2018
- *Foldamers Workshop*, New York, NY, June 20-22, 2018
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2017

- Department of Chemistry, NCSU, 2017
- *Keynote Speaker*, International Symposium on Macrocyclic and Supramolecular Chemistry (ISMCS), Cambridge, UK, July 2017
- 25th American Peptide Symposium, Whistler, BC, Canada, June 17-22, 2017
- Bioorganic GRC, June, 2017
- Appalachian State University, April 21, 2017
- Scripps Research Institute, March 30, 2017

2016

- University of Minnesota, Department of Chemistry, Oct 13, 2016
- *Invited Speaker*, SERMACS, Columbia, SC Oct 23-26, 2016
- *Keynote Speaker*, 23rd IUPAC Conference on Physical Organic Chemistry, Sydney, Australia, July 3-8, 2016
- *Foldamers Workshop*, New York, NY, June 23-24, 2016

2015

- *Ralph Hirschmann Lecturer*, Oberlin College, Nov 18, 2015

- NC-ACS Distinguished Lecturer, *September 2015*
- Departmental Seminar, Centro de Investigaciones Biológicas, CIB-CSIC, Madrid, Spain, *July 24, 2015*
- XXXV Biennial Meeting Royal Spanish Chemical Society, Coruna, Spain, *July 19-23, 2015*
- 24th American Peptide Symposium, Orlando, FL, *June 20-25, 2015*
- NSF Workshop on Supramolecular Chemistry, *May 31-June 4, 2015*
- Duke University Lecture invited by WISE (Women in Science and Engineering), *May 2015*
- James Flack Norris Award Symposium in Honor of Charles Perrin, National ACS Meeting, Denver, CO, *March 2015*
- Dept of Biochemistry and Biophysics, UNC Chapel Hill, *March 3, 2015*

2014

- 97th Canadian Chemistry Conference, *Vancouver, B.C., June, 2014*
- Bürgenstock Conference, Switzerland, *May 2014*
- ETH, Zurich, Switzerland, *May 12, 2014*
- Regis University, Denver, CO, *April 4, 2014*
- University of Washington, Seattle, WA, *April 23, 2014*
- Peptides Gordon Conference, Ventura, CA, *February, 2014*

2013

- *Supramolecular Chemistry Symposium*, SERMACS, Atlanta, GA, *November 2013*
- *Perrin 50th Anniversary Symposium*, University of California, San Diego, *Sept 30, 2013*
- National Meeting of the Canadian Society for Chemistry, Québec City, *May 26-30, 2013*
- University of Rochester, Department of Chemistry, *April 18, 2013*