

**EDWARD EMMETT FENLON**

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DEPARTMENT OF CHEMISTRY  
 FRANKLIN & MARSHALL COLLEGE  
 415 Harrisburg Avenue  
 Lancaster, PA 17603  
 717-615-8090

**EDUCATION AND PROFESSIONAL PREPARATION**

- St. Lawrence University**, Canton, New York Aug 1986 – May 1990  
 B.S. in Chemistry with Honors, *Magna Cum Laude*  
 Honors Thesis: *Rearrangements of Epoxidized Furan Cycloadducts: Routes to Highly Functionalized Cyclopentanones*  
 Advisor: Larry G. French
- University of Illinois**, Urbana-Champaign, Illinois Aug 1990 – June 1995  
 Ph.D. in Organic Chemistry  
 Dissertation: *Hydrogen Bond Mediated Self-Assembly: Solid State Structures and Synthesis of Building Blocks*  
 Advisor: Steven C. Zimmerman
- Northern Kentucky University**, Highland Heights, KY June 1995 – July 1997  
 Camille and Henry Dreyfus Postdoctoral Fellow  
 Advisor: Robert J. Kempton

**PROFESSIONAL FELLOWSHIPS AND APPOINTMENTS**

- 1989 (summer) **Pew Foundation Summer Research Fellow**, Cornell U., Ithaca, NY (Meinwald Lab)  
 1990 – 1994 **Department of Education Fellow**, U. of Illinois at Urbana-Champaign  
 1995 – 1997 **Dreyfus Postdoctoral Fellow**, Dept. of Chemistry, Northern Kentucky U.  
 1997 – Feb 2003 **Assistant Professor** of Chemistry, Xavier University; Cincinnati, Ohio  
 Feb – May 2003 **Associate Professor** of Chemistry with Tenure, Xavier U.; Cincinnati, Ohio  
 Jul 2003 – Jun '09 **Assistant Professor** of Chemistry, Franklin & Marshall College; Lancaster, PA  
 Jul 2009 – Jun '16 **Associate Professor** of Chemistry with Tenure, F&M College; Lancaster, PA  
 Jul 2016 – present **Professor** of Chemistry, F&M College; Lancaster, PA

**SELECTED HONORS**

- DOE-ACS Nuclear Chemistry Summer School, San Jose State University, San Jose, California, 1988
- Captain of Cross Country, Indoor, and Outdoor Track & Field Teams, St. Lawrence U., 1989-1990
- Class of 1934 Scholarship for Outstanding Chemistry Student, 1989-1990
- Phi Beta Kappa, St. Lawrence University, 1990
- North Country Scholar & Herring College Scholar, St. Lawrence University, 1986-1990
- Gage Award for Outstanding Senior Research in Chemistry, St. Lawrence University, 1990
- Joan McDonald Award for Excellence in Science Teaching, Xavier University, March 2000
- One of eight faculty chosen to participate in Indiana University's Inaugural Symposium for Excellence in Undergraduate Chemical Research, September 2001
- Interviewed by [Bethany Halford for a \*Chemical & Engineering News\*](#) for molecular knot work, Sep 2006
- St. Lawrence U. Athletic Hall of Fame Inductee, Class of 2012 (1987 & 1988 Track & Field Teams)
- Interviewed by [Carmen Drahl for a \*Chemical & Engineering News\*](#) story on NOS article, Jul 2013
- NOS history article called “a tour de force” by Nobel Laureate E. J. Corey of Harvard U., Jul 2013
- Interviewed by [Nell Greenfieldboyce for an NPR \*Morning Edition\*](#) story on molecular knots, Jan 2017
- ACS Division of Organic Chemistry (DOC) National Organic Symposium (NOS) Symposium Executive Officer for 2025. 100-year anniversary symposium at RPI in Troy, NY.

## COURSES TAUGHT

CHM112 General Chemistry 2 lecture and laboratory  
CHM211 Organic Chemistry 1 lecture and laboratory  
CHM212 Organic Chemistry 2 lecture and laboratory  
CHM323 Medicinal Chemistry  
(CHEM411 Organic Synthesis & Analysis – Xavier U.)

## General Education

FND182 Pills, Pills, Pills  
CNX230 Mars & Venus on The Pill

## PEER-REVIEWED PUBLICATIONS

Hirsch Index (h-index): **17** (Google Scholar)

h-index for Independent (Xavier & F&M) Publications: **14** (Web of Science & Google Scholar)

Independent Publications cited **641 times** (Google Scholar) as of Feb 2023

i10-index: **24**

### As an Undergraduate:

- (1) Larry G. French, Edward E. Fenlon, Timothy P. Charlton, Rearrangement of Epoxidized Benzyne/Furan Cycloadducts: A Convenient Route to  $\alpha$ -Formyl and  $\alpha$ -Acyl-2-Indanones, *Tetrahedron Lett.* **1991**, *32*, 851-854. (Cited 15 times.)

### As a Graduate Student:

- (2) Edward E. Fenlon, Thomas J. Murray, Monica H. Baloga, Steven C. Zimmerman, Convenient Synthesis of 2-Amino-1,8-naphthyridines, Building Blocks for Host-Guest and Self-Assembling Systems, *J. Org. Chem.* **1993**, *58*, 6625-6628. (Cited 90 times.)
- (3) Sergei V. Kolotuchin, Edward E. Fenlon, Scott R. Wilson, Colin J. Loweth, Steven C. Zimmerman, Self Assembly of 1,3,5-Benzenetricarboxylic Acids (Trimesic Acids) and Their Analogues in the Solid State, *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 2654-2657; *Angew. Chem.* **1995**, *107*, 2873-2876. (Cited 352 times.)
- (4) Paul M. Peterson, Weiming Wu, Edward E. Fenlon, Sungho Kim, Steven C. Zimmerman, Synthesis of Heterocycles Containing Two Cytosine or Two Guanine Base-Pairing Sites. Novel Tectons for Self-Assembly, *Bioorg. Med. Chem.* **1996**, *4*, 1107-1112. (Cited 36 times.)
- (5) Sergei V. Kolotuchin, Paul A. Thiessen, Edward E. Fenlon, Scott R. Wilson, Colin J. Loweth, Steven C. Zimmerman, Self-Assembly of 1,3,5-Benzenetricarboxylic (Trimesic) Acid and Its Analogues, *Chem. – Eur. J.* **1999**, *5*, 2537-2547. (Cited 154 times.)

### During Independent Career as Corresponding Author:

(\* denotes undergraduate coauthors)

- (6) Bianca R. Sculimbrene,\* Raymond E. Decanio,\* Brandon W. Peterson,\* Emily E. Muntel,\* Edward E. Fenlon, Silatranyl-nucleosides: transition state analogues for phosphoryl transfer reactions, *Tetrahedron Lett.* **2001**, *42*, 4979-4982. (Cited 18 times; Impact Factor: **2.275**)
- (7) Christine A. Black,\* Jason W. Ucci,\* Jeremy S. Vorpapel,\* Matthew C. Mauck,\* Edward E. Fenlon, Stereoselective and improved syntheses and anticancer testing of 3'-O-silatranylthymidines, *Bioorg. Med. Chem. Lett.* **2002**, *12*, 3521-3523. (Cited 34 times; Impact Factor: **2.572**)
- (8) Chad M. Rink,\* Matthew C. Mauck,\* Irfan Asif,\* Michael E. Pitzer,\* Edward E. Fenlon, Syntheses of Silatranyl- and Geriatranyl-uridines, *Org. Lett.* **2005**, *7*, 1165-1168. (Cited 8 times; Impact Factor: **6.732**) [doi.org/10.1021/ol050133v](https://doi.org/10.1021/ol050133v)
- (9) Lisa N. Silverman, Michael E. Pitzer,\* Peter O. Ankomah,\* Steven G. Boxer, Edward E. Fenlon, Vibrational Stark Effect Probes for Nucleic Acids, *J. Phys. Chem. B* **2007**, *111*, 11611-11613. (Cited 73 *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 2654-2653 times; Impact Factor: **3.187**) [doi.org/10.1021/jp0750912](https://doi.org/10.1021/jp0750912)

- (10) Edward E. Fenlon, Brandon R. Ito,\* The Thread & Cut Method: Syntheses of Molecular Knot Precursors, *Eur. J. Org. Chem.* **2008**, 3065-3068. (Cited 13 times; Impact Factor: **3.068**) [10.1002/ejoc.200800387](https://doi.org/10.1002/ejoc.200800387)
- (11) Edward E. Fenlon, Open Problems in Chemical Topology, *Eur. J. Org. Chem.*, **2008**, 5023-5035. (Cited 49 times; Impact Factor: **3.068**). **Article featured on the Journal Cover:** <https://chemistry-europe.onlinelibrary.wiley.com/toc/10990690/2008/2008/30>
- (12) Matthew D. Watson,\* Xin Sonia Gai,\* Anne T. Gillies,\* Scott H. Brewer, Edward E. Fenlon, A Vibrational Probe for Local Nucleic Acid Environments: 5-Cyano-2'-deoxyuridine, *J. Phys. Chem. B*, **2008**, *112*, 13188-13192. (Cited 37 times; Impact Factor: **3.187**). [doi.org/10.1021/jp8067238](https://doi.org/10.1021/jp8067238)
- (13) Xin Sonia Gai,\* Edward E. Fenlon, Scott H. Brewer, A Sensitive Multispectroscopic Probe for Nucleic Acids, *J. Phys. Chem. B*, **2010**, *114*, 7958-7966. (Cited 29 times; Impact Factor: **3.187**) [doi.org/10.1021/jp101367s](https://doi.org/10.1021/jp101367s)
- (14) Anne T. Gillies,\* Xin Sonia Gai,\* Beth L. Buckwalter, Edward E. Fenlon, Scott H. Brewer <sup>15</sup>N NMR Studies of a Nitrile-Modified Nucleoside, *J. Phys. Chem. B*, **2010**, *114*, 17136-17141. (Cited 6 times; Impact Factor: **3.187**). [doi.org/10.1021/jp106493t](https://doi.org/10.1021/jp106493t)
- (15) Matthew J. Tucker, Xin Sonia Gai,\* Edward E. Fenlon, Scott H. Brewer, Robin Hochstrasser 2D IR photon echo of azido-probes for biomolecular dynamics, *Phys. Chem. Chem. Phys.*, **2011**, *13*, 2237-2241. (Cited 90 times; Impact Factor: **4.449**). [doi.org/10.1039/C0CP01625J](https://doi.org/10.1039/C0CP01625J)
- (16) Xin Sonia Gai,\* Basil A. Coutifaris,\* Scott H. Brewer, Edward E. Fenlon A direct comparison of azide and nitrile vibrational probes, *Phys. Chem. Chem. Phys.*, **2011**, *13*, 5926-5930. (Cited 55 times; Impact Factor: **4.449**) [doi.org/10.1039/C0CP02774J](https://doi.org/10.1039/C0CP02774J)
- (17) Jacob S. Lipkin,\* Rui Song,\* Edward E. Fenlon, Scott H. Brewer Modulating Accidental Fermi Resonance: What a Difference a Neutron Makes, *J. Phys. Chem. Lett.* **2011**, *2*, 1672-1676. (Cited 56 times; Impact Factor: **8.709**) [doi.org/10.1021/jz2006447](https://doi.org/10.1021/jz2006447)
- (18) Edward E. Fenlon, Brian J. Myers Profiles in Chemistry: A Historical Perspective on the National Organic Symposium, Perspective, *J. Org. Chem.* **2013** *78*, 5817-5831. (Cited 5 times; Impact Factor: **4.805**) **Article featured on the Journal Cover:** <https://pubs.acs.org/toc/jocea/78/12>
- (19) Elise M. Tookmanian,\* Edward E. Fenlon, Scott H. Brewer, Synthesis and protein incorporation of azido-modified unnatural amino acids, *RSC Advances* **2015**, *5*, 1274-1281. (Cited 39 times; Impact Factor: **3.289**) [doi.org/10.1039/C4RA14244F](https://doi.org/10.1039/C4RA14244F)
- (20) Elise M. Tookmanian,\* Christine M. Phillips-Piro, Edward E. Fenlon, Scott H. Brewer Azidoethoxyphenylalanine as a Vibrational Reporter and Click Chemistry Partner in Proteins, *Chem. Eur. J.* **2015**, *21*, 19096-19103. (Cited 16 times; Impact Factor: **5.16**) [doi.org/10.1002/chem.201503908](https://doi.org/10.1002/chem.201503908)
- (21) Daniel E. Levin,\* Andrew J. Schmitz, Shawn M. Hines,\* Kevin J. Hines,\* Matthew J. Tucker, Scott H. Brewer, Edward E. Fenlon Synthesis and Evaluation of the Sensitivity and Vibrational Lifetimes of Thiocyanate and Selenocyanate Infrared Reporters, *RSC Advances* **2016**, *6*, 36231-36237. (Cited 37 times; Impact Factor: **3.289**) [doi.org/10.1039/C5RA27363C](https://doi.org/10.1039/C5RA27363C)
- (22) Andrew J. Schmitz, David G. Hogle, Xin Sonia Gai,\* Edward E. Fenlon, Scott H. Brewer, Matthew J. Tucker Two-Dimensional Infrared Study of Vibrational Coupling between Azide and Nitrile Reporters in a RNA Nucleoside. *Journal of Physical Chemistry B*, **2016**, *120*, 9387-9394. (Cited 33 times; Impact Factor: **3.187**) [doi.org/10.1021/acs.jpcc.6b07212](https://doi.org/10.1021/acs.jpcc.6b07212)
- (23) Meiqi Luo,\* Christopher N. Eaton,\* Kenneth R. Hess, Christine M. Phillips-Piro, Scott H. Brewer, Edward E. Fenlon Paired Spectroscopic and Crystallographic Studies of Proteases. *Chemistry Select*, **2019**, *4*, 9836-9843. (Cited 2 times; Impact Factor **1.716**) [doi.org/10.1002/slct.201902049](https://doi.org/10.1002/slct.201902049)
- (24) Andrew J. Schmitz, Hari Datt Pandey, Farzaneh Chalyavi, Tianjiao Shi,\* Edward E. Fenlon, Scott H. Brewer, David M. Leitner, Matthew J. Tucker Tuning Molecular Vibrational Energy Flow within an Aromatic Scaffold via Anharmonic Coupling. *Journal of Physical Chemistry A*, **2019**, *123*, 10571-10581. (Cited 16 times; Impact Factor **2.836**) [doi.org/10.1021/acs.jpca.9b08010](https://doi.org/10.1021/acs.jpca.9b08010)

- (25) Farzaneh Chalyavi, Olajumoke Adeyiga, Julia Weiner,\* Judith Monzy,\* Andrew Schmitz, Justin Nguyen, Edward E. Fenlon, Scott Brewer, Samuel Odoh, Matthew J. Tucker 2D-IR Studies of Cyanamide (NCN) as a Spectroscopic Reporter of Dynamics in Biomolecules: Uncovering the Origin of Mysterious Peaks. *Journal of Chemical Physics* **2020**, *152*, 074201. (Cited 6 times; Impact Factor **4.304**) [doi.org/10.1063/1.5138654](https://doi.org/10.1063/1.5138654)
- (26) Farzaneh Chalyavi, Andrew J. Schmitz, Natalie R. Fetto, Matthew J. Tucker, Scott Brewer, Edward E. Fenlon Extending the Vibrational Lifetime of Azides with Heavy Atoms. *Phys. Chem. Chem. Phys.*, **2020**, *22*, 18007-18013. (Cited 11 times; Impact Factor: **3.567**) [doi.org/10.1039/D0CP02814B](https://doi.org/10.1039/D0CP02814B)
- (27) Elizabeth A. Margolis,\* Rebecca J. Keyes,\* Stephen D. Lockey, IV,\* Edward E. Fenlon Design and Synthesis of a Bis-macrocyclic Host and Guests as Building Blocks for Small Molecular Knots. *Beilstein J. Org. Chem.*, **2020**, *16*, 2314-2321. (Impact Factor: **2.622**). [doi.org/10.3762/bjoc.16.192](https://doi.org/10.3762/bjoc.16.192)
- (28) ByungUk Lee,\* Brianna M. Papoutsis,\* Nathan Y. Wong,\* Juliana Piacentini,\* Caroline Kearney,\* Nia A. Huggins, Nicole Cruz, Tracey T. Ng, Kexin Heather Hao,\* Jeremy S. Kramer,\* Edward E. Fenlon, Paul S. Nerenberg, Christine M. Phillips-Piro, Scott H. Brewer Unraveling Complex Local Protein Environments with 4-Cyano-L-Phenylalanine. *J. Phys. Chem. B*, **2022**, *126*, 8957-8969. (Impact Factor: **3.466**) [doi.org/10.1021/acs.jpccb.2c05954](https://doi.org/10.1021/acs.jpccb.2c05954)
- (29) Majid Hassani, C. J. Mallon, Judith N. Monzy,\* Andrew J. Schmitz, Scott H. Brewer, Edward E. Fenlon, Matthew J. Tucker Inhibition of vibrational energy flow within an aromatic scaffold via heavy atom effect *Journal of Chemical Physics* **2023**, *158*, 224201. (Impact Factor: **4.304**) [doi.org/10.1063/5.0153760](https://doi.org/10.1063/5.0153760)

#### OTHER PUBLICATIONS (INVITED *NEWS & VIEWS* COMMENTARY, EDITOR-REVIEWED)

- (30) Edward E. Fenlon Tying up some loose ends, *Nature Chem.* **2010**, *2*, 156-157. (Cited 10 times; Impact Factor: **25.87**) [doi.org/10.1038/nchem.561](https://doi.org/10.1038/nchem.561)
- (31) Edward E. Fenlon What tangled webs we weave, *Nature Chem.* **2018**, *10*, 1078-1079. (Cited 5 times; Impact Factor: **25.87**) [doi.org/10.1038/s41557-018-0135-3](https://doi.org/10.1038/s41557-018-0135-3)
- (32) Edward E. Fenlon Double, double trefoil and trouble, *Nature Synth.* **2022**, *1*, 586-587. (no Impact Factor yet, new journal) [doi.org/10.1038/s44160-022-00103-7](https://doi.org/10.1038/s44160-022-00103-7)

#### EXTERNAL SUPPORT FOR RESEARCH

Funding Source	Year(s)	Amount (\$)
Dreyfus Fellow supplemental award	1997-1998	10,000
Council on Undergraduate Research (CUR) summer student stipend	1998	3,000
Research Corporation Cottrell College Science Award	1999-2001	29,000
National Science Foundation – RUI	2002-2005	96,000
NSF REU supplemental (3 awards)	2002-2004	29,356
Research Corporation Cottrell College Science Award	2005-2007	38,088
ACS Project SEED summer high school student stipend	2007	2,500
Andrew W. Mellon Foundation/CPC	2009-2010	5,000
NIH (NIGMS) R15 AREA (Co-PI with Scott Brewer)	2010-2014	195,895
NIH (NIGMS) R15 AREA (Co-PI with Scott Brewer)	2014-2018	272,303
NIH R01 Subaward; PI: A. MacKerell, U. Maryland Baltimore	2017-2019	52,774
NIH (NIGMS) R15 AREA (Co-PI with Scott Brewer)	2019-2023	425,256
NSF MRI grant for a new NMR (PI)	2024-2027	<u>390,720</u>
<b>Total</b>		<b>\$ 1,549,892</b>

## INTERNAL SUPPORT FOR RESEARCH

Funding Source	Year(s)	Amount (\$)
Joan McDonald Teaching Award – Research Fund	2000	5,000
Faculty Hackman Research Grant	2006-2007	5,000
Leser Grant awarded to Pierre Ankomah '07	2006-2007	1,000
Leser Grant awarded to Brandon Ito '08	2007-2008	750
Leser Grant awarded to David Patterson '08	2007-2008	750
Clare Booth Luce awarded to Kelsey J. Michenko '16	2015-2016	<u>2,000</u>
<b>Total</b>		<b>\$14,500</b>

## RESEARCH PRESENTATIONS (SINCE STARTING AT F&M)

- (1) Edward E. Fenlon, Chad Rink, Irfan Asif, Matt Mauck, Brooke Keeley, *Atranyl-Nucleosides: Synthesis and Applications for Ribozyme Structural Biology*. Poster at the Bioorganic Gordon Conference. Andover, NH; June 16 and 17, 2004.
- (2) Edward E. Fenlon, Shin Lin Goh, *Towards a Polyethylene Knot*. Poster at the 39<sup>th</sup> NOS. Salt Lake City, Utah; June 12, 2005.
- (3) Edward E. Fenlon, Shih Lin Goh, Jason M. Keil, Matthew S. Dietz, *Topological holy grails: Progress toward new molecular knots*. Oral presentation at the 232<sup>nd</sup> ACS National Meeting. San Francisco, CA; September 10, 2006.
- (4) Edward E. Fenlon, *Topological holy grails: Progress toward new molecular knots*. Invited research presentation at Carnegie Mellon University. Pittsburgh, PA; November 9, 2006.
- (5) Edward E. Fenlon, *I. New Molecular Knots, II. Electric Fields in Nucleic Acids via the Vibrational Stark Effect*. Invited research presentation at Temple University. Philadelphia, PA; March 1, 2007.
- (6) Edward E. Fenlon, *The World's Smallest Knot*. Invited lecture & demo at Lancaster Country Day, Lancaster, PA; May 16, 2007.
- (7) Edward E. Fenlon, Matthew S. C. Dietz, David M. Patterson, *Recent advances in the chemistry of molecular knot*. Oral presentation at the 234<sup>th</sup> American Chemical Society National Meeting. Boston, MA; August 21, 2007.
- (8) E. E. Fenlon, *Recent advances in the chemistry of molecular knots*. Invited presentation at Messiah College. Grantham, PA; March 24, 2009.
- (9) Edward E. Fenlon, Rebecca J. Keyes, Stephen D. Lockey, IV, *Recent advances in the chemistry of molecular knots*. Oral presentation at the 239<sup>th</sup> American Chemical Society National Meeting. San Francisco, CA; March 24, 2010.
- (10) E. E. Fenlon, *Recent advances in the chemistry of molecular knots*. Invited presentation at Brown U. Providence, RI; April 12, 2011
- (11) Edward E. Fenlon, Scott H. Brewer, Xin Sonia Gai, Anne T. Gillies, Basil Coutifaris, Rui Song, Jacob S. Lipkin, *Multispectroscopic Probes for Nucleic Acids: Synthesis and Applications of Azide, Cyanate, and Nitrile Isotopomers*. Poster presentation at the 42<sup>nd</sup> National Organic Symposium. Princeton, NJ; June 8, 2011
- (12) Edward E. Fenlon, Brian J. Myers *Then and Now: Seattle NOS 1959 vs. 2013*. Poster presentation at the 43<sup>rd</sup> National Organic Symposium. Seattle, WA; June 24-25, 2013
- (13) E. E. Fenlon, *Recent advances in the chemistry of molecular knots*. Invited presentation at Albright College. Reading, PA; March 13, 2014

- (14) Edward E. Fenlon, Ian J. Fucci, Kelsey J. Michenko, *Design and synthetic progress towards new aromatic radicals for DNP*. Oral presentation at the 248<sup>th</sup> ACS National Meeting, Organic Division. San Francisco, CA; August 11, 2014.
- (15) Edward E. Fenlon, Brian J. Myers, Thomas T. Tidwell, *History and Development of the Reaction Mechanisms Conference*. Oral presentation at the 248<sup>th</sup> ACS National Meeting, Division of History. San Francisco, CA; August 13, 2014.
- (16) Edward E. Fenlon, *Hydration, Electric Field, and Distance Measurements in Biomolecules Using Vibrational Reporters*. Oral presentation at the Steven C. Zimmerman 60<sup>th</sup> Birthday Symposium. Urbana, IL; August 18, 2017.
- (17) Edward E. Fenlon, Scott H. Brewer, Matthew J. Tucker, Xin Sonia Gai, Jessie Tianjiao Shi, Julia M. Weiner, Judith N. Monzy, Jeremy S. Kramer, Maria C. Meriwether, Andrew J. Schmitz, David G. Hogle. *Vibrational Coupling: An IR Analogue to FRET*. Poster presentation at the 46<sup>th</sup> NOS. Bloomington, IN; June 25, 2019.
- (18) Edward E. Fenlon, Ellia Osofsky, Alonna Reilly, Judith Monzy, Savannah Familo, Gillian Williams, Holly Batchelder, Tracy Lin. *Vibrational Coupling: An IR Analogue to FRET*. Oral presentation at the American Chemical Society (ACS) National Meeting. Indianapolis, IN; March 29, 2023.
- (19) Edward E. Fenlon. Presider over morning session and *Announcement Presentation for the location of the 2025 NOS*. 48<sup>th</sup> National Organic Symposium (NOS). Notre Dame, IN; July 20, 2023.

## UNDERGRADUATE RESEARCH STUDENTS

### SUMMARY

- Mentored 68 research students since 1997
- 34 students presented research at regional/national meetings
- 39 undergraduate students were coauthors on publications
- 14 research students earned a MD (11) or DO (3)
- 10 research students earned a science PhD
- 7 research students earned a MS
- 3 research students earned an MD/PhD
- 2 research students earned PharmD
- 2 research students earned a DDS
- 2 research students earned a PA
- 2 research students are chemistry prof. at undergraduate institutions
- 1 research student served in the Peace Corp and earned RN, BSN
- 1 research student earned a JD

### STUDENTS

#	Last Name	First Name	Mai den	or F&M	Grad Yr	Degr ee	Institution	Note / Field of Study	Current position
1	Mattingly	Matt		XU	1998		US Army	ROTC	died in Iraq, Sep 2006
2	Wenning	Ben		XU	1998	DDS	Ohio State U.	December grad	Dentist
3	Sculimbrene	Bianca	Nap olita	XU	1999	PhD MB	Boston College	MIT Post Doc	Chem Prof Holy Cross
4	Hogan	Lori	r	XU	1999	A	Xavier U.		Procter & Gamble
5	Ucci	Jason W.		XU	1999		U. Conn.	Mol. Biology Med & Pharm	
6	Schaefer	Kevin		XU	1999	MS	Ohio State U.	Chem	Boehringer Ingelheim
7	Vetter	Kerry A.		XU	1999				Procter & Gamble
8	Muntel	Emily E.		XU	2000	MD	U. Cincinnati Vanderbilt		Rheumatologist
9	Roschek	William		XU	2000	PhD	U.'06	Fl. Gulf Coast Post Doc	Nestlé Purina, St. Louis
10	Cafferky	Katie	DeN icola	XU	2001	PhD	U. Cincinnati	Chemistry	Alnylam, Cincinnati

11	Hindery	Christine	Black	XU	2001	Phr mD	Ohio State U.		Pharmacist
12	Page	Michael		XU	2001	PhD	UCLA	Caltech Post Doc	Chem Prof Cal Poly P.
13	Vorpagel	Jeremy		XU	2001			Aldrich Chemical	deceased 13 Nov 07
14	Rink	Chad		XU	2002	JD	U. Cincinnati		Patent Lawyer in VA
15	Decanio	Ray		XU	2002	MD	U. Cincinnati		Radiologist
16	Peterson	Brandon		XU	2002	PhD	U. Groningen		
17	Bloomfield	Michael		XU	2002	MD	Northwestern		Orthopaedic Surgeon
18	Mettman	Amy		XU	2002	MD	U. Cincinnati		Otolaryngologist
19	Hamilton	Tina	Staton	XU	2002	Phr mD	U. Cincinnati		Clinical Pharmacist
20	Villari	Julie		XU	2002	MD	Creighton U.		Emergency Medicine
21	Mauck	Matt		XU	2003	PhD	Med C. Wisc.		Prof. UNC Med School
22	Asif	Irfan		XU	2003	MD	U. Cincinnati		Family & Sports Med.
23	Maupin	Emily	Geier	XU	2003	DO	Ohio U.		Emergency Medicine
24	Meer	Ben		XU	2003	DDS	Marquette U.		Dentist
25	Keeley	Brooke		F&M	2004	DP M	Temple U.		Podiatric Surgeon
26	Paviol	Scott		F&M	2005	MD	PennStHershey		Dermatologist
27	Matz	Joseph (Jay)		F&M	2005	MD	Temple U.		Resident
28	Worthington	Meredith	Mintzer	F&M	2005	PhD	Texas A&M	Chemistry	Therapeutic Res. Ctr.
29	Goh	Shih Lin (Lynda)		F&M	2006	PhD	Cornell U.	Biochemistry	Post Doc Merck Pharm.
30	Pitzer	Michael		F&M	2006	MD	PennStHershey U.		Family Medicine
31	Rheam	Michael		F&M	2006	MS MD/	Pennsylvania	Chemistry	Science Teacher
32	Ankomah	Pierre		F&M	2007	PhD	Emory U.	Microbial Pop. Biol.	Resident, Mass Gen.
33	Boyce	Beverly	Menghetti	F&M	2007	RN, BSN	U. Wyoming	Peace Corp; Nursing	Labor & Delivery Nurse
34	Dietz	Matthew		F&M	2007	DO	U. NE College		Pediatrician in OR
35	Ito	Brandon		F&M	2008	MS; MD/	Illinois; Bryant	Chemistry PhD 2019	Physician's Assistant
36	Keil	Jason M.		F&M	2008	PhD	U. Michigan	neurosci.	MD-PhD student
37	Patterson	David		F&M	2008	PhD	UC Irvine	Chemistry	Post Doc UCSF
38	Gillies	Anne		F&M	2009	PhD	U. Michigan	Chemical Biol.	
39	Jenkins	William		F&M	2009			Moore mentee 4 weeks	
40	Gai	Xin (Sonia)		F&M	2010	MS	Stanford U.	Chemistry	Velos, Fremont, CA
41	Coutifaris	Basil		F&M	2011	MS	Drexel U.	Mechanical Eng.	IBM
42	Keyes	Rebecca		F&M	2011				PCOM Biomedical
43	Lockey	Stephen		F&M	2011	MS, MD	U. Cincinnati	Epidem.;	Medical resident
44	Margolis	Elizabeth		F&M	2012	DO	Phil. Col. Osteo. Med.	Georgetown U.	Medical resident
45	Song	Rui		F&M	2012			Chemistry;	
46	Pan	Hongyi (Kyle)		F&M	2013		Columbia U.	Columbia U.	Op. Res. grad student
47	Fucci	Ian		F&M	2014		Carnegie Mellon		Researcher at Yale U.
48	Lakin	Amy		F&M	2014	PhD	UNC	Chemistry; NMR	Post Doc NIH; Byrd lab
49	Levin	Dan		F&M	2016	MD	Rutgers: Robert Wood Johnson	Social Work	Graduate student
50	Michenko	Kelsey		F&M	2016	PA	Chatham U.		Medical Resident
51	Shi	Tianjiao (Jessie)		F&M	2017	MS	Wash U. StL	Engineering	Physician's Assistant
52	Luo	Meiqi (Maggie)		F&M	2018		UPenn	Med school	3+3 program
53	Eaton	Chris		F&M	2018			Med school	

54	Fowler	Gwendolyn	F&M	2018		
55	Hao	Kexin (Heather)	F&M	2019	Northeastern	Computer sci
56	Weiner	Julia	F&M	2019	GWU Sidney	Med school
57	Monzy	Judith	F&M	2021	Kimmel	Med school
58	Kramer	Jeremy	F&M	2021	UNC	Chem grad
59	Meriwether	Maria	F&M	2021	NIH	Postbacc.
60	Lamb	Matthew	F&M	2021	Cornell	Chem grad
61	Batchelder	Holly	F&M	2023		Current group member
62	Lin	Tracy	F&M	2023		Current group member
63	Familo	Savannah	F&M	2022	Vanderbilt	Chem grad
64	Williams	Gillian	F&M	2022	Pittsburgh	Biomed. grad
65	Garry	Hu*	F&M	2023	Princeton	Chem grad
66	Ellia	Osofsky	F&M	2024		Current group member
67	Alonna	Reilly	F&M	2024		Current group member
68	James	Conway	F&M	2025		Current group member
69	Sierra	Brophy	F&M	2024		Current group member
	Trout	Todd	NA	NA	Dr. Trout is a Lancaster Country Day School teacher who did CHM390 project in the summer of 2006	
	Alfaro-Aco	Raymundo	NA	NA	Raymundo was a McCaskey High School student who did research in summer of 2007 as part of ACS Project SEED	
	Ong	Jonathan	NA	NA	Jonathan was a student at McGill U. who volunteered in the group in summer of 2018	

\* Departmental Honors.

## COLLEGE AND DEPARTMENTAL SERVICE

### Xavier University

- Health Sciences Committee (5 years)
- Academic Advising for students in three different majors
- Hiring Committee for Sabbatical Replacement and Tenure Track Positions

### Franklin & Marshall College

- Professional Standards Committee (Tenure and Promotion) (2012-2015). Served with three Provosts.
- Chair of the Chemistry Department (2016-2019)
- Committee on the *Faculty Handbook* (2017-2018; 2020-2022; 2023-2024)
- Committee on Postgraduate Fellowships [Fulbright] (Fall 2022)
- Working Group on Financial Exigency and Program Discontinuance (Spring 2022)
- NIH BRAD Grant Steering Committee (2017-2019)
- Faculty Center Advisory Board (2020-2021)
- Common Hour Committee (2011-2012), Chair in Spring 2012
- Ad hoc committee for the review of Teaching Professor promotion, Spring 2020
- Ad hoc participant in new faculty orientation panel for the Faculty Center (2016, 2018, 2020)
- Participant in workshop for FND course development (summer 2012)
- Convener of the Distribution Working Group (F&M curricular review, 2011-2012)
- Connections Program Committee: implementation of Gen. Ed. curriculum (with S. Cooper & K. McClelland, Summer 2013 and 2013-2014)
- Convener of workshop for development of Connections Courses (summers 2015, 2018)
- Secretary of Phi Beta Kappa, Theta of PA (2009-2010, 2011-2015, 2018-2021)
- Hiring Committee for new Science Librarian (2009-2010)
- Library Committee (2004-2005, Chair in 2005-2006, Chair in 2009-2010)

- Faculty Committee on Campus Life (2007-2008)
- Athletics and Recreation Committee (2011-2012)
- Radiation Safety Committee (2005-2006, 2007-2008, 2008-2009, 2009-2010 and 2012-2013)
- Hazardous Materials Committee (Spring 2020)
- Ad Hoc Teaching Evaluator (Spring 2020)
- Academic Advising (cohort classes '11, '12, '15 and '17; chem major classes '09, '17 [S15], '19 [F16], '24)
- Hiring Committees for Tenure Track Positions (7) and Visiting Assistant Professors
- Chemistry department library liaison (2012-2015, 2016-17); *facilitated the net gain of 32 journals in our collection*
- Chemistry dept. seminar coordinator (2009-2010, 2011-2012); 2009 Alumni Career Panel
- CHM490 Coordinator (2012-2013)

### EXTERNAL PROFESSIONAL SERVICE AND OUTREACH ACTIVITIES

- Grant proposal reviewer for National Science Foundation (NSF), Petroleum Research Fund (PRF), Cottrell College Science Award – Research Corporation, Biotechnology and Biological Science Research Council (UK).
- Manuscript reviewer for *Angewandte Chemie International Edition*, *Applied Organometallic Chemistry*, *Beilstein Journal of Organic Chemistry*, *Chemical Science*, *Chemistry a European Journal*, *European Journal of Organic Chemistry*, *Future Medicinal Chemistry*, *Journal of the American Chemical Society*, *Journal of Chemical Education*, *European Journal of Organic Chemistry*, *Journal of Organometallic Chemistry*, *Letters in Organic Chemistry*, *Nature Chemistry*, *Nature Communications*, *Nature Synthesis*
- Emcee of the Steven C. Zimmerman 60<sup>th</sup> Birthday Roast; Champaign, IL; August 18, 2017
- Textbook reviewer for *Organic Chemistry by Loudon – Chapter reviewer*;  
*Organic Chemistry by Guinn and Jameton – Chapter reviewer*
- External Reviewer for Promotion to Full Professor; Hobart & William Smith College (2013)
- External Reviewer for Tenure & Promotion; Siena College (2018)
- External Reviewer for Tenure & Promotion; Sewanee—The University of the South (2022)
- Presided over a morning session of "Heterocycles and Aromatics" at the 248<sup>th</sup> American Chemical Society National Meeting, San Francisco, CA; August 12, 2014
- Presided over an afternoon session of "Materials, Devices, and Switches" at the 239<sup>th</sup> American Chemical Society National Meeting, San Francisco, CA; March 23, 2010
- Co-organized the 73<sup>rd</sup> and 85<sup>th</sup> Annual Intercollegiate Student Chemists' Convention held at F&M on April 18, 2009 and April 2, 2022, respectively.
- Presided over a morning session of "Materials, Molecular Recognition and Self-Assembly" at the 232<sup>nd</sup> American Chemical Society, National Meeting, San Francisco, CA; September 11, 2006
- Chemistry demonstration for elementary school children at the New School, May 2004

### MEMBERSHIPS

- American Chemical Society (since 1990)
- Organic Chemistry Division of the American Chemical Society
- History of Chemistry Division of the American Chemical Society
- Phi Beta Kappa (since 1990)