

Curriculum Vitae

Mark Turlington

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Education

- Ph.D. Chemistry, University of Virginia, Charlottesville, VA, August 2011.
- B.S. Chemistry, *summa cum laude*, Furman University, Greenville, SC, 2006.

Positions

- **Associate Professor of Chemistry**, Berry College, 2019-present.
- **Assistant Professor of Chemistry**, Berry College, 2013-2019.
- **Adjunct Chemistry Faculty**, Nashville State Community College, Fall 2012.
- **Postdoctoral Fellowship**, Vanderbilt University, 2011-2013.

Courses Taught

- **CHM 221** (Organic Chemistry I)
- **CHM 221L** (Organic Chemistry I Laboratory)
- **CHM 222** (Organic Chemistry II)
- **CHM 222L** (Organic Chemistry II Laboratory)
- **CHM 341** (Biochemistry I)
- **CHM 475 I** (Medicinal Chemistry)
- **BCC 160** (Introduction to Scientific Research)

Research Experience

- **Independent Career, Berry College**, 2013-present
 - *Organic reaction methodology development*: Design and optimization of new reactions and synthetic routes for the asymmetric synthesis of chiral amines and aza-heterocycles that are important structural motifs in many drug-like molecules.
 - *Cystic fibrosis medicinal chemistry*: Design and synthesis of small molecule modulators of the cystic fibrosis transmembrane conductance regulator (CFTR) protein in collaboration with Drs. Stephen Aller and Steven Rowe of the University of Alabama-Birmingham.
 - *Anticancer medicinal chemistry*: Design and synthesis of proteolysis targeting chimeras (PROTACs) in collaboration with Dr. Jun Yin of Georgia State University.
- **Postdoctoral Research Fellow**, 2011-2013.
Vanderbilt University, Advisor: Dr. Craig Lindsley.
 - Synthesis of small molecules for positive allosteric modulation of the mGluR₅ receptor and small molecules for inhibition of coronavirus 3CL protease.
 - Natural product total synthesis.
- **Graduate Student Researcher**, 2007-2011.
University of Virginia, Advisor: Dr. Lin Pu.
 - Design of novel BINOL based ligands for asymmetric transition metal catalysis.
 - Development of new methodologies for asymmetric metal-catalyzed alkyne additions to aldehydes and applications of the resulting chiral propargylic alcohols in diastereoselective transformations.

- **Undergraduate Researcher**, 2003-2005.
Furman University, Advisor: Dr. Moses Lee.
 - Synthesis of distamycin related polyamides and determination of DNA minor groove binding properties.

Publications (Berry College undergraduate students underlined.)

Independent:

1. Ramey, E. E.; Whitman, E. L.; Buller, C. E.; Tucker, J. R.; Jolly, C. S.; Oberle, K. G.; Becksvoort, A. J.; **Turlington, M.**; Turlington, C. R. A Biodegradable, Polymer-Supported Oxygen Atom Transfer Reagent. *Polymers* **2023**, *15* (9), 2052.
2. Oberle, K. G.; Whitman, E. L.; Jolly, C. S.; Webster, K. A.; Marx, B. S.; Howard, C. M.; Hanger, C. A.; Ramey, E. E.; Zou, Y.; Lowe, J. C.; **Turlington, M.**; Turlington C. R. Metallopolymers in minutes via organocatalysis at room temperature. *Polym. Chem.* **2022**, *13*, 4747-4751.
3. Zhou, H.; Carpenter, T.; Fu, X.; Jin, B.; Ody, B.; Hassan, M. S.; Jacobs, S. E.; Cheung, J.; Nicholson, E. M.; **Turlington, M.**; Zhao, B.; Lorenz, S.; Cropp, T. A.; Yin, J. Linkage-Specific Synthesis of Di-Ubiquitin Probes Enabled by the Incorporation of Unnatural Amino Acid ThzK. *ChemBioChem* **2022**, *23* (8), e202200133. <https://doi.org/10.1002/cbic.202200133>.
4. Jolly, C.S.; Kochanowski, E.; Dodd, C. J.; Post, S. J.; Hill, H. M.; **Turlington, M.** Diastereoselective Synthesis of Terminal Bromo-Substituted Propargylamines via Generation of Lithium Bromoacetylide and Addition to Chiral *N-Tert*-Butanesulfinyl Aldimines. *J. Org. Chem.* **2021**, *86*, 2667–2681.
5. Doiron, J. E.; Le, C. A.; Bacsá, J.; Breton, G. W.; Martin, K. L.; Aller, S. G.; **Turlington, M.** Structural Consequences of the 1,2,3-Triazole as an Amide Bioisostere in Analogues of the Cystic Fibrosis Drugs VX-809 and VX-770. *ChemMedChem* **2020**, *15*, 1720-1730.
*Article selected as “Very Important Paper” and featured on September 2020 *ChemMedChem* Front Cover.
6. Doiron, J. E.; Le, C. A.; Ody, B. K.; Brace, J. B.; Post, S. J.; Thacker, N. L.; Hill, H. M.; Breton, G. W.; Mulder, M. J.; Chang, S.; Bridges, T. M.; Tang, L.; Wang, W.; Rowe, S. M.; Aller, S. G.; **Turlington, M.** Evaluation of 1,2,3-Triazoles as Amide Bioisosteres in Cystic Fibrosis Transmembrane Conductance Regulator Modulators VX-770 and VX-809. *Chem. Eur. J.* **2019**, *25*, 3662-3674.
7. Prince, C. E.; **Turlington, M.** Nitration of 2-tert-Butylaniline: Preparation of an Intermediate Used in the Development of the Cystic Fibrosis Drug Ivacaftor. *Chem. Educator* **2018**, *23*, 124-128.
8. Penk, D. N.; Robinson, N. A.; Hill, H. M.; **Turlington, M.** A flexible method for the synthesis of 2-substituted 1,2,5,6-tetrahydropyridines and piperidines from chloro-containing propargylamines. *Tetrahedron Lett.* **2017**, *58*, 470-473.
9. Jordan, S.; Starks, S. A.; Whatley, M. F.; **Turlington, M.** Highly Stereoselective Synthesis of Terminal Chloro-Substituted Propargylamines and Further Functionalization. *Org. Lett.* **2015**, *17*, 4842-4845.
10. Breton, G. W.; **Turlington, M.** Alternative synthetic routes to N-methyl-1,2,4-triazoline-3,5-dione (MeTAD) and other triazolinedione derivatives. *Tetrahedron Lett.* **2014**, *55*, 4661-4663.

Postdoctoral:

11. Malosh, C.; **Turlington, M.**; Bridges, T. M.; Rook, J. M.; Noetzel, M. J.; Vinson, P. N.; Steckler, T.; Lavreysen, H.; Mackie, C.; Bartolomé-Nebreda, J. M.; Conde-Ceide, S.; Martínez-Viturro, C. M.; Piedrafita, M.; Sánchez-Casado, M. R.; Macdonald, G. J.; Daniels, J. S.; Jones, C. K.; Niswender, C. M.; Conn, P. J.; Lindsley, C. W.; Stauffer, S. R. Acyl dihydropyrazolo[1,5-a]pyrimidinones as metabotropic glutamate receptor 5 positive allosteric modulators. *Bioorg. Med. Chem. Lett.* **2015**, *25*, 5115-5120.

12. **Turlington, M.**; Noetzel, M. J.; Bridges, T. M.; Vinson, P. N.; Steckler, T.; Lavreysen, H.; Mackie, C.; Bartolomé-Nebreda, J. M.; Conde-Ceide, S.; Tong, H. M.; Macdonald, G. J.; Daniels, J. S.; Jones, C. K.; Niswender, C. M.; Conn, P. J.; Lindsley, C. W.; Stauffer, S. R. Discovery and SAR of a novel series of metabotropic glutamate receptor 5 positive allosteric modulators with high ligand efficiency. *Bioorg. Med. Chem. Lett.* **2014**, *24*, 3641-3646.
13. **Turlington, M.**; Malosh, C.; Jacobs, J.; Manka, J. T.; Noetzel, M. J.; Vinson, P. N.; Jadhav, S.; Herman, E. J.; Lavreysen, H.; Mackie, C.; Bartolomé-Nebreda, J. M.; Conde-Ceide, S.; Martín-Martín, M. L.; Tong, H. M.; López, S.; MacDonald, G. J.; Steckler, T.; Daniels, J. S.; Weaver, C. D.; Niswender, C. M.; Jones, C. K.; Conn, P. J.; Lindsley, C. W.; Stauffer, S. R. Tetrahydronaphthyridine and Dihydronaphthyridinone Ethers As Positive Allosteric Modulators of the Metabotropic Glutamate Receptor 5 (mGlu₅). *J. Med. Chem.* **2014**, *57*, 5620-5637.
14. **Turlington, M.**; Noetzel, M. J.; Chun, A.; Zhou, Y.; Gogliottie, R. D.; Nguyen, E. D.; Gregory, K. J.; Vinson, P. N.; Rook, J. M.; Gogi, K. K.; Ziang, Z.; Bridges, T. M.; Daniels, J. S.; Jones, C.; Niswender, C. M.; Meiler, J.; Conn, P. J.; Lindsley, C. W.; Stauffer, S. R. Exploration of Allosteric Agonism Structure–Activity Relationships within an Acetylene Series of Metabotropic Glutamate Receptor 5 (mGlu₅) Positive Allosteric Modulators (PAMs): Discovery of 5-((3-Fluorophenyl)ethynyl)-N-(3-methyloxetan-3-yl)picolinamide (ML254). *J. Med. Chem.* **2013**, *56*, 7976-7996.
15. **Turlington, M.**; Chun, A.; Tomar, S.; Egglar, A.; Grum-Tokars, V.; Jacobs, J.; Daniels, J. S.; Dawson, E.; Saldanha, A.; Chase, P.; Baez-Santos, Y. M.; Lindsley, C. W.; Hodder, P. Mesecar, A. D.; Stauffer, S. R. Discovery of N-(benzo[1,2,3]triazol-1-yl)-N-(benzyl)acetamido)phenyl) carboxamides as severe acute respiratory syndrome coronavirus (SARS-CoV) 3CLpro inhibitors: Identification of ML300 and noncovalent nanomolar inhibitors with an induced-fit binding. *Bioorg. Med. Chem. Lett.* **2013**, *23*, 6172-6177.
16. Blobaum, A. L.; Bridges, T. M.; Byers, F. W.; **Turlington, M. L.**; Mattmann, M. E.; Morrison, R. D.; Mackie, C.; Lavreysen, H.; Bartolomé, J. M.; MacDonald, G. J.; Steckler, T.; Jones, C. K.; Niswender, C. M.; Conn, P. J.; Lindsley, C. W.; Stauffer, S. R.; Daneils, J. S. Heterotropic Activation of the Midazolam Hydroxylase Activity of CYP3A by a Positive Allosteric Modulator of mGlu₅: In Vitro to In Vivo Translation and Potential Impact on Clinically Relevant Drug-Drug Interactions. *Drug Metabolism & Disposition.* **2013**, *41*, 2066-2075.
17. Schulte, M. L. †; **Turlington, M.** †; Phatak, S. S.; Harp, J. M.; Stauffer, S. R.; Lindsley, S. R. Total Synthesis of Stemaphylline N-Oxide and Related C9a-Epimeric Analogues. *Chem. Eur. J.* **2013**, *19*, 11847-11852.
 †*Contributed equally to this work.*
18. Jacobs, J.; Grum-Tokars, V.; Zhou, Y.; **Turlington, M.**; Saldanha, S. A.; Chase, P.; Egglar, A.; Dawson, E. S.; Baez-Santos, Y. M.; Tomar, S.; Mielech, A. M.; Baker, S. C.; Lindsley, C. W.; Hodder, P.; Mesecar, A.; Stauffer, S. R. Discovery, Synthesis, And Structure-Based Optimization of a Series of N-(tert-Butyl)-2-(N-arylamido)-2-(pyridin-3-yl) Acetamides (ML188) as Potent Noncovalent Small Molecule Inhibitors of the Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV) 3CL Protease. *J. Med. Chem.* **2013**, *56*, 534-546.
19. Tarr, J. C.; **Turlington, M.**; Reid, P. R.; Utley, T. J.; Sheffler, D. J.; Cho, H. P. Klar, R.; Pancani, T.; Klein, M. T.; Bridges, T. M.; Morrison, R. D.; Xiang, Z.; Daniels, J. S.; Niswender, C. M.; Conn, P. J.; Wood, M. R.; Lindsley, C.W. Targeting selective activation of M₁ for the treatment of Alzheimer's disease: further chemical optimization and pharmacological characterization of the M₁ positive allosteric modulator ML169. *ACS Chem. Neurosci.*, **2012**, *3*, 884-895.

Graduate:

20. **Turlington, M.**; Pu, L. Asymmetric Alkyne Addition to Aldehydes Catalyzed by BINOL and Its Derivatives. *Synlett.* **2012**, *23*, 649-684.

21. **Turlington, M.**; Pu, L. Reverse the Diastereoselectivity of the Rh(I)-Catalyzed Pauson-Khand Cycloaddition. *Org. Lett.* **2011**, *13*, 4332-4335.
22. **Turlington, M.**; Du, Y.; Ostrum, S. G.; Santosh, V.; Wren, K.; Lin, T.; Sabat, M.; Pu, L. From Highly Enantioselective Catalytic Reaction of 1,3-Diynes with Aldehydes to Facile Asymmetric Synthesis of Polycyclic Compounds. *J. Am. Chem. Soc.* **2011**, *133*, 11780–11794.
23. Yunge, Z.; **Turlington, M.** LaPar, D.J.; Jones, D.R.; Harris, D.A.; Kron, I.L.; Pu, L.; Lau, C.L. Characterization of Novel Synthesized Small Molecular Compounds Against Non-Small Cell Lung Cancer. *Ann. Thorac. Surg.* **2011**, *92*, 1031-1037.
24. Yu, S.; DeBerardinis, A. M.; **Turlington, M.**; Pu, L. Study of the Fluorescent Properties of Partially Hydrogenated 1,1'-Bi-2-naphthol-amine Molecules and Their Use for Enantioselective Fluorescent Recognition. *J. Org. Chem.*, **2011**, *76*, 2814–2819.
25. DeBerardinis, A. M.; **Turlington, M.**; Pu, L. Activation of Vinyl Iodides for Highly Enantioselective Addition to Aldehydes. *Angew. Chem. Int. Ed.* **2011**, *50*, 2368-2370.
26. **Turlington, M.**; Yue, Y.; Yu, X.-Q., Pu, L. Catalytic Asymmetric Synthesis of Chiral Propargylic Alcohols for the Intramolecular Pauson-Khand Cycloaddition. *J. Org. Chem.* **2010**, *75*, 6941-6952.
27. Du, Y. H.; **Turlington, M.**; Zhou, X.; Pu, L. Highly Enantioselective Addition of Linear Alkyl Alkynes to Linear Aldehydes. *Tetrahedron Lett.* **2010**, *51*, 5024-5027.
28. DeBerardinis, A. M.; **Turlington, M.**; Ko, J.; Sole, L.; Pu, L. Facile Synthesis of a Family of H8BINOL-Amine Compounds and Catalytic Asymmetric Arylzinc Addition to Aldehydes. *J. Org. Chem.* **2010**, *75*, 2836-2850.
29. **Turlington, M.**; Pu, L. Preparation of (S)-3,3'-Bis-Morpholinomethyl-5,5',6,6',7,7',8,8'-Octahydro-1,1'-Bi-2-Naphthol. *Org. Synth.* **2010**, *87*, 59-67.
30. DeBerardinis, A. M.; **Turlington, M.**; Pu, L. Catalytic Asymmetric Addition of an in-situ Prepared Arylzinc to Cyclohexanecarboxaldehyde: (R)-(+)- α -Cyclohexyl-3-methoxy-benzenemethanol. *Org. Synth.* **2010**, *87*, 68-76.
31. Yue, Y.; **Turlington, M.**; Yu, X.-Q.; Pu, L. 3,3'-Anisyl-Substituted BINOL, H4BINOL, and H8BINOL Ligands: Asymmetric Synthesis of Diverse Propargylic Alcohols and Their Ring-Closing Metathesis to Chiral Cycloalkenes. *J. Org. Chem.* **2009**, *74*, 8681-8689.
32. **Turlington, M.**; DeBerardinis, A. M.; Pu, L. Highly Enantioselective Catalytic Alkyl Propiolate Addition to Aliphatic Aldehydes. *Org. Lett.* **2009**, *11*, 2441-2444.
33. DeBerardinis, A. M.; **Turlington, M.**; Pu, L. Activation of Functional Arylzincs Prepared from Aryl Iodides and Highly Enantioselective Addition to Aldehydes. *Org. Lett.* **2008**, *10*, 2709-2712.

Undergraduate:

34. Brown, T.; Mackay, H.; **Turlington, M.**; Sutterfield, A.; Smith, T.; Sielaff, A.; Westrate, L.; Bruce, C.; Kluza, J.; O'Hare, C.; Nguyen, B.; Wilson, W.D.; Hartley, J.A.; Lee, M. Modifying the N-terminus of polyamides: PyImPyIm has improved sequence specificity over f-ImPyIm. *Bioorg. Med. Chem.* **2008**, *16*, 5266-5276.
35. Brown, T.; Taherbhai, Z.; Sexton, J.; Sutterfield, A.; **Turlington, M.**; Jones, J.; Stallings, L.; Stewart, M.; Buchmueller, K.; Mack, H.; O'Hare, C.; Kluza, J.; Nguyen, B.; Wilson, D.; Lee, M.; Hartley, J.A. Synthesis and biophysical evaluation of minor-groove binding C-terminus modified pyrrole and imidazole triamide analogs of distamycin. *Bioorg. Med. Chem.* **2007**, *15*, 474-483.
36. **Turlington, M.**; Mackay, H.; Rutledge, C.; Taherbhai, Z.; Nguyen, B.; Wilson, D.; Lee, M. Synthesis and biophysical testing of a novel pyrrole-containing polyamide-benzamide hybrid. *Heterocycl. Commun.* **2006**, *12*, 89-92.

37. Uthe, P.B.; Staples, A.M.; **Turlington, M.**; Jones, J.B.; Blackmon, K.N.; Bailey, S.L.; Buchmueller, K.L.; Lee, M. Novel picolinic acid-containing pyrrole-imidazole polyamides: Synthesis and T-G mismatched base pair recognition. *Heterocycl. Commun.* **2005**, *11*, 163-166.

Patents

1. Conn, P. J.; Lindsley, C. W.; Stauffer, S. R.; Zhou, Y.; Bartolome-Nebreda, J. M.; MacDonald, G. J. Gogliotti, R. D.; **Turlington, M.** Substituted 5-(prop-1-yn-1-yl)picolinamide analogs as allosteric modulators of metabotropic glutamate receptor subtype 5. *PCT Int. Appl.* **2013**, WO 2013049255.

Funded External Grants

1. MRI: Acquisition of a Biolayer Interferometry Spectrometer to Measure Macromolecule Binding Interactions (2022). Qualley, D.; Poole, A.; Suroviec, A.; **Turlington, M.** National Science Foundation (Award No: 2215642). Amount funded \$108,500.

Presentations

1. Poster Presentation: **Turlington, M.** “Lessons learned from use of the 1,2,3-triazole as an amide bioisostere in cystic fibrosis drugs VX-809 and VX-770.” Presented at 262nd ACS National Meeting & Exposition, Atlanta, GA, United States, August 22-26, 2021.
2. Invited Seminar: **Turlington, M.** “An *In Situ* Click Chemistry Approach For the Discovery of CFTR Modulators.” Presented at University of Alabama at Birmingham, Birmingham, AL, November 1st, 2018.
3. Invited Seminar: **Turlington, M.** “Synthesis and Biological Evaluation of *in situ* Click Chemistry Compatible Tool Compounds for the Cystic Fibrosis Transmembrane Conductance Regulator.” Presented at Emory University, Atlanta, GA, October 17th, 2018.
4. Poster Presentation: **Turlington, M.**; Doiron, J.; Ody, B.; Brace, J.; Le, C.; Aller, S.; Tang, L.; Rowe, S. “Development of *in situ* click chemistry tool compounds for the cystic fibrosis transmembrane conductance regulator.” Presented at 37th National Medicinal Chemistry Symposium, Nashville, TN, April, 2018.
5. Invited Oral Presentation: **Turlington, M.**; Thacker, N. L.; Post, S. J.; Doiron, J.; Hill, H. M.; Alligood, D. M.; Tang, L.; Rowe, S.; Aller, S. “Synthesis and structure activity relationship of *in situ* click chemistry tool compounds for the cystic fibrosis transmembrane conductance regulator.” Presented at 69th Southeastern Regional Meeting of the American Chemical Society, Charlotte, NC, November, 2017.
6. Oral Presentation: **Turlington, M.**; Aller, S.; Rowe, S.; Alligood, D.; Carter, A.; Jordan, S.; Thacker, N.; Tang, L. “Progress Toward Development of an *in situ* Click Chemistry Approach for Discovery of Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) Modulators.” Presented at 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC, October, 2016.
7. Invited Seminar: **Turlington, M.** “Methodology and Medicinal Chemistry: Stereoselective Synthesis of Functionalized Propargylamines and Development of Small Molecule Correctors for Cystic Fibrosis.” Presented at Furman University, Greenville, SC, March, 2016.
8. Oral Presentation: **Turlington, M.**; Jordan, S.; Starks, S. A.; Whatley, M. F. “Highly Stereoselective Synthesis of Terminal Chloro-Substituted Propargylamines and Further Functionalization.” Presented at 71st Southeast Joint Regional Meeting of the American Chemical Society, Memphis, TN, November, 2015.
9. Invited Seminar: **Turlington, M.**; Pu, L. “Catalytic Asymmetric Alkyne Additions to Aldehydes.” Presented at Shenzhen Graduate School Peking University, China, November 2010.

10. Departmental Seminar (*award based, from 1st place in Departmental Poster Session*): **Turlington, M.**; Pu, L. “Catalytic Asymmetric Alkyne Additions to Aldehydes: Progress Toward Versatile Synthetic Intermediates.” Presented at University of Virginia, April 2009.
11. Poster Presentation: **Turlington, M.**; Rutledge, C.; Tahberhai, Z.; Weisbruch, P.; Isenhower, M.; Mackay, H.; Brown, T.; Binh, N.; Wilson, D.; Lee, M. “Synthesis and Biophysical Testing of a Novel Polyamide-Benzamidine Conjugate.” Presented at 57th Southeast Joint Regional Meeting of the American Chemical Society, Memphis, TN, November, 2005.

Undergraduate Conference Presentations (Presenting Berry College students underlined.)

1. Nelson, S. E.; Ody, B.; Liu, R.; Whitzel, S. L.; Dodd, C. J.; Williams, L. A.; **Turlington, M.**; Yin, J. “Discovery of Potent Cereblon-Recruiting HaloPROTAC.” Poster Presentation: Presented at 73rd Southeastern Regional Meeting of the American Chemical Society, San Juan, Puerto Rico, October 19-22, 2022.
2. Quigley, S.; Hasko, V.; Prado, M. G.; Nelson, S.; Tierney, L.; Beavers, M.; Ody, B.; Yin, J.; **Turlington, M.** “Progress towards the development of Aurora A degrading PROTACs.” Poster Presentation: Presented at 73rd Southeastern Regional Meeting of the American Chemical Society, San Juan, Puerto Rico, October 19-22, 2022.
3. Nelson, S.; Ody, B. K.; Liu, R.; Dodd, C. J.; Yin, J.; **Turlington, M.** “Investigation of Pomalidomide-Derived HaloPROTAC Tool Compounds.” Poster Presentation: Presented at 72th Southeastern Regional Meeting of the American Chemical Society, Birmingham, AL, November 10-13, 2021.
4. Nelson, S.; Ody, B. K.; Liu, R.; Dodd, C. J.; Yin, J.; **Turlington, M.** “Synthesis and evaluation of cereblon-targeting haloPROTACs.” Presented at 262nd ACS National Meeting & Exposition, Atlanta, GA, United States, August 22-26, 2021.
5. Jolly, C. S.; Kochanowski, E.; Dodd, C. J.; Post, S.; Hill, H. M.; **Turlington, M.** “Stereoselective synthesis of terminal bromo-substituted propargylamines.” Presented at 262nd ACS National Meeting & Exposition, Atlanta, GA, United States, August 22-26, 2021.
6. Evans, C. N.; Henager, M.; **Turlington, M.** “Synthesis of photoaffinity labels derived from VX-809.” Presented at 262nd ACS National Meeting & Exposition, Atlanta, GA, United States, August 22-26, 2021.
7. Brace, J.; Post, S. J.; Thacker, N. L.; Tang, L.; Rowe, S. M.; Aller, S. G.; **Turlington, M.** “Synthesis and biological evaluation of 1,2,3-triazole analogs of CFTR corrector VX-809.” Poster Presentation: Presented at 257th ACS National Meeting & Exposition, Orlando, FL, United States, March 31-April 4, 2019.
8. Brown, O.; **Turlington, M.** “Discovery of in situ click chemistry compatible analogs of F508del-CFTR corrector VX-809.” Poster Presentation: Presented at 257th ACS National Meeting & Exposition, Orlando, FL, United States, March 31-April 4, 2019.
9. Doiron, J.; Breton, G. W.; Tang, L.; Wang, W.; Rowe, S. M.; Aller, S. G.; **Turlington, M.** “Pharmacological analysis of 1,2,3-triazoles as amide bioisosteres in potentiators of the cystic fibrosis transmembrane conductance regulator protein.” Poster Presentation: Presented at 257th ACS National Meeting & Exposition, Orlando, FL, United States, March 31-April 4, 2019.
10. Marx, B.; Howard, C.; Whitman, E.; Hanger, C.; **Turlington, M.** “Investigation of coupling reagents for esterification reactions of carboxylic acid-containing cyclic carbonate monomers.” Poster Presentation: Presented at 257th ACS National Meeting & Exposition, Orlando, FL, United States, March 31-April 4, 2019.
11. Ody, B.; Doiron, J.; **Turlington, M.** “Synthesis of 1,2,3-triazole analogs of CFTR potentiator VX-770.” Poster Presentation: Presented at 257th ACS National Meeting & Exposition, Orlando, FL, United States, March 31-April 4, 2019.
12. Whitman, E.; **Turlington, M.** “Investigation of methods for introducing structural complexity into cyclic carbonate monomers.” Poster Presentation: Presented at 257th ACS National Meeting & Exposition, Orlando, FL, United States, March 31-April 4, 2019.

13. Hill, H.; Meadows, J.; Prince, C.; **Turlington, M.** “Development of method for the stereoselective synthesis of terminal bromo-substituted propargylamines.” Poster Presentation: Presented at 69th Southeastern Regional Meeting of the American Chemical Society, Charlotte, NC, November, 2017.
14. Doiron, J.; Ody, B.; Aller, S.; **Turlington, M.** “Progress towards the synthesis of a triazole containing VX-770 analog for evaluation of the triazole as an amide bioisostere.” Poster Presentation: Presented at 69th Southeastern Regional Meeting of the American Chemical Society, Charlotte, NC, November, 2017.
15. Brace, J.; Rowe, S.; Tang, L.; Aller, S.; **Turlington, M.** “Preparation of click compatible fragments of the VX-809 scaffold for the discovery of novel correctors for the cystic fibrosis transmembrane conductance regulator.” Poster Presentation: Presented at 69th Southeastern Regional Meeting of the American Chemical Society, Charlotte, NC, November, 2017.
16. Hambrick, K.; **Turlington, M.** “Synthesis and evaluation of “click-on” fluorophores that participate in the copper-catalyzed azide-alkyne cycloaddition reaction.” Poster Presentation: Presented at 69th Southeastern Regional Meeting of the American Chemical Society, Charlotte, NC, November, 2017.
17. Robinson, N.; Hill, H.; Penk, D.; **Turlington, M.** “General and enantioselective approach to functionalized piperidines via nucleophilic alkynes.” Poster Presentation: Presented at 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC, October, 2016.
18. Penk, D.; Robinson, N.; Hill, H.; **Turlington, M.** “Asymmetric synthesis of propargylamines for the construction of chiral aza-heterocycles.” Oral Presentation: Presented at 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC, October, 2016.
19. Jordan, S.; Tang, L.; Rowe, S.; Aller, S.; **Turlington, M.** “Progress towards evaluation of 1,2,3-triazole as an amide bioisostere in a VX-809 analog.” Poster Presentation: Presented at 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC, October, 2016.
20. Andersen, C.; Thacker, N.; Tang, L.; Rowe, S.; Aller, S.; **Turlington, M.** “Synthesis and biological evaluation of triazole-containing VX-809 analogs for in situ click chemistry with cystic fibrosis transmembrane conductance regulator (CFTR).” Poster Presentation: Presented at 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC, October, 2016.
21. Alligood, D.; Tang, L.; Rowe, S.; Aller, S.; **Turlington, M.** “Identification of the pharmacophore of VX-809 for the development of new correctors for the cystic fibrosis transmembrane conductance regulator.” Poster Presentation: Presented at 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC, October, 2016.
22. Robinson, N.; Penk, D.; **Turlington, M.** “An alkyne strategy for the stereoselective synthesis of piperidines.” Poster Presentation: Presented at 67th Southeast/71st Southwest Joint Regional Meeting of the American Chemical Society, Memphis, TN, November, 2015.

Service

College Service:

- Designer and Director of the Berry College Science Scholars Program, 2017-present.
- National and International Fellowships and Scholarships Committee, 2014-present.
 - Barry M. Goldwater Scholarship Faculty Representative.
- School of Math and Natural Sciences Safety Committee, 2014-present.
- Council for Student Scholarship Committee, 2017-2019.
 - Committee Chair, 2018-2019.
- Faculty Development Committee, 2014-2017.
 - Committee Chair, 2015-2016.
- Endowed Lectureship Committee, 2014-2016.
- Center for Integrity in Leadership Planning Committee, 2014-2015.

Professional Service:

- Reviewer for *Medicinal Chemistry Research*, 2022
- Reviewer for *ChemMedChem*, 2022
- Reviewer for *J. Org. Chem.*, 2021
- Reviewer for *ChemMedChem*, 2020
- Reviewer for *Bioorganic & Medicinal Chemistry Letters*, 2019.
- Reviewer for *Tetrahedron Letters*, 2019.
- Reviewer for M.J. Murdock Charitable Trust, 2018.
- Reviewer for *Letters in Organic Chemistry*, 2018.
- Reviewer for *Chemical Papers*, 2016.
- Reviewer for textbook chapters for Oxford University Press, 2016.
- Reviewer for manuscript submitted to the *Journal of Organic Chemistry*, 2015.
- Reviewer for grant submitted to ACS Petroleum Research Fund, 2015.

Fellowships, Honors, and Awards

- Mary S. and Samuel Poe Carden Award: 2021
 - Recognizes the highest standards of teaching, scholarship, helpfulness to students, and other contributions to the Berry College community.
- McRae Award: 2022, 2021, 2019, 2018, 2017
 - Presented by graduating chemistry seniors to chemistry professor whom they feel has the greatest impact on their career at Berry College.
- Drew Residential School on Medicinal Chemistry Full Tuition Scholarship: 2012.
- 1st Place, University of Virginia Departmental 3rd Year Poster Session: 2009.
- Merit-Based Departmental Fellowship, University of Virginia: 2006-2009.
- Phi Beta Kappa: 2006.
- Barry M. Goldwater Scholar: 2004-2006.
- James B. Duke Full Tuition Scholarship, Furman University: 2002-2006.