A MESSAGE FROM JOAN REEDE

Dear BSCP Students and Fellows,

It is my hope that you are safe, and that you are taking care of yourself and those around you as best as you are able. During these uncertain and unprecedented times of social distancing, isolation and rapid adjustment, I am thinking of you. The COVID-19 pandemic has changed the way we live, learn, work and connect seemingly overnight. It has caused uncertainty in the future and, undoubtedly, some level of anxiety for us all. It is important for you to remember that you are not alone; we are all in this together and it is ok to feel uncertain.

I am so proud of the organization that BSCP has become. Through the years, I have had many conversations with students and alumni, and inevitably those conversations refer to the BSCP community as a family. Now more than ever it is a time to stay connected to each other. Reach out to other students, BSCP alumni, advisors or staff. Ask questions, talk about next steps, share your stories; you may be surprised to find how many others are going through similar experiences.

We are here and we want to help. As an organization BSCP will be continuing to provide resources, mentoring and opportunities to connect because we know how vitally important these things are, especially right now. We are beginning to schedule webinars and strategizing on ways to get together virtually. I wish I could tell you what the future holds and the exact steps to take. Many of you have been asking about when we will be able to meet again in person and in what capacity. The truth is I don’t know yet. In that I am no different from the rest of you. But I do know that we can continue to communicate, share information and be kind to one another. We will get through this and we will do it together, as a community.

Hollie and I will be in touch with you over the next few months, as virtual opportunities are put in place and plans for fall 2020 and spring 2021 come together. In the meantime, be well.

Joan Y. Reede, MD, MS, MPH, MBA
President and Chair
Biomedical Science Careers Program
It is not an understatement to say that we are living through unprecedented circumstances. Though quarantine restrictions and stay-at-home orders vary by state, all of us have been inconvenienced, at minimum, by COVID-19. Even those lucky enough not to have become infected can't help but feel the impact of 2020's pandemic. As we at BSCP continue our work remotely, we checked in with BSCP members and associates to see how they are coping with forced changes to their daily life. Here are a few of their stories.

**Francheska López Rivera**  
PhD Candidate, Biological and Biomedical Sciences, Harvard Medical School  
BSCP Student since 2014; 2018 Hope Scholarship Recipient

Francheska López Rivera has spent most of her five years in graduate school conducting basic research on gene regulation in budding yeast in the lab of Fred Winston, PhD, in the department of genetics at Harvard Medical School. López Rivera’s work focuses on better understanding the function of the essential and conserved protein Spn1, which has been associated with cancer. In mid-March, due to the novel coronavirus pandemic, all activity in the lab was stopped.

López Rivera says that during the two-week period before the lab was closed she sensed a shutdown was coming and hurried to finish experiments she had underway. On a Wednesday, she recalls, “We were told we had one week to finish.” She started feeling cold symptoms before the end of the week and stayed home, just in case it was the coronavirus (it was not). Although she was as prepared as she could have been for the indefinite pause, the scientist admits to feeling a sense of loss and adjustment, “when you have been working so hard on something and have to stop and shut it all down.”

In the lab, López Rivera has been working on a 14-person team with her advisor, the principal investigator (Dr. Winston); the lab manager; three post-docs; two other PhD candidates; three early PhD students on rotation; one post-baccalaureate; and two undergraduates. During the shutdown, the group keeps in touch via email and Slack. They continue to have lab meetings, now online, on Tuesdays and Thursdays. Tuesday meetings are focused on reading and discussing scientific articles. At Thursday meetings, members present their own research and discuss future plans.

López Rivera has been hoping to graduate in the spring of 2021, and is now concerned about the timing. She has a few vital experiments left to do before graduation. One, in particular, will produce large amounts of data, and the person who will collaborate with her to analyze the data may leave the area before the experiment is completed. She says her advisor has assured her there are options to making sure the analysis is completed, but the path is no longer as clear as it had been.

When she completes her PhD, López Rivera would like to work in the visual scientific communication field. She wants to combine her love of art with her love of biology to create visual stories of scientific processes that can bridge the scientific community and the general public, especially Spanish-speaking communities. Toward that end, she has used some of her quarantine time to work on her website (francheskalopezrivera.com), which includes scientific illustrations, animations, and some of her architecture work. In addition, López Rivera’s interests in diversity and inclusion of Spanish-speaking communities motivated her to develop Spanish-to-English translations of info-comics with coronavirus information produced by the Harvard Science in the News student group. The translated materials can be found on the Facebook page of the Harvard Puerto Rican Student Association, which López Rivera co-founded.

Even though the pandemic has been an adjustment for her, López Rivera is continuing to work hard with faith in better times.

**Alexander Jeremiah**  
MD Candidate, New York University Grossman School of Medicine  
BSCP Student since 2014; 2019 Hope Scholarship Recipient

Alexander Jeremiah began medical school at New York University (NYU) Grossman School of Medicine in August 2019 hoping one day to help transform health care delivery and decrease barriers to comprehensive care, particularly among communities of color. Eight months later, as he logs into classes remotely from his parents’ Massachusetts home due to the pandemic that has brought much of the world to a standstill, he is even more committed to his vision.

NYU transitioned to virtual learning on March 16. Jeremiah and his classmates are now in Zoom class from 9 to 4 Monday through Friday. “In a way, it’s more challenging,” says the first-year student. “Medicine thrives on human connection and interaction. Once a week we go into
hospitals to meet with patients and we can’t do that now.” Pre-pandemic, patient speakers typically came to class roughly once a month. Now they join in remotely. It’s not quite the same.

Of the 100 students in his cohort, Jeremiah says now there are usually 80–90 in class at the same time. All classes are recorded so everybody has the option to watch at another time. There are also smaller group meetings a couple of times a week and professors hold virtual office hours every day. For the first month Jeremiah stayed in his New York apartment. During a two-week period he and a group of students volunteered at area medical centers making personal protective equipment for hospital workers. But for the most part he and his roommate, also a first-year student, left their apartment only to go to the grocery store. In mid-April the medical school advised all first-year medical students to go home. So Jeremiah has been living with his parents and college-age brother, also home from school, in their town about a half hour south of Boston.

“It feels like as a class we are less connected physically because we were together from sunup to sundown,” he says. “But I’ve gotten closer to my friends. We’ve had lots of conversations about [things like] the practice of health care.” Because the class is made up of students from around the United States, “It’s made taking exams at the same time interesting,” he notes wryly. And the varying climates add a note of variety as students in the seemingly endlessly cold and damp northeast share screen time with classmates sitting among palm trees. As a member of a student council, Jeremiah says he has “spent a significant amount of time helping to coordinate our volunteer efforts and making phone calls to patients for patient education and sharing negative COVID-19 testing results. I’ve been doing the calling for the last four weeks.”

Classes will end on June 12. Jeremiah has been planning to spend the summer on a Health Disparity Fellowship through the office of Diversity at NYU that he hopes he will be able to do remotely. He says he has always been interested in practicing primary care medicine, either pediatrics or family medicine. “Seeing how this [coronavirus] has affected communities that don’t have access to primary care has reinforced that,” he says. “Those most affected by COVID-19 have the highest disease burden. Primary care has a greater role in its ability to address those issues… to try to get to know patients and override barriers to treatment.”

His long-term goal: “If there’s a future outbreak, there won’t be the same disparity.”

Jodi Then
High School Counselor,
Boston Green Academy

Like public schools throughout the country, if not the rest of the world, high schools in Massachusetts transitioned to online learning in March and will continue through the rest of the academic year. We asked Jodi Then, a high school counselor at Boston Green Academy, a charter school for grades 6–12 in the Boston Public School system, whether she has any advice for high school students who have their own specific concerns at this difficult time.

Then, who was a panelist at the BSCP Skills Workshop for High School and College Students in 2014 and 2016, advises students not to be too hard on themselves and understand that this period is difficult for everybody. “Students need to understand this is different,” she says. “It’s OK if [you’re] not at the 100 percent [you’re] normally at.” She adds that students should “communicate, communicate, communicate. Let people know what you need”— whether those people are your parents, teachers, counselors or friends. If your school uses Naviance, as Boston Green Academy does, Then suggests taking the Learning Styles Assessment, which she says can help determine what you need to be most successful. Some people need more teacher feedback. If you are one of them, let your teachers know and they should be able to arrange one-on-one remote check-ins.

A lot of juniors are concerned about how the current situation may affect the college application process. It is definitely a complicating factor, since nobody can visit schools or attend college fairs and many tests scheduled for spring were cancelled. But Then points out that there are virtual college fairs. If you have not discovered these, ask your school counselors. Or recruit your parents to do some research. You should also contact your schools with any questions about SATs, AP exams or any other tests you had been scheduled to or are planning to take. “My hope is that colleges will be flexible in how they evaluate applications for the class of 2021,” she says.

“We are all going through, in some capacity, the five stages of grief,” she continues, referring to denial, anger, bargaining, depression and acceptance. “Recognize that, honor those feelings and be kind to yourself. If you need a couple of days to do nothing, that’s OK.” If the feeling stretches into more than a few days, she adds, you might want to talk to someone about how you’re feeling.

“One of the things that’s saved me is going on walks and bike riding and being outdoors,” Then notes. Try to think about “what will give me a few hours of feeling normal.”