

Katie L. Strong, PhD

1715 Briarvista Way NE, Atlanta GA 30329

Phone: (757) 284-9020 Email: klstron@emory.edu Website: www.katielstrong.com twitter: @katielstrong

HIGHLIGHTS

- PhD in chemistry with an emphasis on medicinal and organic chemistry from Emory University
- Interdisciplinary degree experience through collaboration with chemists, biologists, and pharmacologists
- Writing and media experience from AAAS Mass Media Fellowship at *the Sacramento Bee* and internship at *AJOB Neuroscience*
- Excellent written communication science skills in a variety of medias including academic manuscripts, newspapers, blogs, and grants

EDUCATIONAL EXPERIENCE

Emory University, Atlanta, GA

August 2010-October 2015

Doctor of Philosophy, organic chemistry

Thesis title: The Design, Synthesis, and Biological Evaluation of Subunit-Selective *N*-Methyl-D-Aspartate Receptor Potentiators

University of Mary Washington, Fredericksburg, VA

August 2006-May 2010

Bachelor of Science (Cum Laude), Chemistry Honors Degree

American Chemical Society Certified Degree

RESEARCH EXPERIENCE

Emory University, Atlanta, GA

Postdoctoral Research Fellow, Department of Pharmacology

Advisor: Dr. Stephen F. Traynelis

November 2015-present

Emory University, Atlanta, GA

Graduate Research Assistant, Department of Chemistry

Advisor: Dr. Dennis C. Liotta

August 2010 – October 2015

- Developed and implemented multi-step synthetic routes to access a novel class of subunit-selective potentiators of *N*-methyl-D-aspartate (NMDA) receptors
- Synthesized and isolated chiral materials through enantioselective syntheses and chiral prep column chromatography
- Organized and presented data to synthetic chemists, biologists and pharmacologists through powerpoint presentations and academic journal articles
- Responsible for maintaining and managing an electronic chemical inventory for 15 organic chemists
- Responsible for implementing and monitoring chemical safety policies for 15 organic chemists

Emory University, Atlanta, GA

Graduate Teaching Assistant, Department of Chemistry

- Taught general chemistry I and II laboratory to 32 undergraduate students
- Responsible for grading laboratory performance, homework, quizzes and exams

August 2010 - May 2011

University of Mary Washington, Fredericksburg, VA

Senior Honors Project, Department of Chemistry

Advisor: Dr. Janet Asper

- Developed and implemented synthetic routes for polyethylene glycol guanidinylation reagents for protecting alkylguanidines
- Presented Honors Project work in a written thesis and an oral exam

August 2009 - May 2010

University of Mary Washington, Fredericksburg, VA
Organic Chemistry Research, Department of Chemistry
Advisor: Dr. Janet Asper

May 2008 - May 2010

- Began research project entitled *Synthesis of Polyethylene Glycol Guanidinylation Reagents for Protecting Alkylguanidines* at the Summer Science Institute
- Analyzed and presented cumulative work to chemistry professors and students

University of Mary Washington, Fredericksburg, VA
General and Organic Chemistry Lab Aide, Department of Chemistry

August 2007 - May 2009

- Assisted chemistry professors in multiple general and organic chemistry laboratories
- Prepared labs and helped guide students through experiments

WRITING AND MEDIA EXPERIENCE

AAAS and ACS Mass Media Science and Engineering Fellow, Sacramento, CA

June 2015 - August 2015

Science Desk Reporter, the Sacramento Bee

- Acted as the science writer for *the Sacramento Bee*, a newspaper with a daily press distribution of approximately 275,000 people
- Used my scientific training to write a variety of stories on topics outside my expertise, including shorter pieces on novel research taking place at UC Davis, news-type articles discussing how science related to current events, and longer feature-style pieces describing interesting science trends
- Attended workshops on science writing and communication sponsored by AAAS during the beginning and end of the fellowship

The PLOS Student Blog

August 2015 - present

Regular Contributing Author

- Helped develop content for blog post published in the student blog affiliated with PLOS One
- Wrote and edited article entitled *In "My Virtual Dream", art and science unite in unique study of neurofeedback*
- Acted as peer reviewer for the blog and edited for style and content

American Journal of Bioethics Neuroscience, Atlanta GA

August 2013 - present

Graduate Student Editorial Intern

- Designed, implemented, and managed the official *American Journal of Bioethics Neuroscience (AJOB Neuroscience)* website, www.ajobneuroscience.com
- Assisted Book Review Editor in selecting potential books for review in the journal and acted as a liaison between *AJOB Neuroscience*, authors, and various publishing companies
- Assisted Managing Editor with the organization of submitted articles by creating the staff's bi-weekly meeting agenda
- Designed and developed *AJOB Neuroscience* promotional materials including business cards and informational buttons
- Managed the *AJOB Neuroscience* Twitter account and live-tweeted events relevant to neuroethics

The Neuroethics Blog, Atlanta GA

August 2013 - present

Supporting Editor and Regular Contributing Author

- Developed the content and wrote blog posts on a variety of neuroethics topics, including the impact on technological advances on society, detecting autism in children, modification of free will, and implications of brain-to-brain computer interfaces
- Assisted Managing Editor of Blog in editing articles and advertising the publication of new posts

In Scripto, Emory University, Atlanta, GA

Writer

August 2012

- Helped develop content for article published in *In Scripto*, the magazine for Science Writers Association at Emory (SWAE)

- Wrote and edited article entitled “Advances in Medicine: New Vaccines and Novel Methods of Drug Delivery” published in the Autumn 2012 issue

PUBLICATIONS AND PRESENTATIONS

Publications

- **Strong, K.L.**; Jing, Y.; Prosser, A.R.; NMDA receptor modulators: an updated patent review (2013-2014). *Expert Opinion on Therapeutic Patents*. **2014**, *24*, 1349-1346.
- Santangelo, R.M.; Ogden, K.K.; **Strong, K.L.**; Khatri, A.; Chepiga, K.M.; Jensen, H.S.; Traynelis, S.F.; Liotta, D.C. Synthesis and Structure Activity Relationship of Tetrahydroisoquinoline-based Potentiators of GluN2C and GluN2D Containing *N*-Methyl-D-Aspartate Receptors. *J. Med. Chem.* **2013**, *56*, 5351-5381.
- Santangelo, R.M.; Acker, T.M.; Zimmerman, S.S.; Katzman, B.M.; **Strong, K.L.**; Traynelis, S.F.; Liotta, D.C. Novel NMDA receptor modulators: an update. *Expert Opinion on Therapeutic Patents*. **2012**, *22*, 1337-1352.

Presentations

- **Strong, K.L.**; Menaldino, D.S., Ogden, K.K, Traynelis S.F., Liotta, D.C. “The Structure Activity Relationship of Tetrahydroisoquinoline *N*-Methyl-D-Aspartate Receptor Positive Allosteric Modulators can be Modified to Target GluN2B- Containing Receptors” 249th American Chemical Society National Meeting, Denver, CO, March 22-26, 2015.
Selected for the conference-wide poster session, Sci-Mix, where only 20 posters from the medicinal chemistry division were represented
- **Strong, K.L.**; Rommelfanger, K.S. “Consuming Brain Interfaces: Exploring Ethical Implications of Recent Advances in Physiological Computing” 2014 Annual International Society for Neuroethics, Washington, D.C., November 13-14, 2014.
- **Strong, K.L.**; Ogden, K.K.; Santangelo Freel, R.M.; Liotta, D.C.; Chastain, L.G.; Kinkead, B.; Traynelis, S.F. “Subunit-selective GluN2C and GluN2D NMDA receptor potentiators reverse MK801-induced impairment of pre-pulse inhibition” 43rd Annual Meeting of the Society for Neuroscience, San Diego, CA, November 9-13, 2013.
- **Strong, K.L.**; Asper, J.A. “Synthesis of PEG Guanidinylation Reagents for Protecting Alkylguanidines” Virginia Section of the American Chemical Society Undergraduate Poster Session, Charlottesville, VA, April 2010.
- **Strong, K.L.**; Asper, J.A. “Synthesis of PEG Guanidinylation Reagents for Protecting Alkylguanidines” 239th American Chemical Society National Meeting, San Francisco, CA, March 2010.
- **Strong, K.L.**; Asper, J.A. “Synthesis of PEG Guanidinylation Reagents for Protecting Alkylguanidines” Annual Sigma Xi Student Research Conference, Washington, D.C., November 2008.

Selected Public Scholarship

- In "My Virtual Dream," art and science unite to unique study of neurofeedback, PLOS Student Blog, August 14, 2015
- California scientists try to stay ahead of bat-killing disease, *The Sacramento Bee*, published online August 14, 2015
- Peppers a hot topic in medical research at UC Davis, *The Sacramento Bee*, published online August 14, 2015
- Science researchers turn to crowdfunding for projects, *The Sacramento Bee*, published online August 10, 2015
- UC Davis researchers uncover key step in rice immune response, *The Sacramento Bee*, published online July 28, 2015
- Robot in Uncanny Valley Closes in on Reality, *The Sacramento Bee*, published online July 15, 2015
- UC Davis research reveals decision-making behavior of wild baboons, *The Sacramento Bee*, June 18, 2015
- Adderall as a Motivation Enhancer. *The Neuroethics Blog*, April 15, 2015
- Neuroethics in Neuroscience Series: Exploring Ethical Implications of the Commercialization of Physiological Computing. *The Kopf Carrier*, Issue #82, October 2014.

- Can Neuroscience Validate the Excuse “Not Tonight, Dear, I have a Headache?” *The Neuroethics Blog*, November 18, 2014.
- “Lifelogging” and neurophysiological computing: Will we forget how to forget? *The Neuroethics Blog*, August 26, 2014.
- A review of *The Future of the Mind: The Scientific Quest to Understand Enhance, and Empower the Mind*. *The Neuroethics Blog* and *The NeuroEthics Women Leaders (NEW) Blog*, May 27, 2014.
- How early can signs of autism be detected in infants? *The Neuroethics Blog*, February 4, 2014.

AWARDS

- First Annual Student International Society for Neuroethics Essay Prize for essay entitled “Exploring Ethical Implications of the Commercialization of Physiological Computing,” which was published in the *Kopf Carrier* Issue #82 and was accompanied by the Michael Patterson Travel Award (July 2014)
- The American Institute of Chemist foundation Student Awardee, University of Mary Washington (April 2010)
- College of William and Mary Leadership Award that included the attendance of a leadership seminar (August 2005)

PROFESSIONAL ORGANIZATIONS

- Member, National Association of Science Writers (June 2015 – present)
- Member, American Chemical Society (September 2014 – September 2015)
- Member, International Society for Neuroethics (September 2013 - September 2015)
- Member, Society for Neuroscience (January 2013 - December 2013)
- President, University of Mary Washington Chemical Society Student Affiliates (May 2009 - May 2010)
- Treasurer, Chi Beta Phi, a national science honorary society (May 2009 - May 2010)

COMPUTER PROFICIENCIES

- Performed extensive literature searches using SciFinder Scholar and PubMed
- Extensively utilized CambridgeSoft programs including ENotebook and Chemdraw