

BIOMEDICAL SCIENCE CAREERS PROGRAM

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Job Opportunities in Biotech Where Are They Now: Nicole de Paz, MD 2019 Hope Scholarship Recipients Financial Advice from the Experts

SAVE THE DATE

Biomedical Science Careers
Student Conference
The Westin Copley Place Boston
Friday, April 3 and Saturday, April 4, 2020
Application deadline: February 4, 2020
(December 12, 2019, for high school students)
Conference highlights and description can be found here.

To request an application, please forward your academic level and preferred postal mailing address to: hollie_desilva@hms.harvard.edu

New England Science Symposium

The Joseph B. Martin Conference Center at Harvard Medical School Sunday, April 5, 2020 Deadline to submit abstracts: January 3, 2020 Click <u>here</u> to submit an abstract or to register.

Evening of Hope
The Westin Copley Place Boston
Thursday, May 14, 2020

REMINDER

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Click on "Update Contact Information" and enter your information in the appropriate window.

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JOB OPPORTUNITIES IN BIOTECH

There is a world of opportunity, which is constantly growing, for students engaged in biomedical sciences. In addition to the traditional lab and medical positions, the biotech industry continues to expand and with it the number and variety of internships, part-time and summer jobs for students to explore what it is like to work in the industry. Representatives from three leading companies recently contributed their thoughts on the kinds of opportunities that exist and how BSCP students/fellows can make themselves aware of, and prepare for, possible life in the biotech world.

Biogen

Headquartered in Cambridge, Massachusetts, Biogen's early career programming offers 12-week internships and six-month co-ops to students across degree levels. Each year Biogen visits colleges, universities and conferences (including BSCP) to connect with students and share information about the company's opportunities. Crystal Riley, Biogen's University Relations lead, encourages students to attend these types of events to connect with Biogen employees and share their unique stories and career interests. Making a personal connection with a company representative offers a better way to distinguish yourself than applying online. You can also visit biogen.com/students, to find job listings and in-depth FAQs explaining the application and employment process.

As students prepare for job opportunities in the industry, Riley suggests they thoroughly research a company before an interview. There is a great deal of information online. Third-party sites, such as LinkedIn, are also helpful to search the career paths of people in specific positions. In addition to researching the website of



the company you're applying to, research its competitors as well. "Conduct as much due diligence as you can so when you reach the interview you're asking thoughtful questions you can't find [the answer to] online," Riley says. At conferences like BSCP, don't hesitate to approach individuals from companies where you are interested in working. "People are never shy about talking about themselves," Riley says, adding that they "love to be approached by motivated students."

She advises practicing interviewing with your advisors, peers and by yourself to build confidence as you prep. "Don't forget the things that set you apart."

Vertex

Internships at Vertex, in Boston's hot Seaport district, become available in early winter. Martin Rodriguez, senior director and global head of early career talent, recommends that you start looking at openings as soon as you arrive on campus. Representatives from the company visit schools and Rodriguez emphasizes the importance of meeting people from companies before applying for jobs there. Go to your school's career office to see who is visiting, he says, then hone in on where you can envision yourself working. To those interested specifically in Vertex, he recommends visiting the career sections of the company's website, vrtx.com/ working-here. The company also offers six-month co-ops, which are posted in January and September, fellowships and other early career opportunities.

Vertex does not often recruit on campus for full-time jobs. Rather, Rodriguez says, "We're looking at how we can incorporate graduating students who participate in our programs into full-time roles. [Your] best opportunity is to get an internship and/or co-op. We make an effort to hold onto some of the best talent we have in our programs." In terms of preparation,

Rodriguez says, "Academically, take courses that interest and inspire you. Follow your passion, and above all, do well." He also stresses the importance of preparing for your interview. Understanding the company and its culture "makes a very strong impression," he says. Read annual reports. If you can, talk to employees.

Vertex also works very closely with BSCP, so if you're reading this you could already have a leg up. "We make sure BSCP students who come across our desk are given full visibility," Rodriguez says.

Sanofi

Sanofi US offers summer internships, fall and spring co-ops, entry-level full-time positions and post-doc opportunities for applicants with PhDs and PharmDs. According to Kathryn DiGregorio, recruiter, diversity outreach & university talent acquisition, Sanofi North America, the positions span the company's divisions and can include everything from lab work to marketing and sales. The majority of students in these latter positions are junior and senior undergraduates hoping to learn new skills that will better prepare them for full-time jobs after graduation.

DiGregorio emphasizes, "Sanofi US interns, co-ops, PharmD fellows and full-time university hires work side-by-side with biopharmaceutical professionals, providing an opportunity to learn real-world skills as well as how to make an impact in the lives of patients around the globe."

Though she encourages interested students to visit the company career website, at <u>sanofi.us</u>, DiGregorio notes that some positions are not posted on the site, so send your resumes to her (Kathryn.digregorio@sanofi.com) or BSCP director Hollie DeSilva (Hollie DeSilva@hms.harvard.edu). BSCP also posts positions on its website and alerts eligible students/fellows of the open positions via email. To put yourself in the best possible position for an internship or co-op, DiGregorio advises students to include on your resumes courses that you have taken that are applicable to the job(s) you want and to highlight relevant class projects. Like the others interviewed, she recommends researching the company. "Be able to discuss some of the disease areas, our global reach and the biopharmaceutical area in general," she says. ■

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WHERE ARE THEY NOW

Nicole de Paz, MD

When she was in high school, Nicole de Paz, MD, thought she wanted to be a scientist. "In my senior year I interviewed a stem cell researcher. I thought it was the coolest thing," she says. But as an undergraduate at Yale University, while studying basic science, the Orlando, Florida, native worked in public health, volunteering as an interpreter for uninsured Latino immigrants at a student-run community health clinic. That experience reset her path.

Currently in her first year of a three-year General Academic Pediatric Fellowship at Boston Children's Hospital that combines primary care and general pediatrics research, de Paz says her work at the clinic, which she continued throughout college,



Nicole de Paz, MD

"was amazing. It was the first time I was in a medical setting and saw how [a] community health center worked." She notes that working at the clinic made her recognize that practicing medicine is about more than just patients' medical care. "I wanted to be able to help people in all aspects of their health."

Though she grew up in Florida, de Paz attended the BSCP Skills Workshops for College and High School Students in 2004, when she was a sophomore. Her mother discovered the program and traveled to Boston with her. "She's always been super supportive of me," says de Paz. "Education has always been really important in my family." Both of de Paz's parents, who are Puerto Rico natives, moved to Florida to attend school — and stayed. Her father studied computer engineering and now works as the chief information officer for a radiation oncology company. Her stepfather works in business operations for a large health system. One of her younger sisters works as a veterinary technician and the other plans to study occupational therapy to work with children with special needs.

Since high school de Paz has continued to attend BSCP events, first as a student and later as a panelist and advisor. She attended the Biomedical Science Careers Student Conference in 2006 and 2010 and presented a poster at the New England Science Symposium (NESS) in 2010, "Risk of Abruptio placentae in Relation to Maternal Depressive Anxiety and Stress Symptoms." She was a panelist at the Skills Workshop in 2012, a student advisor at the 2018 BSCP Conference

and an NESS panelist in 2019. "In high school and college, BSCP was one of the few places that introduced me to the NIH, summer science programs, funding opportunities," de Paz says. She also took advantage of the opportunities the organization exposed her to. "I'd look at summer programs and think, 'Wow, there's so much out there.' I'd see so many programs trying to recruit underrepresented minority students. Psychologically, it really helped to know about that support."

In 2010, as a junior at Yale, de Paz was a Hope Scholarship recipient, which she says was "huge," adding that she is still grateful. The award money helped her pay for her MCAT review class, buy a new laptop when hers broke and pay for all of her medical school applications. She returned to the Evening of Hope in 2013, when she was selected to speak on behalf of BSCP students, to thank the generous funders who make BSCP events possible.

de Paz took a gap year between college and medical school, working in an asthma clinic at Children's National Medical Center in Washington, DC. Poverty and asthma can go hand-in-hand, she explains, as the condition can be exacerbated by different triggers, like poor housing quality. She did patient intake, asthma education and traveled to health fairs and elementary school health nights. "It was the first time I got to work with families directly," she says. "It was in English and Spanish, which was really cool."

As soon as she moved to Washington, de Paz began applying to medical schools, submitting written applications and interviewing throughout the fall and winter. She enrolled at Harvard Medical School in the fall of 2012 and graduated in 2016. She completed her pediatrics residency at Massachusetts General Hospital in June 2019 and began her current fellowship in July. The first year is devoted to primary care, at the Martha Eliot Health Center in Jamaica Plain and Boston Children's Hospital primary care clinics. The second and third year are focused on coursework in the Masters in Public Health program at the Harvard T.H. Chan School of Public Health, as well as pursuing general pediatric research.

de Paz says her long-term goal is to practice pediatric primary care in a community health center and continue to conduct clinic- and community-based research. Though she and her husband love Boston — they both attended medical school in the city — de Paz is not sure where she will ultimately practice. But even if she is not living here, her BSCP connection will undoubtedly bring her back.

2019 HOPE SCHOLARSHIP RECIPIENTS

At the 22nd annual Evening of Hope fundraiser, which took place on April 25, 2019, in Boston, the following three students were awarded \$7,500 Hope Scholarships, to be paid over two years:

Alexander Jeremiah, *Tufts University, 2017; NYU School of Medicine 2019–2023*

Born and raised in Massachusetts,
Alexander Jeremiah graduated *summa cum laude* from Tufts University in 2017,
where he studied biology and Spanish.
During college, Alexander participated
in the CURE 2-Year Program at DanaFarber/Harvard Cancer Center, where
he investigated targeted therapies for
Neurofibromatosis, a cancer predisposition syndrome. In the summer of 2016,
Alexander participated in the Harvard
Catalyst Summer Clinical and Translational Research Program, investigating the

epigenetic markers of trauma due to civil war and the outbreak of Ebola Virus disease in Sierra Leone populations. Throughout college, Alexander worked closely with the Office for Diversity Inclusion and Community Partnership at Harvard Medical School, Alexander attended the BSCP Skills Workshops for College and High School Students in 2014 and 2016, and served as a panelist in 2018. He attended and served as a panelist at the Biomedical Science Careers Student Conference in 2018, and was a member of the 2019 BSCP New England Science Symposium (NESS) Planning Committee. In August, Alexander began the NYU School of Medicine program. As a physician, he hopes to transform health care delivery and decrease barriers to comprehensive care, especially among communities of color.

Ashley Matthew, MD/PhD Candidate, University of Massachusetts Medical School

Born and raised in Boston, Ashley Matthew is an MD/PhD candidate at the University of Massachusetts Medical School (UMMS). She received a BS in chemistry from Xavier University of Louisiana in 2012. During graduate school, Ashley received several training scholarships, including the Ruth L. Kirschstein National Research Service Award from the National Institutes of Health. At UMMS, under the guidance of Celia A. Schiffer, PhD, Ashley successfully completed her thesis research, "Targeting Drug Resistance in HCS NS3/4A Protease: Mechanisms and Inhibitor Design Strategies." She attended the NESS in 2015 and the Biomedical Science Careers Student Conference in 2018, and received the Ruth and William Silen, MD Award for her poster

presentation at the 2018 NESS. Ashley credits these experiences as motivators to advocate for minority men and women and embolden them to pursue careers in the biomedical sciences. She plans to pursue a career in urology and design effective therapeutics for the treatment of human disease. She also aspires to diversify the face of medicine by fostering the development of minority faculty in biomedical research and medicine.

Senait Isayas Efrem, College Student, University of Massachusetts Boston

Senait Efrem is a first-generation college student, born in Uganda to Eritrean parents. She is currently a junior at the University of Massachusetts Boston, pursuing a double major in biology and computer science while on the pre-med track. As a sophomore in high school, Senait served as a junior mentor in the Science Club for Girls program at Northeastern University. The following year she was accepted into the CURE Program at Dana-Farber/Harvard Cancer Center, where she spent two summers conducting research, first in a lab at Brigham and Women's



From left to right, Ashley Matthew, Alexander Jeremiah and Senait Isayas Efram

Hospital, then at Harvard Medical School, where she continues her research. In college, Senait co-founded The Coalition Against Student Apathy, was awarded a Louis Stokes Alliances for Minority Participation grant and is a member of the UMass STEM Ambassadors program. She attended the BSCP Skills Workshops for College and High School

Students in 2014 and 2018, and the Biomedical Science Careers Student Conference in 2016 and 2018. Senait plans to pursue an MD/PhD degree with the goal of conducting research that inspires change in health policy and medical practice.

FINANCIAL ADVICE FROM THE EXPERTS

At the 2018 BSCP Skills Workshops for College and High School Students, Edward Rowell, vice president of wealth management at Boston's Eastern Bank, participated in a panel discussion entitled "Funding Your Education."We thought the topics raised at the session, from opening checking accounts to how and when to use credit cards, are applicable to most, if not all, BSCP readers. So this summer we sat down with Rowell and two of his associates, Sarrah Samraoui, vice president and financial planning officer; and Jose Abreu, assistant branch manager, to gather some more advice for students as they settle in to the new academic year. The four areas they highlighted were: checking accounts, credit cards, loans and budgeting.

CHECKING ACCOUNTS: Rowell advises students to open a checking account at a bank branch near their school as soon as they arrive. "You can do a lot online but just talking to someone is better," Abreu points out. "Making a relationship with a branch is

a good idea." He recommends seeking out the branch manager or a service representative, who can provide personalized advice. They also suggest looking for a free checking account (no fees) that does not require a minimum balance.

CREDIT CARDS: Most students do not have any credit history, so Rowell, Samraoui and Abreu all recommend getting a credit card — but only one, and only to be used with discretion. "Use [the card] to build credit versus to ruin your credit," Samraoui warns. A good guide to responsible credit card use, Abreu says, is never spend more than 35 percent of your credit limit and always pay the bill by the due date. Samraoui adds that you should always pay the bill in full, not just the minimum due. And all three agree that it is never a good idea to use credit cards to pay tuition. For that there are...

LOANS: There is a wide range of loans available to pay for education expenses. Our Eastern Bank experts advise, first of

all, do not be afraid to shop for loans. They also suggest that a small local bank, in the neighborhood of your home or school, will probably be easier to work with than a large national bank. The smaller banks can offer more flexibility and are more likely to take your individual needs into account.

BUDGETING: This piece of advice is invaluable throughout school and after. Abreu and Samraoui point to a variety of budgeting tools that can help you keep track of money coming in and going out. Abreu notes that Eastern Bank incorporates a budgeting tool with all new accounts. They also recommend Mint and Personal Capital apps (Mint is free) for mobile devices. Or search online for an app that feels right to you.

Finally, look for every award and scholarship you can find. They are out there — and every little bit helps. High school counselors, professors, faculty advisors and others can be excellent sources of information. Don't be afraid to ask.