

Mitch McVey, Ph.D.



**Associate Professor
Tufts University**

SPIRE teaching site:
JCSU

2000-2003

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The McVey laboratory studies molecular mechanisms of DNA repair and recombination using *Drosophila melanogaster* as a model system. Mitch teaches both undergraduate and graduate courses and is co-Program Director of the IRACDA program at Tufts called TEACRS.

Most impactful aspect of SPIRE

Creating a genetics lecture and lab course from scratch and teaching it at JCSU to 30 very kind and forgiving students.

Fondest memory

The road trips to the partner universities—this was where my cohort bonded for life.



UNC
SPIRE POSTDOCTORAL
FELLOWSHIP PROGRAM

SPIRE Alumni Panel

April 1, 2016

SPIRE Fun Facts

3,000+ students taught	94 scholars
260+ students mentored	17 years of NIH funding
181 courses taught	8 partner universities
120+ publications	1 SPIRE community

SPIRE is funded by the Training, Workforce Development, and Diversity program of the National Institute of General Medical Sciences as part of the Institutional Research and Academic Career Development Awards (IRACDA)

spire.unc.edu



Krystle McLaughlin, Ph.D.



Professor of the Practice

Lehigh University

SPIRE teaching site:
UNC Pembroke

2011-2014

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At Lehigh, Dr. McLaughlin teaches Biology Core 1: Cellular and Molecular and Biology Core II: Genetics along with two advanced labs: Biochemistry, and Molecular Genetics. She has also participated as an organizer and facilitator for faculty workshops at Lehigh (e.g. Inclusive Teaching). Additionally, Dr. McLaughlin is the director of the PA DNA Day outreach program.

Most impactful aspect of SPIRE

I would have to say all of it. Being part of SPIRE meant I was exposed to diverse experiences and got to be part of a vibrant community where we talked not just about research but teaching and making ourselves into better researchers and educators. Now that I am not immersed in the SPIRE community full time, I realize just how amazing that was, and how much SPIRE facilitated my growth.

Fondest memory

There are a lot. I think my first IRACDA conference in Philadelphia, seeing the IRACDA alumni panel where two of the panelists were from SPIRE and being excited, impressed, and proud listening to them was a great memory, with all the potential ahead. Also: Breakfast club for Ed Neal's seminar class.

Omar Quintero, Ph.D.



Assistant Professor

University of Richmond

SPIRE teaching site:
Shaw University

2001-2005

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As a SPIRE postdoc, Omar cloned and characterized a novel myosin, MYO19 that is involved in transport and localization of mitochondria (this remains the focus of his research program). Following his time in SPIRE, he joined the faculty at Franklin & Marshall College as a Visiting Assistant Professor, and then the Department of Biological Sciences at Mount Holyoke College as a tenure-track Assistant Professor. Sensing that his teaching philosophy might be better suited at other institutions, Omar left Mount Holyoke for a position at the Penn State College of Medicine. In 2012 he joined the Biology Department at the University of Richmond. In addition to his work at Richmond, Omar remains involved in with his field through his work on the American Society for Cell Biology Education Committee, the Coalition for Life Sciences (grass roots science advocacy), and the ASAPBio movement (accelerating scientific communication through pre-print servers).

Most impactful aspect of SPIRE

SPIRE gave me a foundation and community that allowed me to develop my philosophy towards research and teaching beyond a "gut feeling" of what worked for me into a fleshed out

Fondest memory of SPIRE

Mitch and Antonio came to my thesis defense and at that moment I knew this was going to be a defining experience in so many ways. That, and now team-teaching with Shannon Jones every day.

Joe Thompson, Ph.D.



**Associate Professor & Chair
Franklin and Marshall
College**

SPIRE teaching site:
UNC Pembroke
2000-2003

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Most impactful aspect of SPIRE
Having to juggle teaching and research simultaneously. It was fantastic training for my career.

Fondest memory
Sitting outside at the medical school bookstore cafe with Brian, Tony, Mitch, and Heather, and outlining the case study that eventually became our first paper (Baines et al. 2006). That was a fun morning and the start of an excellent adventure.

Working at F&M is my second tenure-track job. I was an Assistant Professor of Biology at St. Joseph's University for three years before moving to F&M. I'm in my 10th year (yikes!) at F&M. I also am a Visiting Scientist at the University of Maine's Darling Marine Center.

I teach a variety of courses to different target audiences, though most fall under the broad umbrella of physiology. The four undergraduate courses I teach most often are (1) Principles of Physiology & Development (a sophomore-level, lab course for majors), (2) Comparative Physiology (a lab course for juniors and seniors), (3) Physical Biology (lab course for juniors and seniors), and (4) Nature of Oceans (marine biology course for non-majors).

My undergraduate students and I pursue questions related to muscle physiology and the biomechanics of locomotion. We focus primarily on soft-bodied invertebrates as model systems, especially squid, leeches, and razor clams. Although I'm most productive during the summers when I don't have to teach, my lab is active year-round. I usually mentor 3 to 6 undergrads in my lab during the academic year and 2 undergrads over the summer. I've had 48 students in my lab. I've been lucky in terms of finding extramural support for my research, and have been awarded three collaborative NSF grants since 2005.

C. Dinitra White, Ph.D.



**Associate Professor
North Carolina A&T
State University**

SPIRE teaching site:
JCSU

2002-2006

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Most impactful aspect of

SPIRE on your career:

Everything! It is impossible for me to pick just one. However, the most meaningful aspect has been the relationships developed with other SPIRE fellows over the years. I feel as though I have family members all around the country!

Fondest memory of SPIRE:

IRACDA meeting at Lake Tahoe! AWESOME experience and wonderful memories.

Dr. White maintains an active research laboratory where she trains undergraduate and graduate students interested in microbial pathogenesis. To date, she has trained 12 Masters students and 10 undergraduate students in her laboratory. Most of these students have gone on to M.S. programs, PhD programs, dental school and obtained jobs in research laboratories. Dr. White currently serves as the N.C. A&T Pre-Professional Health Advisor and is the Director of the Pre-Professional Scholars Program, a campus-wide initiative designed to significantly increase the number of N.C. A&T students pursuing careers in medicine, dentistry, veterinary medicine and law. Since joining the faculty at N.C. A&T, she and her

collaborators have obtained over \$1.6 million in funding to support her research laboratory; design, implement and manage several academic and science education enhancement programs for high school students throughout N.C.