



# Science & Medicine Graduate Research Scholars Program at the University of Wisconsin-Madison

Spring / Summer 2017

2525 Microbial Sciences  
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## SciMed GRS Participating Graduate Programs:

Ag & Applied Economics  
Agroecology  
Agronomy  
Animal Science  
Bacteriology  
Biochemistry (IPiB)  
Biological Systems Engineering  
Biophysics  
Cancer Biology  
Cellular & Molecular Biology  
Cell. & Molecular Path.  
Clinical Investigation  
Comparative Biomed. Sciences  
Dairy Science  
Endocrinology & Reprod. Phys.  
Entomology  
Food Science  
Forest Ecology  
Genetics  
Horticulture  
Landscape Architecture  
Life Sciences Communications  
Medical Genetics  
Medical Physics  
Microbiology  
Molecular & Cell. Pharm.  
Molecular & Env. Toxicology  
Neuroscience  
Nutritional Sciences  
Pharmaceutical Sciences  
Physiology  
Plant Breeding & Plant Genetics  
Plant Pathology  
Population Health  
Soil Science  
Wildlife Ecology

Greetings from the SciMed GRS Program,

The SciMed GRS Program at the University of Wisconsin-Madison was established in 2008 and serves to enhance the experience of underrepresented graduate students. The program currently supports approximately 140 students yearly in over 29 graduate programs spanning four schools and colleges on campus. The program is delighted by the recent surge in graduations, now with a vast network of over 80 alumni working in academia, industry and related disciplinary fields. In this newsletter, we feature both current students and an alumnus to showcase the breadth of experience and success of scholars in the program. We hope you enjoy reading about the continued growth and success of the SciMed GRS Program.

- Abbey Thompson, SciMed GRS Coordinator
- Dr. Sara Patterson, SciMed GRS Director



SciMed GRS students at the 2016 poster session, September 30th at the UW Health Sciences Learning Center.

## By The Numbers

- Alumni: 82 (54 PhD; 34 MS)
- Current fellows: 142 and 18 new students entering fall 2017
- UW Graduate programs affiliated: 36
- National Science Foundation GRFP Recipients in SciMed community: 14
- Ford Foundation Fellowship Recipients in SciMed community: 2



## Eddie Rashan, Integrated Program in Biochemistry 2016 Cohort

"A student will face many tough challenges and decisions throughout their time in graduate school. During my rotations, I was able to rely on the SciMed GRS community for advice and discussion on this difficult choice. SciMed GRS is a network comprised of friendly students and affiliated faculty from diverse backgrounds and experiences, providing any type of student with a solid line of support and guidance."



## Diana Guzman Colon, Wildlife Ecology 2013 Cohort

"SciMed GRS has been a crucial part of my training as a graduate student and future professional. The students participating in this program are excellent scientific researchers and, above all, value the importance of mentoring, education and diversity within science. My journey as a graduate student has been enriched and been less daunting thanks to the SciMed community. I personally have benefited from networking with established professionals in my field, learned about grant opportunities and career options outside academia, and the opportunity to do outreach work"



## Nicholas Santistevan, Genetics 2014 Cohort

"Being a part the SciMed community has been one of the best parts about my graduate school experience. When I moved to Madison, I knew a total of 2 people and I found it hard to adjust to a new city, new school, and new way of life all at once. SciMed allowed me to be a part of a community and was really helpful in the adjustment period between my job and starting grad school. It's been great to meet so many interesting and different people. SciMed has given me an outlet to discuss conflicts or struggles and provides a space to get ideas from people with different perspectives."



## Jasenia Hartman, Neuroscience Training Program 2015 Cohort

"Being part of SciMed has allowed me to cultivate friendship with people within the SciMed community. It has given me the opportunity to learn from people who come from different paths in life."

## Welcome to 2016 SciMed GRS Cohort!



Benjamin Sanchez-Sedillo (Molecular & Environmental Toxicology), Miguel Angel Osorio Garcia (Biochemistry), Zachary Romero (Biochemistry), Maeghan Murie (Neuroscience), Eddie Rashan (Biochemistry), Tiaira Porter (Physiology), Terry Hodge (Horticulture), Leah Escalante (Genetics), Luis Torres (Medical Physics), Kristine Donahue (Cancer Biology), Corri Hamilton (Plant Pathology), KaHoua Yang (Bacteriology), Jhewelle Nicole Fitz-Henley, (Pharmaceutical Sciences), Cristina Zambrana Echevarria (Plant Pathology), Christopher Kutyreff (Medical Physics), Marissa Lanker (Agroecology), Whitney Stevens Sostre (Neuroscience), Justin McKetney (Biochemistry), Jonas Rodriguez (Plant Breeding & Plant Genetics), Armand Meza (Neuroscience), Ashley Cortes Hernandez (Comparative Biomedical Sciences), Amarilys Gonzalez Vazquez (Molecular & Environmental Toxicology), Neydis Moreno Morales (Biophysics) (Absent).



**Graduate Program:** Cancer Biology

**SciMed GRS:** 2011 Cohort

**Advisor:** Dr. Nathan Sherer

**What is your favorite part about being part of the SciMed GRS Community?**

My favorite part of SciMed is getting to know so many different individuals from different graduate programs.

**Do you feel that you get both an academic and personal value from SciMed GRS?**

Absolutely! Some of the closest friends I have made are in SciMed GRS. On the most basic level, I wouldn't have my GRS roommate for the last 3.5 years if it wasn't for SciMed!

**Tell us about your research**

I work on a specialized form of transmission that HIV uses called cell-to-cell transmission. Instead of the classic way you'd think of how viruses spread, free-floating in the extracellular space until it randomly finds an uninfected cell to infect, HIV makes that process much more efficient by directly tethering an uninfected cell to an infected cell. Now virus particles take less time and cross a shorter distance to infect another cell.

My thesis project works to identify how these contacts are formed, regulated, and turned over.

**How did you get into science:**

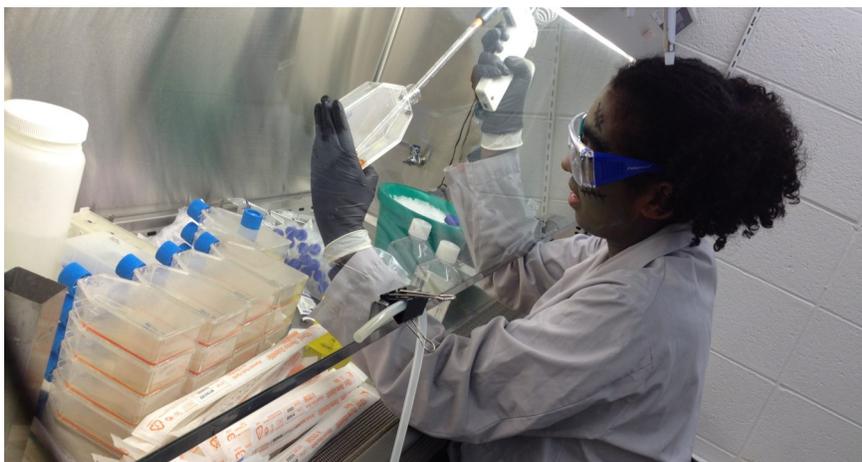
I got into science through fantastic teachers! I always had interest in math and science when I was in elementary school and I would often go to the upper grade classrooms for those subjects to learn with the older students. But when I entered high school and I started to think about college, I wanted to go to art school because I really enjoyed drawing. That changed during my high school chemistry class my sophomore year with Mr. Michael Coy. He made the entire subject so fun and simply emphasized how everything we were doing helped us understand how the world around us worked. After that, I was hooked on science senior year of high school. I took AP Biology with Ms. Lydia Ortiz, she was a phenomenal teacher I fell in love with biology. In college I majored in biology and minored in chemistry (among other things) because of those two fantastic teachers, and the rest is now history!

**What has been the value of serving as a peer mentor?**

For one, I enjoy mentoring and helping others discover what they're passionate about. Also, I know that the beginning of graduate school can be overwhelming since there are so many things going on all at once in your life. I can make that transition any easier for others I'd like to. Additionally, being a peer mentor keeps me connected to the SciMed community, where I can continue to meet more and more amazing individuals. If it wasn't for me being a peer mentor, I wouldn't started making science comics (with Kelly Montgomery and Khoa Tran - two other SciMed GRS fellows!)

**What are your plans for graduation?**

My plan after graduation is to do an academic post-doc pursuing more cancer biology oriented questions. I will join the Cukierman's lab at Fox Chase Cancer Center in Philadelphia, PA as a postdoctoral student. My longer term goal is to have my own lab where I can do science, mentor others, and make comics about my science. That's my dream!



Jaye Gardiner actively working in Dr. Sherer's Lab on her ongoing project harvesting HIV virus like particles from cell culture media to prepare for western blotting.

Interested in the science comics?

Check out this link for more information : [www.jkxcomics.com](http://www.jkxcomics.com)

## Alumni Spotlight: S. Omar Jobe PhD.



### Graduate Program:

Endocrinology and Physiology

SciMed GRS: 2008 Cohort

### Current Employer:

Boston Scientific

### Tell us a little bit about yourself?

I completed my undergraduate degree in Biology and Biochemistry at Eastern Washington University in Cheney, Washington. Before graduate school at the University of Wisconsin, I worked in the medical device industry as a clinical researcher working on technological advancements to treat cardiovascular diseases. I graduated with a PhD in Endocrinology and Physiology and MBA at the University of Wisconsin in 2013 and currently work for Boston Scientific, a medical device company specializing in minimally invasive treatments for a myriad of diseases.

### Can you describe your research in a few sentences?

My research at the UW focused on understanding endothelial and vascular responses and adaptations to estrogen and estrogen metabolism during pregnancy. I currently work as a medical affairs manager for Boston Scientific and serve as a liaison between our company and hospitals and physicians for medical education and training relating to clinical trials, current

products, future products and clinical innovation and education.

### How did SciMed GRS prepare you for your current position?

SciMed GRS provided funding and professional development opportunities that allowed me to become a well-rounded graduate student outside my main program. It was a safe environment where we were given the opportunity to learn from our peers, experts in different fields as well as provided training to tackle the rigors of academic life and beyond. Dr. Sara Patterson and Abbey Thompson were always available and willing to help all of us navigate graduate school and to help us think through and about future endeavors.

### What are some of the biggest challenges (or achievements?) you have faced in your new career?

One of the biggest challenges in working in the healthcare industry is that is a dynamic environment that's always changing due to economic, political and healthcare policy changes. As a result, although this makes it exciting, you are always adapting to new ways of doing things, new competitors, pricing challenges and so on. On the other hand, one of my biggest achievements is seeing that my published works from my graduate research are still being cited and I get calls from time to time where people would like to pick my brain about them.

### What advice do you have for new graduates?

Expand your horizons and think both in and outside academia. Although there is a certain level of prestige, impact and independence in an academic career, there are several other career paths outside of academia that are equally fulfilling and your skill sets are needed in many other non-academic career paths.

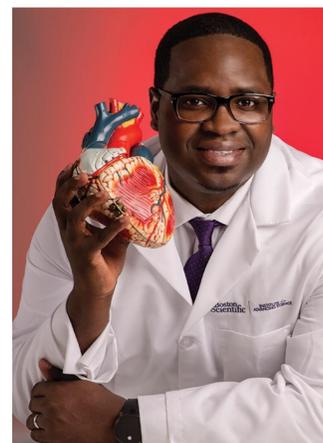
### What prepared you to land your current position and what would you recommend current SciMed GRS student do to pursue that route?

While at the University of Wisconsin-Madison, I ventured out and took many classes outside of my study area including some from the business school that prepared me for a non-academic career path.

I would recommend to SciMed GRS students to look for opportunities for professional development and gain other competencies outside of their primary area of study to become well-rounded and understand the applications of their skill sets in other areas.

### What's next for you?

Working on bridging health disparities and working with other industry, government and non-profit organizations to bring cutting edge medical devices to treat diseases in underserved populations. As I continue to develop in my career in the future, I would like to lead teams of cross-functional teams into the new age of healthcare dedicated to transforming lives through innovative medical solutions that improve the health of all patients.



S. Omar Jobe, PhD serves as a liaison between his company and hospitals and physicians

## August

SciMed GRS Welcome Dinner hosted by Dr. Sara Patterson

## September

SciMed GRS Poster Session

From Silent Spring to Silent Night: Dr. Tyrone B. Hayes

## November

So, You Want to Have a Great Career- Learning from Success & Failure

Invited Speaker Dr. Maggie Werner Washburne



2016 Orientation Dinner with Peer mentors

## SciMed GRS students share interests and expertise through the Teach Me How To Sessions

By Daren Ginete

As SciMed (GRS) is a group of diverse graduate students with unique backgrounds and skills, a series of “Teach me how to” workshops was developed to showcase this diversity and strengthen the SciMed GRS community. During these workshops, volunteer SciMed GRS students teach fellow students various skills. Since its start in April 2016, workshops have included teaching how to salsa dance, cook Puerto Rican dishes, make sushi and ice cream, garden, baking fruit tarts and shortbread, and even visualize proteins for research work. Sofia Macchiavelli-Giron, a second year Ph.D. student in Plant Pathology, said “I’ve enjoyed the ‘Teach me how to’ workshops because they give me the chance to learn a new skill while having fun with my friends. It’s the perfect way to build strong relationships in the SciMed community.” “Teach me how to” workshops will resume in 2017 with opportunities to learn new skills while getting to know other students in the SciMed community.



Teach me how to make ice cream



Teach me how to garden



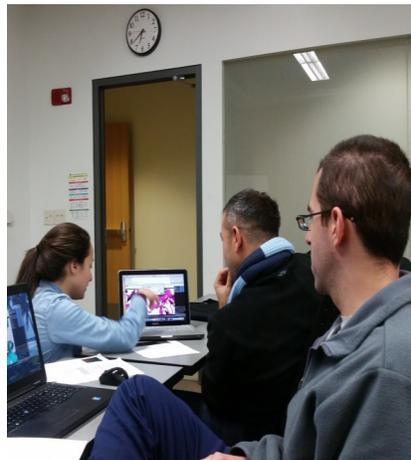
Teach me how to make a Puerto Rican dish



Teach me how to make sushi



Teach me how to make tarts



Teach me how to visualize proteins



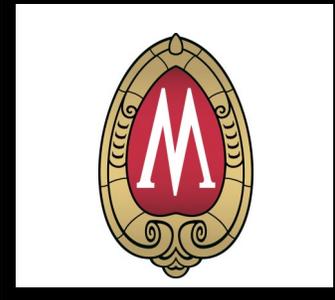
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**Abbey Thompson**  
**SciMed GRS - Coordinator**  
 Email: [abbey.thompson@wisc.edu](mailto:abbey.thompson@wisc.edu)



**Support SciMed Graduate Research Scholars**

I/we wish to join other students/alumni industry, and friends in enhancing service opportunities in the SciMed GRS Program by contributing as indicated below. Please make checks payable to: UW Foundation-Science & Medicine Graduate Research Scholars contributions can also be made online through the SciMed GRS Website: <http://scimedgrs.wisc.edu>

Enclosed in my/our contribution of \$ \_\_\_\_\_ I choose to specifically designate my gift for the following:

The greatest need of the program

Student Support (travel to conferences etc.)

Programmatic events including invited speakers

I/we wish to pledge \$ \_\_\_\_\_ each year for \_\_\_\_\_ Years beginning \_\_\_\_\_ (Year).

Please remind me to of the annual amount I have pledged in \_\_\_\_\_ month.

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