

IN THIS ISSUE

ROBERTO VALVERDE, PHD  
 RAFAEL LUNA, PHD  
 ALEJANDRO SCAFFA  
 2017 EVENING OF HOPE

# BSCP

BIOMEDICAL SCIENCE  
 CAREERS PROGRAM

## BSCP Success Story

### Roberto Valverde, PhD, Relay Therapeutics

AS SOON AS ROBERTO VALVERDE arrived at Harvard Medical School to begin his postdoc in Stephen C. Harrison, PhD's Laboratory of Structural Cell Biology, he started hearing about BSCP. He attended his first event in 2012, presenting a poster at the New England Science Symposium (NESS). "At first I thought, 'Oh well, another thing where I can present my research.' But it was much more.

"BSCP was an opportunity to meet other people who care about the same issues I do," continues Valverde, a structural biologist, who recently started a job at a biotech start-up. It was a place where he could "find support and mentors; talk about my science. I wasn't isolated." For him, chief among "those issues" is inclusion. And he wonders about what he can do to make science more inclusive for future generations.

Valverde grew up in El Paso, Texas. In school he always gravitated toward science but, he says, "I never knew what to do with it. I thought you had to go to medical school. In college I finally learned there are other options." He received a BS in chemistry from the University of Texas and a PhD from Yale, where he studied under the mentorship of Dr. Lynne Regan.

Then he took a detour. For two years, from 2008 to 2010, Valverde lived in Ukraine, where he did humanitarian aid work. "It was hard stepping away from

science," he says. "It felt like a whole different world." The work was hard, too. But he says he loved the experience, learning Russian and another culture. "I gained a whole different perspective."

When he returned to the United States, Valverde began applying for postdoc positions. Harrison's lab was his first choice because he had long admired the biologist/professor's work. Unlike some people whom he met while applying, Harrison commended the work he did in Ukraine. "On a personal level that meant a lot," Valverde says. "Steve was a wonderful mentor in and out of science."

Valverde spent five years in Harrison's lab. During that time he presented posters at two New England Science Symposia and attended one Biomedical Science Careers Student Conference. Alfred Sandrock, MD, PhD, chief medical officer and executive vice president at Biogen, was a judge at one poster presentation. "He was a catalyst in expanding my network," Valverde says. "He was so encouraging — a senior scientist at Biogen taking time to talk to a junior postdoc."

That network led Valverde to his current job at Relay Therapeutics in Cambridge, Massachusetts. The nascent company studies protein motion to leverage them in drug discovery with a goal toward developing cancer treatments. "I feel lucky that



ROBERTO VALVERDE, PHD

"I'm here," Valverde says. "I met the right people at the right time."

Valverde plans to continue his connection to BSCP and is committed to continuing to mentor others. "I still connect with younger scientists," he says. "A downside of the industry landscape is there are less formal mechanisms for connecting mentors to mentees."

He also wants to help spread awareness in the industry of the importance of mentoring to promote inclusion. "Scientists care about this but don't always know how to go about doing it," he says. "Creating visibility for BSCP is high priority." ■

**EDITOR**

Andrea Pyenson, CorPublications

**EDITORIAL BOARD**

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

Lise D. Kaye, Executive Director  
 Biomedical Science Careers Program

**EDITORIAL BOARD, CONTINUED**

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**

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.  
 and the Massachusetts Medical Society  
 for their support of this newsletter



## Conversation with the Board

### Rafael Luna, PhD

RAFAEL LUNA, PhD, A BSCP Board member since 2014, has been involved with the organization since 2006, when he attended his first Biomedical Science Student Careers Conference and presented a poster at the New England Science Symposium. “When I came to Harvard [to do postdoctoral work at Harvard Medical School], there weren’t that many underrepresented minority scientists doing medical research,” he says. “All of them were part of BSCP.” He attended his first events that year and has been returning every year since.

“Joan Reede took me under her wing. I wanted to do that [for others], which wasn’t hard to do at BSCP, since the participants strive for academic success,” he says. Emphasizing the organization’s value to underrepresented minorities interested in medicine as well as biomedical science and research, he adds that there are “pathways for everyone in the biomedical field. Excellence is stressed.”

Although born in the United States, Luna’s first language was Spanish. His mother was from El Salvador and his father was from the Dominican Republic. He attended Southern University in Baton Rouge, Louisiana, on a biology scholarship and there, he says, “I fell in love with science.”

He worked at the National Institutes of Health (NIH) during the summers as an undergraduate and as a post-baccalaureate after graduation. He went on to earn a PhD in biological sciences with a concentration in microbiology at Louisiana State University. At Harvard Medical School, he studied the biochemical mechanisms of cancer. He also developed and published a novel way for writing scientific research manuscripts, *Scientific Storytelling*, which teaches scientists how to write about their research following storytelling guidelines.

“I’ve been very fortunate to have mentors since [I was an] undergraduate,” he says. Early on his mentor, who was a world-renowned cardiovascular-pulmonologist at the NIH said to him, “I’ll have faith in you until you can start believing in yourself.” Now that’s what Luna does for his mentees.

As a BSCP Board member, Luna believes that his background as a previous BSCP participant helps him shape strategic vision. He says he can also serve as “boots on the ground” at events, being attentive to the needs of students and postdocs. “I can do a lot of outreach at conferences. I understand their difficulties and have shared in those experiences.”

Luna recently left Harvard to begin a job as executive director and principal



RAFAEL LUNA, PHD

investigator of the National Research Mentoring Network. Headquartered at Boston College in Chestnut Hill, Massachusetts, the organization operates under the mission to increase diversity in biomedical sciences. “BSCP has uniquely positioned me for this executive leadership role,” he says. ■

## 2017 Evening of Hope

THE 20TH ANNUAL EVENING OF Hope will take place at the Sheraton Boston Hotel on Thursday, April 27, 2017. The event raises money to support BSCP programs, which are offered at no cost to all participants, and celebrates the organization’s successes. Honorees at the event will be David Meeker, MD, executive vice president and head, Sanofi Genzyme, and

BSCP Board member; and Tony Coles, MD, MPH, chairman and CEO, Yumanity Therapeutics. John Maraganore, PhD, chief executive officer, Alnylam Pharmaceuticals, and James C. Mullen, chief executive officer, Patheon, and BSCP Board member, will be the event’s co-chairs. ■

## Networking

### Alejandro Scaffa

ALEJANDRO SCAFFA AND HIS TEAM, “alZEYEmers,” won the Best Aging in Place Hack award at the 2016 MIT Hacking Medicine: Grand Hack the first time he attended the event. And he maintains that he owes it all to BSCP.

In 48 hours the six Brown University students/scientists conceived and created a wearable camera for Alzheimer’s patients that can identify common household objects as well as dangerous ones, like a stove. If the patient is home alone, the camera can warn him or her to stay away from hazards by setting off an alarm if he or she gets too close. In case of a real emergency, it will alert a family member or call 911. The device, which the team prototyped for roughly \$100, combines artificial intelligence, computer vision and neuroscience. Scaffa, a third-year PhD student at Brown University, is studying molecular pharmacology and physiology.

Scaffa was born in Argentina and moved to Brazil with his family when he was eight. He says he was always interested in science but while going to school in Brazil, he thought his only option was medical school. “I didn’t really know [a PhD] was a thing,” he says. When he attended Grinnell College in Iowa, he

met scientists who conducted research and taught. It was a revelation. “I realized, with a PhD, I could do research and teach.” While working on his doctorate, Scaffa is also taking advantage of teaching programs that Brown offers. He has completed one and is looking to community service teaching next.

The developing scientist learned about BSCP from fellow classmates — “minorities in [my] program who had attended BSCP programs in the past. I thought it might be a great, beautiful space to mentor and be mentored,” he says. At the 2016 Biomedical Science Careers Student Conference, he was inspired by Aman Bhandari, PhD, of Merck’s Data Sciences and Insights Center for Observational and Real-World Evidence, who was a panelist on the “Options After Graduate School” session. Before joining Merck, Bhandari co-led health policy initiatives for the Obama White House that combined tech, data and innovation in the context of the Affordable Care and HITECH Acts. He also played a key role in implementing the President’s Open Data and Open Government initiatives, and led or made key contributions to launching Health Data Palooza, Blue Burton, Text4Baby,

ONC Investing in Innovations, and the HHS Entrepreneur in Residence program, among others.

After the session, Scaffa approached Bhandari and said he was interested in entrepreneurship. “I love teaching, but think research [in academia] will be too slow. I think research in industry will be a lot faster and further reaching.” He says Bhandari told him, “Startups are a good idea because you’re working for a stake in the company and everybody is really motivated.”

He suggested that Scaffa attend the MIT hackathon to get some ideas. Though his Brown colleagues all came to the event with him, the decision to enter the competition as a team “was a last minute thing.” The challenge is to develop an idea that’s useful, viable and financially stable and can make enough money that you can keep growing the business. After they presented their device, Scaffa’s team was approached by some potential investors. Right now school is his priority, but he is hoping to develop the product.

“If it wasn’t for BSCP, Aman and I wouldn’t have met and this would not have happened,” he says. ■

## Note to the BSCP Community

AT THIS TIME OF MULTIPLE transitions it may become easy to get distracted by events going on around us. Now, more than ever, it is important to remember your goals and to keep your eyes on the prize. When things are difficult,

you’re feeling challenged or just need a boost, don’t hesitate to reach out to your professors, advisors, mentors and other people who want to support you. That includes us. BSCP believes in you and we are here for you. ■

## SAVE THE DATES

### New England Science Symposium The Joseph B. Martin Conference Center at Harvard Medical School 77 Avenue Louis Pasteur Boston, Massachusetts Saturday, March 25, 2017

There is no registration fee, but pre-registration is required. Please register as early as possible as seating is limited. For online registration, go to [www.NewEnglandScienceSymposium.org](http://www.NewEnglandScienceSymposium.org).

For more information, please contact Rodolfo Ramos, program coordinator, Office for Diversity Inclusion and Community Partnership, Harvard Medical School.  
(617) 432-5580  
[rodolfo\\_ramos@hms.harvard.edu](mailto:rodolfo_ramos@hms.harvard.edu)

### Evening of Hope Sheraton Boston Hotel Thursday, April 27, 2017

#### Reminder

Please remember to update your contact information at [www.bsccp.org](http://www.bsccp.org).

Click on "Contact Information/Submit Resume" and enter your information in the appropriate window.

NON-PROFIT ORG.  
U.S. POSTAGE  
**PAID**  
BOSTON, MA  
PERMIT #53157

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

## Free College Admissions Guide

HARVARD UNIVERSITY UNDER-graduates Luke Heine, AB '17 and Cole Scanlon, AB '18, in the John A. Paulson School of Engineering and Applied Sciences, co-direct the Fair Opportunity Project, a free, online college admissions guide written by Heine. The guide covers topics including application timelines and financial aid. Visit [fairoppportunityproject.com](http://fairoppportunityproject.com) for more information. ■