## SEPTEMBER 2018 \* VOL. 23 NO. 3

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# BSCP

BIOMEDICAL SCIENCE CAREERS PROGRAM



# **Call for Abstracts**

If YOU ARE ELIGIBLE AND INTERESTED in making a presentation at the 18th annual New England Science Symposium (NESS), which will be held on Saturday, April 6, 2019, you might want to start working on your abstract now. Though the deadline for submission is January 4, 2019, the online abstract submission page will go live by the end of September 2018.

The New England Science Symposium (NESS), established in 2002, promotes careers in biomedical sciences by providing a forum for postdocs (research and clinical); medical, dental and graduate students; post-baccalaureates; and college and community college students (particularly African-American, Hispanic/Latino and Native American/Alaska Native individuals) to share their biomedical and health-related research activities through oral or poster presentations, to engage in discussions related to career development in the sciences, to exchange ideas and to expand their professional networks.

If you are part of these communities, and are involved in biomedical or health-related scientific research, you may submit an abstract in the following categories: public health, epidemiology or biostatistics; microbiology, immunology, genetics or molecular biology; cellular biology, neuro-science, biochemistry or physiology; bio-informatics, physics, chemistry or engineering; clinical or social science (including translational research); or interdisciplinary.

#### Abstracts must include:

- 1. Name of author(s)
- Suffixes (if a degree is obtained): BS, MS, PharmD, MD, PhD, MD/PhD, DMD/DDS

- 3. Contact information: mailing and email addresses, phone numbers
- 4. Institution, academic level and expected year of graduation/program completion
- 5. Funding source(s)/research sponsor(s)
- 6. Research title
- 7. The abstract (not to exceed 400 words) must demonstrate the scientific problem and must contain:
  - + Statement of the Problem/Background
  - · Research Question/Hypothesis
  - Research Design/Methods Used in the Investigation
  - · Results/Summary of the Investigation
  - Interpretation/Conclusion of the Investigation

To submit an abstract or register for NESS, go to www.NewEnglandScienceSymposium .org. All abstracts will be reviewed and applicants notified of their acceptance by mid-February. There is no registration fee, but pre-registration is required.

#### **2018 AWARD WINNERS**

#### Ruth and William Silen, MD Awards Oral Presentation Awardees

First Place: Ana Andrade — College Student, Harvard College, Cambridge, Massachusetts

Second Place: Alina Ulezko Antonova — College Student, Emory University, Atlanta, Georgia

Third Place: Harry Reyes Nieva — Master's Candidate, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland

#### Poster Presentation Awards

# 1 — Cellular Biology, Neuroscience,Biochemistry or Physiology Category

First Place: Asia Matthew-Onabanjo — MD/PhD Candidate, University of Massachusetts Medical School, Worcester, Massachusetts

Second Place: Ashley Matthew — MD/PhD Candidate, University of Massachusetts Medical School, Worcester, Massachusetts

Third Place: Aishwarya Kuikarni — Master's Candidate, Tufts University School of Medicine, Boston, Massachusetts

# 2 — Microbiology, Immunology, Genetics or Molecular Biology Category

First Place: Kyungyoon Yoo — College Student, Vassar College, Poughkeepsie, New York

Second Place: Francheska Lopez Rivera — PhD Candidate, Harvard Medical School, Boston, Massachusetts

Third Place: Leighanne Ormston — Master's Candidate, Boston University School of Medicine, Boston, Massachusetts

#### 3 — Public Health, Epidemiology, or Biostatistics, Bioinformatics, Physics, Chemistry, or Engineering and Clinical or Social Science (including Translational Research) Categories

First Place: Adhvait Shah — PhD Candidate, Massachusetts Institute of Technology, Cambridge, Massachusetts

Second Place: Aaron Briggs — MD Candidate, Geisel School of Medicine at Dartmouth, Hanover, New Hampshire

Third Place: Neil Zhang — College Student, Yale University, New Haven, Connecticut

# Where Are They Now Sophia C. Kamran, MD

THE FIRST MEMBER OF HER FAMILY to attend college, former BSCP student Sophia C. Kamran, MD, completed her medical residency in June and started her job as a faculty radiation oncologist at Massachusetts General Hospital in July 2018. The Illinois native, who is half Mexican, grew up living with her single mother and grandparents, with aunts, uncles and cousins nearby. She received an MD cum laude from Harvard Medical School in 2013 and a BS in biology and biological engineering from MIT in 2008.

Kamran attended the BSCP Skills Workshops for College and High School Students in 2004 and her first Biomedical Science Careers Student Conference in 2006, while she was at MIT. She knew at the time that she wanted to pursue a career in biomedical sciences. At the 2006 conference, Kamran recalls, she was exploring options in industry, medicine and academia. "I didn't walk away from the conference thinking, 'I want to be a doctor," she says. But she established connections to others in the biomedical field, met people of diverse backgrounds and learned about their different career journeys, which was helpful. "I am immensely grateful for the exposure, networking and fostered connections," she says.

In her junior year at MIT, Kamran worked in a bioengineering lab with a medical fellow in hematology/oncology. Prior to that, she says, "My only experience with doctors was through my pediatrician or primary care doctor while growing up, and I wasn't sure exactly what their day-today life entailed. When I learned about all the different medical specialties and various career paths, I was really excited." Kamran's



SOPHIA C. KAMRAN, MD

mentor taught her about academic medicine, which often combines patient care with teaching and research. Kamran shadowed her in clinic. "I was struck by the patient connection," she recalls. Patient care has a more immediate impact, she explains, whereas research can take years to yield results. Combining the two seemed an ideal solution.

This experience helped shape Kamran's decision to go to medical school. She chose radiation oncology as her specialty because, she explains, "I was searching for something that combined my love of the physical sciences with oncology." During Kamran's second year of medical school, her mother was diagnosed with cancer. "It was scary but inspiring to go through the cancer journey with her at Northwestern Medical Center. Her oncologist was so caring and patient. This experience piqued my interest in oncology and I was eager to learn more."

Through medical rotations she was initially drawn to radiology but wasn't sure how to incorporate her burgeoning interest in oncology. When she shared her quandary with an intern she was working with, he suggested she look into radiation oncology. The more she learned about it, the more she was drawn to the specialty. "It really felt like the perfect fit," she says.

Throughout medical school Kamran continued to attend BSCP events, presenting posters at the New England Science Symposiums. "I really liked the fact that you could present your research," she says. "It is a skill that takes practice. At the symposium, you receive feedback almost immediately." She also appreciates the event's intimacy. "You can walk around and see what and how others are doing," she adds.

In 2018, Kamran returned to the BSCP Conference as an advisor. "I love mentoring students," she says. "I benefitted from mentors at every level. I wouldn't be where I am today without their help." And she is happy to give back. "I really loved it. I had fun, and look forward to continuing my involvement to help others explore careers in the biomedical sciences."



# Where Are They Now Shannon T. Bailey, PhD

For most of his time as a student at Roman Catholic High School in Philadelphia, Shannon T. Bailey, PhD, thought he wanted to be an engineer. But during the summer of his junior year, Bailey participated in a minority research apprenticeship program at Hahnemann University Hospital, an academic medical center across the street from his high school, that made a lasting impact on his future. Bailey enjoyed the program so much that he worked at the hospital throughout his senior year, studying cancer. And he was hooked. Today, Bailey is associate director of cancer genetics at WuXi NextCODE Genomics in Cambridge, Massachusetts.

A Philadelphia native, Bailey majored in biology at The Pennsylvania State University, receiving his BS in 1996. "Penn State is an agricultural school," he explains, so his studies focused on crops rather than people. Specifically, Bailey researched corn, breeding plants in a greenhouse in the winter and planting them in the field in the summer. Though working with vegetables, he says, "I did all the basic scientific procedures [researchers] would do on humans" in laboratories.

After he graduated, Bailey worked as a technician and studied diabetes and obesity in the division of endocrinology, diabetes and metabolism at the University of Pennsylvania (UPenn) School of Medicine. He cloned a hormone, resistin, that links obesity to diabetes. A paper he co-authored on the topic has been cited more than 4,000 times. Bailey says the best mentor he has had was the principal investigator at the UPenn lab, who helped him select

and apply to graduate schools. "I didn't think I was all that smart or good enough until working with him," Bailey recalls. "In his recommendation letter... he wrote that I was at the level of a third-year grad student."

Bailey attended graduate school at Yale University, where he studied breast cancer in the immunology department. He received an MS, an MPhil and a PhD in cellular and molecular physiology. He attended his first Biomedical Science Careers Student Conference in 2000, during his first year at Yale. "When I think of BSCP I think of it as being a general inspiration," he notes. He has made numerous peer connections through repeat attendance at BSCP conferences and New England Science Symposiums (NESS) and maintains contact with many people. Francis Collins (director of the National Institutes of Health) spoke at the 2002 conference. "[I found it] amazing that he was speaking to all these minority students," Bailey recalls. After receiving his PhD, Bailey spent eight years as a postdoctoral research fellow and instructor at Dana-Farber Cancer Institute and continued to attend BSCP events.

The father of two young boys began working at WuXi, which he describes as a "contract genomic organization [that] takes samples, isolates DNA, sequences it and analyzes it," in 2015. After several years on an academic track he was ready for a change. When he saw the job opening, Bailey says, "It was up my alley. The company is doing great things." In his position, Bailey analyzes customer data, identifies actionable information, helps advance the



SHANNON T. BAILEY, PHD

company's cancer program, decides which technologies to bring into the company's technology platform and interacts with customers — academic medical centers, big pharma companies and individual labs around the world.

Committed to giving back to the organization that has been so important to his life, Bailey was a student advisor at the 2016 and 2018 BSCP conferences and a panelist at the 2017 NESS. "I think it's important to help people as they think about different career paths," he says. As an advisor. "When I sat at the table and spoke to the students, I thought, 'I was in that exact spot the first time I came here.' I'm still the same person, but I made it. I just needed the mentorship."

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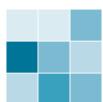
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#### SPECIAL THANKS TO

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## **BSCP**

#### Biomedical Science Careers Program

c/o Minority Faculty Development Program Harvard Medical School 164 Longwood Avenue, 2nd Floor Boston, MA 02115-5818

#### **CALL FOR ABSTRACTS**

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#### Dana-Farber/Harvard Cancer Center Awards

Oral Presentation Award: Chioma Madubata — MD/PhD Candidate, Columbia University, New York, New York

Poster Presentation Award: Myshal Morris — College Student, Langston University, Langston, Oklahoma

#### CloudHealth Genomics Awards

Poster Presentation Award: Angel Byrd, MD, PhD — Postdoctoral Research Fellow, Johns Hopkins University School of Medicine, Baltimore, Maryland

Honorable Mention: Stephanie Rager — College Student, Columbia University, New York, New York

#### Novartis Institutes for BioMedical Research Postdoctoral Awards

First Place: Chidebere Awah, MD, PhD, MSc — Postdoctoral Research Fellow, Northwestern University, Chicago, Illinois

Second Place: Juan Matinez-Francois, PhD — Postdoctoral Research Fellow, Harvard Medical School, Boston, Massachusetts

Third Place: Vicencia Sales, PhD — Postdoctoral Research Fellow, Joslin Diabetes Center, Boston, Massachusetts

### Beth Israel Deaconess Medical Center Department of Neonatology Poster Award

William Yakah — College Student, Michigan State University, East Lansing, Michigan

#### Stem Cell and Regenerative Medicine Poster Award

Karla Rivera — College Student, Barry University, Miami Shores, Florida

#### The American Cancer Society Awards

Oral Presentation Award: Cornelius Taabazuing, PhD — Postdoctoral Research Fellow, Memorial Sloan Kettering Cancer Center, New York, New York

Poster Presentation Award: Michael Oliphant — PhD Candidate, University of Colorado Denver Anschutz Medical Campus, Aurora, Colorado

## **Save the Dates**

#### **Skills Workshops for College and High School Seniors, Juniors and Sophomores**

Saturday, October 27, 2018 Harvard Medical School For information, contact Lise D. Kaye, lise\_kaye@hms.harvard.edu

#### **New England Science Symposium**

Saturday, April 6, 2019 Harvard Medical School Deadline to submit abstracts is January 4, 2019. For information, go to www.NewEnglandScienceSymposium.org

#### **Evening of Hope**

April 2019 Location TBD