

Mychal D. Smith

Department of Chemistry
Virginia Commonwealth University
1001 West Main Street
Richmond, VA 23284
(804) 234-3121
mdsmith@vcu.edu

LinkedIn: www.linkedin.com/pub/mychal-smith/1b/507/197/

Education

- 2013** North Carolina State University, Raleigh, NC
Ph.D., Biochemistry
Dissertation Title: "Probing the Hotspot Binding Sites of Proteins: P22TSP, Ras, and BAF"
Research Advisor: Professor Carla Mattos
- 2007** Fayetteville State University, Fayetteville, NC
B.S., Chemistry

Employment

- 2016 – Present** **Teaching Associate Professor**, Department of Chemistry, Virginia Commonwealth University
- 2015 – 2016** **Community Liaison**, *Center for the Study of Black Youth in Context*, Department of Psychology, University of Michigan
- 2015 -2016** **STEM Curriculum Developer**, *University of Michigan Wolverine Pathways Project*, School of Education, University of Michigan
- 2014 – 2015** **Program Manager**, *NCLSAMP, UROMS, and CPSE*, Department of Mathematics and Computer Science, Fayetteville State University
- 2014 -2015** **Adjunct Faculty Member**, Department of Chemistry and Physics, Fayetteville State University

Teaching and Diversity Program Experience

- August 2016 – Present** **Faculty Member, Virginia Commonwealth University, Teaching,**
- Biochemistry I (CHEM 403)
 - Biochemistry II (CHEM 404)
 - Chemistry in the Community (CHEM 391) Chemistry Service-Learning Class
 - Biochemistry Laboratory (CHEZ 404)
 - Exploring Frontiers in Chemistry: Research Methods (CHEZ 400)
- May 2022 – Present** **PI Louis Stokes Alliance for Minority Participation (LSAMP) Bridge to Doctorate Program,**

- August 2018 - Present** **VCU Co-PI Louis Stokes Alliance for Minority Participation (LSAMP)**
- August 2018 – Present** **VCU Graduate Programming Coordinator (Initiative for Maximizing Student Development) IMSD,**
- June 2014 – July 2015** **Adjunct Faculty Member, Fayetteville State University, Teaching**
- Introduction to Chemical Principles (Nursing)
 - Introduction to Organic and Biological Chemistry (Nursing)
 - Introduction to Organic and Biological Chemistry Lab (Nursing)
 - General Chemistry I
 - General Chemistry II
- March 2014 – July 2015** **Program Grant Manager, Fayetteville State University**
- Center for Promoting STEM Education & Research (CPSER) NSF Grant
 - North Carolina Louis Stokes Alliance for Minority Participation (NCLSAMP) NSF Grant
 - Mathematics and Science (UROMS) Programs NSF Grant

Research Experience

- August 2015 – July 2016** **Community Liaison, University of Michigan**
Parenting and African American STEM Success (PAASS)
Mentor: Dr. Stephanie Rowley
- August 2015 – July 2016** **STEM Curriculum Developer, University of Michigan**
Wolverine Pathways
Mentor: Dr. Robert Jagers
- August 2008 – December 2013** **Graduate Research Assistant, North Carolina State University**
Dissertation Title: “Probing the Hotspot Binding Sites of Proteins: P22TSP, Ras, and BAF”
Research Advisor: Professor Carla Mattos

Grants Funded

- NSF \$1,075,000 08/2022 – 07/2024 LSAMP BD: Virginia Commonwealth University, Virginia-North Carolina Alliance (2022-2024) **PI**
- NSF \$73,818 07/2022 – 07/2023 The Virginia North Carolina Louis Stokes Alliance for Minority Participation Mid-level LSAMP **co-PI**
- NIH \$103,354 02/01/2023 – 01/31/2028 VCU Initiative for Maximizing Student Development Program (IMSD) **Graduate Coordinator**

Publications

1. Gibson SM, Brinkley K, Griggs LA, James BN, **Smith M**, Schwitzerlett M, Waller LM and Hargraves RH (2021) Implementing a Hybrid Summer Transition Program. *Front. Educ.* 6:674337. doi: 10.3389/educ.2021.674337
2. Agarwal, S.; **Smith, M.**; De La Rosa, I.; Verba, K. A.; Swartz, P.; Segura-Totten, M.; Mattos, C.

- (2020). Development of a Structure-Analysis Pipeline Using Multiple-Solvent Crystal Structures of Barrier-to-Autointegration Factor. *Acta Cryst.* **2020**, *D76*, 1001-1014.
3. Dechene M.; Wink G.; **Smith M.**; Swartz P.; Mattos C. Multiple Solvent Crystal Structures of Ribonuclease A: An Assessment of the Method. *Proteins.* **2009**, *76* (4), 861-881.

Professional Presentations, Meetings, Invited Talks, and Community Service Training

1. ACS Black History Month Showcase Inquiry. Guest Speaker. (February 2022)
2. Science Hub Not on my Resume. Guest Speaker. (December 2021)
3. John Marshall High School. Guest Lecturer. Importance of STEM and College Preparation Tips. (May 2021)
4. Black Male Students' Symposium "Black Men's Attainment Post Pandemic.". Co-convener. (April 2021)
5. NIH Becoming a Resilient Scientist Series Facilitator. (Spring 2021)
6. APB Small Lecture: The Impact of COVID on Higher Education and the Future. Panelist. (April 2021)
7. Lloyd C Bird High School Avid Class. Guest Lecturer. The Biochemistry behind COVID-19. (November 2020)
8. ANAT 619. Professional Skills in Biomedical Research. Guest Lecturer. Mentoring and its Importance in the STEM Community. (October 2020)
9. Black Male Students' Symposium A Blueprint: Building Your Pathway to Success. Co-convener. (April 2019)
10. VCU-UR Faculty Development Workshop (February 2019)
11. 2019 VA Engage Inter-Institution Learning Community (iiLC) Member.
12. Akbarali, H., Hargraves R., Golding S., Lloyd J., **Smith M.**, Wright M., Barbour, S., December (2018), "Building a Diverse Community of Scientists: A Decade of VCU Center on Health Disparities", Panel Discussion at the VCU 50: Commemorating History Symposium, VCU, Richmond, Virginia.
13. Smith, Mychal. (April 2018). "*Got the Degree, Now What?*". Talk presented at Black Male Students' Symposium, VCU, Richmond, Virginia.
14. Waller, L. M., Crawley C. D., **Smith M. D.**, (May 2017). Strategies to increase student success in At-Risk STEM populations. Poster Presentation at the Virginia Academy Sciences Conference, Richmond, Virginia.
15. Bridging the Gap STEM Education Conference, (October 2014), Raleigh, North Carolina.
16. 6th Annual Conference on Understanding Interventions that Broaden Participation in Research Careers, (May 2014) Baltimore, Maryland.
17. First Annual Mid Atlantic PREP & IMSD Research Symposium, (May 2013), Blacksburg, Virginia.
18. **Smith M.**, Barbirz S., Mattos C., (April 2013). The Multiple Solvent Crystal Structures of P22TSP. Poster presentation at The American Society for Biochemistry and Molecular Biology: Experimental Biology, Boston, Massachusetts.
19. Annual Biomedical Research Conference for Minority Students, Recruiter for Northeastern University, (November 2012), San Jose, California.
20. Applied Pharmaceutical Chemistry, Drug Discovery in the 21st Century, (October 2012), Cambridge, Massachusetts.
21. **Smith M.**, Barbirz S., Mattos C., (March 2012). The Multiple Solvent Crystal Structures of P22TSP. Poster presentation at 243rd ACS National Meeting & Exposition, San Diego, California.
22. 17th Annual Compact for Faculty Diversity's Institute on Teaching and Mentoring, (October 2011), Atlanta, Georgia.
23. **Smith M.**, Barbirz S., Mattos C., (April 2011). The Multiple Solvent Crystal Structures of P22TSP. Poster presentation at The American Society for Biochemistry and Molecular Biology: Experimental Biology, Washington, DC.

24. 16th Annual Compact for Faculty Diversity's Institute on Teaching and Mentoring, (October 2010), Tampa Bay, Florida.
25. UCSF's AGEP Postdoc Bootcamp, (September 2010), UCSF Mission Bay campus, San Francisco, California.
26. **Smith M.**, Barbirz S., Mattos C., (June 2010). The Multiple Solvent Crystal Structures of P22TSP. Poster presentation at 3rd Annual NC State University Graduate Summer Research Symposium, Raleigh, North Carolina.
27. **Smith M.**, Barbirz S., Mattos C., (June 2010). The Multiple Solvent Crystal Structures of P22TSP. Poster presentation at Mid-Atlantic Research Conference, Baltimore, Maryland.
28. **Smith M.**, Nicely N., Buhrman G., Swartz P., Mattos C., (August 2009). The Multiple Solvent Crystal Structures of Lysozyme. Poster presentation at 2nd Annual NC State University Graduate Summer Research Symposium, Raleigh, North Carolina.
29. **Smith M.**, Nicely N., Buhrman G., Swartz P., Mattos C., (June 2009). The Multiple Solvent Crystal Structures of Lysozyme. Poster presentation at Proteins Gordon Research Conference, Holderness, New Hampshire.
30. **Smith M.**, Swartz P., Mattos C., (July 2008). Multiple Solvent Crystal Structures Analysis of Lysozyme through Computational Methods. Oral presentation at 1st Annual NC State University Graduate Summer Research Symposium, Raleigh, North Carolina.
31. **Smith M.**, Swartz P., Mattos C., (November 2007). Probing the Water Structure of Lysozyme using Multiple Solvent Crystal Structure's method (MSCS) and Molecular Mechanics. Poster presented at Annual Biomedical Research Conference for Minority Students (ABRCMS), Austin, Texas.
32. * Young M., **Smith M.**, Buhrman G., Mattos C. (July 2009). Multiple Solvent Crystal Structures Method of Protein BAF. Poster presented at 8th Annual NC State University Undergraduate Summer Research Symposium, Raleigh, North Carolina.

*Shows presentations in which I mentored undergraduate research assistants.