

12th Annual NIH Career Symposium

May 10th 2019

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ZANDREA AMBROSE

Associate Professor
University of Pittsburgh School of Medicine

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What university is your highest degree from? University of Washington

What field/dept was your highest degree in? Pathobiology

What year was your highest degree awarded? 2001

Describe your current role/responsibilities.

- Associate professor with tenure, Dept. of Microbiology and Molecular Genetics, University of Pittsburgh School of Medicine (primary);
- Associate professor, Department of Infectious Diseases and Microbiology, University of Pittsburgh Graduate School of Public Health (secondary);
- Member of Graduate Programs in Microbiology and Immunology, Integrative Systems Biology;
- Member of Centers for HIV Protein Interactions and Evolutionary Biology & Medicine;
- Chair, Institutional Biosafety Committee

What skills are necessary for you to complete your job?

Research, financial management, personnel management, teaching, mentoring.

I wish I had had more skills on financial management and personnel management.

How did you get your job (networking, job-listing, etc)? Combination of networking and job listing

How long was your job search? Approx 1 year

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Having faculty mentors, academic leadership development course.

What advice would you give to someone who was interested in your career path?

Try to establish a niche for yourself, particularly if you have unique skillsets.

MEDHANIT BAHTA

Patent Examiner
US Patent and Trademark Office

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What university is your highest degree from? University of Tennessee

What field/dept was your highest degree in? Organic Chemistry

What year was your highest degree awarded? 2007

Describe your current role/responsibilities. My job title is "Patent examiner at US Patent and Trademark Office". My role includes examination of patent applications to determine whether or not a patent can be granted for new inventions. I work in the Biotechnology and Organic Chemistry Technology Center. I mainly examine processes for making refrigerants, hydrocarbon fuels from synthesis gas, alcohols/ethers with various pharmaceutical/industrial applications.

What skills are necessary for you to complete your job? Time management is the most important skill in patent examination. A patent examiner is given a specific time to examine an application, and thus the ability to understand the invention, search for prior art and writing the rejections/allowances within that specific time is a skill that is important in the patent examination area. A great amount of time in the patent examination area is spent in searching for prior art. The prior art is any evidence (patent literature, non-patent literature, etc. that is publicly available) that determines whether or not the invention is already known. Thus, searching skills is very important as a patent examiner.

How did you get your job (networking, job-listing, etc)? USPTO opened up a job fair where on-site interview was being held by the supervisors. I was informed about this fair from my network and I scheduled a time slot for the interview. Following the interview, I applied on USAJobs and eventually was hired by the supervisor who interviewed me.

How long was your job search? Two years

What is a typical starting salary in your field? About \$73,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? The only skill required for a patent examiner in the Biotechnology and Organic Chemistry Technology Center is the technical skill, such as any biological and/or chemical background. After hiring, the Office of Patent Training provides the new employees with patent related training for 4 months.

What advice would you give to someone who was interested in your career path?
Never give up and network. It is by networking that I was able to start my current career.

MARC BAILLY

Associate Principal Scientist
Merck Research Laboratory

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What university is your highest degree from? ULP Strasbourg France

What field/dept was your highest degree in? Biochemistry

What year was your highest degree awarded? 2008

Describe your current role/responsibilities. I am currently co-leading the purification and analytical characterization group at MRL Palo Alto. This group is composed of 8 persons focused on providing analytical characterization data on our program lead candidates for Merck's biologics portfolio. We are screening large amounts of sequences for best CQA (critical quality attributes) with an emphasis on functionality and manufacturability.

What skills are necessary for you to complete your job? As a manager, the key skills are: to be a team player, with strong interest in developing people and guiding them into their personal development. As a Scientist: Hands on physicochemical characterization techniques and methodologies with a strong emphasis on attention to details. Proactivity and interest for new technologies and methodologies are key attributes.

How did you get your job (networking, job-listing, etc)? My first job in industry was the product of a long and challenging networking activity. The willingness to relocate was key to obtain my first job in industry.

How long was your job search? Very long until I understood that relocating opens doors.

What is a typical starting salary in your field? It varies based on years of experience and level of appointment.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? My work at NIH was not immediately involved in helping me find success, but later I came to realize that my understanding of the biology behind our programs was made a lot easier by my experience acquired while working at NIH.

Looking back, is there anything you wish you would have discovered earlier or done differently? It is a difficult question. Sometimes I think I should have joined industry immediately after my PhD, as I really enjoy working in the private sector. On the other hand, as mentioned before, getting more experience during my two consecutive postdocs enabled me to better understand the biology behind the programs currently active at the MRL Palo Alto.

What advice would you give to someone who was interested in your career path? Do a lot of networking, LinkedIn is very helpful for this. Talk to recruiters and be prepared to relocate if needed to increase your potential of success.

My job is in Discovery and therefore every day is different with new challenges and paths to explore. It is very nice in terms of personal development.

SHAUN BRINSMADÉ

Assistant Professor, just promoted to Associate Professor
Georgetown University

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What university is your highest degree from? University of Wisconsin-Madison

What field/dept was your highest degree in? Microbiology

What year was your highest degree awarded? 2001

Any other universities or degrees that you would like to mention?

B.S. Molecular and Cell Biology, University of Connecticut-Storrs

Describe your current role/responsibilities. I am the PI of a bacterial physiology and host-microbe lab in the Department of Biology studying nutritional regulation of pathogenesis in *Staphylococcus aureus* (<https://brinsmadelab.com/index.php>). I mentor grad students, postdocs and undergraduates and write grants, papers, etc. I also teach Biochemistry, Microbiology, and a short course on Bacterial Pathogenesis (molecular mechanisms) to undergraduate and graduate students.

What skills are necessary for you to complete your job? Experience with human resource issues... it's one of the most difficult things about my job, and I have to learn about it on the fly. Finding the right people to create the "lab phenotype" that is productive, cohesive, and happy.

How did you get your job (networking, job-listing, etc)? Job listings in the journals.

How long was your job search? 2 cycles; essentially 2 years.

What is a typical starting salary in your field? ~\$85,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Trained by great mentors and experts in bacterial physiology, molecular genetics; exceptional colleagues in the field that are willing to be "external mentors", mentoring and TA opportunities as a grad student and postdoc, a little luck.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I wish I learned computer programming for handling "Big Data". Nowadays, everyone should have a basic understanding of computer programming... the logic itself is invaluable and transferrable to any profession.

What advice would you give to someone who was interested in your career path?

Re-invent yourself, merge your grad and postdoc experiences/science/training/mentoring to create a new you that doesn't exist in anyone else.

In my mind, science is a vocation (a calling) not just an occupation.

TURA CAMILLI

Director Regulatory Affairs
Amgen

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What university is your highest degree from?

PhD from George Washington University

What field/dept was your highest degree in?

Molecular and Cellular Oncology

What year was your highest degree awarded?

2007

Describe your current role/responsibilities.

Responsible for Global regulatory filings and approvals of all Amgen medicinal products in clinical trials

What skills are necessary for you to complete your job?

- Strong Regulatory and Scientific background
- Leadership skills
- Ability to work in a fast-paced environment and in teams
- Excellent communication skills
- Forward-thinking

How did you get your job (networking, job-listing, etc)?

Networking

What advice would you give to someone who was interested in your career path?

Consider FDA fellowships!

JACQUELYN COLE

Assistant Professor of Chemistry, tenure track
Shepherd University

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What university is your highest degree from? Rensselaer Polytechnic Institute

What field/dept was your highest degree in? PhD Chemistry

What year was your highest degree awarded? 2008

Any other universities or degrees that you would like to mention? Bethany College, WV - BS Chemistry

Describe your current role/responsibilities. Teach three class and three lab sections plus office hours, 25% of my time is spent doing undergraduate research, plus serve on committees and community service

What skills are necessary for you to complete your job? Teaching pedagogy, research appropriate to undergraduates and on a strict budget, grant writing for small institutions, journal article writing, presentation writing

How did you get your job (networking, job-listing, etc)? I was an NIH postdoc and looking at jobs online and found the position. The department chair saw that I went to the same university that he did so he chose me for an interview.

How long was your job search? 9 months.

What is a typical starting salary in your field? \$45-75,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? While at the NIH and grad school, I went to every workshop I could attend as well as every conference, even if they weren't exactly what I wanted to do (so teaching, grant writing, policy, business, ethics, etc).

Looking back, is there anything you wish you would have discovered earlier or done differently? I would have worked as an adjunct while doing research at the NIH postdoc to gain teaching experience before jumping in.

What advice would you give to someone who was interested in your career path? Always look at reality. Often in the big research places like the NIH and R1 universities, we expect having everything we need or the funds to get what we need. At small liberal arts institutions, you are expected to do journal article worthy research with virtually no funding and students who have limited experience and time. Your research goals have to adjust to the limitations of the institute.

It is rewarding to make a difference in students' lives. But it is a 24/7 job. You are constantly speaking to someone or emailing. You will be up well past bedtime grading exams or getting grades in on time. The field is changing to online formats now too so the sooner you adapt to the technology, the easier it is to help the students. At the end of the day, it's all about the students' success, which is directly related to your success.

JUAN CRESPO-BARRETO

Toxicologist
US Food and Drug Administration

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What university is your highest degree from? Baylor College of Medicine

What field/dept was your highest degree in? Cell and molecular biology

What year was your highest degree awarded? 2009

Any other universities or degrees that you would like to mention?

Bachelor in Science, University of Puerto Rico

Describe your current role/responsibilities. Reviews, evaluates and interprets preclinical toxicological data offered in support of new tobacco product applications. Responsibilities include expanding CTP's regulatory knowledge through development and review of preclinical toxicological research studies related to hazards associated with harmful and potentially harmful constituents (HPHCs) in tobacco products. As the FDA lead, oversees several preclinical research studies designed to fill data gaps in our current knowledge of tobacco toxicity. These studies are currently being performed under FDA contract or in collaboration with FDA laboratories, using cutting edge techniques and methods that improve the scientific quality and validity of tobacco research.

What skills are necessary for you to complete your job? As part of my scientific training, I strived to obtain additional skills that eventually allowed my transition into a career in regulatory science. For my research, I have not limited myself to only one area of expertise, but have ventured into new fields. I believe that these experiences taught me to learn quickly about new topics. I have acquired excellent communication experience through oral presentations, writing individual grants and meeting summaries. Good writing skills are essential.

How did you get your job (networking, job-listing, etc)? Networking, and job-listing.

How long was your job search? 6-10 months

What is a typical starting salary in your field? >\$75000, higher in government with postdoctoral experience.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? In addition to conducting research as a postdoctoral fellow at the National Institute of Health, I continued to expand the depth and breadth of my scientific knowledge by taking courses in regulatory affairs and drug discovery. I completed a course in Food and Drug Law for Scientists offered by FAES. My participation in several committees, including the Science Policy Discussion Group at NIH, provided me with strong teamwork and leadership skills to complement my scientific training. After starting as a Biologist at FDA, I completed graduate coursework (Certificate of Clinical Toxicology from U of Florida) to earn credits in Toxicology necessary to become a Toxicologist at the FDA.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I would not have underestimated the amount of time and effort necessary to find a job. Particularly one away from the bench.

What advice would you give to someone who was interested in your career path? Take advantage of all the additional training opportunities available at NIH. Get involved in committees, take classes on your field of interest. Network a lot, and often, even if you feel like that person does not have a job for you right away. Do not sell yourself short, and do not think that you need to be an expert in a field to be able to excel in a job.

KIMBERLY DECKER

Chief Scientific Officer
Cell Systems

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What university is your highest degree from? Johns Hopkins University & NIH GPP

What field/dept was your highest degree in? Molecular Biology

What year was your highest degree awarded? 2011

Any other universities or degrees that you would like to mention? B.S. Biology from UNC-Chapel Hill

Describe your current role/responsibilities. I am the Chief Scientific Officer at Cell Systems, a life science company that provides primary (non-immortalized) human cells and cell culture reagents for biomedical and basic research. We are a small business, so I wear many hats:

- My primary responsibility is the research and development of new primary cell isolates (reading the literature to develop and refine isolation protocols; performing cell isolation from tissue; characterizing cell isolates using molecular biology techniques);
- I oversee the manufacturing of our cell culture reagents (inventory of raw ingredients, manufacturing SOPs and timelines) and manage the quality control practices and outcomes for all primary cell products and cell culture reagents;
- My other responsibilities include business development (performing bench research on potential collaborative products, participating in/providing guidance on potential business partnerships, revising marketing materials and website, networking at trade shows); technical service (speaking with customers about their research applications, assays, troubleshooting); and lab management/operations (inventory of consumables, preparing buffers, etc.).
- I oversee an associate scientist and together we comprise the entire lab team. We work closely with all other employees of our small company.

What skills are necessary for you to complete your job? Good record-keeping is essential, because the pace is rapid, because there are regulatory components to the job and industry, and because of the potential for audit and/or acquisition. Time-management and triage skills are helpful, to sort out 'urgent' vs. 'important' vs. both. Also important are communication skills – written and oral – to scientists of all levels (for communicating technical details and protocols, sharing collaborative data, and marketing) as well as to non-scientists (such as board members, purchasing agents, FedEx reps). Interpersonal skills are needed for effective communication and resolution with customers and within the company. Also important are negotiating and advocating skills – to gain support for a project, idea, or change in compensation structure, for example.

How did you get your job (networking, job-listing, etc)? I had been casually looking for a new job for ~6 months, told everyone I knew that I was looking, and tried to have eyes and ears wide open for interesting opportunities. I was sitting on my front stoop and my neighbor, a retired engineering professor, walked past with her dog and said, "My nephew just bought a life-science company and is looking for a scientist to help him run it. Would you talk to him?" We met over coffee, initially thinking I would just connect him with others in my network. It turned out that he was looking for someone with my skill set, and the position would match the

criteria I was looking for. I didn't go into that first conversation like it was an interview – I was incredibly frank about what I did and didn't want. Our second meeting/interview was on-site at the company, and I was offered the job after that.

How long was your job search? About 6 months of casually looking (informational interviews, setting aside time specifically to think about what I wanted to do, working on my resume), then 2 months of meetings/discussion/negotiation to land in my current position.

What is a typical starting salary in your field? (Limiting my response to the small-business sector) Anywhere from \$50,000-100,000 with the caveat that there is a huge range in compensation structure; you might get \$0 and all-equity in a start-up.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I benefitted from training in labs where record-keeping is of utmost importance (documenting, annotating, cover sheets, lots and lots of binders). I worked on many research projects where methods development was a key part of the work, and I don't hate troubleshooting. I was part of a Board of Scientific Counselor review at the NIH – good experience in handling regulatory audits. My experiences mentoring, tutoring, and volunteering for science outreach to kids all contribute to my attempts at communicating with non-scientists, like those on my advisory board.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I might have made the leap to research support/services earlier, because I really like that I'm helping advance diverse and important research as opposed to a singular focus on a mechanism or disease. I wish I had learned earlier that there will always be a tall stack in the figurative in-box – you can never read all the literature or do all the assays – so that cannot be the goal. The goal is to do solid work that others can rely on.

What advice would you give to someone who was interested in your career path? Try to gain exposure to the many facets of running and building a small business (operations, financials, hiring/firing, marketing strategies, presenting to investors) because you will likely be asked to weigh in. Think about how to frame the experiences that you do have in these business terms. Interning or shadowing will give you an idea of the breadth of decisions, successes, and hurdles faced on a daily basis. Maintain your connections across scientific disciplines and institutes as these resources can be very helpful.

DARIO DIEGUEZ JR

Science Officer
 Congressionally Directed Medical Research Programs

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What university is your highest degree from? University of Texas at San Antonio

What field/dept was your highest degree in? Neuroscience

What year was your highest degree awarded? 2006

Any other universities or degrees that you would like to mention?

I did a postdoctoral fellowship in Neuroscience at Boston University School of Medicine.

Describe your current role/responsibilities. I am the Science Officer for two multi-million dollar CDMRP programs: Neurofibromatosis Research Program and Multiple Sclerosis Research Program. Currently, I am responsible for about 120 grant awards.

What skills are necessary for you to complete your job? The skills necessary for me to do my job include a) the ability to quickly understand new research proposals, in diverse areas, at a high level; b) the ability to interact with investigators at different levels and understand their needs; c) the ability to write about complex science in simple terms that can be understandable to lay audiences; and d) the ability to quickly change gears to meet new deadlines.

Having written, and gotten funded for, my own research grant proposals as a scientist, from a variety of funding agencies, is greatly advantageous in the ability to do my job. Similarly, having published my own research in peer reviewed journals is also advantageous in the ability to do my job.

How did you get your job (networking, job-listing, etc)? I applied for an opening.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? First, I have worked in research grant administration in a variety of topic areas. Second, I conducted clinical research while working as a Research Project Manager at the Epilepsy Foundation (several years after completing my PhD and postdoctoral fellowship). Lastly, I have also been pursuing a Master of Public Health (part-time), which I will be completing in the next two years.

What advice would you give to someone who was interested in your career path? I would advise anyone interested in this career path to complete a PhD in an area that fascinates you, complete a postdoctoral fellowship, and consider pursuing a fellowship in science policy and administration. Also, it is helpful to do informational interviews with people who have the job you would like to get in order to gain inside information about how they got there. Importantly, if you have not conducted any clinical research, it is very advantageous to gain some firsthand experience in this area.

JOHN EICHER

Senior Scientist
Merck Research Laboratories

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What university is your highest degree from? Yale University

What field/dept was your highest degree in? Genetics

What year was your highest degree awarded? 2014

Any other universities or degrees that you would like to mention?

B.S., Biological Sciences; University of Connecticut

Describe your current role/responsibilities. I am a Senior Scientist in the Genetics & Pharmacogenomics group with a specialty in Neurosciences. I provide human genetics support in Early Discovery Neurosciences with a focus in target identification and validation. My responsibilities involve performing novel genetic association statistical analyses (e.g., GWAS & exome sequencing and downstream functional analyses), evaluating human genetic evidence for targets, and using human genetics findings to inform translational into wet lab experimentation in the Early Discovery space. All my work involves working in team-based settings. For some projects, I lead teams in our multi-disciplinary identification & validation of targets. In addition to ensuring team members meet their timelines, this also involves developing overall strategies and integrating multiple types of experiments to interrogate our hypotheses. For other projects, I am an individual contributor performing particular analyses and evaluations of interest for the team.

What skills are necessary for you to complete your job? Communication is the number one skill needed for my position. There are many different aspects of communication that come into play.

Every day I interact with scientists and clinicians with very different backgrounds—ranging from geneticists & chemists to clinical physicians & analysts. In order to be effective, I need to be able to explain what my work shows and does not show as well as how these findings impact their work and programs. So I need to be able to distill my information into digestible information, while still maintaining scientific rigor.

In that same vein, most of our communication occurs via PowerPoint and giving presentations. Spending time learning some tricks in PowerPoint and learning how to discuss research professionally has been important.

Additionally, learning how to be comfortable running meetings and lead groups of scientists is a vital skill that does not get much attention. Getting experience guiding conversations and ensuring that meetings achieve their goals (and not waste everyone's time) can greatly aid a transition from being a trainee.

Adaptability and resiliency also comes to mind. Industry does move fast, and one constant is change. Being comfortable with change in projects, organization, and even therapeutic area is incredibly helpful.

How did you get your job (networking, job-listing, etc)? I found my current position through a combination of a job advertisement and my network. I saw a job posting for the position and realized that I knew two individuals in the department—both of whom I actually had met through my work at NIH. I had informal

discussions with two people in the department who passed my name along to the hiring manager as I applied for the position.

How long was your job search? 3-4 months

What is a typical starting salary in your field? \$115,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I served on the Training & Development Committee for the American Society of Human Genetics. On that committee, I gained valuable leadership experience in starting new initiatives, reaching out to leaders in my field, affecting change in a large organization, and working cooperatively toward a common goal. Not only that, but I had a front row seat to all sorts of different career options (publishing, academic, industry, non-profit, etc.) & training programming as I finished my PhD and moved into my postdoc. It was a truly invaluable experience for me.

Also, during my postdoc, my PI pushed me to serve as the junior lead in a large consortium. This experience running large meetings, ensuring a group met important deadlines, and developing overall strategies for a large project cooperatively was great training for my current role.

What advice would you give to someone who was interested in your career path? Technical skills and an understanding of one's field are, of course, important foundations to anyone's career. They enable you to objectively assess the strengths and weaknesses of different scientific approaches, a valuable asset for any career. They also allow you to learn new things—which every scientist needs to be prepared to do. Finally, do not be afraid to apply for that job that sounds interesting but you may not fit every requirement—take that chance.

ADAM FOGELSenior Scientist
Scholar Rock

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- What university is your highest degree from?** Yale
- What field/dept was your highest degree in?** Biochemistry and Biophysics
- What year was your highest degree awarded?** 2009
- Any other universities or degrees that you would like to mention?** B.A. from Brandeis

Describe your current role/responsibilities. I am a team leader for a discovery phase (i.e., pre-clinical) project. In this role I organize strategy, advocate for resources, manage the day-to-day activities of associates and CROs, and perform some lab work. I would say the split is probably 65% desk work/35% lab work, although it varies widely week to week. I also spend a small portion of my time trying to think about new targets/projects.

What skills are necessary for you to complete your job? Project management skills are probably the biggest area that I was lacking out of my post-doc. Running a drug discovery project is very different than a typical post-doc project; drug discovery projects involve a larger number of people with different expertise, as well as a larger number of "stakeholders" (decision makers). The best training for this as a post-doc is likely to be managing or working in a collaboration which is truly interdisciplinary (and not just a hand-off of reagents).

How did you get your job (networking, job-listing, etc)? I got the job at Scholar Rock via networking; the former head of my department at Biogen had moved there, and from this relationship I was able to get an interview. I got the job at Biogen (first industry job) partly via referral from a friend, and partly by having a skill-set which was a good match for the position.

How long was your job search? My job search to get into industry was probably 18 months or so (>50 applications). Switching jobs was much faster.

What is a typical starting salary in your field? ~100k (also depends on location).

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Working at NCATS in the assay development/compound screening lab of Jim Inglese was a huge advantage for me in getting the job at Biogen. There I developed a skill-set in developing cell assays for high throughput screening. In particular, my high-content imaging experience stood out when I applied to Biogen.

However, it is important to caveat this by noting that there is no one magic skill that will definitely get you into an industry position (except maybe bioinformatics). The trendy skills of today are the commodities of tomorrow.

Looking back, is there anything you wish you would have discovered earlier or done differently? The first ~2 years of my post-doc were not very focused in terms of planning for the next step. For most people it will likely take a bit of time to find the first industry position, so the sooner you get focused on this, the better.

What advice would you give to someone who was interested in your career path? I can only speak to people interested in smaller biotechs and/or the discovery side of R&D from my personal experience. For the first job, it may take some time unless you have a really good connection - but keep networking/reaching out to people you meet, apply to jobs that are a good fit (and don't waste time on poor fitting job descriptions, it will just be at the bottom of a stack of 50 CVs).

Also, as a practical matter, a lot of the jobs are now in either the Boston area or South San Francisco. There are other pockets around, but networking within those communities (maybe attend a relevant conference?) and willingness to move there may be helpful.

This career track is probably best for people who still want to be part of ups-and-downs of scientific research, but have realized that getting an academic position is not tenable for a number of reasons (e.g., industry jobs allow much better work-life balance).

OVIDIU GALESCU

Medical Officer
FDA/CDER

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What university is your highest degree from? Carol Davila School of Medicine, Bucharest, Romania

What field/dept was your highest degree in? Medicine

Any other universities or degrees that you would like to mention? MS in Biostatistics

Describe your current role/responsibilities. I am a clinical reviewer in the Lipid and Obesity Team in the Division of Metabolism and Endocrinology Products CDER/FDA

What skills are necessary for you to complete your job? Some of the critical skills required for my current position are attention to details, critical thinking and ability to multitask.

How did you get your job (networking, job-listing, etc)? I reached out to a former NIH fellow currently working at the FDA. With her help I contacted the Division Director and expressed my interest in learning more about the FDA environment.

How long was your job search? 1 year

What is a typical starting salary in your field? \$150,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? My prior knowledge of statistics and working as a peer reviewer for specialty journals during fellowship at the NIH.

What advice would you give to someone who was interested in your career path? Try to visit the FDA, learn what the are some of the specifics of the Agency and the requirements from its employees.

ARIELLE GLATMAN ZARETSKY

Scientist
Regeneron

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What university is your highest degree from?

University of Pennsylvania

What field/dept was your highest degree in?

Cell and Molecular Biology (Microbiology, Virology, Parasitology group)

What year was your highest degree awarded?

2014

Any other universities or degrees that you would like to mention? Brown University, ScB

Describe your current role/responsibilities. I am a scientist in Inflammation and Immunity. I am responsible for moving a broad range of scientific projects forward, including pipeline projects, tech development projects, and other side projects based on my own scientific interests. This requires me to collaborate across departments – working with a diverse group of other employees that includes basic researchers, clinicians, project managers, etc – as well as to work closely with other groups in my department. I am also a manager, so in addition to my own workload, I am responsible for guiding and directing the experiments of my direct report(s).

What skills are necessary for you to complete your job?

Communication skills are critical in my position. If I'm not putting together or giving a presentation, I'm watching and giving feedback on one. Meetings are often composed of employees from a variety of different departments and backgrounds (every project is a collaboration in one way or another) and projects can only progress if everyone understands the challenges, as well as the successes. Communication also ties into management skills, because I need to communicate our goals, help set up experimental plans, and critically discuss results in ways that promote enthusiasm for the projects. Happy teams are more engaged, more productive, and much more fun to work with. Along those same lines, it's important to be able to critically evaluate data, as well as to be able to design and analyze experiments quickly, both within my group and across collaborations.

How did you get your job (networking, job-listing, etc)?

I applied to a job listing that was suggested to me based on my experience, because it looked really exciting scientifically.

How long was your job search?

A few months.

What is a typical starting salary in your field?

\$90,000-120,000, but I think it varies depending on years of post doc experience, location, company, etc

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

I still look back on the management bootcamp offered by the NIH OITE as the most helpful source of information about being a manager that I've had thus far. It's something that takes very different skills than we are trained for in our postdocs, but they are critical to develop.

What advice would you give to someone who was interested in your career path?

Talk to people at the company (or companies) that you're interested in before applying and learn as much as you can about the company, the scientific culture, and what your job will actually entail. A "scientist" position means very different

things at different companies. That said, keep talking to those people throughout the process and try not to neglect those relationships once you start there. Whether you find people through past jobs/schools or networking, it really helps to have a support network already built in, particularly when you're making such a big career transition. It's also really advantageous to have connections in various departments once you are working at the company, because as collaborative as everyone is, it's much easier to find the right person to talk to when you have someone to reach out to – and like everything else in science, it's really helpful to have friends with varied expertise when you have a new idea that you want to develop or when you need help troubleshooting!

REBECCA GOODWIN

Policy Analyst & Open Science Specialist
National Library of Medicine, NIH

Rebecca.Goodwin@nih.gov

What university is your highest degree from? University of Florida

What field/dept was your highest degree in? Law

What year was your highest degree awarded? 2007

Describe your current role/responsibilities. I work on activities that promote stewardship and access to scientific data and information, as well as health information technology. I work across the NIH and Federal agencies on initiatives and activities relevant to these topics, including open science and data science. I serve as Executive Secretary of the NIH Scientific Data Council's Common Data Elements Task Force. As the NLM Technology Development Coordinator and Co-Chair of the NLM Copyright Working Group, I provide support and guidance to NLM leadership and staff related to legal and intellectual property (IP) issues affecting NLM, and coordinate technology transfer for NLM. As the alternate NLM Planning and Evaluation Officer, I also support analysis, evaluation, reporting on, and implementation of NLM programs, activities, and strategic plans.

What skills are necessary for you to complete your job? Critical skills include communication (written, spoken, visual, and ability to adapt to different audiences), reading comprehension and analysis, time management (including flexibility to accommodate new/changing assignments, information, and priorities), organizational/institutional knowledge to connect and collaborate with the appropriate stakeholders

How did you get your job (networking, job-listing, etc)? Presidential Management Fellowship & networking

How long was your job search? 2 years.

What advice would you give to someone who was interested in your career path?

In addition to cultivating the skills described above, speak with people doing the type of work you are interested in doing to learn more about what the day-to-day work involves. Bolster your subject matter expertise by finding relevant online courses and reading.

SHARI GORDON

Scientific Leader
ViiV Healthcare

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What university is your highest degree from? Emory University

What field/dept was your highest degree in? Viral Immunology

What year was your highest degree awarded? 2008

Describe your current role/responsibilities. I lead a group of scientists developing new long acting antibodies to treat, prevent or cure HIV. This spans from drug discovery, lead optimization, toxicology to first time in human studies.

What skills are necessary for you to complete your job?

Immunology, virology, statistical analysis, design of experiments, oral and written communication.

How did you get your job (networking, job-listing, etc)? Networking.

How long was your job search? 1 year.

What is a typical starting salary in your field? PhD with 2 year postdoc experience: ~ \$100,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Apart from my formal PhD and Postdoc training, public speaking experience has helped with all the may presentations I give in my current role.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I should have started preparing for my transition from postdoc to industry sooner.

What advice would you give to someone who was interested in your career path?

Network, used LinkedIn or other means to contact people who have the job you may someday want.

LAURA HELFT

Managing Science Editor
Cornell Lab of Ornithology

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What university is your highest degree from? University of Wisconsin - Madison

What field/dept was your highest degree in? Cellular and Molecular Biology

What year was your highest degree awarded? 2011

Describe your current role/responsibilities. I oversee research and development of stories and projects for the Conservation Media group. I work with partnering conservation organizations to crystalize plans for media and communications in the context of their ongoing goals and work. As those media projects mature, I ensure they are accurate and balanced. Conservation needs clear messaging to make it comprehensible, relatable, and actionable. Our group infuses these communications with science so that the audience understands not just what is known, but how it's known, and why it's relevant.

What skills are necessary for you to complete your job?

- Deep knowledge of science and how it works, and an ability to read broadly across scientific disciplines.
- Strong writing and editing capabilities.
- Experience with any kind of communications is really useful in this job, which could be written, verbal, visual, audio, etc. The broader the experience with one or more communications techniques the better (knowing enough to be dangerous helps form new collaborations more readily).

How did you get your job (networking, job-listing, etc)? Networking. A former colleague told me about the job before it was even listed which got me to the front of the queue.

How long was your job search? 1 year, with perhaps an additional year of casual looking.

What is a typical starting salary in your field? \$65k

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Participating in science outreach as a graduate student launched my career.

Teaching (as an instructor as well as a TA) was an important foundational experience for collaborating with formal science educators.

What advice would you give to someone who was interested in your career path? Practice the kinds of communications you are interested in pursuing. That can be as simple as regularly writing a blog or curating a great collection of science-y photos on Instagram. And get feedback on those efforts, and take constructive criticism seriously. There is more than one way to do communications well, and also more than one way to do it poorly. Find the ways that work well for you, and work on those.

Science film research and editorial is a pretty niche job, but the skills of putting together a collaborative project focused on science is much broader.

MATTHEW HOWE

Licensing Analyst
North Carolina State University - Office of Research Commercialization

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What university is your highest degree from? Duke University

What field/dept was your highest degree in? Pharmacology

What year was your highest degree awarded? 2015

Describe your current role/responsibilities. My primary responsibilities include conducting technology evaluations, market analysis, IP evaluation, prior art searches, freedom to operate analysis, patent landscape analysis, patentability assessment, make strategic decisions on patent filings, and develop and execute marketing campaigns. I also negotiate, draft, and execute commercial license agreements, options, MTAs, CDAs, IIAs, and facilitate the launch of university start-up companies.

What skills are necessary for you to complete your job?

- Technical background to be able to understand research at the core of inventions.
- Effective time management to balance various deadlines within the portfolio.
- Communication skills to ensure that the IP management plan is clear to the various stakeholders (e.g., Inventors, PIs, Students, Licensees, Internal Team).

How did you get your job (networking, job-listing, etc)? I found my job through an online posting.

How long was your job search? 2 months.

What is a typical starting salary in your field? \$60k - \$70k

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

- FAES classes in technology transfer and business development.
- Internship in NIAID TTIPO

What advice would you give to someone who was interested in your career path? Complete an internship in a Tech Transfer Office to get a better understanding of the job responsibilities and to ensure it is the right path for you.

LIAT IZHAK

Director, Biomarker and Clinical Scientist
Johnson & Johnson

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What university is your highest degree from? Technion, Israel

What field/dept was your highest degree in? Immunology/Biotechnology

What year was your highest degree awarded? 2009

Describe your current role/responsibilities.

- Responsible for developing translational research and biomarker strategies for the Hematology/Oncology portfolio, that will translate benchside findings to clinical trials
- Support the operation of clinical trials by closely interacting with regulatory, clinical pharmacology, statistics and programming, medical writing and clinical operation
- Lead a group of junior scientist in and outside the lab

What skills are necessary for you to complete your job?

- Necessary - ability to communicate and network; flexibility
- Desirable but not necessary - Exposure to clinical settings during training

How did you get your job (networking, job-listing, etc)? Networking!!! An introduction to one person during my postdoc led to the connection with the right person, who contacted me when a their company had an opening.

How long was your job search? My first industry job search took about 6 months.

What is a typical starting salary in your field? \$80-100k (base)

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Working on presentation skills.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I completed a undergraduate degree in engineering, which took 4 years, but I'm not sure was needed. Also, the exposure to other types of positions and jobs that I could do with my background would have been useful.

What advice would you give to someone who was interested in your career path?

Network as much as possible, and ask for informal interviews

RUI JACQUES

Patent Agent

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

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What university is your highest degree from?

University of Maryland, College Park

What field/dept was your highest degree in?

Molecular and Cell Biology

What year was your highest degree awarded?

2010

Describe your current role/responsibilities.

Prepare, file and prosecute US and international patent applications.

Conduct patentability and technology assessments, as well as freedom-to-operate searches for clients in the biotechnology sector and related industries.

What skills are necessary for you to complete your job?

Verbal and written communication.

How did you get your job (networking, job-listing, etc)?

Networking (LinkedIn), Recruiter.

What advice would you give to someone who was interested in your career path?

Pass the patent bar if you are determined to pursue this career path.

RASIKA KALAMEGHAM

Group Director, US Regulatory Policy
Genentech, a member of the Roche Group

kalamegr@gene.com

- What university is your highest degree from?** The Pennsylvania State University
- What field/dept was your highest degree in?** Molecular Genetics
- What year was your highest degree awarded?** 2003
- Any other universities or degrees that you would like to mention?** NIH Post-doctoral Fellowship

Describe your current role/responsibilities.

Dr. Rasika Kalamegham is Group Director, U.S. Regulatory Policy at Genentech. Her policy portfolio includes issues related to personalized medicine, rare diseases and digital health.

She worked in increasingly senior positions at Friends of Cancer Research (FoCR), The Pew Charitable Trusts and The American Association for Cancer Research (AACR) before joining Genentech, a member of the Roche group. Based in Washington, D.C, she brings her considerable scientific, regulatory and policy expertise and experiences working in the non-profit, academic and industry sectors to recognize and solve problems by building evidence-based multi-stakeholder driven solutions. She is active in influencing regulatory science and policy activities via many industry associations including PhRMA, BIO and Transcelerate, and served as a member of BIO's 2018 annual meeting program committee.

Her efforts have led to several important regulatory policy outcomes including, FDA guidances (Codevelopment of Two or More New Investigational Drugs for Use in Combination, Use of Public Human Genetic Variant Databases to Support Clinical Validity for Genetic and Genomic-Based In Vitro Diagnostics etc.), passage of the Generating Antibiotics Incentives Now or GAIN Act (signed into law by President Barack Obama as part of the Food and Drug Administration Safety and Innovation Act), the Blueprint PD-L1 IHC Assay Comparison Project and others. A recognized regulatory policy expert, she is routinely invited to speak at national and international conferences, as well as at the FDA and EMA. She has authored several research and policy papers and chapters in graduate level text books.

What skills are necessary for you to complete your job? Strong analytic skills, communication skills (verbal and written), ability to multi-task, and the ability to work both independently and in large teams.

How did you get your job (networking, job-listing, etc)? A policy fellowship led to me getting a policy position.

What is a typical starting salary in your field? USD 75,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Fellowship, strong desire to see my scientific training have a practical impact.

What advice would you give to someone who was interested in your career path?

Be curious. Read a LOT. Talk to people.

It is an immensely satisfying career - never a dull moment and no two days are ever the same!

PATRICK KILLION

Director of Discovery-Based Learning
University of Maryland College Park

pkillion@umd.edu

What university is your highest degree from? University of Texas at Austin

What field/dept was your highest degree in? Cell & Molecular Biology

What year was your highest degree awarded? 2007

Any other universities or degrees that you would like to mention?

BS, Computer Science, Texas A&M University, 1997

Describe your current role/responsibilities. I am currently the Director of Discovery-Based Learning in the Office of the Senior Vice President and Provost at the University of Maryland (UMD). I was recruited from a faculty role into this position by UMD Provost Dr. Mary Ann Rankin in 2013, with a mandate to de novo create and lead a university-wide undergraduate research program inspired and informed by the Freshman Research Initiative model that I helped scale at the University of Texas at Austin. Over the past five years, I have grown the UMD First-Year Innovation & Research Experience (FIRE) program to annually serve 700+ first-year students through the operation of 17+ discrete research groups in the natural, agricultural, computer and social sciences, engineering and the arts and humanities. My role with UMD FIRE requires the annual direction of all fiscal, curricular, assessment and evaluation, facilities and personnel operations, for an organization that includes 17+ full-time faculty members. Additionally, I have engaged with campus partners to initiate a campus-wide undergraduate peer mentoring program, integrate and leverage FIRE curricula into the degree requirements of students and increase institutional use of experiential learning.

Summary:

- Continued and ongoing leadership, direction and strategic planning for UMD FIRE: The First-Year Innovation & Research Experience – <http://fire.umd.edu/>
- Leading initiative focused on broader institutional adoption of discovery-based learning
- Co-leading initiative focused on institutional analytics and data-driven decision making
- Founding director of a major campus-wide first-year research initiative that connects students with authentic faculty-driven research in a manner that impacts academic success, personal development, a strong sense of community and professional opportunity. FIRE: The First-Year Innovation & Research Experience – <http://fire.umd.edu/>
- Manage fiscal budget and directed all operations for a team of 17+ full time faculty members impacting more than 700 new first-year students annually
- Led development of processes that drive curricular, student recruitment, staffing and professional development, and assessment and evaluation components of FIRE operations

What skills are necessary for you to complete your job?

The most important skills:

- Communication
- Collaboration
- Data science and analysis
- Leadership
- Multitasking
- Managing short, medium and long-term objectives

How did you get your job (networking, job-listing, etc)?

Networking, Chronicle jobs.

How long was your job search? 1 year.**What is a typical starting salary in your field?** \$100k**What advice would you give to someone who was interested in your career path?**

Develop your leadership story... How can you demonstrate a clear capacity to communicate, collaborate and drive something to completion?

SANDEEP KUMAR

Senior Research Fellow - Biotherapeutics
Boehringer Ingelheim Pharmaceutical Inc. USA

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What university is your highest degree from? Indian Institute of Science

What field/dept was your highest degree in? Molecular Biophysics

What year was your highest degree awarded? 1998

Any other universities or degrees that you would like to mention? B. Sc. (Hons) Physics from University of Delhi and M.Sc. (Molecular Biology and Biotechnology) G. B. Pant University of Agriculture and Technology

Describe your current role/responsibilities. My current role is to help discover novel biologic drug candidates. My responsibilities include managing a highly productive team of extraordinary scientists.

What skills are necessary for you to complete your job? Computational Biophysics, Biopharmaceutical Informatics, Computer programming and data analyses, Managerial skills and business acumen.

How did you get your job (networking, job-listing, etc)? Job-listing, Networking as well as talking with recruiters

How long was your job search? 1 year or so.

What is a typical starting salary in your field? ~\$60k (entry level)

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? My apologies, but I consider myself as someone who is not done yet. It's a work in progress. I am very curious and hard working. I continue to perform new research, learn new skills and contribute to the scientific discourse in my field. I am also learning management skills and hope to grow as a good coach for my team.

Looking back, is there anything you wish you would have discovered earlier or done differently? Yes. Hindsight is always 20/20. I did not design my career. It evolved via numerous failures, and a few successes. I have made full use of the opportunities that came my way. However, I wish I was more career focused, and therefore more oriented towards reaching certain job titles.

What advice would you give to someone who was interested in your career path? Ask yourself whether you would like to be Industry or Academia early in your career. If your choice is Industry, you would require excellent communication skills, networking, emotional intelligence, in addition to your scientific skills

I am advocating for Biopharmaceutical Informatics. It is a strategic vision to discover and develop novel medicines by taking advantage of latest developments in computational biophysics, information technologies and combining them biological/biophysical experimentation. My goal is to help improve the efficiency of drug discovery and development cycles, accelerate translation of discoveries into medicines and reduce the costs of drug development. I hope this will eventually help make cutting edge medicines affordable to everyone.

LUCIE LOW

Scientific Program Manager
NIH/NCATS

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What university is your highest degree from? University College London

What field/dept was your highest degree in? Neuroscience

What year was your highest degree awarded? 2010

Describe your current role/responsibilities. I currently manage a large trans-NIH extramural program. I work with extramurally funded scientists to provide guidance and information on their project's science and administration needs, and with my extramural colleagues in my IC to develop, plan and implement new funding initiatives. I work as part of multiple teams to support current research programs and help shape future research landscapes.

What skills are necessary for you to complete your job? Good time management and organizational skills are essential. The ability to work between academic and administrative worlds (and speak both languages) is very important. Good communication skills - oral and written - are critical. My work is also incredibly collaborative so an open mind and focus on teamwork is crucial.

How did you get your job (networking, job-listing, etc)? Networking and lots of informational interviews. I was a co-chair of FelCom, which helped build my network and introduced me to the information about my current position before I applied.

How long was your job search? ~2 years.

What is a typical starting salary in your field? GS-12 equivalent

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I did a 6 months detail in Program while I was a postdoc, which was invaluable for introducing me to the basic job role of a Health Science Administrator, where I familiarized myself with a number of NIH processes and databases.

Looking back, is there anything you wish you would have discovered earlier or done differently? At the time, I wish I had a better understanding of the barriers for non-US Citizens in the US government. I encountered many dead-ends during my job search. Also, most Program staff begin as Program Analysts, and it can be hard to progress above that (depending on your IC and the current hiring landscape).

What advice would you give to someone who was interested in your career path? Don't give up; if you're interested in something, keep networking and talking to new people. As a non-US citizen, I am ineligible for a 'traditional' role in Program and it took a long time to work out how I could get into that area. Totally worth it though!

I think I have the coolest job you can do away from the bench: I support cutting edge biomedical research and I get to be part of the project teams doing amazing research. I also help identify, create and manage new research programs that can have huge impacts.

REBECCA LYNCH

Assistant Professor
George Washington University Medical School

rmlynch@gwu.edu

- What university is your highest degree from?** Emory University
- What field/dept was your highest degree in?** Immunology and Molecular Pathogenesis
- What year was your highest degree awarded?** 2010
- Describe your current role/responsibilities.** Being PI of my own lab and includes: managing employees and a budget, applying for funding, driving scientific direction of the lab, and overseeing experiments/data analysis.
- What skills are necessary for you to complete your job?**
Skills in management, leadership and budgeting are necessary, and I wish I had acquired them earlier.
- How did you get your job (networking, job-listing, etc)?** I got my job through introductions by friends to a new department chair, who was looking to hire new faculty.
- How long was your job search?** 1 year.
- What is a typical starting salary in your field?** \$80-120,000
- What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?** Working with post-bacs was great for developing management and delegation experience.
- Looking back, is there anything you wish you would have discovered earlier or done differently?**
I wish I would have been more pro-active about developing proficiency in NIH grant writing.
- What advice would you give to someone who was interested in your career path?** Take advantage of all the career development programs offered by the NIH, talk to as many people as possible to gain information and put your name out there, be proactive about obtaining examples of grants and developing your documents ahead of grant writing.

SUZANA MARKOLOVIC

Chemistry Teacher / Assistant Cross Country and Track & Field Coach
Blair Academy

markos@blair.edu

What university is your highest degree from? University of Oxford

What field/dept was your highest degree in? Organic Chemistry

What year was your highest degree awarded? 2017

Any other universities or degrees that you would like to mention? Cornell University, BA

Describe your current role/responsibilities. A boarding school teacher is required to wear many different hats. During the academic day, I teach high school chemistry at the general and honors levels. Because I work at an independent school, I have been given the freedom to customize the chemistry curriculum and my lesson plans. I closely collaborate with two other chemistry teachers, both of whom also have PhDs and several years of combined teaching and research experience, so it is exciting to continue to work in an intellectually-stimulating environment with supportive and dedicated colleagues. The academic day may also consist of meeting with students for extra help during "conference blocks" and attending school, faculty, or department meetings.

Outside of the classroom, all faculty are required to either coach two seasons or lead extracurricular clubs or activities. Running has always been a passion of mine, and working as an assistant cross country and track coach in the afternoons is a fulfilling part of my day. The afternoon looks different for every teacher - some are leading the robotics, dance, or Model UN clubs while others might be rehearsing the school play in the performing arts building. Given the boarding nature of the school, faculty members are also involved in residential life. This entails being on "dorm duty" during study hall one night per week. Faculty also act as advisors to members of the student body and are very involved in community life.

What skills are necessary for you to complete your job? Having a PhD in the subject that you want to teach already shows you have expert-level knowledge in the field. While teaching certifications are not required at private schools, proven teaching ability and experience are highly desirable. Curriculum design and delivery require organization, clear written and oral communication, and creativity. Because you are working directly with high school students, patience, empathy, flexibility, and the ability to effectively lead are essential for success in the classroom and supporting your students' learning. These transferable skills are also important to sports/extracurricular activities and residential life. Given the many daily responsibilities, time management is crucial. Because boarding schools look for the "triple threat" (i.e., someone that can be successful in the classroom, in their sport/extracurricular activity, and in residential life), they are seeking a well-rounded individual whose values closely align with the school and its mission. Having leadership experiences and interests outside of your research will certainly set you apart as a candidate.

How did you get your job (networking, job-listing, etc)? The short answer is networking.

What is a typical starting salary in your field? \$45,000-\$60,000 (with no living expenses at a boarding school).

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

Although research was at the center of my work day, I was intentional about finding opportunities to teach, even if it was not in a traditional classroom setting or with high school students. In the UK, working as a teaching assistant is not as common as in the US; therefore, in graduate school, I sought out opportunities to mentor undergraduate and masters students in the lab and also teach chemistry during summer programs, as time allowed. As a postdoc at NIH, I taught an evening course through FAES to continue to foster my interest and skills in teaching and education. During my PhD and postdoc, I also sought out opportunities outside of the lab to support my other passions and interests. As a PhD student, I took on several leadership roles within the Oxford University Cross Country Club. At NIH, I got involved with organizing this very career symposium. Pursuing passions outside of research is worthwhile in enabling you to further develop your strengths and skills.

What advice would you give to someone who was interested in your career path?

Many individuals find jobs at private, independent schools through Carney Sandoe (<https://www.carneysandoe.com/>), a website that posts job listings and helps match you to a school that fits your profile and preferences. However, networking is a key component to any job search these days, so tap into your network and talk to individuals that currently hold the position.

Passion for teaching and education is crucial for success in this job. Teaching is a highly demanding profession, but the impact of your hard work can be seen daily. For me, it is my impact on students' lives that is most rewarding. There is no doubt that teachers are undervalued in American society, but the bottom line is that teachers have the important responsibility to educate and prepare future generations. As a boarding school science teacher, you not only have the duty to effectively teach a subject love, but also the opportunity to impact your students' lives outside of the classroom. If you are looking to work in a vibrant community and make an impact in your work daily, teaching is a profession that might be right for you!

MASFIQUE MEHEDI

Assistant Professor
University of North Dakota

masfique.mehedi@und.edu

What university is your highest degree from? University of Manitoba

What field/dept was your highest degree in? Medical Microbiology

What year was your highest degree awarded? 2013

Any other universities or degrees that you would like to mention?

M.Sc. in Microbiology; B.Sc. in Biotech & Gen Eng

Describe your current role/responsibilities.

Typical for a tenure-track Assistant Professor: research, teaching, and services.

Daily activities: responding to request, lab-bench work, administrative duties, class/seminar, talk to students and colleagues and check emails. I oversee a lab technician and students.

What skills are necessary for you to complete your job? We need all type of skills (time management, critical analysis, writing, public speaking, building interpersonal relationships, etc.) more or less. Time management and writing are the top most important.

How did you get your job (networking, job-listing, etc)? I applied in response to a job advertisement because it matched with my interest. I got an email for a phone interview. After a successful phone interview, I went for an onsite interview. Immediately, they offered me the position. I went for a second visit. I accepted the offer.

How long was your job search? Several months.

What is a typical starting salary in your field? \$80,000 - \$120,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Postdoctoral training, grant writing, mentoring students, teaching courses.

What advice would you give to someone who was interested in your career path? Be positive! Know the key facts. Faculty positions are independent. You must show the potential for unique and sustainable research ideas, create a research niche, communicate effectively, and secure funding. Start your job-search when you feel ready to lead a lab. Prove that you are ready, qualified and personable. Practice makes perfect!

It is a rewarding experience.

RAHMAN MONZUR

Part time Faculty/Data Manager
Montgomery College

Rahman.Monzur@montgomerycollege.edu

What university is your highest degree from? Okayama University, Okayama, Japan

What field/dept was your highest degree in? Molecular Biology

What year was your highest degree awarded? 1997

Any other universities or degrees that you would like to mention?

BS, Biology; and MS, Microbiology from University of Dhaka

Describe your current role/responsibilities. I teach Biology and Gateway Courses and Microbiology as a part time Faculty, in addition to my full time position as a data manager of a DOL funded project called CPAM (Cyber Security Program Across Maryland). I promote STEM disciplines in the college and collaborate with 14 different Community Colleges in Maryland to promote and establish cyber security program.

What skills are necessary for you to complete your job? Training in pedagogy, culturally responsive teaching, use of web based teaching tools (Blackboard/ Canvas), working with disable students, advising etc. As Data manager I need different data collection and data analysis tools.

How did you get your job (networking, job-listing, etc)? I started teaching at CCBC (Community College of Baltimore County), which I found from a web listing. At Montgomery College, I got the job through networking.

How long was your job search? Forever, I am still looking for better position

What is a typical starting salary in your field? It varies first year I made only \$33,000. Last year I made \$120,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Training summer interns at NIH and Johns Hopkins.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I am not good in communicating/networking. I wish I was better in those.

What advice would you give to someone who was interested in your career path? Start networking and shadow some faculty for couple of months one semester. Then start as part-time faculty decide in one semester if you like it. Do not continue part time teaching more than one semester.

Teaching is always rewarding. Teaching includes mentoring, career advising and lot of other things that you will enjoy each of it.

VIJAY MORE

Scientist II Non-Clinical Development
Celgene

vrsmore@gmail.com

What university is your highest degree from? University of Rhode Island

What field/dept was your highest degree in? Pharmacology and Toxicology

What year was your highest degree awarded? 2013

Describe your current role/responsibilities. In-vitro/ in-vivo drug-drug interaction studies based on pharmacokinetic properties of the compounds in late drug development

What skills are necessary for you to complete your job?

- Knowledge of drug development
- Clear and timely communication
- Swift decision making

How did you get your job (networking, job-listing, etc)? Networking.

How long was your job search? 5-6 months.

What is a typical starting salary in your field? 100k

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Active participation in regional and national meetings, applying for and winning incentive awards at the conferences

What advice would you give to someone who was interested in your career path?

- Network network network
- Publish publish publish
- Put yourself out there

MEGHAN MOTT

Brookings Fellow

Senate Committee on Health, Education, Labor and Pensions (HELP)

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- What university is your highest degree from?** University of Louisville
- What field/dept was your highest degree in?** Anatomy and Neurobiology
- What year was your highest degree awarded?** 2011
- Any other universities or degrees that you would like to mention?** University of Chicago

Describe your current role/responsibilities. As a Brookings LEGIS fellow at the Senate HELP Committee, I serve on the Health Team Minority staff for Senator Patty Murray (WA). My portfolio includes issues related to biomedical research (especially NIH-related issues), women's health, mental health, and substance use/the opioid crisis. In this role, I perform policy analyses and prepare briefing materials for a variety of programs and initiatives, high priority, high profile, or politically sensitive topics. I develop planning and briefing materials related to Senate HELP Committee hearings and briefings, meet with constituent and special interest groups on behalf of the Senator and Committee staff, and provide scientific, analytical and policy insight to a broad range of HELP Committee and Senate Democratic Steering Committee activities as they pertain to public health.

What skills are necessary for you to complete your job?

1. Excellent communication skills, both verbal and written. The ability to distill complex information quickly and succinctly, outlining issue areas and potential policy action items. A high level of writing and editorial skill.
2. Relationship building (and management). The ability to effectively identify and manage critical points of contact involving relevant policy areas and the ability to establish and maintain positive relationships with internal and external stakeholders (especially those on the other side of an issue area, on the other side of the Capitol, or across the political aisle).
3. The ability to multi-task quickly and effectively in a high-pressure situation. Being comfortable with and able to cope with unplanned tasks that may require a final product, analysis or recommendation to be delivered under fast turn-around time.
4. Learning to be comfortable not being prepared for a meeting.

How did you get your job (networking, job-listing, etc)?

I learned about the Brookings fellowship through a friend of a friend who had done it, spoke to previous fellows, and applied for the program as an NIH employee.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

My experience working as a chief of staff in an NIH Institute definitely helped. I had experience working in a fast-paced environment looking at broad issues affecting biomedical research that were sometimes high profile and sensitive. As part of my job I had to interface with the Hill when my Institute Director would meet with Congressional Members or their staff. This experience helped introduce me to the legislative world and its influence and interaction with Federal agencies.

Looking back, is there anything you wish you would have discovered earlier or done differently?

Not yet...

What advice would you give to someone who was interested in your career path? Seek experiences of interest to you and take advantage of being in the DC area! Witness the legislative process yourself by making the trek down to the Capitol to attend hearings of interest to you, or watch them online or on C-SPAN. Participate in the process yourself by volunteering for a campaign (on your personal time) or with a special interest or advocacy group (with ethics clearance) or seek an internship with your local Representative. Network, network, network. Learn from others career paths who have similar interests and backgrounds. Don't be too strategic and be open to the possibility that your ultimate career goal may change along the way.

Working on the Hill is not for everyone, it is a unique place filled with people with various backgrounds and skillsets. Scientists are few and far between and our knowledge and analytic abilities can contribute to crafting evidence-based legislation that impacts not just this country, but the world.

KIMBERLY MYERS

Principal
Deloitte Consulting LLP

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- What university is your highest degree from?** Harvard University
- What field/dept was your highest degree in?** Virology (Medical Sciences)
- What year was your highest degree awarded?** 2006
- Any other universities or degrees that you would like to mention?** B.S., Microbiology, Middle Tennessee State University

Describe your current role/responsibilities. I'm a Partner at Deloitte Consulting, where I lead strategy and data strategy work for nonprofit and Federal Health clients. My work focuses on helping organizations more rapidly advance the development of new therapies, specifically by leveraging data assets to meet mission needs. My work is far ranging, from helping organizations design future-focused strategies to helping them build large data analytics platforms that support those strategies.

What skills are necessary for you to complete your job? It's important for individuals to recognize the skillsets they are gaining in their current roles, and how those might be applied to a career in consulting. For example, my work in the lab and at the NIH taught me problem solving, troubleshooting, communication and presentation skills, people management (managing both up and down), as well as core science and health knowledge. While the day-to-day use of those skills may look very different in a consulting environment, I use those same skillsets each day in my current capacity.

How did you get your job (networking, job-listing, etc)? Networking.

What advice would you give to someone who was interested in your career path? Find ways to exercise those skillsets that will be most useful in consulting. This could include joining clubs or organizations that focus specifically on consulting skills. Or, taking on leadership roles that require you to manage people and resources. Do this while continuing to maintain and develop an understanding of the life sciences and healthcare industries, where the trends are headed, how technology is enabling the industry, etc.

JULIE NADEL

Senior Program Manager,
Office of the Vice Provost of Graduate and Professional Education
Johns Hopkins University

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What university is your highest degree from? Albert Einstein College of Medicine

What field/dept was your highest degree in? Genetics

What year was your highest degree awarded? 2015

Describe your current role/responsibilities. Developing, managing, and facilitating effective programs for graduate and professional students at Johns Hopkins to prepare them for meaningful careers through work in collaboration with the Vice Provost of Graduate Education, the Vice Deans of Education, members of the Doctor of Philosophy Board, and other stakeholders across the University.

What skills are necessary for you to complete your job? Project management, time management, building collaborations and interpersonal relationships, persuasive writing and public speaking, having an understanding of graduate education and the key stakeholders.

How did you get your job (networking, job-listing, etc)? I was working as an external contractor for a different office at Hopkins and was sent this job. I would have never found it through a job listing because the internal title is "executive specialist," which is not in line with what I was looking for.

How long was your job search? 9 months, but I was being very picky.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I participated in the ASHG/NHGRI Genetics and Education Fellowship, which was an excellent training experience and transition from bench work to program management.

What advice would you give to someone who was interested in your career path? Start demonstrating your interest in whatever your chosen field is as soon as possible. The non-academic career market is also competitive, and most positions are looking for demonstrable relevant experience. Take advantage of your more flexible schedules during graduate school and postdoctoral fellowships to volunteer or do internships to gain relevant experience to your chosen path. Some PIs may make it more challenging to discuss non-academic career paths than others, but the earlier you talk to them about skills you want to gain and networking connections you hope to make, the better they can (hopefully) help set you up for success in your chosen field.

TIEN NGUYEN

Science journalist
Freelance

tiennguyenwrites@gmail.com

What university is your highest degree from? University of North Carolina at Chapel Hill

What field/dept was your highest degree in? Organic Chemistry

What year was your highest degree awarded? 2014

Describe your current role/responsibilities.

Pitch, research, conduct interviews, report, file, and fact-check news and feature stories for media outlets.

What skills are necessary for you to complete your job?

- Resourcefulness
- Organization
- Conducting interviews
- Research
- Reading and comprehension of scientific articles
- Writing
- Editing

How did you get your job (networking, job-listing, etc)? Networking

What is a typical starting salary in your field? \$45000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

- Auditing a journalism course
- Open Notebook Fellowship

What advice would you give to someone who was interested in your career path?

Talk to as many people who do the job you think you want as possible. It requires initiative and a tolerance for instability.

YEVGENIYA NUSINOVICH

Senior Editor
Science Translational Medicine

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What university is your highest degree from? George Washington University

What field/dept was your highest degree in? PhD in molecular medicine, also MD

What year was your highest degree awarded? 2009

Any other universities or degrees that you would like to mention?

MIT (undergraduate degrees in biology and chemistry)

Describe your current role/responsibilities. I am the Senior Editor at Science Translational Medicine, an interdisciplinary journal that cuts across all areas of biomedical research and has a weekly publication schedule. My work activities include reading and evaluating incoming manuscripts, recruiting appropriate reviewers for manuscripts sent to peer review, and editing manuscripts to prepare for publication. In addition, the other editors and I are responsible for communication with authors, reviewers, and other people associated with scientific publishing, planning and soliciting articles such as reviews and perspectives, and networking and outreach to current scientists and trainees through scientific conferences and laboratory visits. I work as part of a team of six editors, where we each handle our own manuscripts but discuss them and make decisions together as a group.

What skills are necessary for you to complete your job? The most important thing for this job is having very strong communication skills, covering interpersonal and scientific communication, written and oral. Other key skills are patience and customer service for dealing with difficult situations such as authors angry about rejected papers, organization and time management, and a broad range of scientific knowledge and ability to learn new topics quickly. In addition, public speaking skills are very useful because we often give talks or serve on discussion panels, and this is not always clear from the job description.

How did you get your job (networking, job-listing, etc)? During residency, I found the journal through personal networking and spent my elective time there as an intern editor. As I was finishing residency, I found out that the journal had a job opening for an editor in my field, so I applied and interviewed for it.

How long was your job search? I found the job before I started looking in earnest.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? As an editor of a translational medical journal, clinical experience has turned out to be very helpful, though not required. Key experiences that specifically led me down the editing path were serving as an editor of student publications in college and medical school, as well as helping edit friends' research articles and dissertations.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I am not sure if I would have finished residency or transitioned to editing earlier.

What advice would you give to someone who was interested in your career path? The most important thing for this job is to build up your scientific knowledge base, so read as much scientific literature as possible, as broadly as possible, especially if you are interested in working at an interdisciplinary journal. Try to help other people edit their work, either as a volunteer or for pay through a formal editing service. It is also a good idea to network with researchers and editors at conferences. In general, scientific editors tend to come from a variety of backgrounds and past experiences, but all have a strong interest in scientific communication and a broad knowledge base.

It is a high-pressure job with a high workload and a busy travel schedule, but it can also be very rewarding and intellectually stimulating.

CHRISTINA OLIVERAS

Sr. Research Associate, Product Development
PGDx

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What university is your highest degree from? Mount Saint Mary's University

What field/dept was your highest degree in? MS, Biotechnology and Management

What year was your highest degree awarded? 2017

Any other universities or degrees that you would like to mention?

University of Maryland, BS, Biochemistry

Describe your current role/responsibilities. Currently, I work on the Product Development team on multiple projects. I have work on both feasibility and verification/validations activities in the development of novel products, including leading studies, writing protocols/reports/ other supporting documents, data analysis, and running experiments in the lab.

What skills are necessary for you to complete your job? Ability to multi-task, be adaptable, work in a fast-paced environment, good observational/analytical skills, abstract thinking, and time management are all important, but as product development is very much a team effort, ability to communicate effectively across departments is vital to keep up with timelines.

How did you get your job (networking, job-listing, etc)? I was contacted by a recruiter.

How long was your job search? 2 months.

What is a typical starting salary in your field? Entry level, 40-50,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I try to keep up with the field by watching webinars/reading articles.

What advice would you give to someone who was interested in your career path? Don't be afraid to step outside your comfort zone when looking for a new position, there are a lot of transferrable skills you might not realize you have. Also, even if you don't go the regulatory/quality route, it is a good idea to gain some familiarity with it.

KRISTEN PORTER

Assistant Professor
Westfield State University

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- What university is your highest degree from?** Albany Medical College
- What field/dept was your highest degree in?** Immunology and Microbial Disease
- What year was your highest degree awarded?** 2010
- Any other universities or degrees that you would like to mention?** Previous NIH Program Officer

Describe your current role/responsibilities. Almost all day I am running from one place to another, with little time off my feet. Between giving lectures, advising students, overseeing student research at the bench and attending numerous committee meetings. In the evenings I prep lectures for the next day, deal with other courses/lab related materials, finally have time to respond the hundreds of emails I receive a day, and grant writing, etc. I often work weekends and throughout the summer. Either to help students complete their research projects or to focus on my own scholarship (which has to take place at collaborator sites due to lack of resources and equipment at my institution), which often takes a back seat to other activities. Further, I teach courses online throughout the summer.

Additionally, I headed up development of the biotechnology concentration at the University and am constantly adapting the courses related to drug development, etc., that only I am able to teach (given my previous experiences). Thus, I am often in meetings for this or off-site as Advisory board members for different biotechnology programs at surrounding schools. Or, on the phone with colleagues in Pharma, academia, and government to not only maintain my knowledge but ensure continued relationships.

What skills are necessary for you to complete your job? Skills: Building interpersonal relationships and networking have been the key to my successes, past and present. I cannot stress "networking" enough. Connections made throughout my time in Program at NIH and at meetings, etc., have served and continue to serve me to this day in order to have subject matter expert, guest lecturers for my classes and or research collaborations.

Public speaking prepared me for giving lectures and serving as a subject matter expert for talks at other institutions.

Time Management. If you thought you had this skill down because you are a parent and work a full-time job, you (as I did) will get a quick reality check. My institution puts students FIRST. Thus, you are constantly bombarded with students chasing you down and or last minute meetings, etc., that hamper your ability to do activities you had planned for the day. I almost never get to attend conferences or talks that I want to, even attending this symposium was dependent upon the semester schedule. Very rarely do I get to read scientific literature that relates to my own research due to lack of time.

Surprising skills. Teaching: Understanding different pedagogical methods and mechanisms for giving formative assessments. The pyramid for critical thinking milestones and how to adjust your courses to help students meet these milestones. Syllabus and course development was an undertaking all on its own so that you can meet the learning outcomes of the department and design "inquiry-based" courses. Also, you don't always teach the same

courses each semester, so course, syllabus design and composition of lecturers is on-going. For example, you may teach senior-level courses one semester and then teach introductory or non-majors courses the next with no previous experience teaching them.

Bottom line: This position is the most intense and demanding job that I have ever had. Graduate school was a cake walk compared to the amount of time and energy you pour into this job.

How did you get your job (networking, job-listing, etc)? I found the add online and pulled together a comprehensive application package. Little did I know my previous (or current at the time) career and thus knowledge made me extremely competitive. This job was the first one I got without networking in some capacity.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I was previously at the NIH, working in the extramural program. I served as a Program Officer and FAC-COR I with DAIDS/NIAID. Here I used grants and contracts to take and oversee the development of HIV prevention products from bench through Phase I clinical trials. In addition to learning sponsored research funding and speaking with investigators and all of the other activities associated with a Program Officer, I had to learn the Code of Federal Regulations and all sorts of other practices and policies in order to complete my job. This experience allowed me to develop a well-rounded biotechnology curriculum. I also received NIH funding during my post-doc, presented at the AIDS Advisory Research Council, planned meetings at Bill and Melinda Gates Foundation and other national meetings. This has allowed me to give strong presentations and plan many meetings that have led to a successful collaborative effort with other institutions, directly benefiting the University, further contributing to my own success.

Looking back, is there anything you wish you would have discovered earlier or done differently? Nothing. Everything has led to this point in my life. Despite the amount of work my job entails, it has provided me the opportunity to live where I'd like and support my family. I still have my autonomy and opportunities (though reduced) to do research and collaborate/converse about the science I am passionate about.

What advice would you give to someone who was interested in your career path?

1. Decide what is most important to you: research or teaching. Then, look closely at what type of educational institution you are applying to and what they value the most. For WSU it is the students and teaching first. Here you will have a intensive teaching and advising load. However, you are expected to perform some scholarship. With little resources, you will unlikely be performing the high-level research you are used to. Also, identify what the tenure procedure is.
2. To be competitive:
 - 1) Learn about different pedagogical methods and understand that you will be designing courses and labs from scratch, which takes time and optimization as you offer future iterations of these courses.
 - 2) Have teaching experience. Particularly at the undergraduate level, with an entire course.
 - 3) Think of a course you would like to teach or what you can offer that is unique to the institution you are applying to. Guarantee they will ask this during the interview process.
 - 4) Have a strong application package.

LAURA PRESTIA

Invention Development & Marketing Specialist
National Cancer Institute, NIH

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What university is your highest degree from? SUNY Upstate Medical University

What field/dept was your highest degree in? Neuroscience

What year was your highest degree awarded? 2014

Describe your current role/responsibilities. I work within the NCI Technology Transfer Center where we manage technology transfer activities for the NCI and 9 other Institutes and Centers at the NIH. In my unit, we focus on generating awareness for NCI tech transfer, marketing NIH technologies, and invention development activities. I also manage the NCI Technology Transfer Ambassadors Program (TTAP) that offers training for NIH post-docs seeking to enhance their current research activities with hands-on training in biomedical invention development, commercialization, and entrepreneurship.

What skills are necessary for you to complete your job? Ability to understand/explain science outside of your technical expertise, strong attention to detail, heavily deadline/timeline-oriented, strong communication and writing skills, ability to work well with various stakeholders and communicate effectively for each type (PIs, post-docs, tech transfer colleagues, industry partners)

How did you get your job (networking, job-listing, etc)? Research into the field to explore my own interest; informational interviews to learn what the job is like, how hiring works, and what I needed to accomplish to break into the field; then I crafted my own internship during graduate school to gain experience needed to land a TT fellowship position at the NIH OTT and joined the NCI TTC a couple years later as a federal employee.

How long was your job search? 6 months

What is a typical starting salary in your field? \$40,000-\$50,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Gaining hands on experience in the field is critical.

What advice would you give to someone who was interested in your career path?

Be a self starter and don't give up!

WILLIAM PROCTOR

Associate Director / Senior Scientist
Genentech, Inc.

proctorw@gene.com

What university is your highest degree from? University of North Carolina at Chapel Hill

What field/dept was your highest degree in? Pharmaceutical Sciences

What year was your highest degree awarded? 2010

Any other universities or degrees that you would like to mention? B.S. in Chemistry, Trinity College

Describe your current role/responsibilities. I serve as both a project toxicologist and group leader of Investigative Toxicology, which focuses on in vitro and ex vivo approaches to elucidate mechanisms of toxicities observed pre-clinically or in humans. I serve as a member of our Toxicology leadership team in the Department of Safety Assessment. My primary roles involve people management, aligning with and building relationships with key stakeholders, and providing both scientific and strategic direction to the activities of our Investigative Toxicology group and that of our larger toxicology organization. Secondary roles include project toxicology support where I support project teams in all aspects of non-clinical toxicology and safety assessment.

What skills are necessary for you to complete your job? Effective communication skills (verbally, written), ability to flex management styles to tailor an individual's needs, critical scientific inquiry, and practical business management skills. The skills that are particularly advantageous when applying to my initial role at Genentech would be the ability to learn and apply different fields quickly. Having a proven track record of scientific publications in several areas is a particular advantage.

How did you get your job (networking, job-listing, etc)?
Networking with previous contacts from my PhD lab and NIH postdoc lab.

How long was your job search? 6 months.

What is a typical starting salary in your field? \$115,000-130,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? The overall breadth of academic training and research experiences prior to starting my job helped tremendously in the pharmaceutical industry. If you can speak several scientific languages (in my case it was chemistry, drug disposition, and safety) you are best positioned to thrive in a highly matrixed and team oriented role that the industry is comprised of.

Looking back, is there anything you wish you would have discovered earlier or done differently?
I would have built more understanding of data analytics and informatics. Regardless of whether you are generating data, processing, or owning the results, understanding of how the caveats and issues around data integrity and integration as well as inferences made by large "big data" sets are present in almost any function in the industry.

What advice would you give to someone who was interested in your career path? If you are interested in jumping into the pharmaceutical industry, get a handle on the basic processes of drug discovery and development, including the general roles of functions broadly present across the industry. You don't need to know a lot, but be able to understand where the position you are applying to fits in the larger organization and drug discovery/development processes. Also having a handle on many of the regulatory guidances in this space (in particular regarding safety) will give you the appropriate foundation/lexicon to have meaningful conversations with hiring managers etc. All of this high level information can be found at FDA website, ICH guidance documents, etc.

Safety is one of the major sources of drug attrition in the clinic and post-market withdrawal of therapeutics. If you want to work in an impactful area in the industry, toxicology spans the entire drug discovery/development pipeline and is typically at the inflection point for molecule success.

ELAYNE PROVOST

Bioscience Sales Specialist
Nikon Instruments, Inc

elayne.provost@nikon.com

What university is your highest degree from? Yale University

What field/dept was your highest degree in? Molecular Medicine

What year was your highest degree awarded? 2004

Any other universities or degrees that you would like to mention? Post-doc at Johns Hopkins University

Describe your current role/responsibilities. I am responsible for managing Nikon Instruments account at the NIH. This includes both sales and support roles. I work daily with researchers who currently have Nikon systems or are considering adding Nikon systems to their labs. My job has both hands on technical aspects and account management aspects. Account management includes both long and short term projects that gain exposure for Nikon's microscopy solution with the NIH community.

What skills are necessary for you to complete your job?

Important skills for my job are clear communication skills, self-direction, the ability to multi-task and being extremely organized. Great interpersonal skills are a must too.

How did you get your job (networking, job-listing, etc)? I found my job by networking with the representatives who supported our Nikon scopes while I was in the lab as a post doc.

How long was your job search? About 1 year.

What is a typical starting salary in your field? 100K

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? The biggest factor that has influenced my success is my excellent organizational skills and ability to multitask. That was important when managing multiple projects in the lab, and it is critical to my day to day working for Nikon.

Looking back, is there anything you wish you would have discovered earlier or done differently? I didn't realize how important networking was when I started my job search. I should have done this earlier.

What advice would you give to someone who was interested in your career path? Our company has jobs that are more technical than mine. To get a full picture of what positions exist at a company and how they align with your talents, it's best to have informational interviews with reps for the companies you're considering.

KENNETH REMY

Assistant Professor
Washington University in St. Louis

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What university is your highest degree from? Jefferson Medical College

What field/dept was your highest degree in? MD

What year was your highest degree awarded? 2004

Any other universities or degrees that you would like to mention?

Duke University; MHSc., Washington University in St. Louis; MSCI

Describe your current role/responsibilities.

1. Running an independent laboratory for 75% of my effort.
2. 25 % adult and pediatric ICU

What skills are necessary for you to complete your job?

1. Time Management
2. Communication Skills
3. Organization skills for prioritization
4. Being diffuse enough but also remain focused

How did you get your job (networking, job-listing, etc)? Presented at a meeting. Then was recruited.

How long was your job search?

I was recruited directly without me searching first. Total course of recruitment was about 18 months.

What is a typical starting salary in your field? 230-260K

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

1. NIH Course work in Duke Master's Degree.
2. NIH Mentors and continuing that relationship.
3. Having strong mentors and a good peer group

Looking back, is there anything you wish you would have discovered earlier or done differently?

Portable funding while at NIH. Getting funding takes years.

What advice would you give to someone who was interested in your career path? Be persistent. It is called research instead of search because it takes time. Keep writing. Grant funding takes many tries. Manuscripts need time to percolate.

Get a mentor and mentoring committee even as junior faculty. It seems demoralizing but actually is done for your benefit.

Reach out to those that have gone through the path before. These will be your advisors and future collaborators.

BENOIT RENVOISE

Global Project Manager II
Roche

benoit.renvoise@roche.com

What university is your highest degree from? University of Paris VII

Describe your current role/responsibilities. Manage project team information to support project team, leadership decision making. Accountable for quality implementation on projects in Project risk management, Critical path analysis, Scenario creation and analysis, Budget, Robust planning. Identify and communicate issues proactively to a wide range of stakeholders. Create, coordinate and maintain complex integrated project plans in Project & Portfolio Mgmt Tool. Identify gaps, potential bottlenecks or delays, challenges assumptions and proposes options to close gaps and get projects back on schedule. Guide and manage preparation for project milestone reviews. Manage meetings to include setting agendas, organizing meeting time and meeting minutes. Execute project management processes and lead improvement initiatives. Share best practices in project teams and fosters continuous improvement by sharing knowledge and continuous exchange. Models advanced PMO expertise and mentor junior team members. Performs other duties as required

What skills are necessary for you to complete your job?

- Problem-solving skills and the ability to coordinate project related activities. Advanced written and oral communication skills.
- Strong negotiation, stakeholder management, and facilitation skills. Knowledge of Project & Portfolio Management Tool.
- Manage complex projects in high-pressure circumstances
- Escalate and drive management decisions in relation to project execution and resource needs
- Understand relevant Design Control and/or Phased Development processes.
- I wish I would have acquired earlier some skills in decision-making process, communication, and PMP certification.
- PMP gives a serious advantage to apply to this type of position.

How did you get your job (networking, job-listing, etc)? Job-listing

What advice would you give to someone who was interested in your career path?

- Have strong leadership/communication skills
- Be confident
- Be flexible and adaptable
- Be proactive

NADEENE RIDDICK

Professorial Lecturer
American University

nriddick@american.edu

What university is your highest degree from? University of Pennsylvania

What field/dept was your highest degree in? Cell & Molecular Biology

What year was your highest degree awarded? 2012

Describe your current role/responsibilities. In my teaching faculty position, I teach both introductory and advanced courses (lectures and labs) in the Biology Department. My teaching responsibilities include developing lesson plans and class activities, delivering lessons, grading assignments, and providing feedback (in person and electronically). My service responsibilities include serving as a member of the Biology undergraduate and graduate committees as well as advising students.

What skills are necessary for you to complete your job? Outside of content knowledge, time management and multitasking are two essential skills for my current position. Countless hours can be spent grading and doing class prep so it's essential to maximize your time. Additionally, discernment is another important skill in this position. I interact with hundreds of students during a semester, it's important to discern different situations and determine how to appropriately handle them in a relatively short time frame. Another skill that would be helpful, but I've yet to master, is organizational skills, which would be very beneficial in this position as well.

How did you get your job (networking, job-listing, etc)? I applied to a job posting on Higher Ed Jobs.

How long was your job search? Roughly 5 months

What is a typical starting salary in your field? Approximately \$60K (9-month contract)

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? After leaving my postdoc at NIH, I was an American Association for the Advancement of Science (AAAS) Science and Technology Policy fellow at the National Science Foundation (NSF). In this role, I learned a lot about education policy and the higher education system on a national level. My time as a fellow exposed me to a different side of science that I had never truly considered. Also, the AAAS fellowship has a large focus on professional development which I hadn't focused on as much as I would have liked prior to joining the fellowship. Also, during my time as a postdoc in NIAID, I did a detail with the Education and Community involvement branch of NHGRI. This was a great opportunity to learn more about education with respect to different audiences (i.e. K-12, general public).

What advice would you give to someone who was interested in your career path? Once you have an idea of the area you're interested in, I would reach out to people in those fields and ask for an informational interview. I never realized how many people are extremely generous with their time and are happy to discuss their career path and help you to understand their role and/or organization. I think my biggest piece of advice would be to talk to people and find out as much as you can about the organization/institution and the role you're interested prior to applying for the position. Through conversation you can glean a lot about the work culture and if you can see yourself thrive in that setting.

Until I began my teaching position, I didn't know much about non-tenure track teaching positions. I'm happy to discuss the details of this type of teaching position at my institution.

JALEAL SANJAK

Principal Technical Specialist
Gryphon Scientific

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What university is your highest degree from? University of California, Irvine

What field/dept was your highest degree in? Ecology and Evolutionary Biology

What year was your highest degree awarded? 2018

Describe your current role/responsibilities. As a scientific consultant I provide quantitative and computational support to a wide range of projects. I help set technical milestones for projects and assist in writing technical sections of project proposals. I also perform statistical analysis, modeling/simulation and software development roles.

What skills are necessary for you to complete your job? Strong quantitative skills, probabilistic reasoning, programming practices and strategic thinking. The most advantageous skills for this type of role are critical thinking surrounding quantitative/statistical problems and an appreciation for development operations best practices. In addition, strict time management is essential--my job now is MUCH more structured in terms of project deadlines than graduate school was.

How did you get your job (networking, job-listing, etc)? I got this job through my personal network. However, I was participating in the Insight Data Science Fellowship at the time. The two month Insight program was extremely valuable--there I learned the skills that employers in data science were looking for and how to interview for such jobs. After the fellowship I had 4 competing job offers, with several other potential interviews lined up. By getting offers from tech companies, I was able to negotiate a better salary for the job that I actually wanted.

How long was your job search? 2 months

What is a typical starting salary in your field? \$90,000-\$120,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Insight Data Science Fellowship

Looking back, is there anything you wish you would have discovered earlier or done differently? I would have taken more statistics and computer science courses during graduate school.

What advice would you give to someone who was interested in your career path? My job requires me to use my biology and computational background differently than in grad school. I am not doing much traditional comp bio or bioinformatics. It's more like I am mixture of statistician, software engineer and biologist. The ability to be comfortable quickly learning a little about a lot of new things is essential in consulting.

ESTEVAN SANTANA

Director, Science and Regulatory Advocacy
PhRMA

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What university is your highest degree from? The Ohio State University

What field/dept was your highest degree in? Microbiology

What year was your highest degree awarded? 2014

Describe your current role/responsibilities. At PhRMA, I work in the Science and Regulatory Advocacy division focused on advocating for and advancing FDA regulatory policy that enhances the drug development process through increased efficiency and predictability. My portfolio ranges from pediatric and rare disease drug development issues to understanding how real-world data (e.g. EHR and medical claims data) and its analysis can be further utilized in regulatory decision-making.

What skills are necessary for you to complete your job? Consensus building, advocacy strategy, ability to translate complex ideas into simple language, ability to build and maintain personal trust and relationships

How did you get your job (networking, job-listing, etc)? I applied to a job posting on the PhMRA website, combined with networking to speak with former employers who knew the hiring manager.

How long was your job search? Total job search was about 8 months.

What is a typical starting salary in your field? Equivalent to the GS-14 pay scale.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I had experience in a state legislative setting that taught me political thinking and advocacy strategy as well as experience in the federal government. Advocacy experience can be gained through a job or volunteer work/internships.

Looking back, is there anything you wish you would have discovered earlier or done differently?

No. I took the fellowship route which provides excellent training.

What advice would you give to someone who was interested in your career path? Seek out fellowship opportunities to obtain training in policy/politics/advocacy. However, there are ample opportunities to gain this training through volunteer/internships.

Scientific knowledge is helpful, but the most important part of an advocacy job is being able to analyze the political landscape and design a strategy to advance the interests of your constituency. You have to get out of the lab to get that type of experience.

NINA SCHOR

Deputy Director
NINDS/NIH

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What university is your highest degree from? Rockefeller University and Cornell Medical School

What field/dept was your highest degree in? Medical Biochemistry (PhD), Medicine (MD)

What year was your highest degree awarded? PhD, 1980; MD, 1981

Any other universities or degrees that you would like to mention?

Yale University, BS, Molecular Biophysics & Biochemistry, 1975

Describe your current role/responsibilities. With the Director, provide leadership for the National Institute of Neurological Disorders & Stroke (NINDS) at NIH.

What skills are necessary for you to complete your job? Emotional intelligence; political savvy; interpersonal relationship-building and skills; credibility as a scientist and physician; ability to prioritize tasks and initiatives; intellectual and social flexibility

How did you get your job (networking, job-listing, etc)? Networking; job advertisement in professional journal

How long was your job search? Wasn't really searching!

What is a typical starting salary in your field? In government sector, \$135,000.

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? During my career, I have been fortunate to have had and accepted an extraordinary string of progressively broad and complex leadership experiences, including running a lab, a course, a training program, an IRB and an IACUC, a curricular reform initiative, a PhD program, a clinical division, a department, and a Children's Hospital.

Looking back, is there anything you wish you would have discovered earlier or done differently?

I think I would have preferred for my clinical responsibilities to be more closely aligned topically with my laboratory research than they were.

What advice would you give to someone who was interested in your career path?

Pay attention to everything. Learn from everyone, including the "bad examples". Instead of saying "no", figure out under what circumstances you would say "yes" to being asked to take something new on. Never forget how to look at yourself in the mirror and laugh at the person who looks back at you!

It's tough and sometimes frustrating, but very rewarding. Every step of my career, creating and leaving a legacy has been very important to me and I have been fortunate to have many opportunities to do so.

EVAN SNITKIN

Assistant Professor
University of Michigan

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What university is your highest degree from? Boston University

What field/dept was your highest degree in? Bioinformatics

What year was your highest degree awarded? 2009

Describe your current role/responsibilities. Leader of research group at large academic medical center.

What skills are necessary for you to complete your job? Research skills pertinent to field of study, manuscript writing, grant writing, project planning, multi-tasking, time management, personnel management.

How did you get your job (networking, job-listing, etc)? Job listing.

How long was your job search? 1 year

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Attending/presenting at conferences, being involved in many projects, mentoring junior trainees, practicing scientific writing, maintain broad knowledge of scientific literature.

Looking back, is there anything you wish you would have discovered earlier or done differently? More quantitative/statistics coursework during PhD.

What advice would you give to someone who was interested in your career path? Always be looking forward (e.g., what projects do you want to take from your postdoc, what skills do you need to acquire, how will you differentiate yourself from past mentors, what interests/projects are most likely to be fundable, what types of job ads are currently being put out). The answers to these questions may change during the course of your postdoc, but good to have them on your mind.

JEANELLE SPENCER

Senior Medical Writer
Ashfield Healthcare

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What university is your highest degree from? Johns Hopkins University School of Medicine

What field/dept was your highest degree in? Biochemistry, Cellular and Molecular Biology

What year was your highest degree awarded? 2011

Any other universities or degrees that you would like to mention? Howard University BS in Chemistry

Describe your current role/responsibilities.

Write, review and edit scientific medical writing (abstracts, posters, slide decks, manuscripts)

Stay current with medical literature and advancement

Research, present, and rationalize work to clients

What skills are necessary for you to complete your job?

- Ability to communicate scientific or medical information in a clear and concise manner
- Proficiency in Word, Excel, PowerPoint, email, and the Internet
- Familiarity with the principles of clinical research
- Ability to interpret and present clinical data and other complex information
- Time management

How did you get your job (networking, job-listing, etc)? I responded to a job posting from a healthcare recruiting firm. The recruiter contacted me regarding positions and companies that would interest me. He then referred me for appropriate positions.

How long was your job search? 3 months

What is a typical starting salary in your field? 85000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? I did a detail with OITE Communications that allowed me to demonstrate my ability to communicate science to different audiences and contribute outside of the laboratory.

Looking back, is there anything you wish you would have discovered earlier or done differently?

The PhD prepares you for many possible careers and I like my path. The only thing I wish I had discovered earlier is just the existence of this field. I could have been more knowledgeable and strategic earlier in my career.

What advice would you give to someone who was interested in your career path?

Network with people currently in the field; research medical communications agencies; look for writing opportunities

There is lots of flexibility with the ability to work remotely. The work is varied and intellectually stimulating, but you cannot be too attached to any disease or therapeutic area. Also, you must be disciplined and comfortable working independently.

PRAKASH SRINIVASAN

Assistant Professor
Johns Hopkins University

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What university is your highest degree from? Case Western Reserve University

Describe your current role/responsibilities.

Develop a successful research program focused on understanding the biology of malaria parasite Plasmodium falciparum. The goal is to develop new anti-malarial strategies to prevent disease.

What skills are necessary for you to complete your job?

- Good track record in your field of research.
- Sound ideas for developing a successful research program.
- Good communication and writing skills.

How did you get your job (networking, job-listing, etc)? Networking and job listings.

How long was your job search? 1 year

What advice would you give to someone who was interested in your career path?

It's never early to start the process- writing your research statement, teaching philosophy.

Discuss with your mentor about your research plans and have a clear idea of what aspect of your current research if any that you can take with you.

Start networking- earlier the better.

NATALIE STRINGER

Director of Content Development and Resident Professor
LabArchives, LLC

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What university is your highest degree from? University of Iowa

What field/dept was your highest degree in? Molecular and Cellular Biology

What year was your highest degree awarded? 2010

Describe your current role/responsibilities. I am essentially a product developer and manager for the education side of the company. I collaborate with senior management, sales, marketing, users (i.e., professors), and content writers to design and implement a new product. I also attend trade shows, train internally and externally, and work with customer service to solve user issues.

What skills are necessary for you to complete your job?

- Communication and writing! I spend A LOT of time talking - in person or virtually - to all kinds of people. While it is a creative position, I have to communicate those ideas to others in a clear, easy to read format.
- Flexibility: I have to switch my focus often. From designing all the technical requirements of a product or writing document to putting out fires.
- Problem-solving: The job is basically figuring out how to design and build a product to solve a problem. In my case, I'm building something that (hopefully) solves problems that occur in teaching labs. If something goes wrong, I have to find a solution.
- Being comfortable with being uncomfortable: This is a new role for me so I'm still learning the ropes. However, I am surprised at how many of my research and teaching skills transferred to this role. Designing a product is basically planning a research program without the pipette.

How did you get your job (networking, job-listing, etc)? I stumbled into it. The company was looking at me for a contract content writing role, but I needed full time work. We worked together to develop a position that met both of our needs. It's been a win-win for both parties.

How long was your job search? 1.5 years

What is a typical starting salary in your field? 70000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? My teaching, curriculum design, and research experience were exactly what the company wanted. I also think my side-gig as a content writer helped me learn skills and make a career transition.

Looking back, is there anything you wish you would have discovered earlier or done differently? I wish I had been willing to take on part-time contract work earlier. The experience I gained writing curriculum really helped me in the end. Having two jobs wasn't easy but in the end it was worth it.

What advice would you give to someone who was interested in your career path? One piece of advice is to shore up your skill set. For example, I knew I needed experience building storyboards so when the opportunity came, I jumped at it. It took me twice the amount of time than expected but now I know what's expected and I can put it on my resume. The second part is I've found that position descriptions outside of academia are far more ambiguous. Don't feel like you need every requirement on the page to apply. If you can see yourself being successful in the position and have most of the key skills, go ahead and try - you'll be surprised.

ANNA SUNDBORGER-LUNNA

Assistant Professor
University of Minnesota

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What university is your highest degree from? Karolinska Institute

What field/dept was your highest degree in? Neuroscience

What year was your highest degree awarded? 2010

Any other universities or degrees that you would like to mention? MSc

Describe your current role/responsibilities. Run a research lab.

What skills are necessary for you to complete your job? Experimental design, data analysis, trouble shooting, science writing and communication, mentoring, budgeting, negotiation, teaching, leadership

How did you get your job (networking, job-listing, etc)? Job-listing.

How long was your job search? 1-2 years

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? Working HARD in the lab at the NIH for 5 years!

Looking back, is there anything you wish you would have discovered earlier or done differently?

I wish I had applied for a K99, that's key to a successful postdoc-to-faculty transition.

What advice would you give to someone who was interested in your career path?

1. Negotiate with your PI about what preliminary data you can bring and get working on it before you leave your postdoc.
2. Apply for a K99 or similar.
3. Negotiate.

Finally, my department is 100% research with no teaching, so quite different from a traditional academic position.

MARYNA TARANOVA

Principal Data Scientist
Roche

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What university is your highest degree from? University of California Irvine

What field/dept was your highest degree in? Computational Chemistry

What year was your highest degree awarded? 2014

Any other universities or degrees that you would like to mention?

Postdoctoral scholar at Stanford University

Describe your current role/responsibilities. As a Principal Data Scientist at Roche Nanopore Sequencing, I lead a small team that focuses on developing machine learning frameworks for wide range of applications. Colleagues call my team 'fortune tellers' as we predict the future of experiments. My team leverages the power of advanced machine learning techniques and in-house generated data sets to develop reliable predictive models.

What skills are necessary for you to complete your job?

The top three skills in my opinion are:

- 1) Technical skills
- 2) Resourcefulness
- 3) Out-of-the-box thinking and problem-solving skills

Strong technical skills are very important. At Roche, we have rigorous interview process to test candidate's math and coding skills for data science positions. However, the field of data science is evolving super-fast – every single day new methods and tools are being developed and new papers are published. Thus, for a data scientist every day comes with a new challenge. I believe that ability to efficiently navigate this large amount of information and to find quick and clever ways to solve a problem is of a great value. Lastly, it is worth to mention that data scientists often work on hard-to-solve problems where scientific creativity and out-of-the-box thinking is a key to success.

How did you get your job (networking, job-listing, etc)? Landing a managing position at Roche straight out of a postdoc is unusual. I believe my passion for emerging biotechnologies and a sequence of random favorable events led me to this role. As I started my postdoc at Stanford University, I was particularly interested to learn about new emerging biotech start-ups and their technologies. Acquisition of nanopore sequencing start-up Genia by Roche made big news in June 2014. Month after the acquisition, the CTO of Genia gave a talk at Stanford University about Genia's revolutionary technology and its promise for the biotech industry. I was super thrilled about their approach for DNA sequencing. Two weeks later, I absolutely unexpectedly got contacted by an internal recruiter from Genia for an open position and scheduled an interview. As I was interested in the technology for a while and did a large amount of research, I demonstrated a solid knowledge of the platform and its challenges at the interview, and several managers offered me positions at their teams. Unfortunately, very soon I learnt that I had to leave the country for an uncertain amount of time for personal reasons and could not accept any of the offers. A year later, I was back at Stanford University finishing some of the projects and actively

looking for a full time position in industry. I contacted the managers from Genia who I talked to the year before, said that I was still interested to join the company and asked if they might have an open position. It was a huge surprise to me that after a couple of phone interviews with different teams, I was offered to interview for a manager position to lead a data science team. Several weeks later, I had an offer.

How long was your job search? 3 months

What is a typical starting salary in your field? \$150k

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)? As a graduate student and a postdoc I was working on a highly collaborative research projects with scientists from different disciplines. This experience taught me how to effectively communicate with people from different fields which is a highly valuable skill in my current position. While working on my PhD thesis, I also participated in a business competition – proposed a product, built a team and led my team to the finals of the competition. While I did not proceed with product development after the competition, I learn many valuable lessons from this experience – how to manage a team, keep the development process on track, meet strict deadlines, etc.

What advice would you give to someone who was interested in your career path? My two pieces of advice are simple – 1) be open to a life-long learning experience 2) don't be shy to reach for help or advice. When it comes to learning, the sky is the limit – challenge yourself with continuous learning, keep your skills updated with new technologies and communicate your interest to learn with potential employers. There are many people who share your passion and vision, and will guide you to your goals, don't hesitate to ask for help or career advice.

DANIELLE TOWNSLEY

Director, Oncology, Clinical Development
AstraZeneca MedImmune

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- What university is your highest degree from?** George Washington University
- What field/dept was your highest degree in?** medicine
- What year was your highest degree awarded?** 2006
- Any other universities or degrees that you would like to mention?** University of California, San Diego
- Describe your current role/responsibilities.** Medical director for early phase oncology clinical trials
- What skills are necessary for you to complete your job?**
Clinical research skills, trial design, clinical investigator
- How did you get your job (networking, job-listing, etc)?** Networking.
- How long was your job search?** 3 months.
- What is a typical starting salary in your field?** 200k
- What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?** NIH clinical research experience
- What advice would you give to someone who was interested in your career path?**
Speak directly to those doing the job

SHANE TRASK

Lead Data Analytics Engineer
The MITRE Corporation

strask@mitre.org

What university is your highest degree from? Harvard University

What field/dept was your highest degree in? Virology

What year was your highest degree awarded? 2008

Any other universities or degrees that you would like to mention?

BS - Biology, The Johns Hopkins University

Describe your current role/responsibilities. Work directly with government clients to develop analytics, information systems, and develop prototypes. My role is largely technical - working to define a problem, parameterize it, perform data analysis and validation, develop prototypes and applications to turn the analysis into a system. However, there are two leadership components to my role: Serving as a "trusted advisor" to the client to help guide their thinking and priorities, and working as a project lead (directing a team of MITRE staff to meet the goals of a given project).

What skills are necessary for you to complete your job? Necessary: The ability to be generally curious (i.e., wanting to understand data and problems that are outside your prior experience), and the ability to learn continuously (formally or informally). The ability to work as part of a team.

Wish that I had acquired sooner: The ability to empathize with others and understand how to see challenges from their perspective so that you can better communicate goals and objectives in a way that is relatable, understandable, and motivating.

How did you get your job (networking, job-listing, etc)? Networking. I had a fixed-term fellowship and knew when I would be leaving the position. I worked during the fellowship to identify folks at organizations (and in positions) of interest. I was very open about my interests, career goals, and time frame for moving to my next job. That helped me to identify folks that would be willing to make hiring referrals for me.

How long was your job search? 1 month.

What is a typical starting salary in your field? 75-85K

Looking back, is there anything you wish you would have discovered earlier or done differently?

I always wish that I had learned programming formally and earlier.

What advice would you give to someone who was interested in your career path? I would strongly recommend looking at fellowship opportunities to allow you to step farther outside your field that you would normally be able to do. Side projects (and publishing them - e.g., Medium, etc.) can also be helpful to demonstrate that you know how to look beyond your domain knowledge and are ready/interested in broader problems.

SYDEAKA WATSON

Owner/Founder; Principal Data Scientist
Korelasi Data Insights, LLC

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What university is your highest degree from? Baylor University

What field/dept was your highest degree in? Ph.D. Statistics

What year was your highest degree awarded? 2011

Any other universities or degrees that you would like to mention?

M.S. Mathematics, Michigan State University, 2003

Describe your current role/responsibilities. In my role, I am responsible for clarifying the project objectives, translating the client task into a mathematical question/hypothesis, developing the analytics plan, data gathering, data cleaning, data analysis, experimental design, visualization, and creating presentations where I summarize the results.

What skills are necessary for you to complete your job?

The big three technical skills are:

- (1) Computer programming - know one programming language well, preferably R or Python
- (2) Strong foundation in math/statistics, machine learning
- (3) Big data technologies - SQL, Hadoop (Spark/Hive), AWS

Skills I wished I acquired earlier:

- (1) Public speaking
- (2) Creating slide decks, giving presentations
- (3) Working on a team along with people with different skill sets

How did you get your job (networking, job-listing, etc)? I created the company, but I find out about new projects through networking.

How long was your job search? When I was looking for a full time data science job, it took maybe 3 months.

What is a typical starting salary in your field? \$100,000-120,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

(1) Networking, networking, networking!!

(2) I'm a continuous learner. I follow the trends to see where the industry is going. This proactive approach ensures that I always have the skills that are in demand, so I never have to work hard to find a new company that will want to hire me.

Looking back, is there anything you wish you would have discovered earlier or done differently?

Back then, I wish I understood the value of networking. I have been introduced to so many opportunities just through my connections to a diverse set of people in various roles and industries.

What advice would you give to someone who was interested in your career path? Find one or more mentors who have had the types of professional experiences you would like to have some day. Pick their brains and regularly solicit them for advice.

It's a lot of work, but it's so much fun! It's honestly what you make it. Pretty much any industry you can think of (social media, fashion, sports, politics, health care, etc.) has a data science component. It's easy to find projects that will keep you interested. There's plenty of room for growth. Go for it!

FELIX YU

Senior Consultant
Booz Allen Hamilton

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- What university is your highest degree from?** Johns Hopkins University
- What field/dept was your highest degree in?** Chemical Biology/Pharmacology
- What year was your highest degree awarded?** 2018

Describe your current role/responsibilities.

- provide health data subject matter expertise
- support Booz Allen's life science and health business development at the NIH
- support FDA CDER's modernization of drug review and drug development tools

What skills are necessary for you to complete your job?

- Soft skills: collaboration, communication, leadership, organizational, presentation, analytical
- Efficiency, adaptability and ability to work in a fast pace and high pressure environment
- Basic understanding of information system, software development, and data structures
- Ability to translate basic science expertise and understanding into meaningful solution and easy-to-understand deliverable

How did you get your job (networking, job-listing, etc)?

- leadership position in student organizations
- networking
- collaboration with university administrators

How long was your job search? ~2-3 months

What is a typical starting salary in your field? \$80,000-100,000

What other experiences led to your success (such as additional training, volunteer experience, or classes/certifications)?

- Participation in the student-organized graduate consulting club: leadership, pro-bono consulting, event organization
- Participation in case competitions
- Participation in other "alternative career" resources
- Self-driven networking

Looking back, is there anything you wish you would have discovered earlier or done differently?

I think it is important to start preparing for interviews early, particularly case practices for case interviews. I wished I would've appreciated and paid more attention to my research and thesis topics despite being well-aware of my career inclinations.

What advice would you give to someone who was interested in your career path?

Don't be afraid to reach out to various sources. Cold calls and emails are the best way to shape your path and overcome nervousness.

Use every opportunity, whether in the lab or outside of the lab, to simulate consulting practices. Consulting can be applied to all forms of topics, questions or organizations.

Learn more about industry, do not generalize consulting and spend time discerning how each firm is different in terms of client types, culture and operational expertise.