

PERSONAL INFORMATION

SIDNEY MALIK WILKERSON-HILL

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1311 Venable Hall

University of North Carolina, Chapel Hill

Chapel Hill, NC 27599

919-962-7775

EDUCATION

University of California Berkeley, CA, 94720

Ph.D. in Chemistry – Reaction Methodology, Natural Products, Total Synthesis

Dissertation Title – “Development and Applications of (Hetero)cycloisomerization Methodologies to Access Natural Product Scaffolds”

Research Adviser – Prof. Richmond Sarpong

Cumulative GPA: 3.947

NSF Fellowship 2011 – 2015

Chancellors Fellowship 2010 – 2011

Graduation Date: May 16, 2015

North Carolina State University, Raleigh, NC, 27607

B.S. in Polymer and Color Chemistry

B.S. in Chemistry with Honors

Cumulative GPA: 3.979

Phi Beta Kappa Honor Society

Deans List: August 2006 – May 2010

Graduation Date: May 15, 2010

OBJECTIVE

To use skills in small molecule synthesis and catalysis gained during my doctoral and postdoctoral studies to develop a research program based on using C–H activation strategies for the rapid generation of molecular complexity using cycloaddition reactions

WORK EXPERIENCE

Emory University, UNCF-Merck Postdoctoral Fellow, Research Adviser: Prof. Huw M. L. Davies, August 2015-Present

University of California Berkeley, NSF Fellowship, 2011-2015

North Carolina State University, College of Textiles, January 2009 – May 2010. Undergrad. Research.

North Carolina State University, Department of Chemistry, September 2008 – May 2010. Undergrad Research.

Brookhaven National Labs, Medical Department, June 2009 – August 2009; June 2008 – August 2008 – Intern.

North Carolina State University, College of Textiles, January 2006 – December 2009 – Head Tutor.

ACTIVITIES AND HONORS

National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE)

Professional Development Committee Member – National Meeting 2017

Technical Session Committee Member – National Meeting 2017

United Negro College Fund (UNCF) – Merck Fellowship Postdoctoral Fellowship– April 2015 – 2016.

U. C. Berkeley Department of Chemistry’s Outstanding Graduate Student Instructor (GSI) Award 2013 – 2014.

College of Physical and Mathematical Sciences Undergraduate Research Award - May 2010

US DOE’s Science and Energy Research Challenge (SERCh) 1st in Physical Science Division – Nov 2009

College of Textiles Henry A. Rutherford Award – May 2009

College of Textiles Wilson Whaley Award - December 2008

Caldwell Fellows Scholarship Program - February 2007

University Scholars Program

REFEREED PRESENTATIONS

Wilkerson-Hill, S. M.; Davies, H. M. L. “Intermolecular [3+2] Cycloaddition Reactions of 4-Phthalimido-*N*-sulfonyltriazoles and Substituted Arenes” Presented at the 253rd American Chemical Society National Meeting & Exposition in San Francisco, CA, April 02, 2017; ORG 45 (oral)

Wilkerson-Hill, S. M.; Sawano, S.; Sarpong, R. “Bis(1-cyanovinylacetate) is a Linear Precursor to 3-Oxidopyrylium Ions” Presented at the Northeastern Midwestern Regional NOBCCHE meeting in Pittsburgh, PA, March 17, 2017; (oral)

Wilkerson-Hill, S. M.; Davies, H. M. L.; “Enantioselective Rh(II)-catalyzed [3+2] Cycloaddition Reaction between *N*-Sulfonyl-1,2,3-triazoles and Mono-substituted Arenes” Presented at the 252nd American Chemical Society National Meeting & Exposition in Philadelphia, PA, Aug 22, 2016; ORG 239. (oral)

Wilkerson-Hill, S. M.; Lavados, C. M., Sarpong, R. “Diels–Alder Reactivity of 2-Vinylindenes” Presented at the 247th American Chemical Society National Meeting & Exposition Dallas, TX, March, 19th, 2014; ORG 630. (poster)

REFEREED PUBLICATIONS

Wilkerson-Hill, S. M.; Yu, D.; Painter, P. P.; Fischer, E. L.; Tantillo, D. J.; Sarpong, R. S.; Hein, J. E. Mechanism of a No-metal-added Heterocycloisomerization of Alkynylcyclopropylhydrazones: A Mild Synthesis of Cycloheptane-fused Aminopyrroles Facilitated by Copper Salts at Trace Loadings.” *J. Am. Chem. Soc.* **2017**, *139*, 10569 - 10577. Highlighted in JACS Spotlights. *J. Am. Chem. Soc.* **2017**, *139*, 11307 – 11308.

Wilkerson-Hill, S. M.*; Sawano, S.*; Sarpong, R. S. “Bis(1-cyanovinylacetate) is a Linear Precursor to 3-Oxidopyrylium Ions” *J. Org. Chem.* **2016**, *81*, 11132 – 11144.

Kubiak II, R. W.; Mighion, J. D.; Wilkerson-Hill, S. M.; Alford, J. S.; Yoshidomi, T.; Davies, H. M. L. “Enantioselective Intermolecular C–H Functionalization of Allylic and Benzylic sp³ C–H Bonds using *N*-Sulfonyl-1,2,3-triazoles” *Org. Lett.* **2016**, *18*, 3118 – 3121.

Wilkerson-Hill, S.M.; Sarpong, R. S. “The Diels – Alder Reactivity of 2-Vinylindenes” – *Tetrahedron* **2016**, *72*, 3635 – 3640.

Beng, T. K.; Wilkerson-Hill, S. M.; Sarpong, R. S. "Direct Access to Functionalized Azepanes by Cross-Coupling with α -Halo Eneformamides," *Org. Lett.* **2014**, 16, 916-919.

Fisher, E. L.; Wilkerson-Hill, S. M.; Sarpong, R.S. "Tungsten-Catalyzed Heterocycloisomerization Approach to 4,5-Dihydro-benzo[b]furans and -indoles," *J. Am. Chem. Soc.*, **2012**, 134, 9946 – 9949.

Hooker, J. M.; Reibel, A. T.; Hill, S. M.; Schueller, M. J.; Fowler, J. S. "One-Pot, Direct Incorporation of [13 C]CO₂ into Carbamates," *Angew. Chem. Int. Ed.*, **2009**, 48, 3482 – 3485.

Wilkerson-Hill, S. M.; Davies, H. M. L. "Synthesis of [3a,7a]-dihydroindoles by a Thermal Cyclopropanation/3,5-Sigmatropic Rearrangement Reaction" *Manuscript in Preparation*.

* Designates equal contribution

COMMUNITY INVOLVEMENT

"California Alliance" March 2014 - present

Active participant in a new outreach program funded by the National Science Foundation (NSF) that aims leverage the abilities of U. C. Berkeley, Stanford, UCLA, and Caltech to increase the number of underrepresented students taking faculty positions in the sciences and to eliminate barriers faced by those students. Featured in the Daily Californian (<http://newscenter.berkeley.edu/2014/02/13/california-alliance/>) and in Chemical & Engineering News (C&EN) (<http://www.cen-online.org/articles/92/i18/Teaming-Promote-Diversity.html>).

Berkeley Science Network August 2011 - Present

Active participant in a new outreach program with the College of Letters and Science, that aims create a comprehensive network (both online and interpersonal), which strives to advance under represented students in the mathematical, physical sciences, and computer sciences and eliminate barriers faced by those students.

"Teach for Madagascar" (Self-Designed) May 2007 – July 2007

Madagascar Container Project August 2006 - March 2007

College of Textiles Open House Volunteer February 2007 – February 2010

Science Olympiad Summer Camp Summer 2006, 2007

PERSONAL INTERESTS

Running, swimming, Nintendo®, traveling, teaching and learning.