

Ashley R. Longstreet  
136 Highland Ave #28 Somerville, MA 02143  
Cell Phone: (609) 618-6348 Work Phone: (617) 452-2761  
E-Mail: arlong@mit.edu

## EDUCATION

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Florida State University Tallahassee, FL Aug. 2010 – Aug. 2015  
Ph. D., Organic Chemistry  
Thesis Title: Access to Polysubstituted Heterocycles and Fluorescent Indicators  
from a Single Enamine Class

Lynchburg College Lynchburg, VA Aug. 2006 – May 2010  
B.Sc. Biomedical Science and Chemistry, Highest Honors, magna cum laude  
Honors Thesis Title: The Development of an Effective Water-Soluble Receptor  
for Pyrene Derivative Dyes

## RESEARCH AND P

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the girls in subjects such as engineering and physics and promoted their interest in the sciences.

Mentorship †FSU & MIT

January 2012 to  
Present

Mentored a total of four undergraduates, four graduate, and two visiting students.

Mentorship roles included:

- † Developing suitable projects for undergraduates and visiting students
- † Educating mentees on responsible, reliable, and safe techniques in organic chemistry
- † Advising students on how to develop and test hypotheses
- † Helping prepare graduate students for their qualifying exams
- † Involving students in the publication process

Teaching Assistant for Organic I Recitation †FSU

2011 Spring & Fall  
Semesters

Responsibilities included:

- † Conducting two 50-minute review sessions once a week with ca. 40 students each
- † Holding office hours once a week
- † Preparing quizzes and tests, grading

Department of Chemistry & Biochemistry Outreach Program †FSU

Aug. 2010 † Aug. 2011

Other graduate students and I traveled to local middle and high schools to perform chemistry demonstrations to children during their science class. Each graduate student was responsible for leading and educating the class on one or two demonstrations. Demonstrations included the iodine clock experiment, synthesizing slime, igniting gun cotton, and freezing objects in liquid nitrogen.

Teaching Assistant for Organic II Laboratories †FSU

Responsibilities included:

- † Teaching one lab section

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8583.

7. Longstreet, A.R.; Jo, M.; Chandler, R.R.; Hanson, K.; Zhan, N.; Hrudka, J.J.; Mattoussi, H.; Shatruk, M.; McQuade, D.T. Ylidenemalononitrile Enamines as Fluorescent On-Off Indicators for Primary Amines. J. Am. Chem. Soc. 2014, 136, 15493.
6. Longstreet, A.R.; Opalka, S.M.; Campbell, B.S. ; Gupton, B.F.; McQuade, D.T. Investigating the Continuous Synthesis of a Nicotinonitrile Precursor to Nevirapine. Beilstein J. Org. Chem. 2013, 9, 2570. Invited article for the Chemistry in Flow Systems III thematic series.
5. Longstreet, A.R.; Campbell, B.S. ; Gupton, B.F.; McQuade, D.T. Improved Synthesis of Mono- and Disubstituted 2-Halonicotinonitriles from Alkylidene Malononitriles. Org. Lett. 2013, 15, 5298.
4. Opalka, S.M.; Park, J.K.; Longstreet, A.R.; McQuade, D.T. Continuous Synthesis and Use of N-Heterocyclic

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Dean's Award for Best Poster at C Student Scholar Showcase †2 <sup>nd</sup> Place	2010
Iota Sigma Pi †National Honor Society for Women in Chemistry (inducted)	2009
Phi Kappa Phi †National Academic Honor Society (inducted)	2009
Omicron Delta Kappa †National Leadership Honor Society (inducted)	2009
Beta Beta Beta †National Biological Honor Society (inducted)	2009
Volunteer Award †Lynchburg College Emergency Medical Services	2007
Westover Honors Program	2007-2010
Phi Eta Sigma †National Freshman Honor Society (inducted)	2007

#### LEADERSHIP AND SERVICE ACTIVITIES

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#### REFERENCES

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***D. Tyler McQuade***

Program Manager  
Defense Sciences Office  
Defense Advanced Research Projects Agency  
675 North Randolph Street  
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***Timothy F. Jamison***

Professor of Chemistry, Department Head  
Department of Chemistry  
Massachusetts Institute of Technology  
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***Michael Shatruk***

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Department of Chemistry & Biochemistry  
Florida State University  
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