Dr. Amanda C. Jones, C.V.
Assistant Professor
Salem 4B, jonesac@wfu.edu
Department of Chemistry
Wake Forest University
http://www.wfu.edu/~jonesac/

Interests
Mechanistic Organometallic Chemistry, Reactive Intermediates, NMR Spectroscopy, History of Chemistry

Appointments
2010-Present Assistant Professor, Wake Forest University

2007-2010 NIH Postdoctoral Scholar, California Institute of Technology (Prof. Brian M. Stoltz)
• Project Title: Efforts Toward the Total Synthesis of Ineleganolide and Preparation of Pyrazole Pyrimidine Inhibitors of ATPase p97

Education
2001-2007 Ph.D., Organic Chemistry, University of Wisconsin–Madison (Prof. Hans J. Reich)
• Dissertation Title: Rapid-Injection NMR and Organolithium Reactivity

1997-2001 A.B., Chemistry, Princeton University (Prof. Maitland Jones, Jr.)
• Thesis Title: The Photochemistry of Fused Carbocyclic Carboranes

Academic and Professional Honors
2011-2013 Wake Forest CRADLE Fellowship, Recipient
2007-2010 Ruth L. Kirschstein-NRSA Postdoctoral Training Fellowship, Recipient
2001 Elected to Sigma Xi Society, Princeton University
2001 Graduated *Cum Laude*, Princeton University
1999 Summer Undergraduate Research Fellowship, Princeton University, Recipient

Grants
2010-2011 Wake Forest Science Research Fund, *$10,000*

Publications (*Indicates Undergraduate Co-Author)
Chou, T.; Brown, S. J.; Minond, D.; Nordin, B. E.; Li, K.; Jones, A. C.; Chase, P.; Porubsky, P. R.; Stoltz, B. M.; Schoenen, F. J.; Patricelli, M. P.; Hodder, P.; Rosen, H.; Deshaies, R. J. Reversible inhibitor of p97, DBeQ, impairs both ubiquitin-dependent and autophagic protein clearance pathways. *Proc. Natl. Acad. Sci. U. S. A.* **2011**, *108*, 4834-4839.

Reich, H. J.; Sikorski, W. H.; Sanders, A. W.; Jones, A. C.; Plessel, K. N. Multinuclear NMR Study of the Solution Structure and Reactivity of Tris(trimethylsilyl)methyllithium and its Iodine Ate Complex. *J. Org. Chem.* **2009**, *74*, 719–729.

Jones, A. C.; Sanders, A. W.; Sikorski, W. H.; Jansen, K. L.*; Reich, H. J. Reactivity of the Triple Ion and Separated Ion Pair of Tris(trimethylsilyl)methyllithium with Aldehydes: A RINMR Study. *J. Am. Chem. Soc.* **2008**, *130*, 6060–6061.

Jones, A. C.; Sanders, A. W.; Bevan, M. J., Reich, H. J. Reactivity of Individual Organolithium Aggregates – a RINMR Study of *n*-Butyllithium and 2-Methoxy-6-(methoxymethyl)phenyllithium. *J. Am. Chem. Soc.* **2007**, *129*, 3492–3493.

Reich, H. J.; Sikorski, W. H.; Thompson, J. L.; Sanders, A. W.; Jones, A. C. Interconversion of Contact and Separated Ion Pairs in Silyl- and Arylthio-Substituted Alkyllithium Reagents. *Org. Lett.* **2006**, *8*, 4003–4006.

Bradley, A. Z.; Cohen, A. D.; Jones, A. C.; Ho, D. M.; Jones, M., Jr. Photolysis of Naphthocarborane and Benzocarborane in Oxygen. *Tetrahedron Lett.* **2000**, *41*, 8695–8698.

Posters and Presentations

Jones, A. C. Structure and NMR Spectroscopy of Gold(I) Complexes Relevant to Catalysis. Department Seminar Series, Appalachian State University, March 2, **2012**. (Invited Presentation)

Jones, A. C. Forays in Total Synthesis, Rapid-Injection NMR, and Organometallic Reactivity. Department Seminar Series, University of North Carolina–Charlotte, September 20, **2010**. (Invited Presentation)

Jones, A. C. Studies of Organolithium Reactivity Using Rapid-Injection NMR. Inorganic–Organometallics Seminar Series, California Institute of Technology, February 1, **2008**. (Oral Presentation)

Jones, A. C.; Reich, H. J. Rapid-Injection NMR and Organolithium Reactivity. Poster presented at 8th International Symposium on Carbanion Chemistry, Madison, WI, USA. June 6–10, **2007**.

Jones, A. C.; Reich, H. J. Rapid-injection NMR (RINMR) analysis of *n*-butyllithium reactivity. Abstracts of Papers, 230th ACS National Meeting: Washington, DC, United States. August 28-September 1, **2005**. ORGN–343. (Oral presentation)

Jones, A. C.; Reich, H. J. A Rapid-Injection NMR Study of *n*-Butyllithium Reactivity. Poster presented at Organic Reactions and Processes Gordon Research Conference, Bryant University, Smithfield, RI, USA. July 31–August 5, **2005**.

Jones, A. C. The Use of Rings to Control Stereochemistry in the Syntheses of R. B. Woodward. Organic Division Seminar Series, University of Wisconsin–Madison, April 8, **2004**. (Oral Presentation)

Jones, A. C.; Reich, H. J. A Rapid-Injection NMR Study of *n*-Butyllithium Reactivity. Poster presented at 30th Reaction Mechanisms Conference, Northwestern University, Evanston, IL, USA. June 25–28, **2004**.

University Service

2011-Present Lower Division Academic Advisor
2011 Invited Panel Speaker, New Faculty Orientation
2010-Present Undergraduate Committee Member

Professional Memberships and Service

2011 Reviewer, Beilstein Journal of Organic Chemistry (1 Article Reviewed)
2005-Present American Chemical Society

Students Mentored

Yuyang Zhu, *Graduate, Fall 2010 – present*
Hillary McDonald, *Undergraduate, Fall 2011 – present*
Dwaine Hodges, *Undergraduate, Summer 2011 – present*
Quintus Owen, *Undergraduate, Summer 2011 – present*
Ellen Petryna, *Undergraduate, Spring 2012*
Katarina Hauser, *Undergraduate (Appalachian State University), Summer 2011 – present*
Sean Clark, *Undergraduate, Summer 2011 – Spring 2012*
Niral Patel, *Graduate, Summer 2011*
Grant Gilbert, *Undergraduate, Fall 2011*
Madison Bushman, *Undergraduate (Part-time, Pre-Pharmacy, 2010-2011)*
Mark Walley, *Undergraduate (Part-time, Spring 2011)*

Wake Forest Courses Taught

2012 CHEM722 – Physical Organic Chemistry (*Graduate Course, Upcoming*)
2012 CHEM122/L – Organic Chemistry I (Lecture and Lab)
2011 CHEM223 – Organic Chemistry II
2011 CHEM725 – Structure Identification in Organic Chemistry (*Graduate Course)*

Other Teaching Experience

2008-2010 Undergraduate Research Mentor, California Institute of Technology
2003-2007 Undergraduate Research Mentor, University of Wisconsin
2003-2004 NMR Facility Teaching Assistant, University of Wisconsin
2001-2003 Organic Chemistry Teaching Assistant, University of Wisconsin
1999 Organic Chemistry Teaching Assistant, Princeton University