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Meet Our 2024 Hope Scholars

SAVE THE DATES

Biomedical Science Careers Biennial Student Conference

Friday, March 28 and Saturday, March 29, 2025
The Westin Copley Place Boston

New England Science Symposium (NESS)

Sunday, March 30, 2025
Joseph B. Martin Conference Center at Harvard Medical School

To register, go to www.NewEnglandScienceSymposium.org

Career Fair (Virtual)

May 14, 2025
Registration link available soon.

For more information, please visit www.bscp.org.

REMINDER

Please remember to update your contact information at www.bscp.org.

Click on "Update Contact Information" and then "Current BSCP Students/Fellows and Alumni."

CONFERENCE KEYNOTE KAREN NELSON TO STUDENTS: "BELIEVE IN YOURSELF ABOVE EVERYTHING, NO MATTER WHAT DISCOURAGEMENT OR FAILURES YOU FACE"

When Karen Nelson, PhD, delivers the keynote address at BSCP's Biennial Student Conference next month, the chief scientific officer at Thermo Fisher Scientific wants to offer the kind of advice and encouragement she'd give if she had the opportunity to meet with each student one-to-one.

Nelson's success has come from a steadfast confidence in the face of common scientific failures, and her career is proof that your passions will bring you to where you need to be. "I want to speak to the students about potential...and believing in yourself. At the end of the day, I did what I loved," says Nelson. "I didn't believe it when people were trying to discourage me, and I do meet young people sometimes who are not sure it's the right thing to do."

Born in Jamaica and having grown up around nature, Nelson had first dreamed of becoming a veterinarian. But some discomfort led a professor to suggest a career in research instead. From there, she was hooked.

After graduating from the University of the West Indies, Nelson got her master's degree from the University of Florida and went on to Cornell University for her doctor of philosophy (PhD) due to her interest in microbial genetics. "I knew exactly what I wanted to study, and there was perfect alignment with the team at Cornell when I went there," she remembers.

Though moving from Jamaica to Florida had been relatively natural, the move to Cornell was anything but. "Big culture



Karen Nelson, PhD

shock, going to Ithaca in upstate New York. But I have no regrets choosing that path." Spurred on by the long winters, Nelson focused on completing her PhD as soon as possible. "Giving up wasn't an option for me, so I just plowed through," she says.

Nelson's research focus had been perfectly timed. "I graduated from Cornell right when the J. Craig Venter Institute (JCVI) was taking off with [research on] the human genome." She did her postdoc with them and ended up staying for 24 years. "When I left, I was president of the institute."

JCVI's non-profit research structure was the perfect environment for Nelson's research. Organized similarly to academic institutions but without teaching obligations, most of her time was spent writing grants for her own scientific questions since the majority of their programs were funded with "soft money" from the

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National Institutes of Health (NIH) and other grants. For scientists following in Nelson's path, she wants to share an essential lesson: failure is the norm.

"I was willing to take on new challenges, willing to listen to people, and also I recognized early in my career as a scientist that you're going to get rejected," she says nonchalantly. "Your grants get rejected; your papers get rejected. People don't believe in your science sometimes, but you have to keep on believing in yourself and your research programs." To her, taking on new challenges is the epitome of your purpose as a scientist.

Nelson took on a new challenge herself in 2021, leaving JCVI after 24 years and becoming the chief scientific officer at Thermo Fisher Scientific. Today, Nelson spends her time focusing on any number

of tasks at a company whose headcount now hovers around 125,000. She's constantly impressed by the expanse of her role. "The breadth of science is unimaginable. The level of excellence in technology development and engineering and scientific thinking that goes on internally here has been one of the most wonderful surprises for me, and the scientists are great. Everybody wants to work together, and by virtue of where I sit, I'm able to pull ideas together across the different teams." One of these core ideas is a commitment to social responsibility. Nelson's favorite assignments come on days when she's sent to Washington D.C. to speak with hundreds of young scientists about her passion for science or create novel ways to bring more young scientists into the fold at Thermo Fisher.

As Nelson prepares for the BSCP Student Conference this spring, she wants to emphasize the importance of mentorship. "Figure out what you want to do and find somebody who can help you get there. There are a lot of good mentors, and there are a lot of good people out there who want to help you. I've had good mentors my entire life." Nelson has worked with Dr. Joan Reede, President and Chair of BSCP, when looking to connect students to the places they need to go and the people they need to meet.

At the end of the day, Nelson wants to "help the next generation be successful in the sciences and pursue their dreams. There's a lot of good work to be done out there, and the world needs a lot more of us. That's all I know." ■

DID YOU KNOW? SUPPLEMENTAL PROGRAMMING AT BSCP CONFERENCE/NESS WEEKEND SUMMIT

As many of you know, the BSCP Student Conference and New England Science Symposium (NESS) is happening on March 28, 29, and 30, 2025. But you might not know about some other exciting opportunities that weekend. Mark your calendars and keep an eye out for invitations! All programming takes place on Friday, March 28, prior to the start of the BSCP Student Conference Friday evening. All events have separate registrations.

Harvard Medical School Department Tours — Each year, Harvard Medical School (HMS) hosts laboratory tours for the undergraduate students accepted into NESS. This is a unique and exciting opportunity to explore working laboratories in various scientific disciplines, including Systems Biology, Cell Biology, Genetics, Systems Pharmacology and more! Students are able to connect and network not only with each other but also with the faculty and lab members participating.

Harvard Medical School Postdoc Info Session — Senior doctoral students

attending NESS and the BSCP Conference are invited to join us to learn more about postdoc opportunities and expectations at HMS and beyond. You will also get to meet and chat with current HMS postdocs and faculty.

Career Development Series for Postdoc Fellows — All postdocs (research and clinical) are invited to attend the following programs focused on career development and networking.

Vertex will welcome postdoc students onsite for a robust career panel discussion. Postdocs will hear from employees about their educational background and what brought them to the company. Inspiring and encouraging fellows to see what's possible in the world of biomedical science is one of the best ways Vertex serves our community through their partnership with BSCP. Following this session, fellows will be invited back to HMS for an afternoon career development workshop.

Questions on any of these opportunities can be directed to Pinar Kilicci-Kret at pinar_kilicci-kret@hms.harvard.edu. ■

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Matthew O. Hersey, Freeboard Publications

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2024 HOPE SCHOLARSHIP RECIPIENTS

Cami N. Christopher
PhD Candidate, 2026
Harvard School of Public Health

Scholarship sponsored by Sanofi

Born and raised in Los Angeles, Cami N. Christopher has been passionate about health and disease prevention for as long as she can remember. As an undergraduate at California Polytechnic State University, Cami was inspired to pursue a career in research after studying the impact of physical activity on colon cancer prevention. She went on to assist with research on exercise and nutrition interventions for cancer patients and survivors at Dana-Farber Cancer Institute while getting her master's degree at Boston University. Today, Cami is a PhD candidate at the Harvard T.H. Chan School of Public Health, where she studies lifestyle behaviors in cancer and chronic disease prevention. She won both the Ruth and William Silen MD Award and the Dana-Farber Harvard Cancer Center Award for her presentation at the 2024 New England Science Symposium. Through her academic studies and research, Cami is addressing health disparities, advocating for under-studied populations, and tailoring health care to be more culturally accessible to all people. She aspires to a career bridging the gaps between epidemiologic and clinical research, ultimately improving access to care and preventing disease.

"To me, BCSP is about inspiring the current generation of diverse, young scholars to achieve excellence and celebrate one another, which will have a direct impact on raising up the next generation to achieve excellence."



EDUCATION

California Polytechnic State University,
San Luis Obispo, BS, 2020
Boston University, MPH, 2022

PUBLICATIONS

Physical activity before and after cancer diagnosis and mortality risk in three large prospective cohorts; *Cancer Causes & Control*, Oct. 2024.

Impact of Moderate-Vigorous Physical Activity Trajectories on Colon Cancer Risk over the Adult Life Course; *Cancer Epidemiology, Biomarkers & Prevention*, Jan. 2023.

High-intensity interval training improves metabolic syndrome in women with breast cancer receiving Anthracyclines; *Scandinavian Journal of Medicine & Science in Sports*, Dec. 2022.

BSCP INVOLVEMENT

BSCP Student Conference 2023
New England Science Symposium 2022, 2023, 2024 (presenter, all years)

Rejoice Farai Dhliwayo
MD Candidate, 2025
Tufts University School of Medicine

Scholarship sponsored by the Biogen Foundation

Born in Zimbabwe, Rejoice Farai Dhliwayo immigrated to the United States at the age of two and is now a first-generation medical student. As an undergraduate at the University of New Hampshire, Rejoice was a research assistant and a teaching assistant while also working as a nursing assistant, a medical assistant, and a scribe. All these experiences deepened her passion to become a physician. Before starting medical school, Rejoice went on a "medical brigade" to Panama, where she helped get care to people in rural areas. She also worked as a clinical research coordinator at Beth Israel Deaconess Medical Center. While in medical school at Tufts, Rejoice participated in Harvard's Medical Student in Aging Research Program as well as Harvard's Pediatric Community Advocacy Program, an outreach program for underrepresented youth focused on building interest in pediatrics, developing advocacy skills, and empowering young people to tackle child health issues. Currently in her last year of medical school, Rejoice has applied to pediatric residency programs and hopes to work with children and their families as a physician.

"Over the last 6 years, BSCP has helped me grow from a young student to now completing medical school. I am looking forward to being a mentor, helping students who were once in my shoes."



EDUCATION

University of New Hampshire,
BS, 2019

CLINICAL EXPERIENCE

Nursing assistant at a nursing home
Nursing assistant at an urgent care center
Scribe and medical assistant at a urology office
Clinical research assistant at a major hospital

BSCP INVOLVEMENT

BSCP Student Conference 2018, 2021, 2023
BSCP Skills Workshops Conference for College and High School Students 2018

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Rahim Hirani
MD/PhD Candidate, 2028
New York Medical College

Scholarship sponsored by Cytiva

Born and raised in Pakistan, Rahim Hirani moved to the United States at age 16 and was the first in his family to go to college, where he studied molecular biology and international relations. Rahim spent his summers exploring his interest in research with a fellowship at the Georgia Cancer Center and as part of a training program with the University of Washington's Harborview Injury Prevention & Research Center. He went on to get a master's in biochemistry and molecular biology, after which he worked at Memorial Sloan Kettering Cancer Center. Rahim's research there inspired him to enroll in an MD/PhD program at New York Medical College, where he's now in his fourth year. In 2023, Rahim was selected to participate in Harvard Medical School's Visiting Research Internship Program, an eight-week, mentored summer program. In addition to his research, he has been heavily involved at medical school — cofounding a program for disadvantaged students pursuing careers in health care, serving as president of the Graduate Student Association, and running the Center for Human Rights. Rahim looks forward to becoming a physician-scientist and aspires to elevate the standard of care for his future patients while addressing health disparities.



"I've been part of the BSCP community since my undergraduate years. BSCP has been a cornerstone in my journey, helping me connect with mentors and offering a network of support that has been essential in my growth."

EDUCATION

Hampshire College, Bachelor's degree, 2017
Georgetown University, MS, 2019

AWARDS AND SPECIAL RECOGNITION

Charles Eldridge Award for Excellence in Research
Exceptional Master's Student Award at Georgetown University
Medical Student Research Fellow at Memorial Sloan Kettering Cancer Center
American Pakistan Foundation Fellow

BSCP INVOLVEMENT

New England Science Symposium 2017, 2020, 2022, 2023, 2024 (presenter, all years)
BSCP Student Conference 2021

Esther Jagwer
College Student, 2026
Amherst College

Scholarship sponsored by Anonymous Donor

Born in Botswana to Ugandan parents, Esther Jagwer moved to the United States in 2022. She graduated with highest honors from MassBay Community College in 2024 and went on to Amherst College, where she is pursuing a degree in neuroscience with plans to go to medical school. While at MassBay, Esther participated in the Sanofi Experiential Learning Opportunity, gaining valuable insights into the research and development of biological drugs. A connection made through BSCP led her to a summer internship at Massachusetts General Hospital in 2023, where she assisted with research on rehabilitation therapy for traumatic brain injury in immigrants and asylum seekers. Esther currently serves as a Link Health Ambassador at community clinics, volunteers with the Medical Careers Exploration Program at Brigham and Women's, and mentors young minds as part of the Science Club for Girls. Driven by her passion for global health and policy, Esther's ultimate goal is to pursue an MD/MSc. She aspires to contribute meaningfully to addressing health inequities and making health care accessible to all.



"I knew I wanted to go into medicine, but I had no idea how it would unfold. Participating in the BSCP empowered me with connections to mentors in the field, resources, and opportunities that have helped me on my path to a career in medicine."

EDUCATION

MassBay Community College, AS, 2024

SERVICE

Volunteer, Medical Exploration Careers Program at Brigham and Women's
Mentor, Science Club for Girls
Leader, Minority Association of Pre-Medical Students at Amherst College
Cofounder, Pre-Health Science Club at MassBay Community College

BSCP INVOLVEMENT

BSCP Skills Workshops for College and High School Students 2022, 2023
BSCP Student Conference 2023

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Kimberly Stephanie Meza
PhD Candidate, 2025
Brown University

Scholarship sponsored by Vertex

Raised in Central Florida, Kimberly Stephanie Meza is the proud daughter of immigrant parents from Mexico and a first-generation Xicana and college graduate. She got her bachelor's degree in biological sciences from Barnard College, where she did biomedical research supported by the Columbia SPURS program and the Barnard Summer Research Institute. After graduation, Kimberly researched health disparities and cancer with the University of Florida's Prostate Cancer Transatlantic Consortium. She was also selected as a postbaccalaureate scholar for the inaugural cohort of the National Cancer Institute's Intramural Continuing Umbrella of Cancer Research Experiences fellowship program. Her findings were presented at the 2020 New England Science Symposium. Today, Kimberly is a pathobiology PhD candidate at Brown University. She is also a leader with the Society to Advance Chicanos/Hispanics and Native Americans in Science (SACNAS) as well as Científico Latino. Influenced by her sister surviving a rare aggressive cancer in their childhood, Kimberly seeks to lead innovative cancer biology research, increase diversity in science and medicine, and support the next generation of scientists and scholars.

"BSCP has been a pillar of support to me. I have connected to encouraging mentors, benefitted from program resources, and taken advantage of incredible opportunities to thrive professionally." ■



EDUCATION

Barnard College of Columbia University, BA, 2017

SPECIAL RECOGNITION

American Association for Cancer Research Minority Scholar
Yale Ciencia Academy Fellow
Brown University Blavatnik Family Fellow
Dr. Rhonda K. Simper-Ronan Graduate Award in Cancer Research

BSCP INVOLVEMENT

New England Science Symposium 2020, 2023 (presenter, both years)
BSCP Student Conference 2022, 2023



From Left to Right: Rahim Hirani, Kimberly Stephanie Meza, Rejoice Farai Dhlwayo, Cami N. Christopher. Not Pictured: Esther Jagwer