Curriculum vitae for Jason K. Sello, Ph. D.

1. Address:

Mail: Brown University, Department of Chemistry, 324 Brook Street, Box H, Providence, RI 02912

E-mail: jason_sello@brown.edu

2. Formal Education:

1993-1997	B.S. Biology, Morehouse College, Atlanta, GA
1997-2002	Ph.D. Biophysics, Harvard University, Cambridge, MA Department of Chemistry and Chemical Biology Advisor: Prof. Stuart L. Schreiber, Ph.D. Thesis Title: "Use of Conformational Analysis as a Design Element in Diversity-Oriented Organic Synthesis"
2002-2004	Post-doctoral Fellow, Harvard Medical School, Boston, MA Department of Biological Chemistry and Molecular Pharmacology Advisor: Prof. Christopher T. Walsh, Ph.D. Research Topic: Enzymology of Chloramphenicol Biosynthesis

3. Independent Career:

2004-2006	Visiting Scientist, John Innes Centre, Norwich, England Department of Molecular Microbiology
2006-2012	Assistant Professor, Department of Chemistry, Brown University, Providence, RI
2012-present	Associate Professor (with tenure), Department of Chemistry, Brown University, Providence, RI
2013-2014	Visiting Professor, Department of Biology, Massachusetts Institute of Technology, Cambridge, MA (2013-2014 academic year)

4. Honors and Awards:

2014	Inaugural Lecture of the National Organization of Black Chemists and Chemical Engineers (NOBCCHE) at the University of Pennsylvania
2013	Martin Luther King, Jr. Visiting Associate Professor of Biology, Massachusetts Institute of Technology
2012	Manuscript featured as "Very Important Paper" by *ChemBioChem* journal
2011	National Science Foundation Career Award
2011	Seed Fund Award (w/ Profs. Charles Lawrence and Rebecca Page), Office of Vice President of Research, Brown University
2011	Discussion Leader at Bioorganic Gordon Conference
2011	ASBMB Minority Spotlight Scientist for Month of March

2011	Invited Co-Chair and Speaker at Chemical Biology and Catalysis Session of the 2012 national meeting of the American Society of Biochemistry and Molecular Biology
2011	Co-chair and Speaker at Evolution of Antibiotic Resistance session, 16th International Symposium on the Biology of Actinomycetes 2011 (Puerto Vallarta, Mexico)
2010	Top-Ten Most Accessed Papers in "Organic and Biomolecular Chemistry" in the month of October.
2010	Invited Lecture, Young Investigator Symposium at National Meeting of the American Chemical Society, Boston, MA
2009	Best Poster in Natural Products Section, Society for Industrial Microbiology Meeting (presented by Jesse Davis Morin)
2009	Brown University Swearer Center Engaged Scholar Award
2008	Discussion Leader at the Enzymes Gordon Conference
2008	Frontier in Chemistry Award, Department of Chemistry, Brown University
2008	Recipient of R. B. Salomon Award, Brown University, OVPR
2008	Brown University Nominee, FASEB Diversity Award
2003	Burroughs Wellcome Fund Career Award at the Scientific Interface
2002-2004	Merck-UNCF Postdoctoral Research Fellowship
2000	Graduate Prize Fellowship, Harvard University
2000	Certificate of Distinction in Teaching for "Biological Sciences 1: Introduction to Molecular Biology," Harvard University
1997	Pre-doctoral Fellowship, National Science Foundation
1998	Glaxo-Wellcome-UNCF Scientific Achievement Award
1997	*Magna cum laude* graduate, Morehouse College
1997	Phi Beta Kappa, Morehouse College
1997	J. K. Haynes Award for Outstanding Senior Biology Major
1993 - 1997	Dean's List, Morehouse College

5. Society Memberships:

American Chemical Society
American Society for Microbiology
Society for Industrial Microbiology
American Society for Biochemistry and Molecular Biology

6. Publications (42 total; 6-42 represent work from independent career):

42. Arvanitis, M., Li, G, Li, D.-D., Cotnoir, Gangley-Leal, G., Carney, D., Sello, J., and Mylonakis, E. (2016) "A conformationally constrained cyclic acyldepsipeptide is highly effective in mice infected with methicillin-susceptible and -resistant Staphylococcus aureus", PlosOne,*11(4):e0153912*. PMID: 27101010

41. Alvaro, A. J., Schmitz, K., R., Sello, J. K., Baker, T., and Sauer, R. T. (2016) "Highly dynamic interactions maintain kinetic stability of the ClpXP protease during the ATP-fueled mechanical cycle", *ACS Chemical Biology*, *in press*, DOI: 10.1021/acschembio.6b00083. PMID 27003103

40. Handy, E. L. and Sello, J. K. (2015) “Structure and Synthesis of Conformationally Constrained Molecule Containing Piperazic Acid”; book chapter in “Topics in Heterocyclic Chemistry” pp. 1- 28.

39. Totaro, K. A., Barthelme, D., Simpson, P. T., Sauer, R. T. and Sello J. K. (2015) “Substrate-Guided Optimization of the Syringolins Yields Potent Proteasome Inhibitors with Activity Against Leukemia Cell Lines”, *Bioorganic and Medicinal Chemistry*, 23, 6218-6222 PMID: 26296913

38. Carney, D. W., Schmitz, K. R., Scruse, A. C., Sauer, R. T., and Sello, J. K. (2015) “Examination of a Structural Model of Peptidomimicry by Cyclic Acyldepsipeptides Antibiotics in their Interaction with the ClpP Peptidase", *ChemBioChem*, 16, 1875- 1879. PMID: 26147653

37. Compton, C. L., Fernandopulle, M. S., Nagari, R. T., Sello, J. K. (2015) “Genetic and Proteomic Analyses of Pupylation in *Streptomyces coelicolor*”, *Journal of Bacteriology*, 197: 2747-53. PMID: 26031910

36. Compton, C. L., Carney, D. W., Groomes, P. V. and Sello, J. K. (2015) “A Fragment-Based Strategy for Investigating and Suppressing the Efflux of Bioactive Small Molecules”, *ACS Infectious Diseases*, 1: 53-58. DOI: 10.1021/id500009f. PMID: 27620145

35. Schmitz, K. R., Carney, D. W., Sello, J. K., and Sauer, R. T. (2014) “The crystal structure of *M. tuberculosis* ClpP1P2 suggests a model for peptidase activation by AAA+ partner binding and substrate delivery”, *Proceedings of the National Academy of Sciences*, 111, E4587-4595. PMID: 25267638

34. Carney, D. W., Compton, C. L., Schmitz, K. R., Sauer, R. T., and Sello, J. K. (2014) “A Simple Fragment of the Cyclic Acyldepsipeptides is Necessary and Sufficient for ClpP Activation and Antibacterial Activity”, *ChemBioChem*, 15, 2216-20. PMID: 25212124

33. Carney, D. W., Nelson, C. D. S., Ferris, B. D., Stevens, J. P., Lipovsky, A., Kazakov, T., DiMaio, D. C., Atwood, W. J., and Sello, J. K. (2014) “Structural Optimization of a Retrograde Trafficking Inhibitor that Protects Cells from Infections by Human Polyoma- and Papillomaviruses”. *Bioorganic and Medicinal Chemistry*. pii: S0968-0896(14)00499-4. PMID: 25087050

32. Handy, E. L., Totaro, K. A., Lin, C. P., and Sello, J. K. (2014) Efficient and Regiospecific Syntheses of Peptides with Piperazic and Dehydropiperazic Acids via a Multicomponent Reaction”. *Organic Letters*, 16, 3488-91. PMID: 24937740

31. Carney, D. W., Schmitz, K. R., Truong, J. V., Sauer, R. T., and Sello, J. K. (2014) "Restriction of the Conformational Dynamics of the Cyclic Acyldepsipeptide Antibiotics Improves Their Antibacterial Activity". *Journal of the American Chemical Society*. 136, 1922-9. PMID: 24422534

30. Nelson, C., Carney, D. W., Derdowski, A, Lipovsky, A, Gee, G., O’Hara, B., Williard, P., DiMaio, D., Sello, J. K., and Atwood, W. (2013) “A retrograde trafficking inhibitor of ricin and shiga-like toxins inhibits infection of cells by human and monkey polyomaviruses". *mBio*, 4(6):e00729-13. PMID: 24222489

29. Compton, C. L., Schmitz, K. R., Sauer, R. T., and Sello, J. K. (2013) “Antibacterial of and Resistance to Small Molecule Inhibitors of the ClpP Peptidase”. *ACS Chemical Biology*, 8, 2669- 2677. PMID: 24047344

28. Davis, J. R., Goodwin, L., Teshima, H., Detter, C., Tapia, R., Han, C., Huntemann, M., Wei, C.-L., Han, J., Chen, A, Kyrpides, N., Mavrommatis, K., Szeto, E., Markowitz, V., Ivanova, N, Mikhailova, N., Ovchinnikova, G., Pagani, I., Pati, A., Woyke, T., Pitluck, S., Peters, L., Nolan, M., Land, M., and Sello, J.K. (2013) “Genome Sequence of *Streptomyces viridosporus* T7A ATCC 39115, a Lignin-Degrading Actinomycete”. *Genome Announcements*, 1(4): e00416-13. PMID: 23833133.

27. Davis, J. R., Brown, B. L., Page, R., and Sello, J. K. (2013) “Study of PcaV from *Streptomyces coelicolor* Yields New Insights into Ligand-Responsive MarR Family Transcription Factors”. *Nucleic Acids Research*. 41: 3888-900. PMID: 23396446

26. Sello, J. K. (2012) “Mining the Antibiotic Resistome”. *Chemistry & Biology*. 19: 1220-1221. PMID: 23102216

25. Totaro, K. A., Okandeji, B.O., and Sello, J. K. (2012) “Use of a Multicomponent Reaction for Chemoselective Derivatization of Multiple Classes of Metabolites”. *ChemBiochem*, 13: 987- 991. PMID: 22505051

24. Davis, J. R. Goodwin, L. A., Woyke, T. Teshima, H., Bruce, D., Detter, C., Tapia, R., Han, S., Han, J., Pitluck, S., Nolan, M., Mikhailova, N., Land, M. L., and Sello, J.K. (2012) “Genome Sequence of *Amycolatopsis* sp. ATCC 39116, a Plant Biomass-Degrading Actinomycete”. *Journal of Bacteriology*, 194:2396-7. PMID: 22493203

23. Morin, J., Adams, K. L., and Sello, J. K. (2012) “Efficient Synthesis of the γ-butyrolactone Autoinducer of *Streptomyces griseus* via Replication of Biosynthetic Reactions”. *Organic and Biomolecular Chemistry*, 10: 1517-20. PMID: 22246070

22. Carney, D., Truong, J., and Sello, J. K. (2011) “Investigation of the Configurational Stabilities of Chiral Isocyanoacetates in Multicomponent Reactions”. *Journal of Organic Chemistry*. 76: 10279-10285. PMID: 22044401

21. Okandeji, B. O., Greenwald, D. M., Wroten, J., and Sello, J. K. (2011) “Synthesis and Evaluation of Inhibitors of Drug Efflux Pumps of the Major Facilitator Superfamily in Bacteria”. *Bioorganic and Medicinal Chemistry*, 19:7679-89. PMID: 22055717

20. Socha, A. M., Tan, N. Y-M., LaPlante, K. and Sello J. K. (2010) “Diversity-Oriented Synthesis of Cyclic Acyldepsipeptides Leads to the Discovery of a Potent Antibacterial Agent”. *Bioorganic and Medicinal Chemistry*, 18, 7193-7202. PMID: 20833054

19. Badu-Nkansah, *A*. and Sello, J. K. (2010) “Deletion of the Elongation Factor 4 Gene (*lepA*) in *Streptomyces coelicolor* Enhances the Production of the Calcium-Dependent Antibiotic”. *FEMS Microbiology Letters*, 311, 146-151. PMID: 20735483

18. Socha, A. M. and Sello J. K. (2010) “Efficient Conversion of Triacylglycerols and Fatty acids into Biodiesel in a Microwave Reactor Using Metal Triflate Catalysts”. *Organic and Biomolecular Chemistry*, 8, 4753-4756. PMID: 20714659

17. Socha, A. M., Kagan, G., Li, W., Hopson, R. W., Sello, J. K., and Williard, P. G. (2010) “Diffusion coefficient-formula weight correlation analysis via DOSY NMR to examine acylglyceride mixtures and biodiesel production”. *Energy and Fuels,* 24, 2518-2521.

16. Morin, J. B. and Sello, J. K. (2010) “Efficient Synthesis of a Peculiar Vicinal Diamine Pheromone from *Streptomyces natalensis*”. *Organic Letters*, 12, 3522-3524. PMID: 20670016

15. Vecchione, J. J. and Sello, J. K. (2010) “Regulation of an Auxiliary, Antibiotic-Resistant Tryptophanyl-tRNA Synthetase Gene via Ribosome-Mediated Transcriptional Attenuation”. *Journal of Bacteriology*, 192, 3565-3573. PMID: 20453096

14. Davis, J. R. and Sello, J. K. (2010) “Regulation of Genes in *Streptomyces* Bacteria Required for Catabolism of Lignin-Derived Aromatic Compounds”. *Applied Microbiology and Biotechnology*, 86:921-9. PMID: 20012281

13. Vecchione, J. J., Alexander, B. Jr. and Sello, J. K. (2009) “Two Distinct Major Facilitator Superfamily Drug Efflux Pumps Mediate Chloramphenicol Resistance in *Streptomyces coelicolor”*. *Antimicrobial Agents and Chemotherapy*, 53, 4673-7. PMID: 19687245

12. Vecchione, J. J. and Sello, J. K. (2009) “A Novel Tryptophanyl-tRNA Synthetase Gene Confers High Level Resistance to Indolmycin, *Antimicrobial Agents and Chemotherapy”*. 53, 3972- 3980. PMID: 19546369

11. Davis, J. B., Bailey, J. D., and Sello, J. K. (2009) “A Biomimetic Synthesis of a New Class of Bacterial Signaling Molecules”. *Organic Letters*, 11, 2984- 2987. PMID: 19545145

10. Okandeji, B. O. and Sello, J. K**.** (2009) “Brønsted Acidity of Substrates Influences the Outcome of Passerini Three Component Reactions”. *Journal of Organic Chemistry*. 74, 5067-5070.

9. Vecchione, J. J. and Sello, J. K. (2008) “Characterization of an Inducible, Antibiotic-Resistant Aminoacyl-tRNA Synthetase Gene in *Streptomyces coelicolor”*. *Journal of Bacteriology,* 190, 6253-6257. PMID: 18621902

8. Okandeji, B. O., Gordon, J. R., and Sello, J. K. (2008) “Catalysis of Ugi Four Component Coupling Reactions by Rare Earth Metal Triflates”. *Journal of Organic Chemistry. 73, 5595-5597.* PMID: 18570401

7. Sello, J. K. and Buttner, M. J. (2008) “The Oligoribonuclease Gene in *Streptomyces coelicolor* is not Transcriptionally or Translationally Coupled to *adpA,* a key *bldA* target”. *FEMS Microbiology Letters,* 286, 60-65. PMID: 18625025

6. Sello, J. K. and Buttner, M. J. (2008) “The Gene encoding Ribonuclease III Gene in *Streptomyces coelicolor* is Transcribed During Exponential Phase and is Required for Antibiotic Production and for Proper Sporulation”. *Journal of Bacteriology,* 190, 4079-4083. PMID: 18359817.

5. Pacholec, M., Sello, J. K., Walsh, C. T., and Thomas, M. G. (2007) "Formation of an Aminoacyl-*S*-Enzyme Intermediate is a Key Step in the Biosynthesis of Chloramphenicol". *Organic and Biomolecular Chemistry*, 5,1692-1694. PMID: 17520135.

4. Sello, J. K., Andreana, P. R., Lee, D. and Schreiber, S. L. (2003) "Stereochemical Control of Skeletal Diversity". *Organic Letters*, 5: 4125-4127. PMID: 14572265.

3. Lee, D., Sello, J. K. and Schreiber, S. L. (2000) "Pairwise Use of Complexity Generating Reactions in Diversity-Oriented Synthesis". *Organic Letters*, 2: 709-712. PMID: 10814416.

2. Lee, D., Sello, J. K. and Schreiber, S. L. (1999) "A Strategy for Macrocyclic Ring Closure and Functionalization Aimed Toward Split-Pool Syntheses". *Journal of the American Chemical Society,* 121: 10648-10649.

1. Quadri, L. E. N., Sello, J., Keating, T. A., Weinreb, P. H., and Walsh, C. T. (1998) "Identification of a *Mycobacterium tuberculosis* gene cluster encoding the biosynthetic enzymes for assembly of the virulence- conferring siderophore mycobactin". *Chemistry and Biology*, 5: 631- 645. PMID: 9831524.

7. Issued Patents and Provisional Patent Applications:

"Enopeptins, Uses Thereof and Methods of Synthesis Thereto". Issued 11/24/2015 Patent No. 9,193,767 (Inventor: J. K. Sello)

"Chemical Methods for the Selective Derivatization of Biomolecules". Issued 6/16/2015 Patent No. 90,057,698. (Co-inventors: J. K. Sello, B. O. Okandeji and K. A. Totaro)

"Compounds for the Treatment and Prevention of Infections". Filed 1/16/2015. (Co-Inventors: W. Atwood, J. K. Sello, C. Nelson and D. W. Carney)

"Novel Syringlin Proteasome Inhibitors with Activity Against Cancer Cell Lines". Filed 5/8/2015 (Co-Inventors: J. K. Sello and K. A. Totaro).

"Antibacterial β-lactones, and Methods of Identification, Manufacture, and Use. Filed 8/26/2014(Co-Inventors: J. K. Sello and Corey L. Compton)

"Macrocyclic Proteasome Inhibitors". Filed 5/9/2014. (Inventor: J. K. Sello)

8. Advising and Teaching

Advising at Brown:

Nine Ph.D. students (two current and eight successfully defended Ph.D. theses), fifty-six undergraduates (four currently), and two post-doctoral fellows.

Seventeen undergraduate advisees have been authors on sixteen manuscripts.

Eight undergraduate advisees have received the Chemistry Department Clapp Prize for outstanding thesis in either chemistry or biochemistry.

Two Ph.D. students (Dr. James J. Vecchione and Dr. Corey L. Compton) awarded the Potter Prize for Outstanding Thesis in Chemistry and another (Dr. Jennifer Reeve Davis) received the Brown University Joukowsky Family Award for Outstanding Thesis in the Life Sciences.

Courses Taught at Brown:

CHEM009: First year Seminar- Drug Discovery in the Pharmaceutical Industry (Undergraduate Level)

CHEM360: Organic Chemistry II (Undergraduate Level)

CHEM1230: Chemical Biology (Undergraduate/Graduate Level)

CHEM1240: Biological Chemistry (Undergraduate/Graduate Level)

CHEM1560: Chemistry and Biology of Antibiotics (Undergraduate/Graduate Level)

CHEM2430: Synthetic Organic Chemistry (Undergraduate/Graduate Level)

Biol190: Phage Hunters (co-taught with Prof. Peter Shank)

Courses Taught Away from Brown:

"Bioorthogonal Chemistry", Chemical Biology Workshop, University of Sao Paulo, Brazil (September 2015)

9. Service:

a. Department Service:

2014	Member, Organic Chemistry Faculty Search Committee
2014	Member, Graduate Student Recruiting Committee
2014	Member, Lecturer Reappointment Committee
2012	Member, Lecturer Reappointment Committee
2010-present	Faculty Adviser, CHEM DUG (Department Undergraduates)
2008	Member, Potter Prize Selection Committee
2007	Member, Organic Chemistry Faculty Search Committee
2006-2009	Member, Website Update Committee
2006-present	Chair, Organic Chemistry Colloquium

b. University Service:

2015-present	Member, Brown University Title IX Advisory Committee
2014-present	Trainer, Brown University Graduate Program in Molecular Biology, Cell Biology and Biochemistry
2014-15	Member, President's Committee on Sexual Assault Policy
2013	Member, Deputy Dean of the College Search Committee
2012-13	Member, Strategic Planning Committee on Financial Aid
2012-present	Member, Student Conduct Board

2012	Member, Structural Biology Search Committee for Department of Molecular and Cellular Biology, Brown University
2012	Faculty Adviser, Biodiesel Team of the Master's Program in Innovation Management and Entrepreneurship at Brown University
2011	Member, Director of the Third World Center and Assistant Dean of the College, Brown University
2010	Member, Science Outreach Director Search Committee, Dean of the College, Brown University
2009- present	Faculty Adviser, Master of Arts in Teaching program in chemistry, Graduate School, Brown University
2009- 2012	Faculty Team Enhanced Advising and Mentoring (TEAM) for Undergraduate Advising Program, Dean of the College, Brown University
2009- 2012	Faculty Participant, Brown Environmental Leadership Laboratory (BELL) for high school students, Brown University
2009- 2010	Member, Premedical Curriculum Study Group, Dean of the College, Brown University
2009	Member, Search Committee for Associate Dean for Research, Dean of the College, Brown University
2009- 2013	Member of the Undergraduate Teaching and Research Assistantships (UTRA) Selection Committee, Brown University
2009	Panelist, Interviewing and Networking Workshop, Brown University Postdoctoral Association
2008	Trainer. Graduate Program, Department of Molecular Pharmacology, Physiology, and Biotechnology
2008	Member, Systems Biology Faculty Search Committee, Department of Molecular and Cellular Biology, Brown University
2008	Physical Science Faculty Representative. New Graduate Student Orientation, Brown University Graduate School
2008	Brown University Representative. Morehouse College Presidential Inauguration
2008-2009	Member. Graduate Student Travel Committee, Graduate School, Brown University Graduate School
2007- 2011	Member, Third World Center Faculty Advisory Board
2007-present	Member, Institute for Molecular and Nanoscale Innovation, Brown University
2007-2012	Academic advisor to first and second year undergraduates, Brown University

c. Extramural Service

i. Educational Institutions and Scientific Societies:

2016	*ad hoc* reviewer, NIH NIGMS, SBCB Study Section
2015	Associate Editor, "Systems and Synthetic Biology"
2014	External Thesis Reader. McMaster University
2014	Howard Hughes Medical Institute/MIT Outreach to High School Teachers

2012	Research Mentor. Leadership Alliance, (advised Mr. Anthony Scruse, Morehouse College '14)
2012	Poster Judge, Brown University Science Prep Program for high school students
2012	Poster Judge, New England Science Symposium
2010	Visiting Teacher, Martin Luther King, Jr. Elementary School, Providence, RI
2009	Faculty Participant, Brown Summer Science Program for high school students (Summer 2009);
2010-2012	Faculty Participant "Conceptual Assessment in Biochemistry and Molecular Biology Group (CABMB)" sponsored by American Society for Biochemistry and Molecular Biology
2008-present	Unpaid Consultant to the John Hopps, Jr. Research Scholars Program at Morehouse College, an all male, historically black college in Atlanta, GA
2008	Research Mentor. Leadership Alliance, (advised Mr. Blair Alexander, Jr., Morehouse College '11)

ii. Funding Agencies:

2013	Scientific Reviewer, NSF
2012	Scientific Reviewer, USDA, NSF, ARPA-E and NIH
2011	Scientific Reviewer, NSRDEC Biological Sciences Review, Department of Defense, Natick MA
2010	*Ad hoc* reviewer for NSF.
2007- 2008	Reviewer, MCB and CHEM Panels, National Science Foundation

iii. Scientific Journals:

Reviewer: "Journal of the American Chemical Society", "Organic Letters", "Tetrahedron Letters", "Advanced Synthesis and Technology", "Microbiology", "Proceedings of the National Academy of Sciences", "Chemistry and Biology", "Archives of Microbiology", "FEMS Microbiology Letters", "PlosOne" and "Applied Environmental Microbiology", "Chemical Sciences", "Industrial Crops and Products", and "FEBS Letters".

10. Invited Lectures and Poster Presentations:

Lecture, Department of Biology, Duquesnse University (October 14, 2016)

Lecture, Department of Medicinal Chemistry, University of Minnesota (April 17, 2016)

Lecture, 2016 Annual Meeting of the American Society for Biochemistry and Molecular Biology (April 4, 2016)

Lecture, Department of Chemistry, University of Texas- Southwestern Medical Center (November 17, 2015)

Lecture, Tuberculosis Research Center, Johns Hopkins School of Public Health (October 28, 2015)

Lecture, Gustaf H. Carlson School of Chemistry, Clark University (September 18, 2015)

Lecture, Department of Chemistry, Brooklyn College (September 4, 2015)

Lecture, Department of Medicinal Chemistry, University of Iowa College of Pharmacy (April 17, 2015)

Lecture, Department of Cellular and Molecular Pharmacology, University of California, San Francisco (March 25, 2015)

Lecture, Department of Chemistry, City College of San Francisco, (March 24, 2015)

Lecture, Department of Biophysics, Johns Hopkins Medical School, Baltimore, MD (December, 3, 2014)

Lecture, Department of Chemistry, Jackson State University, Jackson, MS (November 7, 2014)

Lecture, Department of Chemistry, Pennsylvania State University, State Park, PA (November 4, 2014)

Lecture, GlaxoSmithKline, King of Prussia, PA (October 21, 2014)

Lecture, Department of Chemistry, University of Pennsylvania, Philadelphia, PA (October 20, 2014)

Lecture, Department of Biochemistry, McMaster University, Hamilton, CA (August 28, 2014)

Lecture, Global Tuberculosis Alliance, New York, New York (August 18, 2014)

Lecture, Natural Products Gordon Research Conference, Andover, NH (July 2014)

Poster Talk, Bioorganic Chemistry Gordon Research Conference, Andover, NH (June 2014)

Lecture, Department of Chemistry, Wesleyan University, Middletown, CT (May 2, 2014)

Lecture, Department of Chemistry, Scripps Research Institute, La Jolla, CA (April 11, 2014)

Lecture, Frontiers in Interdisciplinary Biosciences Seminar Series, Stanford University, (April 10, 2014)

Lecture, Department of Chemistry, Massachusetts Institute of Technology, (February 24, 2014)

Lecture, Department of Chemistry, Boston University, (February 6, 2014)

Lecture, Therapeutics Groups, Broad Institute of Harvard University and Massachusetts Institute of Technology, (January 24, 2014)

Lecture, Department of Physical Sciences, Rhode Island College, (October 11, 2013)

Lecture, Department of Biology, Morgan State University, (April 25, 2013)

Lecture, Department of Microbiology and Immunology, Geisel School of Medicine, Dartmouth College (December 3, 2012)

Lecture, Department of Chemistry, Rutgers University (November 16, 2012)

Lecture, Frontiers in Biorefineries 2012 Meeting, St. Simon's Island, Georgia (October 30- November 2, 2012)

Lecture, Department of Chemistry, University of Maryland, (October 16, 2012)

Lecture, Department of Chemistry, Wesleyan University, (June 20, 2012)

Lecture and Session Co-chair, Chemical Biology and Catalysis Session, ASBMB National Meeting (April 2012)

Lecture and Session Co-chair, Evolution of Antibiotic Resistance, International Symposium on the Biology of Actinomycetes, Puerto Vallarta, Mexico (December 2011)

Lecture, Canadian Society of Microbiologists National Meeting (June 20-23, 2011)

Poster Presentation, Bioorganic Chemistry Gordon Conference (June 12-17, 2011)

Lecture, Department of Chemistry, Holy Cross College (March 25, 2011)

Lecture, Department of Biology, Morehouse College (October 16, 2010)

Lecture, Department of Chemistry, Wellesley College (October 28, 2010)

Lecture, Department of Biology, Northeastern University (October 8, 2010)

Lecture Department of Molecular Microbiology and Immunology, Brown University (October 7, 2010)

Lecture, Department of Chemistry, Haverford College (October 1, 2010)

Lecture, Novobiotic Pharmaceutical, Cambridge, MA (September 13, 2010)

Lecture, Young Investigator Symposium, National Meeting of the American Chemical Society, Boston, MA (August 23, 2010)

Lecture, Northeast Section of the Society for Industrial Microbiology, Boston, MA (June 26, 2010)

Lecture, Department of Microbiology, University of Georgia (June 4, 2010)

Poster Presentation, Jacque Monod Symposium, Pasteur Institute, Paris, France (May 31, 2010)

Lecture, Department of Chemistry, University of Rhode Island (April 16, 2010)

Lecture, Department of Bacteriology, University of Wisconsin, Madison (March 4, 2010)

Lecture, Department of Chemistry, University of Illinois, Chicago (March 2, 2010)

Lecture, *Reunion Internacional de Investigacion en Pruductos Naturales*, Iraputo, Mexico (October 22, 2009)

Poster Presentation, 15th International Symposium on the Biology of Actinomycetes, Shanghai, China (August 19- 28, 2009)

Lecture, National Meeting of the American Society for Microbiology, Philadelphia, PA (May 18, 2009)

Lecture, Department of Chemistry, University of Connecticut, Storrs, CT (April 17, 2009)

Lecture, Department of Chemistry, Williams College, Williamstown, MA (April 18, 2008)

Lecture, Department of Chemistry, University of Massachusetts, Dartmouth (March, 12, 2008)

Lecture, Department of Chemistry, Colby College, Waterville, ME (October 19, 2007)

Lecture, Department of Chemistry, Bowdoin College, Brunswick, ME (October 18, 2007)

Poster Presentation, Bioorganic Chemistry Gordon Research Conference, Proctor Academy, Andover, NH (June 10-15, 2007)

Lecture, Department of Molecular Biology, Princeton University, Princeton, NJ (February 25, 2004)

Lecture, Department of Biology, Morehouse College, Atlanta, GA (October 28, 2003).

Lecture, Department of Biology, Worcester Polytechnic Institute, Worcester, MA (September 13, 2002).

Lecture, Winter Meeting of the Northeast Section of the Society for Industrial Microbiology, Whitehead Institute, Cambridge, MA (March 13, 2001).

Poster Presentation, 41st Meeting of the Division of Organic Chemistry, American Chemical Society, Bozeman Montana, (June 9, 2001).

11. Funding:

a. Current Funding

National Science Foundation Career Award, "Bacterial Catabolism of Plant Biomass- A Phenomenon with Special Relevance to Bioenergy and Environmental Science" (PI: J. K. Sello, 7/2011- 6/2016)

National Institutes of Health PO1 Grant, "Project #2: Mechanisms Controlling Neuroinvasion of Brain Cells by JCPYV" (PI: W. J. Atwood, sub-contract to J. K. Sello, 2014- 2019)

Lara Hull Trust, "Development of Inhibitors of the 20S Proteasome in *Mycobacterium tuberculosis*" (PI: Jason K. Sello, 11/1/2014-10/31/2015)

Air Force, Department of Defense, "Development of Efflux Pump Inhibitors to Suppress Growth of Bacteria in Jet Fuel Tanks" (PI: Jason K. Sello, 2/15/2015-6/30/2015)

b. Completed Funding:

Pharmlogic, LLC Sponsored Research Agreement, "Development of Novel Antibacterial Agents" (PI: J. K. Sello, 4/2013- 6/2015)

Johnson & Johnson Translational Pilot Award, "Synthetic and Mechanistic Studies of Antiviral Compounds" (Co-PIs: Jason K. Sello and Walter Atwood. 9/2012- 3/2013)

Seed Award, Office of Vice President for Research, "Genetic, Biochemical, and Bioinformatic Approaches to Understanding Microbial Degradation of Plant Biomass, (Co-PIs: J. K. Sello, Charles Lawrence, and Rebecca Page, 6/2011-6/2013)

Howard Hughes Medical Institute, Science Education Alliance (Co-PI: Jason K. Sello,)

National Science Foundation Research Initiation Grant “Harnessing *Streptomyces* bacteria as Lignocellulose Biorefineries” (PI: J. K. Sello, 8/2009-7/2011)

Salomon Research Grant, Office of Vice President for Research, Brown University, "Development of New Chemical Methods for the Analysis of Proteins and Metabolites in Biological Samples," (PI: Jason K. Sello Ph.D.)

Brown University, Department of Chemistry. “Frontiers in Chemistry Award” (PI: J. K. Sello, (Jan. 1– Dec. 31, 2008)

Burroughs Wellcome Fund, Career Award at the Scientific Interface.