

Talithia Williams: Making math count

Success takes drive, perseverance and support—all things the Alliance values and strives to promote. The Alliance seeks to ensure that each of our scholars gets properly placed in graduate programs, and have the support from that program, to ensure the success they are capable of. Below is an excerpt from an article detailing Dr. Talithia Williams's success and perseverance on the road to her PhD and beyond. We include this because not only is Dr. Williams a great model, she also has great advice on selecting a PhD program! It is great advice, because it is the same message as we send — look for a graduate program to commit to your success—but she says it better in the quote below starting with “It was a great department.”



Talithia Williams
Photo Credit: Harvey Mudd College

There's a kind of irony to it all: Talithia Williams ('08 PhD STAT) just became the first African-American woman to earn tenure from Harvey Mudd College—and she never really intended to be a math major.

“I took AP calculus in high school and my teacher suggested I might think about majoring in math in college,” she said. After she was accepted to Spelman College, the school sent her an application for NASA's Women in Science and Engineering Scholarship (WISE). “And I was sitting there at the kitchen table, my mom was washing the dishes and I had to check off these boxes saying what I thought I would major in. And I kept crossing things off: chemical engineering, biology. Finally, my mom looked at the sheet and there were only two choices left, math and physics, and she said, ‘You have to pick something to get this scholarship.’”

She chose math, was awarded a WISE scholarship, and went on to earn her bachelor's degree from Spelman, and then applied to Rice for graduate studies in the Department of Computational and Applied Mathematics (CAAM)—and didn't get in.

“But that was ok,” she told herself. “I knew from the minute I walked on campus while I was a senior at Spelman, that Rice was where I was supposed to be.” She was accepted by Howard University, where she pursued her master's in math, then applied to Rice again, both to CAAM and the Department of Statistics. CAAM still rejected her, but STAT welcomed her.

“It was a great department,” she remembered. “I loved that they did Monday lunches with students and faculty; you always felt supported. It was like, they accepted nine people because they wanted nine people to get Ph.Ds., not they accepted 25 people and they'd wait to see if you could actually make it before they worked with you.”

Upon graduating from Rice, she joined the faculty at Harvey Mudd College, teaching courses such as introduction to probability and statistics, statistical linear models and time series analysis. The draw for her wasn't just the ability to teach at a small school and continue her research into disease modeling, but also to have a place with a good quality of life for her husband and three sons. About being the first African-American woman at the college to receive tenure, she mused, “Historically, Harvey Mudd College had been made up of mostly white men. And over the last decade, our diversity has grown tremendously. To me, this is really about a larger shift in both opportunity and awareness. Harvey Mudd has only been around since 1955, but, when I look around, I see more women, I see more minorities. And there is such a group pride on this campus—as at Rice—that you just feel surrounded by people who not only want to help you succeed, but are happy when you do.”

She hopes that her tenure will be a sign to young women and minority students that they, too, can achieve success in math and statistics. Williams said there's a subtle, but powerful advantage to seeing someone of similar background advance in a student's chosen field.

“It says, ‘If someone who looks like me can do this, then so can I’” she said.

To read the rest of the article on Dr. Williams please visit <http://engineering.rice.edu/SpotlightContent.aspx?id=8589936342>. If you'd like to learn more about Dr. Williams [click here](#) to watch her TEDx Talk.



National Alliance for Doctoral Studies in the Mathematical Sciences

University of Iowa: College of Public Health-
145 N. Riverside Drive
Iowa City, Iowa 52245
Tel: 319-384-1592
Fax: 319-384-1591
<http://www.mathalliance.org/>

For additional information contact Billie Townsend at billie-townsend@uiowa.edu

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Upcoming Events:

SAMSI Bioinformatics Workshop

Research Triangle Park, NC
September 8-12, 2014

DIMACS Conference on Challenges Identifying Integer Sequences

Piscataway, NJ
October 9-10, 2014

Modern Math Workshop

Los Angeles, CA
October 15-16, 2014

SACNAS National Conference

Los Angeles, CA
October 16-18, 2014

SAMSI Undergraduate Workshop

Research Triangle Park, NC
October 23-24, 2014

Field of Dreams Conference

Phoenix, AZ
November 7-9, 2014



Recruiting & Retaining Graduate Students in the Statistical Sciences & Applied Mathematics Review

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In early June, representatives from three Departments of Biostatistics (Duke, Emory University, and University of Pittsburgh) and from the Program in Systems Modeling and Analysis at Virginia Commonwealth University came together for a workshop on Recruiting and Retaining Graduate Students in the Statistical Sciences and Applied Mathematics at the Statistics and Applied Mathematical Sciences Institute (SAMSI) in Research Triangle Park, North Carolina.



The workshop, co-sponsored by SAMSI and the Alliance focused on best-practices for graduate education in these fields. Dr. Kutzko began the workshop by welcoming the participants, and introducing the Alliance. Each group participating then gave presentations describing their programs. Panels described

transitioning from minority serving institutions to majority research institutions and best practices for mentoring PhD students, and Dr. Chaloner presented data about the diversity in statistics and biostatistics, compared to mathematics. Each team prepared and presented their plan for moving forward with their own graduate programs. Interesting and insightful discussion emerged regarding recruiting and mentoring US students in general, as well as students from groups which are underrepresented among PhD graduates in the mathematical and statistical sciences. There was good synergy in educational practices among the faculty from Biostatistics programs.

The Alliance would like to thank our partners at SAMSI for hosting such an outstanding workshop, and we look forward to continuing to work with the programs represented in the future.

AMS Math in Moscow Scholarship Program



Applications are now being accepted for the AMS Math in Moscow Scholarship Program.



This is a special scholarship program primarily for undergraduate mathematics or computer science majors to cover some of the costs associated with attendance for one semester of study in the Math in Moscow program at the **Independent University of Moscow (IUM)**. Funding for these scholarships is provided by the National Science Foundation (NSF) and are administered by the American Mathematical Society (AMS). The deadline is September 15, 2014. **Click here** for full details and how to register.



The Mathematical Sciences in Obesity

The University of Alabama at Birmingham has just recently completed the 1st year of a five year NIH grant in order to host a five-day short course at UAB on The Mathematical Sciences in Obesity. **Click here** to access the course website, which includes videos of the lectures given during this short course in May.