

Welcome to The Career Network SPYglass, the quarterly newsletter for CNSPY. In this issue, we report the most recent networking events sponsored by the CNSPY and provide a preview of upcoming events and projects for 2015. Our "Career in Focus" for this issue highlights Science Education. We answer many FAQs about Science Education and bring you an exclusive interview with Dr. Julia Zichello, Manager of the Sackler Educational Laboratory for Comparative Genomics and Human Origins at the American Museum of Natural History in New York City. Finally, the CNSPY has open positions on the Leadership Team. As board members prepare to graduate, we invite you to get involved and apply to join the CNSPY Team!

- Victoria Schulman

Editor-in-Chief, The Career Network SPYglass and CNSPY Blogger

In This Issue Feb 2015

CNSPY in Focus

- Join the Leadership Team
- Networking in Nature
- Small Group Discussions
- CNSPY Blog and Podcast
- CNSPY Mixer
- Regeneron Site Visit

Career in Focus

- Science Education
- Interview with Dr. Julia Zichello

CNSPY in focus

CNSPY was established to provide graduate students and postdocs with a platform to explore diverse career options and build an extensive professional network of peers, career mentors, and faculty advisors. Our events allow our members to meet and learn from career mentors while building a community of like-minded peers. We aim to establish new avenues for collaboration, business ventures, and job opportunities while supporting an entrepreneurial environment among science trainees at Yale.

Join the Leadership Team!



The CNSPY Leadership Team

President, Tenaya Vallery, Graduate Student

Vice President, Daniel Mori, Ph.D., Postdoc

Strategy Consultant, Shalini Nag, Ph.D., Postdoc

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Claudia Bertuccio, Jimi Miller, Prabitha Natarajan, Victoria Schulman, and Yixiao Zou

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Communications Team

Elaine Guevara, Nikit Kumar, Victoria Schulman, and Shang-Min Zhang

Events Team

Sophie Dutheil, James Havey, Leo Ma, Prabitha Natarajan, Sophia Espinoza Sanchez, Nisheet Nautiyal, and Yixiao Zou

We are always looking for dedicated individuals who are interested in exploring new career avenues and sharing that passion with our members. If you are one of those people, we want to hear from you! Apply to join the team!

JOIN THE TEAM! Apply [here](#) or email us



Networking in Nature

Becoming a more popular event is our Networking in Nature series that continues from its inception last fall. Brought to us by CNSPY Executive Board Members, Yixiao Zou and Prabitha Natarajan, Networking in Nature allows trainees and career mentors to mingle while hiking the beautiful trails of Connecticut!

Devil's Den Preserve, Weston, CT with Dr. Maximillian Vargas, COO, LambdaVision LLC Strategic Consulting

On Saturday, November 8th, 2014, five CNSPY members spent the afternoon with Dr. Max Vargas hiking along four miles of the well-maintained trails in Devil's Den. During the hike, Dr. Vargas answered numerous questions and recounted his own experiences converting a volunteer position during his graduate career as a business analyst at a UConn start-up, LambdaVision LLC, into a full-time position after graduation and eventually becoming the Chief Operating Officer of the company. He encouraged members to carve their own paths because, as he pointed out, his position was not available when he secured it. Leveraging volunteer roles into permanent positions can help students and postdocs create their ideal jobs. Dr. Vargas also advised trainees to learn and acquire a wide set of skills and compared career development to investing. On skill development, he commented, "You would never put all your eggs in one basket. Definitely establish an area of expertise, but also diversify." For those who want to follow in Dr. Vargas' footsteps, he recommended gaining experience in project management, finance, and business analysis, citing these as key skills required in his field.



Join us for the next Networking in Nature!

There are many more trails to explore, and we post sign-ups for our Networking in Nature excursions in the CNSPY Weekly Digest. Register as a CNSPY member [here](#) to receive emails about upcoming Networking in Nature events! We hope to see you there!



Small Group Discussions

Our most popular event continues as we have invited a number of professionals in a wide range of career avenues to join us and speak about their jobs, companies, and the paths they took to get there. These round-table discussions allow students and postdocs to ask questions in an informal setting and learn about different careers.

Dr. Natasha Moningka, Medical Associate, Healthcare Consultancy Group - The Scienomics Group

On Tuesday, December 16th, 2014, Dr. Natasha Moningka joined us to discuss her transition from bench science to the field of Medical Writing. She explained the types of projects she works on - from summarizing clinical trials to developing PowerPoint presentations - for her clients. She also detailed how she networked at careers fairs and specifically tailored her resume to the job postings to secure an interview at The Scienomics Group, a branch of the Healthcare Consultancy Group located in Greenwich, CT. At the end of the discussion, Dr. Moningka provided interest forms for students to fill out, which she delivered to the HR department at her firm, and offered to speak one-on-one with students by phone or email to address any remaining questions.

COMING SOON!

Our next small group discussion will feature three active R&D scientists at Biogen Idec on March 11th! Look for details in the CNSPY Weekly Digest!



SPYcast

NEW! This spring, CNSPY is beginning a new and exciting initiative! SPYcast, the official podcast of the CNSPY, will feature exclusive interviews with numerous career mentors from a variety of backgrounds. SPYcast gives CNSPY members the opportunity to learn from career mentors who are unable to meet in person on campus. Additionally, there's no need to worry about missing the latest CNSPY event. With SPYcasts, you'll be available to listen in at any time that's convenient for you! We have a number of career mentors from Management Consulting, Medical Writing, and Private Equity, who have already volunteered their time and insight to us. Be sure to catch their interviews on our **website**, and don't forget to send in your requests for additional interviews from certain fields or specific individuals to Executive Board member, [Prabitha Natarajan](#).



CNSPY Mixers

As one of our more casual and easy-going events, the main objective of the mixers is to bring together old and new members as well as prospective CNSPY members to share details of their career explorations with one another in a informal atmosphere.

Winter Mixer at Kelly's Pub, February 18th, 2015

CNSPY members gathered at Kelly's Gastro Pub for a great night of socializing. Ice breakers and games (with free drinks as prizes!) helped kick off the evening and encouraged participants to introduce themselves to unfamiliar faces. Congrats to the six participants who earned free drink tickets! Following the ice breakers, free mingling brought together friends, new and old, and sparked conversations about our fellow colleagues' career exploration paths. Everyone enjoyed the casual environment and made many new contacts.

We thank Kelly's for hosting the CNSPY Mixer, and we also want to specially thank the Graduate and Professional Student Senate (GPSS) at Yale for providing delicious free appetizers for everyone!

The CNSPY hosts mixers quarterly, and for future mixers, we're inviting Yale alumni and former CNSPY members to further enhance the networking opportunities for our current and prospective members. Look for details about our next Mixer in the CNSPY Weekly Digest!



CNSPY Blog

This past fall, the CNSPY started a weekly blog series to offer thoughts and advice on how to improve your networking skills. Every Wednesday, CNSPY Blogger, Victoria Schulman, highlights many small things that could make a big difference. To get direct access to this content, subscribe to the [CNSPY blog](#).

NEW: We are opening up the blog to guest writers! Have an idea or a strategy for successful networking? Take this opportunity to test out or enhance your writing skills. For those who are thinking about a career in Science Journalism, guest blogging for an established organization is a great way to get your feet wet and add a line to your writing resume. If you are interested in guest blogging for the CNSPY blog, contact [Victoria Schulman](#).



Site Visits

CNSPY-sponsored trips to local companies in the industry sector became popular last year, and this year we're continuing these events to enable students and postdocs to preview the facilities and benefits that accompany a career in industry.

Regeneron Pharmaceuticals Inc., Tarrytown, NY

Founded in 1988, Regeneron is a pharmaceutical company that boasts the development of many drugs and therapeutics approved by the FDA for use in treatment programs for patients with a wide variety of illnesses, ranging from macular degeneration to metastatic cancers. Learn the full history and other details about the company on their website, [Regeneron](#).

On Wednesday, December 3rd, a group of 21 CNSPY members enjoyed a day of talks and tours at Regeneron Pharmaceuticals. During a morning session of talks, members heard from Susan Croll, the head of the Regeneron postdoctoral research program, who detailed the opportunities that this highly prestigious program provides to recently graduated PhD students. Jenelle Timmins then described her path from the bench to her role as a program manager at Regeneron. Over lunch, CNSPY members had the opportunity to interact with a postdoc and an academic liaison at Regeneron. Tours of the VelociGene facility and the Regeneron Genetics Center followed lunch, allowing members to be exposed to the breadth and scale of research performed at Regeneron. At the Regeneron Genetics Center, CNSPY members were able to see the newest venture at Regeneron: an approach using genetics to predict genes capable of combating disease. Participants then returned to the tour's home base for a series of talks by the regulatory intelligence department, medical affairs, and human resources. The site visit to Regeneron provided CNSPY members an opportunity to understand the variety of careers on and off the bench that are available at a large research-driven pharmaceutical company.

Look for details about the next site visit to Jackson Laboratories in the CNSPY Weekly Digest!

Register as a CNSPY member [here](#) to receive the Weekly Digest and other emails about upcoming site visits!

We hope to see you there!

There are always new developments, opportunities, events, and programs hosted by CNSPY. Stay tuned by signing-up on our [website](#), joining our [LinkedIn](#) group, or following us on [Facebook](#) or [Twitter @cnspy](#)

Career in focus: Science Education

This issue of the SPYglass focuses on careers in science education and outreach. Below you will find some general information on careers in this area along with a profile of Dr. Julia Zichello (pictured), the manager of the Sackler Educational Laboratory for Comparative Genomics and Human Origins at the American Museum of Natural History in New York. Dr. Zichello studied evolutionary biology and genetics in graduate school and received her Ph.D. from the City University of New York Graduate Center. Dr. Zichello talks about how she was able to make the transition from academia to her position at the museum, as well as a bit about what her life as a science educator is like.



FAQs

What is science education?

Science education spans a wide range of jobs united by the common objective of educating the general public about science. Most jobs require teaching science in primary and secondary schools or coordinating programs at educational institutions like museums or zoos. Traditional classroom science teaching involves preparing and delivering lessons, and there are set requirements that qualify you for these jobs. In contrast, coordinating programs at places like museums might involve a mix of developing curricula, running after school science enrichment programs, planning public lectures, or contributing to the curation of exhibits. Some other jobs include science tutoring, developing content for educational websites or other media, and training teachers in scientific topics. Many of these positions do not require a specific background and are filled by people with training in diverse areas from research to communications to teaching.

Why consider science education?

If you love learning about and discussing science, but aren't as enamored with bench work, grant writing, or other duties of research, science education could be a good career option. If you prefer being around people to the more solitary life in the lab, and if you value community involvement and directly making a difference in people's lives, you might find science education more fulfilling than other careers. Finally, while many K-12 science teachers may work long hours, other science education positions might offer a better work-life balance than standard research positions.

What kinds of skills are needed to be successful at science education?

Science educators need to be enthusiastic about science and, even more importantly, enjoy sharing their fascination with others. You should of course have a solid science background, but, it's worth noting that in this field, broad knowledge of science trumps in-depth knowledge of a certain area. Science educators must have excellent communication skills, interpersonal skills, and patience. A large part of some science education jobs involves coordinating events from small to large, so basic event planning skills are helpful. Finally, many science educators work primarily with children, so having an idea about how to most effectively interact with children of different ages is also important.

What kinds of activities can you do now to get experience in science education?

There are many opportunities to gain experience in science education. Common volunteer opportunities include judging local science fairs; giving lessons at public schools, museums, or libraries; or helping to coordinate regional science festivals. You can also mentor high school students or undergraduates. Alternatively, you might try auditing or taking an education or communications course. It's also advised to become an engaged and attentive consumer of popular science media to learn how science can be effectively communicated to a broad audience.

Opportunities at Yale:

[Yale Science Outreach](#) - Yale Science Outreach runs the New Haven Science Fair and many other programs. Click on the "Students" link in the left column to find out about getting involved in a way that matches your interests.

[Yale Science Diplomats](#) - YSD runs a variety of outreach programs, from Science in the News, a lecture series given by Yale students and postdocs at the Public Library, to interactive lessons in high schools around New Haven.

[Yale Peabody Museum](#) - If you are interested in museum work, you are lucky to be at a school with a top notch science museum right here on campus. Opportunities include leading tours and working shifts in the Discovery Room.

[New Haven International Festival of Arts & Ideas](#) - New Haven's annual summer festival includes science-related programming. Volunteering offers an excellent chance to get education and outreach-related event planning experience.

Other Useful Resources: [Science Careers Blog](#), [NIH Career Blog](#), [NIH Training Workshop](#), [NSTA](#)

Interview with Dr. Julia Zichello, Ph.D.

*Manager, Sackler Educational Laboratory for Comparative Genomics and Human Origins
American Museum of Natural History, New York, NY*

How did you get interested in science education?

During graduate school I was craving a more engaged audience and professional growth, so I volunteered with the New York Academy of Sciences as a STEM mentor. I worked with middle school students teaching genetics in an informal after-school format. It was a huge challenge, and I learned a lot about how different age groups and demographics view science and the role it has in their lives. The students were much more savvy than I anticipated, given our information-laden world. I enjoyed addressing various permutations of the question “Why does this matter?” ([NYAS Stem Mentoring Program](#))

What was your path from science grad student to science educator?

After being a STEM mentor, I worked part-time in the Sackler Educational Lab at the American Museum of Natural History (AMNH) teaching human evolution and genetics to high school students and the public. When I was close to finishing graduate school, a full-time position opened as manager of the lab - this is my current position. Talking to the public about human evolution at the AMNH helped me maintain enthusiasm about the topic, even when grad school got me down, which was often.

What did you do while you were still a student to explore science education and better position yourself to move into that career?

Throughout the last three years of graduate school, I taught middle and high school students about genetics and evolution. I also started a blog on the Nature network to begin to refine my popular science writing skills.

What was the most challenging part about your transition?

I have been finished with my PhD for nearly a year, and now that I am on the education side, I am sometimes not viewed as a scientist anymore. This is difficult, but not insurmountable. I hope with time I can publish academically and continue to serve in my education position.

What is a typical day like for you now?

Teaching middle and high school students, answering emails, and attending meetings about current and new creative projects at AMNH. The pace feels very different than graduate school, which is a good fit for me.

What were the most important skills, different than those you used as a grad student, that you had to develop for your current career?

The most important skill is to learn to clarify complex concepts but not minimize them to the point where they lose depth. Another imperative interpersonal skill is to use your knowledge to engage, not alienate, your audience. You cannot interest people in science by making them feel inferior or ignorant. The competitive culture of graduate school can sometimes work in opposition to developing these two traits, although it need not.

How do you “sell” your research background?

My PhD is in Physical Anthropology. I studied human and primate evolution. My dissertation was focused narrowly on a topic that is not accessible (or interesting) to someone outside of the field. Instead of saying I studied how population history influenced intraspecific cranial variation, I say I studied the evolution of primate skull shape. Also, at AMNH I am called upon to contribute to projects on a vast array of topics—from viruses to dinosaurs—this is fun, challenging, and sometimes scary. Given my interests now, and how I plan to develop as a scientist, I find it makes more sense to be recognized as an “Evolutionary Biologist”, which is more broad than “Physical Anthropologist.”

What are your most and least favorite parts of your job now?

My most favorite part is brainstorming about creative ways to communicate novel and complex scientific concepts. My least favorite is telling so many interested people that we don’t have a position for them at AMNH at the moment.

What advice would you give to someone looking to transition from science to science education in a role like the one you have?

Do as much as you can during graduate school. Many volunteer opportunities exist for developing informal science communication experience. Also, writing for the public understanding of science is a good exercise for any graduate student to learn how to clarify and communicate their ideas. It is very easy to start a blog, just be sure your internet presence always remains professional and of the highest quality of research and writing.

Thank you for reading!!

[CNSPY Leadership Team](#)

Co-founders - Thihan Paddukavidana, Rebecca Brown

Executive Board - Tenaya Vallery, Dan Mori, Claudio Bertuccio, Jimi Miller, Prabitha Natarajan, Victoria Schulman, and Yixiao Zou

Advisors - Yan Gao, Lu Jin, and Shalini Nag

Career Network SPYglass - Editor-in-Chief Victoria Schulman, Elaine Guevara, and Contributors