

THE DEMCHENKO RESEARCH GROUP MEMBERS (total trainees 136)

Post-doctoral Associates - 18

Current	Alumni (in the alphabetical order) – immediate position, current position if different
Dr. Jay K. Bhattarai, 2015- (with Stine) Dr. Yashopal Singh, 2017-	1. Dr. Cristina De Meo, 2002-2003, SIUE, Asst. Prof.; SIUE Professor of Chemistry 2. Dr. Kohki Fujikawa, 2010-2012, RIKEN, Post-doc (PD) Suntory Research Institute, Group Leader 3. Dr. Umesh Gangadharmath, 2003-2004, Utah State, PD; Optimal Tracers, VP of Operations 4. Dr. Abhijeet Kayastha, 2013-2014, Wockhardt Res. Center, Sr. Scientist 5. Dr. Aixiao Li, 2007-2008, WUSTL School of Medicine, PD 6. Dr. Nelli N. Malysheva, 2002, ZIOC, Senior Scientist 7. Dr. Vijaya G. Narayanaswamy, 2010-2012, U Alberta, PD; Toronto Chemicals, Sr. Scientist 8. Dr. Archana R. Parameswar, 2008-2010, WUSTL, PD Valence Laboratories, Lab Manager 9. Dr. M. Cristina Parlato, 2006-2007, UW Madison, PD 10. Dr. Papapida Pornsuriyasak, 2006-2008 and 2011-2013, PTT Global Chemical, Sr. Res. Scientist 11. Dr. Olga V. Shulga, 2006-2008, Crosslink, Scientist; ICL Performance Products, Product development 12. Dr. Limei Sun, 2009-2010, UMSL Optometry, PD 13. Dr. Yih H. Tan, 2009-2013, Albany Molec. Res., Principal Sci.; Lantheus Med. Imaging, Sr. Process Engineer 14. Dr. Haisheng Wang, 2005-2006, Auburn U, PD GeneTron Pharma Co., Ltd., Founder & CEO 15. Dr. J. Prithika Yasomanee, 2014-2016, Millipore-Sigma, Sr. Scientist 16. Dr. Crystal O'Neil, 2016-2020, Alcami Corp., Tech. Writer

Doctoral Students - 25

Current	Alumni (in the order of graduation) – immediate position; current position, if different
21. Ms. Catherine Alex, F2016- 22. Ms. Samira Escopy, F2017- 23. Mr. Ganesh Shrestha, W2018- 24. Ms. Melanie Shadrack, F2018- 25. Ms. Hayley Steber, F2019-	1. Dr. Papapida Pornsuriyasak, 2002-2006, UMSL, PD; PTT Global Chemical, Sr. Res. Scientist 2. Dr. Medha N. Kamat, 2002-2006, Emory, PD; GSK, Principal Scientist Dr. 3. Dr. James T. Smoot, 2002-2008, Tate & Lyle, Principal Scientist; Tate & Lyle, Senior Manager 4. Dr. Archana R. Parameswar, 2004-2008, UMSL, PD; Valence Laboratories, Lab Manager 5. Dr. Aileen F. G. Bongat, 2004-2008, NIH, PD; Dextra, Sr, Chemist 6. Dr. Laurel K. Mydock, 2005-2010, WUSTL, PD; Fimbrion Therapeutics, Sr. Scientist 7. Dr. Sophon Kaeothip, 2006-2010, UGA, PD; PTT Global Chemical, Sr. Res. Scientist

8. Dr. Hemali D. Premathilake, 2007-2011, Portland CC, Lecturer
9. Dr. Sneha C. Ranade, 2007-2012, Sai Adventium Pharma, Sr. Scientist; IIT Bombay, Project Manager
10. Dr. Scott J. Hasty, 2008-2013, SEMU, Lecturer; Lindenwood U, Assoc. Prof.
11. Dr. J. Prithika Yasomanee, 2009-2014, UMSL, PD; Millipore-Sigma, Sr. Scientist
12. Dr. Swati S. Nigudkar, 2009-2014, Monsanto, Sr. Process Chemist; Wayne State, PD
13. Dr. Xiao G. Jia, 2011-2016, EKG Life Sci Solutions; Analyst
14. Dr. Salvatore G. Pistorio, 2012-2016, Monsanto, Process Chemist; Zoetis Inc., Tech Transfer Specialist
15. Dr. Satsawat Visansirikul, 2013-2018, Mahidol University, Asst. Prof.
16. Dr. Tinghua Wang, 2014-2018, WuXi Biologics, Sr. Program Manager
17. Dr. Michael P. Mannino, 2014-2019, UGA, PD
18. Dr. Mithila D. Bandara, 2014-2019
19. Dr. Matteo Panza, 2015-2019, Cayman Chemical, Scientist
20. Dr. Scott A. Geringer, 2015-2020

Master's Students - 8

Current

Alumni (in the alphabetical order) – immediate position

1. Ms. Maha Abutokaikah, 2012, UMSL GradSchool
2. Ms. Fawziah G. Alshehri, 2015, UMSL GradSchool
3. Mr. Chase Gobble, 2012-2013, UMSL GradSchool
4. Mr. Jamin Graham, 2002-2003, KCU of Medicine
5. Mr. Bradley Jones, 2019-2020, UMSL GradSchool
6. Ms. Teerada Kamkhachorn, 2008-2010, Greater Pharma
7. Mr. Huy Nguyen, 2017, UMSL GradSchool
8. Mr. Sergey L. Sedinkin, 2006-2007, UMSL GradSchool

Undergraduate Students - 63

Current

Alumni (in the alphabetical order) – immediate position

Mr. Nicholas Forsythe, 2020-

1. Mr. Daniil Ahiadorme, 2015, Moscow State
2. Mr. Steve Akins, 2009-2010, UMKC MedSchool
3. Mr. Henry Akinyemi, 2018
4. Ms. Brenda Ali, 2006, Express Scripts
5. Ms. Elizabeth Ayo-Vaughan, 2009
6. Mr. James Banto, 2004-2005, Mass. Coll. Pharm.
7. Mr. Phil Barber, 2006
8. Mr. James Clark, 2003, Thailand, High school teacher
9. Ms. Roxann Crenshaw, 2013, George Washington U.
10. Ms. Nichole Curvey, 2007-2008, UMSL GradSchool
11. Mr. Jacob Delcoure, 2017
12. Ms. Ashley Dent, 2016-2017, UNC, GradSchool
13. Ms. Ariel Dunteman, 2018, Millipore-Sigma
14. Mr. Brian Elliott, 2011, U Florida, GradSchool
15. Mr. Brendan Greer, 2017

16. Mr. Scott J. Hasty, 2007-2008, UMSL GradSchool
17. Mr. Adrian Hristov, 2010, Sigma-Aldrich
18. Mr. Daniel Hoard, 2019
19. Mr. Bunpot Intarathat, 2014, SWU Bangkok
20. Ms. Tyra Jenkins, 2015, UMKC
21. Ms. Hope L. Johnson, 2009-2010, Harvard Dental School
22. Ms. Dorcas Kamau, 2014
23. Ms. Natarikan Khomchu, 2016, SWU Thailand
24. Ms. Mercy Kiiru, 2007-2008, UMSL GradSchool
25. Mr. Matthew Kleine, 2009, bioMerieux
26. Mr. Dmirty I. Krits, 2013-2014
27. Ms. Chatcharee Lohanoot, 2018, SWU Thailand
28. Ms. Nicole A. Lubanowski, 2004-2007, Monsanto
29. Ms. Sana Majid, 2016
30. Mr. Dhaval Mehta, 2010-2011
31. Mr. Joe Moleski, 2010, Med. School
32. Ms. Samiyah Munshi, 2009, SIUE School of Pharmacy
33. Ms. Laurel Mydock, 2005, UMSL GradSchool
34. Ms. Mariya Novakova, 2018-2019, Millipore- Sigma
35. Mr. Evgeny Okun, 2013, Moscow State
36. Ms. Yanina Pankratova, 2015, MIT GradSchool
37. Mr. Hyung S. Park, 2014, UMSL GradSchool
38. Mr. Jefferson Peak, 2013, High School Teacher
39. Ms. Trang Phan, 2011
40. Ms. Brandi Pierce, 2004, Pfizer
41. Mr. Nikita Podvalnyy, 2006, RAS GradSchool
42. Mr. Marek Poplawski, 2008
43. Mr. Eugene Redekop, 2005, WUSTL GradSchool
44. Mr. Abdullah Rehman, 2015
45. Mrs. Linda Ridenhower, 2002, Sigma-Aldrich
46. Mr. Jeremy Ridenour, 2008, Reliable Biopharm.
47. Ms. Ramia Safi, 2009-2010, SIUE GradSchool
48. Mr. Sergey Sedinkin, 2005, UMSL GradSchool
49. Mr. Jonathan Silva, 2003
50. Ms. Ruth Simpson, 2011-2012, Mississippi College
51. Mr. Charles R. Sims, 2006-2007, UM Jackson MedSchool
52. Mr. Matthew Souris, 2013
53. Ms. Hayley Steber, 2018-2019, UMSL GradSchool
54. Ms. Andrea Sullivan, 2011-2013, SIUE Dental School
55. Ms. Anna Sumner, 2017
56. Mrs. Anna Thibaut, 2014, Sigma-Aldrich
57. Mr. Fei Tsao, 2014
58. Mr. Dmitry Vasiliev, 2013, Moscow State
59. Ms. Rachaya Wannarat, 2019, SWU Thailand
60. Mr. Daniel Worsham, 2015-2016, Millipore-Sigma
61. Ms. Lai-Ping Yan, 2009-2010, Axygen Bioscience
62. Mr. John Zhou, 2015-2016

High School Students - 5

Current

Alumni (in the alphabetical order) – immediate position

1. Mr. Noah Angeles, 2015, Timberland HS

2. Mr. Kevin Kotzbauer, 2019, Clayton HS
3. Mr. Anthony Ton, 2014, Ladue Horton Watkins HS
4. Mr. Gregory Wilson, 2019, Jennings HS
5. Ms. Katherine Yee, 2014, Burroughs School, MIT

Visitors - 17

Current

Ms. Cristina M. Santi, 2020, U Milan
Ms. Helle H. Trinderup, 2020, Aarhus U

Alumni (in the alphabetical order) – immediate position

1. Mr. Scott Geringer, 2014, UMSL GradSchool
2. Mr. Holger Grugel, 2009, University of Hannover
3. Ms. Jacqui Hawkins, 2008, WUSTL, School of Medicine
4. Mr. Mads Heuckendorff, 2012, University of Copenhagen
5. Ms. Madeline Jackstadt, 2019, WUSTL
6. Ms. Natthakaln Lomchoey, 2014-2015, SWU Thailand
7. Dr. Wallace Macindoe, 2002, South Thames College
8. Mr. Matteo Mossotti, 2010-2011, Eastern Piedmond U.
9. Ms. Linda Obiero, 2005-2006, Mallinckrodt
10. Mr. Salvo Pistorio, 2012, UMSL GradSchool
11. Ms. Natalia Plechkova, 2002, Queen's Univ. Belfast
12. Prof. Vikas Telvekar, 2007, 2017 University of Mumbai
13. Ms. Cornelia Vetter, 2006, 2008, Halle, GradSchool
14. Ms. Janice Wildrick, 2008-2009, St. Louis University
15. Mr. Xu Zhang, 2003, University of Pittsburg

ACADEMIC GENEALOGY

Alexei V. Demchenko (Moscow, 1993)

Nikolay K. Kochetkov (Moscow, 1948)

Alexandr N. Nesmeyanov (Moscow, 1925)

Nikolay D. Zelinski (Gottingen/Odessa, 1889)

Victor Meyer (Gottingen, 1867)

Robert Wilhelm Eberhard Bunsen (Gottingen, 1830)

Friedrich Stromeyer (Paris/Gottingen, 1800)

Louis Nicolas Vauguelin (Paris, 1789)

Antoine Francois de Fourcroy (Paris, 1780)

Jean Baptiste M. Bucquet (Paris, 1770)

Antoine Laurent Lavoisier (Paris, 1764)

Guilluaume-Francois Rouelle (Paris, 1725)

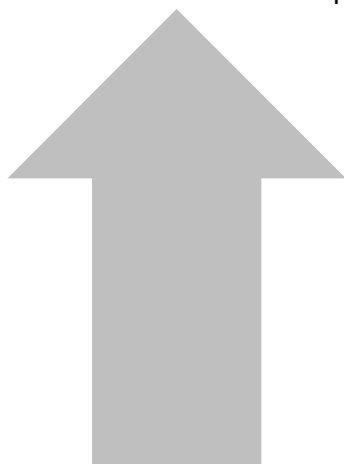
J. G. Spitzley (Paris, ~1710)

Nicolas Lemery (Paris, 1667)

Christophle Glaser (Paris/Basel, 1640)

Antoine Vallot (Paris, 1617)

Etienne de Clave (unknown)



DOCTORAL DISSERTATIONS COMPLETED (20)

1. Development of novel glycosylation methodology for convergent oligosaccharide synthesis based on S-thiazolanyl glycosides; Papapida Pornsuriyasak, PhD, April 2006
2. S-Benzoxazolyl (SBox) glycosides: synthesis, structure, mechanism of activation, and application in stereoselective O-glycosylation; Medha N. Kamat, PhD, November 2006
3. Development of the arming participating group; James T. Smoot, PhD, April 2008
4. Towards development of a fully synthetic conjugate vaccine: investigation of structural analogs of *Streptococcus pneumoniae* serogroup 6; Archana R. Parameswar, PhD, July 2008
5. Synthesis and evaluation of structural analogues of *Escherichia coli* Lipid A for application towards CD-14 – targeting glycotherapeutics; Aileen F. G. Bongat, PhD, July 2008
6. The nature of the O-2/O-5 cooperative effect and its role in chemical glycosylation; Laurel K. Mydock, PhD, April 2010
7. Development of new strategies for expeditious oligosaccharide synthesis; Sophon Kaeothip, PhD, November 2010
8. Superarmed glycosyl donors in chemical glycosylation; Hemali D. Premathilake, PhD, November 2011
9. Glycosyl thiocarbamates as new building blocks for chemical glycosylation; Sneha C. Ranade, PhD, November 2012
10. New methods and strategies for orthogonal oligosaccharide synthesis; Scott J. Hasty, PhD, June 2013
11. Picolinyl-assisted approaches to stereocontrolled glycosylation; J. Prithika Yasomanee, PhD, June 2014
12. Development of the regenerative glycosylation approach for manual and automated oligosaccharide synthesis; Swati S. Nigudkar, PhD, July 2014
13. Templated oligosaccharide synthesis; Xiao G. Jia, PhD, July 2016
14. Development of the HPLC-based oligosaccharide synthesizer; Salvatore G. Pistorio, PhD, November 2016
15. Chemical synthesis of staphylococcal oligosaccharides; Satsawat Visansirikul, PhD, April 2018
16. Application of glycosyl imidates and nitrates in carbohydrate synthesis; Tinghua Wang, PhD, November 2018
17. Application of the picoloyl protecting group in carbohydrate chemistry; Michael P. Mannino, PhD, April 2019
18. Chemical synthesis of human milk oligosaccharides; Mithila D. Bandara, PhD, October 2019
19. Towards completely automated glycan synthesis; Matteo Panza, PhD, November 2019
20. New catalytic reactions in carbohydrate chemistry; Scott A. Geringer, PhD, March 2020

RESEARCH GROUP MEMBERS' AWARDS, FELLOWSHIPS, AND HONORS

<i>Catherine Alex</i>	UMSL Graduate Research Fair, Poster Competition, First Prize, 2019
<i>Elizabeth Ayo-Vaughan</i>	Barbara Willis Brown Women in Chemistry Scholarship, UMSL Chemistry, 2010-2011
<i>Mithila Bandara</i>	U.S. Advisory Committee for International Carbohydrate Symposia. Travel grant to attend the 29 th ICS in Lisbon, Portugal, 2018
<i>Aileen Bongat</i>	UMSL Graduate School Dissertation Fellowship, 2007-2008 UMSL Graduate Research Fair, Poster Competition, First Prize, 2008
<i>Nichole Curvey</i>	Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2008 William & Erma Cooke Scholarship, UMSL Chemistry, 2008-2009
<i>Ashley Dent</i>	Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2017 Chemistry Club President, 2017-8 Award for Outstanding Service to the Chemistry Department and Campus Community, 2018
<i>Samira Escopy</i>	Saudi Arabian Culture Mission Doctoral Scholarship, 2017-2021 Saudi Arabian Culture Mission Travel Award, 2019
<i>Scott Geringer</i>	H.C. Brown Lectures at Purdue University, Poster Award Winner, 2019 Research Accomplishment Award, UMSL Chemistry, 2019-2020 Ceil DeGutis Award for Research Excellence, UMSL, 2019
<i>Scott Hasty</i>	Chemistry Graduate Student Association (CGSA), President, 2010-2011 UMSL Graduate Research Fair, Poster Competition Winner, 2011 U.S. Advisory Committee for International Carbohydrate Symposia, Inc. Travel grant to attend the 26 th ICS in Madrid, Spain, 2012 UMSL Graduate School Dissertation Fellowship, 2012-2013 UMSL Graduate Research Fair, Poster Competition, Special Prize, 2013
<i>Xiao Jia</i>	UMSL Graduate Research Fair, Natural Sciences, Organic Chemistry Division Poster Competition Winner, 2014
<i>Hope Johnson</i>	UMSL Undergraduate Research Symposium, Sigma Xi Prize for Physical Sciences, 2010
<i>Sophon Kaeothip</i>	UMSL Graduate School Dissertation Fellowship, 2010 Research Accomplishment Award, UMSL Chemistry, 2009-2010
<i>Medha Kamat</i>	Thomas Jones Fellowship, UMSL Chemistry, W2004 UMSL Graduate Research Fair, Poster Competition, Second Prize, 2004 UMSL Graduate School Dissertation Fellowship, 2006 Research Accomplishment Award, UMSL Chemistry, 2005-2006
<i>Dorcas Kamau</i>	Award to the Outstanding Student in Sophomore Chemistry, 2014
<i>Mercy Kiiru</i>	American Chemical Society Scholarship for underrepresented minority college students with financial need, 2007-2008 Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2008 William & Erma Cooke Scholarship, UMSL Chemistry, 2008 - 2009
<i>Kevin Kotzbauer</i>	STARS Award for Excellence in Research, 2019

<i>Dmitry Krits</i>	Alan F. Berndt Outstanding Senior Award, UMSL Chemistry, 2014 ACS Award for Organic Chemistry, 2014 ACS Award for Analytical Chemistry, 2014
<i>Nicole Lubanowski</i>	Barbara Willis Brown Scholarship for Women in Chemistry, UMSL Chemistry, 2005-2006 Research Ambassador at the UM Undergraduate Research Day at the Capitol, 2006
<i>Michael Mannino</i>	M. Thomas Jones Memorial Fellowship, UMSL Chemistry, F2017 and W2019 Jack L. Coombs Outstanding Graduate Teaching Assistant Award, UMSL Chemistry, 2017-2018
<i>Laurel Mydock</i>	Thomas Jones Fellowship, UMSL Chemistry, F2007 and W2010 Research Accomplishment Award, UMSL Chemistry, 2007-2008 and 2008-2009 UMSL Graduate Research Fair, Poster Competition, Special Sigma Xi Prize for Physical Sciences, 2010
<i>Swati Nigudkar</i>	UMSL Graduate School Dissertation Fellowship, W2014 Thomas Jones Fellowship, UMSL Chemistry, W2014 Research Accomplishment Award, UMSL Chemistry, 2013-2014
<i>Crystal O'Neil</i>	NIH Diversity Post-doctoral Fellowship, 2016-2018
<i>Matteo Panza</i>	UMSL Graduate School 3MT competition, 3 rd place, 2017 UMSL Graduate School 3MT competition, People's Choice Award, 2017 Chemistry Graduate Student Association (CGSA), Vice President, 2017-2019 M. Thomas Jones Memorial Fellowship, UMSL Chemistry, S2018 Ceil DeGutis Award for Research Excellence, UMSL, 2019 UMSL Graduate School Dissertation Fellowship, 2019 15 th Annual Midwest Carbohydrate and Glycobiology Symposium, Best Oral Presentation Award, 2019 Thomas Jones Fellowship, UMSL Chemistry, F2019
<i>Archana Parameswar</i>	Thomas Jones Fellowship, UMSL Chemistry, W2008
<i>Salvatore Pistorio</i>	Thomas Jones Fellowship, UMSL Chemistry, F2014, F2016 UMSL Graduate School Dissertation Fellowship, 2016 UMSL Graduate Research Fair, First Prize, 2016 UMSL Graduate Research Fair, Natural Sciences, Carbohydrate Chemistry Division Poster Competition Winner, 2016 Research Accomplishment Award, UMSL Chemistry, 2015-2016
<i>Papapida Pornsuriyasak</i>	UMSL Graduate Research Fair, Poster Competition, Second Prize, 2004 Tom Jones Fellowship, UMSL Chemistry, F2004 Research Accomplishment Award, UMSL Chemistry, 2004-2005 23 rd International Carbohydrate Symposium, Whistler, Canada; Student Oral Presentation Winner, 2006
<i>Hemali Premathilake</i>	Thomas Jones Fellowship, UMSL Chemistry, F2009 Research Accomplishment Award, UMSL Chemistry, 2010-2011 UMSL Graduate School Dissertation Fellowship, 2011
<i>Sneha Ranade</i>	UMSL Graduate Research Fair, Poster Competition, First Prize, 2010
<i>Melanie Shadrick</i>	Chemistry Graduate Student Association (CGSA), Vice President, 2019-2020

<i>Charles Sims</i>	UMSL Undergraduate Research Symposium, Sigma Xi Prize for Physical Sciences, 2007
<i>James Smoot</i>	Thomas Jones Fellowship, UMSL Chemistry, F2005
<i>Hayley Steber</i>	Eugene and Joyce Corey Scholarship, 2018 Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2018 Hal and Mary Harris Endowed Scholarship in Chemistry, 2018 UMSL Undergraduate Research Symposium, Runner-up, 2019 Outstanding Undergraduate Teaching Assistant Award, 2019 Award for Outstanding Service to the Chemistry Department and Campus Community, 2019
<i>Andrea Sullivan</i>	Undergraduate Research Award, College of Arts and Sciences, UMSL, 2012 Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2012 William & Erma Cooke Scholarship, UMSL Chemistry, 2012-2013 UMSL Undergraduate Research Symposium, First Prize, 2013 Undergraduate Research Award, College of Arts and Sciences, UMSL, 2013
<i>Anna Sumner</i>	Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2017
<i>Anna Thibaut</i>	ACS Award for Analytical Chemistry, 2014 Outstanding Service to the Chemistry Department and Campus Community Award, 2014
<i>Anthony Ton</i>	STARS Award for Excellence in Research, 2014
<i>Satsawat Visansirikul</i>	UMSL Graduate Research Fair, Third Prize, 2016 UMSL Graduate Research Fair, Natural Sciences, Synthetic Chemistry Division Poster Competition Winner, 2016 UMSL Graduate Research Fair, First Prize, 2017 UMSL Graduate Research Fair, Natural Sciences, Carbohydrate Chemistry Division Poster Competition Winner, 2017 UMSL Graduate School Dissertation Fellowship, 2017-2018 M. Thomas Jones Memorial Fellowship, UMSL Chemistry, S2018 Research Accomplishment Award, UMSL Chemistry, 2017-2018
<i>Tinghua Wang</i>	UMSL Graduate Research Fair, Third Prize, 2018 U.S. Advisory Committee for International Carbohydrate Symposia, Inc. Travel grant to attend the 29 th ICS in Lisbon, Portugal, 2018
<i>Lai-Ping Yan</i>	Commendation for Service Award, UMSL Chemistry, 2009 William & Erma Cooke Scholarship, UMSL Chemistry, 2009-2010 Eric G. Brunngraber Memorial Scholarship, UMSL Chemistry, 2009-2010
<i>J. Prithika Yasomanee</i>	M. Thomas Jones Memorial Fellowship, UMSL Chemistry, F2011, W2014 UMSL Graduate School Dissertation Fellowship, 2013 UMSL Graduate Research Fair, Poster Competition, Third Prize, 2013 Research Accomplishment Award, UMSL Chemistry, 2012-2013
<i>John Zhou</i>	Outstanding Junior Chemistry Major Award, St. Louis Section of the ACS, 2016 ACS Award for Organic Chemistry, 2016 Hal and Mary Harris Endowed Scholarship in Chemistry, 2016 Undergraduate Aid to Education Chemistry Award, UMSL Chemistry, 2016 ACS St. Louis Undergraduate Symposium, Third Prize, 2016