

CURRICULUM VITAE

Ra'sheedah Richardson

Department of Teaching, Learning & Culture
College of Education and Human Development
Texas A&M University
College Station, Texas 77843-4232

Current as of April 2012

PERSONAL

Email Address: sheedah@tamu.edu

EDUCATION

Texas A&M University, College Station, TX

Ph.D. Candidate in Curriculum and Instruction and Policy Research in Science Education: Anticipated Graduation, May 2012. [Proposal passed May 2011]. Dissertation Title: *Recruitment Experiences and Decision Factors of High School Science Teachers in Texas*

M.Ed. in Curriculum and Instruction emphasis in Science Education: January 2003 to December 2004

B.A. in Biology, Chemistry Minor: September 1996 to May 2002

PROFESSIONAL LICENSE

State Board for Educator Certification

Classroom Teacher Certification, Biology, 6th-12th grade: January 2003-Present

EXPERIENCE

Center for Teaching Excellence, Office of the Dean of Faculties and Associate Provost, Texas A&M University, College Station, TX

Instructional Consultant and Program Coordinator for Graduate Student Professional Development in Teaching and Learning, February 2012-Present

- **Develop** programming (workshops, learning communities, and consulting) for graduate students
- **Coordinate** university TA training program
- **Collaborate** with colleagues on broader programming on teaching and learning

Office of Graduate Studies, Texas A&M University, College Station, TX

Dissertation Completion Fellowship, September 2011-May 2012 (Graduate Fellowship funded by Texas A&M University Office of Graduate Studies)

- **Manage** state data sets relevant to dissertation topic
- **Employ** mixed-methodology research skills to analyze data and provide answers to novel questions
- **Communicate** research purpose and outcomes using the journal based three paper dissertation format

Dwight Look College of Engineering, Division of Educational Outreach, Texas A&M University, College Station, TX

Graduate Assistant, May 2010-August 2011

- **Assisted** Associate Director in project management activities for the Louis Stokes Alliance for Minority Participation (LSAMP) Program
- **Supervised** multidisciplinary team of Graduate Assistants and coordinated with office staff
- **Facilitated** Engineering Transfer Scholars' (ETS) Program and Bridge-to-Doctorate Program
- **Designed** and **coordinated** appropriate academic and professional experiences for 30 undergraduate and graduate students in science, technology, engineering and mathematics (STEM)
- **Communicated** with scholarship and fellowship recipients using **oral** and **written** methods
- **Mentored** undergraduate and graduate students in STEM fields
- **Collected, Maintained, and Analyzed** student data
- **Prepared** project summary reports
- **Submitted** quarterly project reports using an online government-supported reporting site

Bryan Independent School District, Bryan, TX

GearUp Project!-Advancement via Individual Determination (AVID) Program, Consultant-Science, April 2010

- **Planned** a science day camp, In Pursuit of Science (iPS), for at-risk 8th graders students
- **Facilitated** campus-based activities
- **Designed** science experiments appropriate for 8th grade students
- **Coordinated** with research scientist and graduate students in Chemistry and Physics

Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

Graduate Teaching Assistant, September 2005-May 2010

- **Served** as instructor of the undergraduate methods courses: Science in the Elementary School, TEFB 413; Science Methods in Early Childhood Education, ECFB 420; and Problem Solving in Math-Science, MASC 351
- **Observed, evaluated, and advised** pre-service teachers' instructional practices in public schools
- **Coordinated** with classroom teachers about pre-service teachers' instructional experiences
- **Designed curriculum including pedagogy and experimental design appropriate for pre-service teachers**

Bryan Independent School District, Bryan, TX

GearUp Project-Advancement via Individual Determination (AVID) Program, Consultant/Instructor-Science, December 2009

- **Designed science curriculum based on the bad science in the Hollywood movie, 2010**
- **Instructed** at-risk 8th grade students in science content and investigative process skills, such as observation, experiment design, and communication of data during a science camp
- **Coordinated with the Director of the Brazos Valley Museum of Natural History, Dr. Deborah Cowman, for resources**

Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

Policy Research Initiatives in Science Education Scholar/Graduate Student/Graduate Research Assistant, September 2005-December 2009 (Graduate Fellowship funded by the National Science Foundation)

- **Managed high school-university connections with eight Texas high schools and the PRISE Research Group**
- **Collected field data at high schools using survey and case study research methods**
- **Led and assisted** in writing a series of reports, including white papers, policy briefs and state-of-the-state reports, documenting the practices of high school science programs in Texas
- **Assisted in the management and analysis of data relating** to the recruitment, induction, professional development and retention of high school science teachers

Botanical Society of America, Saint Louis, MO and Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

PlantIT: Cases, Collaboration and Careers, Graduate Assistant, August 2009 (Funded by the National Science Foundation)

- **Assisted** in the planning and facilitation of a two-week professional development workshop, including contacting scientist and guest speakers
- **Mentored a diverse population of students** in middle and high school indicating an interest in a science related career

Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

Science Methods Boot Camp, Curriculum Designer/Presenter, April 2009

- **Designed** science curriculum for a three day workshop for undergraduate pre-service science teachers
- **Instructed** pre-service teachers in pedagogy and experimental design
- **Collaborated** on a diverse **instructional team including faculty and graduate students**

Botanical Society of America, Saint Louis, MO and Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

PlantingScience research in high school classrooms, Research Assistant, August 2008 (Funded by the National Science Foundation)

- **Assisted** public school teachers in the design of inquiry activities based in plant biology during a ten day professional development workshop
- **Observed and recorded**, using case-study research methods, public school teachers' experiences as they engaged in innovative instructional practices involving collaboration with scientists during a ten-day workshop

Botanical Society of America, Saint Louis, MO and Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

PlantIT: Cases, Collaboration and Careers, Graduate Assistant, July 2008 (Funded by the National Science Foundation)

- **Assisted** public schools teachers to design and implement case-based laboratory practices with plants during a two week professional development workshop
- **Mentored** students in middle and high school indicating an interest in a science related career

Department of Veterinary Physiology and Pharmacology, Texas A&M University, College Station, TX

e-bat, Teacher Mentor, June 2007 (Funded by the Michael E. DeBakey Institute and the National Science Foundation)

- **Mentored** public school teachers in the design of 9-12th grade instructional practices relevant to cardiovascular research using live bats
- **Helped** teachers coordinate with research scientists on-site at Texas A&M and **use innovative technology** such as establish remote access connections to laboratory microscopes from their classrooms

College of Science and Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

ITS Center for Teaching and Learning, Teacher Mentor-Plant Genomics Team, June 2007 (Funded by the National Science Foundation)

- **Collaborated** with a multidisciplinary research team, including scientist, educational researchers, teachers and graduate students in the design and facilitation of a three-week professional development workshop for teachers and graduate students involving innovative instructional practices in science
- **Assisted** teachers in the development of research skills used in plant genomics and design of inquiry based lesson plans

Department of Soil and Crop Sciences, Texas A&M University, College Station, TX

Graduate Assistant/Technician, September 2004-June 2005

- **Designed** a series of **online** learning modules on biotechnology for use by middle school teachers in the classroom <http://cottongenomics.biosci.utexas.edu/outreach/index.php>
- **Assisted** in the development and facilitation of the secondary science workshop *Stepping into Biotechnology*

Department of Teaching, Learning, and Culture, Texas A&M University, College Station, TX

Graduate Student/Graduate Assistant, May 2003-September 2004

- **Assisted** in the instruction of the undergraduate course **Teaching Education Field Based, TEFB 406- Science Methods**
- **Conducted classroom evaluations** of pre-service science teachers instructional practices in public schools

Bryan Independent School District, Bryan, TX

Substitute Teacher, January 2003-June 2007

- **Taught** middle and high school classes **over 4 years** at Bryan High School, Hammond-Oliver High School for Human Sciences, Jane Long and Sam Rayburn Middle Schools, Bonham, Milam and Neal Elementary Schools
- **Developed and/or implemented** lesson plans and **designed** a classroom environment conducive to student learning
- **Assumed** full duties as a classroom teacher, approximately eight weeks, in a long term substitute teacher position at Milam Elementary

Johnston Middle School, Houston, TX

Student Teacher, September 2002-December 2002

- **Developed** lesson plans for 8th grade science
- **Implemented various instructional strategies** to assist student learning in an inner-city school
- **Used** appropriate assessment techniques
- **Taught** approximately 80 unassisted and assisted days of science classes
- **Maintained** student progress reports, including 6 weeks grades, and other school data
- **Cooperated** with a multidisciplinary team of teachers to design an integrated lesson cycle

Department of Biology, Texas A&M University, College Station, TX

Research Technician, May 2002-August 2002

- **Instructed** a summer intern in proper laboratory research skills and procedures
- Identified and characterized potential regulatory genes in nutrient deprived *E. coli* colonies using novel research techniques

Department of Biology, Texas A&M University, College Station, TX

Student Researcher I & II, September 1996-May 2002

- Identified and preserved *E. coli* cells expressing heightened transcription levels of pMCB, promoter for the microcin B17 operon
- **Evaluated** the effects of mutagenesis on gene expression in *E. coli*
- Presented research results and methods at symposiums

SERVICE, MEMBERSHIPS, COMMITTEES

Texas A&M University Student Organization Advisor: September 2009-present ; September 2006-December 2008; September 2002-December 2004;

National Association for Research in Science Teaching (NARST) 2005-

SigmaXI Selection Committee Member: 2008-2009; 2007-2008

Texas A&M University Science Education Clinical Faculty Search Committee: September 2005-2007

PROFESSIONAL INTERESTS

Professional Development of Teachers

Innovative Science Curriculum Design

Science Teacher Recruitment Practices

Pre-service Teacher Training in Science

Mentor-mentee Relationships

HONORS AND AWARDS

Texas A&M University Office of Graduate Studies Dissertation Completion Fellowship: 2011-2012

National Science Foundation Young Scholar Award: 2007-2008

PRISE Scholar Fellowship, Sponsored by NSF: September 2005-December 2009

Kappa Delta PI International Honor Society in Education, Inducted into the Texas A&M Chapter : 2004

PUBLICATIONS, POSTERS, CONFERENCES, AND PRESENTATIONS

Technical Reports and White Papers

Bozeman, D., Stuessy, C. L., Hollas, T, Ivey, T, **Richardson, R.**, Spikes, S., Vasquez, C., & Yoo, D. (2009). *Professional Policies and Practices for Recruiting and Retaining High School Science Teachers: A Chart Essay Describing the State-of-the-State of Texas High Schools*. A Technical Report published by the Policy Research Initiative in Science Education, Texas A&M University, College Station, TX.

Ivey, T., Stuessy, C. L., Hollas, T, Eds. (2009). *Settings for High School Science in Texas: Sketches of Representative High Schools*. A Technical Report published by the Policy Research Initiative in Science Education, Texas A&M University, College Station, TX.

Ivey, T. A., **Richardson, R.** (2007). *Professional Relationships Within School Walls*. White paper, Policy Research Initiative in Science Education, Texas A&M University, College Station, TX. Retrieved from <http://prise.tamu.edu>

Metty J., Lisa Brooks, Ivey, T., Milam, J., Peterson, C., **Richardson, R.**, Stuessy, C.L., & Troncoso-Skidmore, S (2006, September). *Four Examples of Mixing Methods to Enrich Graduate Student Research*. Paper presented at the Southwest Association of Science Teacher Education, Wichita, KS.

Richardson, R., Troncoso-Skidmore, S., & Wilson, R. (2007). *Recruitment practices*. White paper. Policy Research Initiative in Science Education, Texas A&M University, College Station, TX. Retrieved from <http://prise.tamu.edu>

Richardson, R. & Wilson, R. (2007). *Professional Supports Outside School Walls*. Unpublished white paper, Policy Research Initiative in Science Education, Texas A&M University, College Station, TX.

Stuessy, C. L., Bozeman, D., Hollas, T, Ivey, T, **Richardson, R.**, Spikes, S., Vasquez, C., & Yoo, D. (2009). *Professional Practices: A Chart Essay Describing the State-of-the State of Texas High School Science Teachers*. A Technical report published by the Policy Research Initiative in Science Education, Texas A&M University, College Station, TX.

Paper and Poster Presentations

Metty, J., Ivey, T., Milam, J., Brooks, L., Peterson, C., **Richardson, R.**, et al. (2006, October). *Mixed methods research: Examples of graduate students' mixed methods study proposals*. Paper presented at the School Science and Mathematics Association, Missoula, MT.

- Peterson, C. A. and **Richardson, R** (2004, October). *Model of an instructional framework dismissing misconceptions of photosynthesis and respiration*. Poster presented at the annual meeting of the School Science and Mathematics Association, Atlanta, GA.
- Peterson, C., **Richardson, R.**, Troncoso-Skidmore, S., & Stuessy, C. (2006, October). *Changes in participants' concerns about the innovative professional learning environment of the information technology in science center (ITS) for teaching and learning*. Paper presented at the School Science and Mathematics Association, Missoula, MT.
- Stuessy, C., Bozeman, D., Ivey, T., Metty, J., **Richardson, R.**, Skidmore, S., Wilson. (2006). *Process and Products: Results of the First Year of the PRISE Research Agenda*. Texas A&M University.
- Stuessy, C. L., McNamra, J. F., Scott, T., Bozeman, T. D., Ivey, T. A., **Richardson, R.**, et al. (2006, September). *Recruitment, retention, and continuous career development of science teachers: A policy research initiative*. Paper presented at the Center for Research, Evaluation and Advancement of Teacher Education (CREATE), San Antonio, TX.
- Stuessy, C. L., Bozeman, T. D., Ivey, T. A., Metty, J., **Richardson, R.**, Troncoso-Skidmore, S., et al. (2006, September). *Informing policy: Strategies for retaining highly qualified high school science teachers*. Paper presented at the Southwest Association for Science Teacher Education, Wichita, KS.
- Stuessy, C., Bozeman, D., Ivey, T., Metty, J., **Richardson, R.**, Skidmore, S., et al. (2007). *Process and Products: Results of the first year of the PRISE research agenda*. Paper presented at the Educational Research Exchange, College Station, TX.
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SKILLS

- Survey Research Methods
- Qualitative Research Methods
- Mixed-Method Research Methods
- Experimental Science Research Methods
- SPSS
- French (Intermediate)
- Photoshop
- Image J
- Camtasia
- Dreamweaver
- Microsoft Software Package (e.g. Access, PowerPoint, Word)

