



IN THIS ISSUE

Conversations with the Board
2021 Virtual Conferences
Where Are They Now
BSCP Students

SAVE THE DATE

15th Biennial Biomedical Science Careers Student Conference Virtual Conference

Friday, April 9 and Saturday, April 10, 2021

There is no registration fee for this program, but pre-registration is required. To request an application, please contact hollie_desilva@hms.harvard.edu.

Application deadline: February 12, 2021
(High school deadline: January 15, 2021)

20th Annual New England Science Symposium Virtual Research Symposium

Friday, April 23 and Saturday, April 24, 2021

Deadline for abstract submission:

January 15, 2021

All abstracts must be submitted online at www.NewEnglandScienceSymposium.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."

CONVERSATIONS WITH THE BOARD

Yvonne Greenstreet, MBChB, MBA

Yvonne Greenstreet, MBChB, MBA, president and COO of Alnylam Pharmaceuticals in Cambridge, Massachusetts, is one of the newest members of the BSCP Board of Directors. She joined Alnylam, one of the world's leading life sciences companies, in 2016 as chief operating officer and was promoted to her current position in 2020. A practicing physician for the first several years of her career, she has spent over 25 years in the biopharmaceutical industry, helping develop transformative medicines and build successful companies in Europe and the United States.

When she was a young girl in Ghana, Greenstreet became interested in medicine as a career. She had a lingering cough that her parents feared may have been TB, so they took her to see a doctor. "I remember sitting in the consulting room with my mother," she says. "I was really curious to learn about everything going on." Seeing her interest, the physician invited eight-year-old Greenstreet to join her at some clinic sessions. "I became struck by the impact of ill health on people's lives, particularly in the developing world," she says, "and also the opportunity to make a difference to that in a positive way through medicine."

Ten years later Greenstreet was in medical school at the University of Leeds, graduating in 1985. She then worked as a physician in London. "It was a time where people were starting to think differently about health care delivery, health care systems and disease management. I wanted to learn not only about how best to treat individual patients, but also how to meet the needs of populations at a broader scale," she recalls. To understand more about the business of medicine,



Yvonne Greenstreet, MBChB, MBA

Greenstreet decided to pursue an MBA at INSEAD in France, planning to subsequently return to clinical practice.

While in business school, exposure to people from a variety of disciplines "made me excited about the potential to become involved in driving innovation and delivering new medicines that would impact not only individual patients but potentially millions of lives," says the current executive. About halfway through her program, Greenstreet decided on the next step of her career. "It dawned on me that the biopharmaceutical industry would be the perfect place for me to bring together my different interests... in science, in medicine and in business."

After graduation Greenstreet joined Glaxo in the United Kingdom, where she went on to enjoy an 18-year career that spanned roles, disciplines and geographies. "It ended up being an incredible journey for me," she says. In her first position she worked on the drug Zofran, a novel anti-nausea and -vomiting medication for cancer patients receiving chemotherapy. "It was an impactful experience," she says. "Seeing the numbers of patients who were able to complete their chemotherapy regimen, thanks to this new medicine that we had created, was a spine-tingling experience. I was bitten by the bug to do more and more of this."

Greenstreet's last position with GlaxoSmithKline was in the United States. "I thought it would be two to three years, but I'm still here," she laughs. "The extent of innovation in the US and the vibrancy of the life sciences sector made it difficult for me to leave." After spending a few years at Pfizer, she joined Alnylam because she believed "the technology the company was developing had the opportunity to be able to change the face of medicine." A leader in RNAi therapeutics, Alnylam has brought four new medicines to patients over the last three years. Alnylam is also in the early stages of development of a COVID program based on its RNAi technology.

Greenstreet is quick to note how pleased she has been to witness the collaboration among different players in biopharma and

governments to develop vaccines and treatments "at what has been an extraordinary pace. It has been one of the extraordinary successes of this period, and showcases the power of science and innovation in being able to transform health outcomes," she says. "On the other hand, the COVID pandemic has been an eye-opening experience for society," exposing a lot of weaknesses in the system, such as the stark racial inequalities in health care. This, she notes, highlights the importance of BSCP's mission.

Greenstreet attended her first Evening of Hope fundraiser shortly after joining Alnylam. "I was blown away by the students' stories," she says, as well as by the tangible needs that students have to enable their progress in biomedical sciences. "I immediately identified with the critical role that

BSCP has played and continues to play in supporting students. It was an honor and privilege when I was invited to join the Board."

Having had personal and professional mentors throughout her schooling and career, Greenstreet says, "I've always felt it's important to do the same for others. I can't overemphasize the importance of mentorship in helping ensure that people reach their potential."

She advises everyone interested in a biomedical science career, "Don't give up. If you're committed to pursuing a dream in the biomedical sciences, there will be challenges along the way, but don't give up. Be resourceful in how you engage the support you need in order to keep moving forward. Most things that are really worth doing are actually hard and success doesn't happen overnight." ■

2021 VIRTUAL CONFERENCES

The **15th biennial Biomedical Science Careers Student Conference** will take place virtually on Friday, April 9 and Saturday, April 10, 2021. The event is for postdocs (research and clinical); medical, dental and graduate students; post-baccalaureates; college and community college students; and high school seniors and juniors, particularly Black/African American, Hispanic/LatinX or American Indian/Alaska Native students/fellows.

As in previous years, conference highlights will include keynote addresses, small group meetings with individually assigned mentors and advisors, workshops and panel discussions for each academic level and a career fair featuring national and local organizations and institutions. There will also be a special networking and career discussion for postdocs. The keynote speaker on Friday will be Angela DePace, PhD, associate professor of systems biology at Harvard Medical School. Keynote speakers on Saturday will be Reshma Kewalramani, MD, FASN, chief executive officer and president at Vertex, and a BSCP Board member; and Eliseo J. Pérez-Stable, MD, director of the National Institute on Minority Health and Health Disparities at the National Institutes of Health.

Some of the workshop and panel discussion topics include:

- Getting into College/Medical/Graduate/Professional Schools
- Approaching Residency Selection
- Options After Graduate School
- Funding and Research Opportunities
- Other Biomedical-Related Career Opportunities
- National Institutes of Health 101

All the workshops will be recorded, so students can attend three "live," but for the first time they will be able to view any others at their leisure on the Conference platform.

Though clearly different than in-person conferences, networking with peers and leaders in biomedical and other science-related fields will still be available through pre-arranged, small-group mentoring sessions, interactive panels and opportunities for online conversations using discussion boards. This year it is more important than ever for students to completely and thoughtfully fill out their applications to aid the BSCP team in the mentor matching process.

Vertex, a global biotechnology company that invests in scientific innovation to create transformative medicines for people

with serious and life-threatening diseases, is a major sponsor of the conference.

The **20th annual New England Science Symposium (NESS)** will take place virtually on Friday, April 23 and Saturday, April 24. Established in 2002 to promote careers in biomedical sciences, NESS provides a forum for postdocs (research and clinical); medical, dental and graduate



students; post-baccalaureates; and college and community college students, particularly Black/African American, Hispanic/LatinX or American Indian/Alaska Native students/fellows, to share their biomedical and health-related research activities through oral or poster presentations and to engage in discussions related to career development. The keynote speaker on Friday will be Charles R. Bridges, MD, ScD, chief technology officer, head of Cross-Enterprise Innovation, Cardiovascular, Metabolism and Pulmonary Hypertension Therapeutic Areas, Janssen Pharmaceuticals, Johnson & Johnson.

Awards will be presented for outstanding oral and poster presentations in several different categories. Anybody interested in delivering a presentation must submit an abstract by January 15, 2021. For more information and to submit an abstract, visit www.NewEnglandScienceSymposium.org.

NESS is co-sponsored by the Harvard Medical School Minority Faculty Development Program and BSCP and supported by Vertex. ■

EDITOR

Andrea Pyenson, CorPublications

EDITORIAL BOARD

Hollie DeSilva, Executive Director, Biomedical Science Careers Program

Emorcia V. Hill, PhD, Director, Converge, Harvard Medical School

Joan Y. Reede, MD, MPH, MS, MBA, Professor of Medicine, Dean for Diversity and Community Partnership, Harvard Medical School, President and Chair, Biomedical Science Careers Program

Special Thanks To

The Massachusetts Medical Society for their support of this newsletter

www.bscp.org



WHERE ARE THEY NOW

Alejandro Scaffa, PhD

"I never considered another career," says Alejandro Scaffa, PhD, who is an associate scientist/postdoctoral fellow at Merck in Boston. "I was always interested in science. My mother is a pharmacist. My father is a biochemist. I always looked up to them as scientists." At one point he considered medicine, but in college he "realized experiments were really fun."

Born in Argentina, where his parents attended college, Scaffa was raised in Brazil from the time he was eight. He was recruited by Grinnell College in Iowa and has been in the United States since his freshman year, in 2010. Scaffa admits to an adjustment period from Campinas, in São Paulo, Brazil, to a small liberal arts college in a Midwestern city, but he says Grinnell "did a great job of acclimating international students. There were students from 80-plus countries; everyone around you was going through culture shock too."

From Grinnell Scaffa went directly to Brown University, where he earned an MA and PhD in molecular pharmacology and physiology, the latter in 2020. It was at Brown that he first learned about BSCP, attending his first conference in 2016. He delivered a keynote introduction at the 2018 Biomedical Science Careers Student Conference and was a panelist at the Skills Workshops for College and High School Students that year. In 2019 he was on the New England Science Symposium Planning Committee, where he helped review more than 300 abstracts. "Honestly, I wish I had heard about it earlier," he says, "because I got the most mentorship through BSCP. Being introduced to a community of minorities in science... it connects us all in one big network."

In his PhD work, Scaffa studied models of the lungs of premature babies, trying to understand the cellular response to stress. Some of his study involved examining the effects of ventilator use and how this can lead to senescence in lung cells, a larger field that Scaffa says is also relevant to the study of aging.



Alejandro Scaffa, PhD

At Merck, he is working in oncology, exploring underlying causes of cancer. "It makes you want to get up and go to work every day," he says. "You always know someone who has been impacted by cancer. I like the idea of doing research. It's very exciting. Every day you learn something new. It's a career you never get bored in."

Less than a year into his position, Scaffa notes, "Something Merck does really beautifully is help you develop through this postdoc program." As much as he loves what he is doing now, he has heard from people he has met through BSCP that "at some time being on the bench gets tiring. But there are ways to be very engaged with science without being at the bench, and it has opened my mind to future possibilities." And he anticipates exploring opportunities in other areas of research, drug development, possibly computational biology and even management.

"I don't think I would have gotten my job if it wasn't for BSCP," Scaffa states. "It opened doors in terms of career and postdoc opportunities. One day I would like to become a mentor for BSCP. I really highly value the organization." ■

BSCP STUDENTS

Ryan Keen, PhD Candidate

Growing up in rural Bland, Virginia, in the state's Appalachian region, Ryan Keen was inspired at a young age to become a doctor. His half-brother struggled with juvenile diabetes and nearly died several times due to complications from low blood glucose levels and because the nearest hospital was a 45-minute drive from the family's home. In a book he made when he was in first grade, Keen wrote, "When I grow up I want to be a doctor because they help people get well."

As a pre-med student at the University of Virginia intending to go to medical school, Keen explains, he became interested in homelessness and rural health. When he started to see how health systems were experienced by these communities, he thought he might prefer to attend graduate school for public health, with an eye toward applying social epidemiology to clinical medicine. Today he is a second-year PhD student in Population Health Sciences at Harvard University's T.H. Chan School of Public Health and Graduate School of Arts and Sciences, focusing on early childhood development in children experiencing homelessness. During the summer of 2020 he participated in Massachusetts General Hospital's Rural Health Leadership Fellowship, working with Great Plains-area Native American communities.

Keen attended the 2018 Biomedical Science Student Careers Conference while he was still an undergraduate. "I was looking for some mentorship to help decide between public health and an MD," he says. As a student with his background — first-generation in his family to graduate from high school, low-income, from rural America — Keen found the event "extremely helpful. So many people showed me so many different avenues."

One of the things that struck him, once he got past his initial nervousness, was how friendly everybody was. He arrived feeling extremely intimidated "because there were so many wildly successful people. But they have all committed to mentoring people. Once I realized that, I relaxed." He admits, though, that it took a few hours of stumbling over his words and awkward conversations to achieve that relaxation.

Keen was drawn toward his summer fellowship in part after a conversation with a colleague who is a JD/PhD candidate studying Native American history and law. "She told me there are so many conversations at Harvard about health disparities that completely overlook Native Americans. She said, 'Don't be one of those people who overlook them.'"

Keen connected with Katrina Armstrong, MD, and Matthew Tobey, MD, MPH,



Ryan Keen, PhD Candidate

senior advisor and director of the Rural Health Leadership Fellowship, through which physicians early in their careers partner with challenged communities to improve health systems. He received funding through Harvard's Presidential Public Service fellowship and the Chan School's Rose Service Learning Fellowship. He had planned to go to South Dakota for several weeks to work on palliative care projects.

Due to the COVID pandemic he was unable to travel. Because the Native American population has been among the country's hardest hit by the pandemic, many people who work in epidemiology within this community are currently focused on COVID and have been diverted from other important areas. Keen worked on one of those, conducting and scoring interviews to assess community readiness to accommodate the needs of patients with HIV. This work is ongoing. Keen has also shared BSCP resources with the Native American communities he worked with.

Though the pre-med student has taken a detour, Keen still thinks he will attend medical school after completing his PhD. And he looks to Joan Reede, MD, MS, MPH, MBA, as a role model. A proctor at Harvard College, he says he is building the tools to be a mentor. "What Joan Reede is doing is outstanding," he says. "I want to do something like that — from my own angle." ■

