



Center for Cancer Research  
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# CCR Fellows & Young Investigators Newsletter



## The journey starts here.

At NCI, we are all fellow travelers seeking experience and guidance for our next step in our career trajectory. If you are a new trainee (postdoc, postbac, intern), we hope you enjoy our selection of articles here. Amanda Decker lists valuable resources in NIH for trainees. Justin Kaplan extols the virtues of living in Frederick, MD. Abbey Zuehlke relates her experiences as the liaison for the National Postdocs Association (NPA) and why it's important to join in. Pamela Gallaher shares her personal experience as a recipient of the Sallie Rosen Kaplan Fellowship. Melissa Fernandez recaps this year's CCR-FYI Colloquium, an important event where trainees can learn career development skills while providing a venue to talk about their science. Veena Somasundaram highlights a conference she attended in Greece. And finally, we have Christopher Rice discussing the experience of expats - international scientists who come to the USA - in a three-part article.

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**From the Editor-in-  
Chief's Desktop**

**Anna Serquiña**

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If you are one of the trainees who are ready to move on (that's me), we also have career-readiness in the spotlight. Kyster Nanan talks about careers in consulting. Keith Schmidt shares his decision-making process regarding seeking a second graduate degree (definitely a major life decision!). And for inspiration, Jailynn Harke chats with CCR Deputy Director Deb Citrin, our featured scientist for our Leaders in Science series.

As for me, I am standing at the train platform (illustrated here by an excellent photograph courtesy of Helen Brooks, FDA fellow), waiting for my connection. It has been a pleasure and a privilege working with the authors, editors and other contributors these last 3 years. I now pass the torch to the able hands of Manasi Apte, incoming Editor-in-Chief, and Melissa Fernandez, Managing Editor (read her article on why CCR-FYI is important).

Until next time, *au revoir!*

Metro Station photo by Helen Brooks, FDA Fellow

CCR-FYI Association is supported by the CCR Office of the Director, National Cancer Institute.

## Table of Contents

<b>THE JOURNEY STARTS HERE.....</b>	<b>1</b>
<b>17TH CCR-FYI COLLOQUIUM .....</b>	<b>4</b>
<b>CONFERENCE HIGHLIGHTS .....</b>	<b>6</b>
<b>NATIONAL POSTDOCS ASSOCIATION .....</b>	<b>8</b>
<b>EXPLORING CAREER PATHS: SCIENTIFIC CONSULTING .....</b>	<b>11</b>
<b>LEADERS IN SCIENCE: DR. DEBORAH CITRIN.....</b>	<b>16</b>
<b>GUIDE TO RESOURCES FOR NIH FELLOWS .....</b>	<b>19</b>
<b>MY EXPERIENCE AS A SALLIE ROSEN KAPLAN (SRK) FELLOW .....</b>	<b>22</b>
<b>PHARM.D. TO PH.D. ....</b>	<b>23</b>
<b>FIVE REASONS WHY FREDERICK, MARYLAND IS AN AWESOME PLACE TO LIVE .....</b>	<b>30</b>
<b>THE EXPAT'S EXPERIENCE.....</b>	<b>31</b>
<b>THE IMPACT OF CCR-FYI .....</b>	<b>34</b>



# Highlights from the 2017 CCR-FYI Colloquium



Poster Session



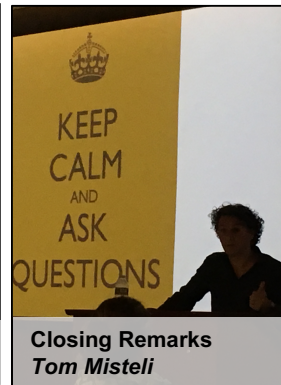
Outstanding Postdoc  
Alexander Gorka



Travel Awards



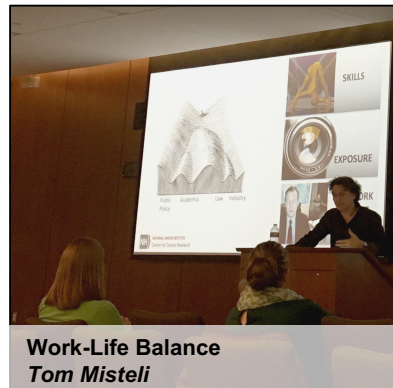
Office of Training and Education  
Jonathan Wiest



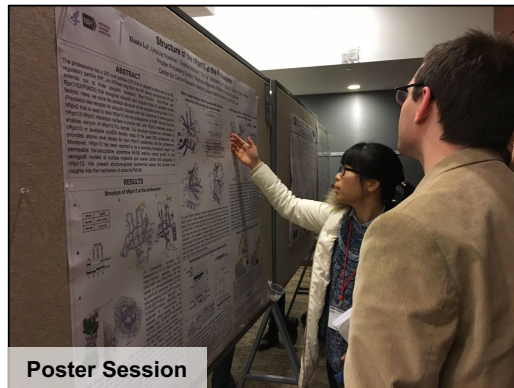
Closing Remarks  
Tom Misteli



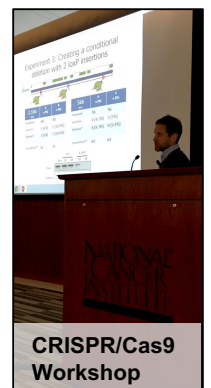
Opening Remarks  
Douglas Lowy



Work-Life Balance  
Tom Misteli



Poster Session



CRISPR/Cas9  
Workshop



2017 Planning Committee



Social Networking

# 17th CCR-FYI Colloquium

## Colloquium Workshop Review

By Melissa Fernandez

### Elevator Speeches with Scott Morgan

Tales of Scott Morgan's incredible powers to shape a strong elevator speech have followed me for over a year. Somehow, though, the universe contrived to create scheduling conflicts with his periodic workshops hosted by the CCR Office of Training and Education. Finally, I had the pleasure of inviting Scott to attend this year's CCR-FYI Colloquium to give his famous 'Elevator Speeches' Workshop.

An elevator speech is literally what it sounds like: essentially, you have a few moments to introduce yourself to a new connection. A strong and impressive elevator speech has become a valuable tool to network with new colleagues and for highly desired positions. With the changing structure of scientific research and the job market, it is important to leave a strong and positive impression that showcases how your skills fit in the context of another person/company's needs.

During the workshop, I witnessed Scott Morgan's incredible ability to give even the shyest NCI fellow a solid elevator

speech in just one hour. Participants had multiple opportunities to work on their introductions and receive immediate feedback on how to strengthen their pitches. The key was identifying how one's highly technical and specific expertise can benefit the listener (e.g. a potential employer). For example, I started my elevator speech by saying, "I study how cellular proteins interact with HIV glycoproteins *en route* to sites of viral budding". To a potential employer in industry, this statement is too specific and does not translate to how my expertise can benefit the company considering whether they want to invest in hiring me. Scott's suggestions, along with the group's, helped me come up with a better elevator speech. We worked together as a team to determine the bigger picture of my research and structure it into a statement that is much more marketable, relatable, and understandable to a non-scientist. My new introduction now begins, "I am working on identifying targets for drug design against pathogens". After attending Scott's Elevator Speeches workshop, I am much more confident about my elevator speech and will be practicing it in

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*"A strong impressive elevator speech has become a valuable tool to network with new colleagues and for highly desired positions..."*

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the coming months as I attend scientific conferences.

This workshop would benefit every fellow interested in building a stronger, more diverse network. Students interested in applying for graduate and medical school would benefit from this workshop during their school interviews; a strong elevator speech would provide them with the confidence to explain who they are and what they have been working on during their time at the NIH and how this fellowship experience would make them a strong and successful candidate for the program of their interest.

### **CRISPR-Cas9 Workshop**

I spent one year between graduate school and starting my first postdoctoral fellowship teaching high school science. When I returned to research, this new and widely applied technique called CRISPR-Cas9 was on the tips of everyone's tongue. There was no seminar, research paper, or journal club presentation that took place without mention of CRISPR. Even the TV series return of *X-Files* mentioned CRISPR in their season finale!

While the mechanism of how the CRISPR-Cas9 works is straightforward, I also could not find any easily understandable sources of information on how to implement this technique in the lab. The teacher in me reasoned that the best way to learn about

how to use CRISPR was to find the leading CRISPR-Cas9 experts at the NIH and invite them to share their wisdom with NCI fellows. By helping the fellows learn, I would learn as well. I tracked down three NIH experts: Dr. Todd Macfarlan of the NICHD Unit on Mammalian Epigenome Reprogramming, Dr. Kajal Biswas of the Mouse Cancer Genetic Program, and Dr. Stephen Jones of the Laboratory Animal Science Program (LASP). They all graciously accepted my invitation to host a CRISPR-Cas9 workshop at the CCR-FYI Colloquium.

Dr. Macfarlan very enthusiastically spoke about the basic of the CRISPR-Cas9 system and how to design straightforward experiments. As with any system, there are several caveats that he pointed out. Next, we had Dr. Biswas share his experience with designing a successful CRISPR-Cas9 experiment, going into the more technical details of how to screen for successful knockout clones. The workshop ended with a presentation by Dr. Jones on the nascent Genome Modification Core (GMC) and how they can assist NCI investigators in utilizing CRISPR-based methodologies to generate somatic and germ-line mutations in cells and whole organisms. The goal of GMC is to ensure an efficient and specific knockout is achieved in the model of your

choice while saving you time and money.

The biology and nuances of CRISPR-Cas9 technology in various forms can be daunting to new comers. Fortunately, researchers well versed in CRISPR-Cas9 exist on our campus and will gladly assist fellows with understanding this

vital technique, including creating the knockout model for you.

Attendees of this workshop left with a deeper understanding of how this ever-expanding technology can be used to answer challenging and important research questions and how the LASP-GMC can facilitate the generation of a reliable knockout model.

## Conference Highlights

### 21st World Congress on Advances in Oncology By Veena Somasundaram

In October 2016, I attended the 21<sup>st</sup> World Congress on Advances in Oncology that was held together with the 19<sup>th</sup> International Symposium on Molecular Medicine at one of the most historically treasured cities in the world: Athens, Greece. It was indeed an ‘international’ meeting which dealt with diverse demographic and geographical determinants of cancer progression and prognosis.

The thing that struck me as novel about this meeting was a very elegant organization of the scientific sessions. Instead of dedicating one cancer type per session, most of the sessions were divided such that they showcased the same facet of different cancers. For example, I attended a session where they focused on studies targeting biomarker development or

validation relevant in multiple cancer types. This helped me gain a comprehensive understanding of the molecular, cellular and clinical aspects of cancer while accounting for the inter-tumor differences. I especially enjoyed a talk on how the regulatory potential of microRNAs could be employed to epigenetically modulate Epithelial-Mesenchymal Transition (EMT), a cardinal step in the metastatic spread of cancers. I believe that epigenetic regulation of the different facets of cancer is an area that has great potential to provide insights into the behavior of cancers but has not been studied extensively enough.

The meeting had a good mix of scientists and clinicians from all parts of the world, with a generous representation from Japan, China, India, Malaysia and

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*“We strolled along the narrow streets of Monastiraki (the market), shopping for beautiful, hand-painted vases and figurines...”*

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Photos from left to right: Acropolis, the city of Athens as seen from atop the Acropolis which is the highest point in Athens, the Temple of Zeus, traditional dancers performing at the conference venue, delegates in front of one of the two pharmacies on Hydra.

the Middle East in addition to Europe and the Americas. I could discuss my work with scientists from different fields and at different stages of their career. The poster sessions turned out to be great venues for getting to know the research focus of various groups and I was able to lay the groundwork for future collaborations, especially patient cohort studies. Overall, it turned out to be a great networking opportunity.

The weather in Athens was perfect at that time of the year. The pride the Greeks have in their history and culture was evident when the organizers invited traditional dancers to perform for the delegates after one of the evening sessions. The organizers also had scheduled for three-hour free time post-lunch every day for international delegates to explore the city of Athens. I took this opportunity to visit the historical Parthenon, the Acropolis, the

Temple of Zeus with other delegates from the NIH. We learnt about the different types of characteristic architecture that distinguished the buildings from different eras of Greek history. The intricacy of the columns which form a major part of Greek architecture was breathtaking. We also strolled along the narrow streets of Monastiraki (the market), shopping for beautiful, hand-painted vases and figurines, tasting the famous Baklava in every possible flavor, and dining at traditional Greek restaurants.

The day-long cruise of the Saronic Gulf and a visit to the

islands of Hydra, Poros and Aegina was the cherry on top. The island of Hydra seemed otherworldly. It was a small, nondescript, close-knit island community which boasts of being home to many Greek presidents, despite being an island that still does not have any motorized vehicles (except the one ambulance that serves the entire island) and relies on horses for transportation.

This trip was indeed a wholesome experience of great science, remarkable history and awesome food.

## National Postdocs Association

### 15<sup>th</sup> NPA Annual Meeting Report

By Abbey Zuehlke

The National Postdoctoral Association (NPA) is a member-driven non-profit association aimed at improving the postdoctoral experience through providing a voice to the postdoctoral community. As an organization designed to better understand and advocate for the postdoctoral community, the NPA hosts an Annual Meeting focused on defining areas within the postdoctoral experience that needs improvement, as well as building on the strengths of the current postdoctoral environment.

As the NPA liaison for the CCR-FYI, I recently attended the 15th Annual NPA Meeting at the Fairmont Hotel in San Francisco. This year's meeting focused on diversity retention within the scientific community, allowing me to learn about the many unique programs provided by other attending institutions, as well as present two of the outstanding opportunities offered to the NCI postdoctoral fellows aimed at obtaining a diverse scientific field. The keynote address was given by Dr. Peter Fiske, a known

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*“Affiliate membership for the NPA is free for NCI fellows and includes several benefits...”*

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science communicator and CEO of PAX Water Technologies, demonstrating the many transferable skills learned through the postdoctoral experience that are often not recognized. Postdoctoral fellows often obtain significant training in areas such as project management, leadership, organization, complex thinking, and many other skills that make them highly qualified in a wide range of careers. Dr. Fiske emphasized the importance of understanding career goals and making strategic plans to execute them. For example, he explained the importance of gaining skills outside of the laboratory, networking, reaching out for informational interviews, and presenting your best self. This level of career planning will result in one becoming more attractive candidate for a wide range of jobs.

Through networking events, career development workshops, plenary and keynote sessions the NPA Annual meeting disseminated information to better improve the current work environment and training of the postdoctoral attendees. This year, the career development workshop was organized in a “speed networking” fashion. Groups of postdoctoral fellows would rotate from one table to the next, every fifteen minutes during this workshop. The tables were chaired by people from various science-related career paths

including industry, academia, non-profit associations, and self-employed career development counselors. This allowed postdoctoral fellows to learn more about the diverse career options available to scientists and bring the information back to their respective postdoctoral organizations.

As the NPA liaison for the CCR-FYI, I presented a poster focusing on two of the unique programs available to the NCI postdoctoral fellows to recruit and increase diversity retention in the scientific community. These two programs included the Sally Rosen Kaplan (SRK) Fellowship for women in science and the Diversity Career Development Program (DCDP) for underrepresented minority postdoctoral fellows. The SRK program seeks to prepare women for independent research careers using professional coaching, as well as sessions focused on leadership skills, management, and confidence building. In order to build and maintain a diverse scientific community, the DCDP employs six training components: 1) coaching workshops, 2) videoconferences, 3) career development workshops, 4) invited speakers, 5) focused mentoring provided by co-mentors, and 6) community oriented activities and volunteering. The poster session was well attended and many institutes expressed their enthusiasm for the many

collaborative training programs offered to our postdoctoral community. For more information on these programs, please visit the following links.

SRK:<https://www.cancer.gov/grants-training/training/at-nci/srk>

DCDP:<https://www.cancer.gov/grants-training/training/idwb/dcd-program>

Attending this meeting demonstrated to me the impressive power of collaboration. Fifteen years ago, the NPA was first formed. Since that time, the NPA has assisted in making significant changes for the postdoctoral community. Some of the many achievements include assisting NSF with its national postdoctoral survey, providing information regarding the alignment of advanced training and career options to the White House Office of Science and Technology Policy Graduate Education

Modernization Taskforce, and providing data to the NIH Advisory Committee to the Director of Biomedical Research Workforce Working Group.

Affiliate membership for the NPA is free for NCI fellows and includes several benefits, such as reduced registration fees for the annual conference, access to the POSTDOCKET newsletter, and access to the NPA career center and occasional discounts on many retailers/events etc. I would highly encourage every NCI fellow to become a member of this awesome organization and benefit from it. For more information on the National Postdoctoral Association or the Annual Meeting, please contact me at [abbey.zuehlke@nih.gov](mailto:abbey.zuehlke@nih.gov).



NPA Meeting at the Fairmont Hotel in San Francisco, California (Photo by Abbey Zuehlke)

# Exploring Career Paths: Scientific Consulting

## An interview with Dr. Michael Keller (Booz Allen Hamilton Consulting Group)

By Kyster Nanan

Over the past few years, there has been a notable increase in the number of doctoral-level scientists, across many disciplines, who have been seeking careers away from the traditional tenure track. Many of these so-called “alternative” careers can be quite removed from the bench and may include employment in fields of scientific writing, patent law, science policy, or advocacy work. For those who are interested in keeping their feet immersed in cutting-edge research, one of the alternative professional avenues to consider may be a career in consulting.

I will admit that I have heard the term “consulting” many times before, but had only the vaguest ideas of what it meant from a professional standpoint. On a recent and very rainy spring morning, I met with Dr. Michael Keller at a Bethesda coffee shop, to discuss the ins-and-outs of consulting. Dr. Keller is a Senior Associate at the management consulting firm Booz Allen Hamilton. Despite the miserable weather, Michael strode into the coffee shop and greeted me with a warm smile and a firm handshake. I immediately sensed

that this was going to be great interview. I tried to gather as much information as I could about Michael himself and, more generally, about consulting so that I may share it with you, our readers. Please read on to learn more about Michael’s story and the truly fascinating world of scientific consulting that he occupies.

### Meet Dr. Michael Keller

Michael attained his doctorate degree in Microbiology and Immunology from Wake Forest University School of Medicine in Winston-Salem, NC. He described his doctoral research project as “hardcore basic science,” a label I found to be quite apt. During his Ph.D. studies, Michael characterized critical gene-regulatory elements that controlled replication of the paramyxovirus simian virus 5. Michael acquired extensive molecular virology skills during his tenure as a doctoral student and his unique skillset piqued the interests of the life sciences research arm of the US military, which led to him securing a postdoctoral fellowship position at Fort Detrick, working for the United States Army Medical

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*“...consulting is the provision of problem-solving advice from one professional to another...”*

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*“...scientific consulting is powered by people who are natural problem solvers with analytical minds... who can think and act beyond their intellectual comfort zone.”*

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Research Institute for Infectious Diseases (USAMRIID). At USAMRIID, he combined his RNA biology and molecular virology prowess with high-throughput screening technology to identify small molecule inhibitors of the *Ebola* RNA polymerase, which had the potential for downstream therapeutic use.

During his tenure at Fort Detrick, he had great success with his high throughput experiments, but Michael grew somewhat weary of the rote nature of his studies; he began feeling uncertain about a future life on the tenure track, and felt a tenacious need for “something more.” He decided to reach out to his colleagues to discuss his general sentiments about his career. Fortunately, a sympathetic colleague, who happened to work at Booz Allen, suggested that he consider transitioning over to the consulting field. Michael had never truly considered a career in scientific consulting, but this timely suggestion prompted him to investigate and later embark on this career path and, thirteen years later, he has yet to look back.

### **So, what is consulting, exactly?**

There are a few reasons that Michael had not considered a career in scientific consulting. He, like many of us in academia, had his sights set on the tenure track. As academic scientists, we are surrounded by tenure track scientists and rarely pause to

consider that there may be other scientific career paths out there. Michael also *had no idea what scientific consulting was*, another feeling that I suspect may be familiar to a lot of STEM trainees.

To help clear up the fog surrounding the term, Michael explained consulting in a manner relatable to someone outside of the field. Simply stated, *consulting is the provision of problem-solving advice from one professional to another*. He provided further clarity by describing some consulting projects in which he was previously involved at Booz Allen. Early in his career, Michael embarked on a project with NCI’s Center for Bioinformatics and Information Technology to work with over 50 NCI-designated cancer centers to provide an infrastructure that allowed for the secure exchange of cancer research data among scientists. He also supported the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) by implementing solutions to facilitate the management, organization, and access to clinical study data. Currently, Michael is leading a team supporting Veterans Affairs (VA) Million Veteran Program (MVP), which aims to discern the underlying molecular mechanisms that contribute to disease and define health potential. Throughout his career at Booz Allen, he has been able to engage in projects and programs that take

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*“Michael described the thrill of working with “visionary clients,” who are on the leading-edge of research in their respective fields.”*

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advantage of his molecular biology expertise in ways that would not have been possible on the tenure track. While his previous work mostly involved database and informatics, consulting projects at large firms are diverse enough that they may be “something for everyone.”

#### **What does Michael’s work week typically look like?**

Since I was truly interested in determining what the life of a consultant entailed, I inquired further into his day-to-day work experience. To be sure, his roles have changed over the course of his thirteen-year stint at the company, but in his current capacity as a Senior Associate at BAH, Michael has some more well-defined roles. His duties are largely divided into *client delivery* (getting products and technologies to clients), *business development* (seeking out new consulting opportunities), *staff and team development*, and *recruitment* of future team members. As is the nature of modern business communication, Michael spends a lot of time on the computer answering “tons of emails.” Meetings and presentations are an effective means of communicating potential solutions to clients, so these are also integral features of the consulting life. Every so often, Michael will travel to conferences where he presents some of his work and provides updates on relevant ongoing projects.

#### **The nitty-gritty of a career in consulting**

I wanted a reasonably comprehensive view of the whole scientific consulting package, so I asked Michael if he could explain some of the details of consulting life that are less obvious to the casual observer. For instance, I wondered if he could describe some of the perks of being a consultant. Michael described the thrill of working with “visionary clients,” who are on the leading-edge of research in their respective fields. Despite being in the industry for over thirteen years and working on myriad projects with numerous clients, he admits to being “constantly amazed” by the profound ingenuity of the research that is typically being conducted by Booz Allen customers. Because consultants are called in during the earliest phases of a project, they are also able to witness a project grow from an idea on a piece of paper or whiteboard into a full-fledged entity before their very eyes. I agree with Michael that it sounds like quite a privilege to be able to contribute to and witness this type of drastic transformation. When asked about the “anti-perks” of consulting, Michael jokingly mentioned the mountains of email associated with his work that he has learned to manage in expert fashion.

Irrespective of the career under discussion, the subject of work-life balance is on the tip of

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*“...a liaison or point of contact (POC) ... which ensured that his resume did not get lost in a sea of competing job application packages.”*

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many of our tongues these days. I asked Michael if he could comment on the work-life balance of a Booz Allen consultant and he responded with the natural answer, which is that “it’s up to you!”. In fact, Booz Allen would prefer that you lead a balanced life instead of “burning yourself out” and even provides opportunities for employees to step away from their projects and get involved in their community. One such initiative is the Brains And Hearts Campaign, an employee-led program with the goal of having Booz Allen health team members collectively engage in volunteer activities ranging from fundraising for cancer research to stocking foodbanks and backpacks for underprivileged children. The Booz Allen health team clocked in 19,590 hours last year and have set a target for 25,000 hours this year.

### **What does it take to become a consultant and do I have it?**

I will admit that, prior to my chat with Michael, I had a lot of misconceptions about what the world of consulting and its inhabitants was actually like. I was, however, quite relieved to learn that he had the exact same feelings before entering the field over thirteen years ago. Michael, much like myself, presumed that consulting jobs were reserved for established scientists, but he quickly learned that his colleagues ran the gamut of professional training to include individuals who

were fresh-out-of-college all the way to tenured professors. Based on this, I began to get the impression that almost any scientist could become a consultant and asked whether he would be able to describe some of the personality traits that are prized in scientific consultants.

It should come as no surprise to most of you that A) the same traits that are prized in consulting are valued in virtually all professions, and B) as a scientist and life-long learner, you may already have many of these skills! Above all, scientific consulting is powered by people who are natural problem solvers with “analytical minds,” as Michael describes it, and who can think and act beyond their intellectual comfort zone. Oftentimes, consultants are posed with somewhat abstract, larger-than-life, original ideas and are tasked with realizing these conceptions. For this type of challenge, creative thinking skills are a must. Also, due to the sheer scale of many projects, consultants often work in groups, which requires that each member be a team player. This trait should be inherent to many scientists since collaboration is a tenet of modern life sciences research programs. Tied in with the ability to work comfortably in teams is the idea that an effective consultant must have excellent communication skills, as well. These skills will come in handy during formal presentations, meetings, and are important for



coordinating movements within your team. If you possess these traits, revel in an intellectual challenge, and can work comfortably in a team environment, you may potentially thrive in consulting.

### **How do I get my foot in the door with consulting?**

This will come as no surprise to most of our readers, but the key to getting almost any job nowadays depends on effective networking skills. I mentioned earlier that Michael learned about consulting from a colleague who was already in the business. This friend of his later functioned as a liaison or point of contact (POC) between Michael and his future employer, which ensured that his resume did not get lost in a sea of competing job application packages. In your search for your POC, Michael recommends taking up every possible opportunity to alert your current and former colleagues of your career aspirations – you never know where your next lead will come from. While your online LinkedIn network can be instrumental when seeking your next career opportunity, Michael was an advocate of physically

“getting out there.” He suggested attending career fairs, meet-and-greets that take place on the NIH campus or at conferences, and joining interest groups such as the Fellow’s Consulting and Business Club. Above all, however, he stressed that you should be persistent! Do not be discouraged if you fail to get a response from companies when you first apply or are outright rejected. Do your best to learn more about the job application process, establish a POC, get some third-party input about your application, and try, try again!

In closing this article, I would first like to thank Dr. Michael Keller, who was gracious and generous with his time. I further hope that this article has helped to demystify the world of consulting and spark interest in our readers who are ready for the next step in their career but are not quite sure where they are headed. If you have an undeniable love for science and life-long learning but feel like you need “something more” than what the tenure track can offer, perhaps it may be time to consider whether a career in consulting might be right for you.

## Leaders in Science: Dr. Deborah Citrin

### CCR Deputy Director and NCI Women Scientist Advisor

#### By Jailynn Harke

Dr. Citrin arrived fashionably late to our coffee date and for good reason: she was ensuring that a diabetic colleague was taken care of before she left the office. I admire the scientist who puts people first. This may come more naturally to a trained medical doctor but nonetheless, I respected her priorities right off the bat. After apologizing, kindly introducing herself, and shaking my hand, she grabbed a large coffee and I immediately felt that she and I could relate. Again, priorities.

Deborah E. Citrin is a medical doctor by training and a clinical translational researcher in practice. She received her medical degree from Duke University and proceeded with residency at NCI. In 2001, she became an investigator in the Radiation Oncology Branch. Her work now focuses on techniques to preserve healthy (non-cancerous) tissue. But when I sat down with her, I wanted to know everything leading up to this point in her career. I wanted to know the science and not science that paved her path to success. I love talking with people in search of finding little pieces of myself in



them. Even seemingly intangibly successful people are still human and I found out, even before our discussion began, that I could relate to Dr. Citrin on at least two counts.

I typically think in terms of chronology, perhaps because of my Type A hardwiring. I first wonder, when talking to a rock star scientist, how they got started. Where did the ball start rolling down the hill towards science and away from other fields? I think about the wonderful teachers I encountered year after year and some of my peers who followed in their parents' footsteps.

Dr. Citrin was exposed to both science and the arts by her parents' careers. It was her father who was the scientist, a

physician. There was not a defining point in her upbringing that she can remember choosing science over other options. Like many of us, she liked and excelled in both math and science. She pursued engineering late into her undergraduate studies before realizing it wasn't the career for her. The future doctor realized that just because you're good at something doesn't mean that it will be satisfying. Her young wisdom knew that she had to figure out what her contribution to society would be and seek that career. The switch to pre-med was harmless for the young engineering student. Additional biology and chemistry classes were easy to tackle with her strong physics and math background.

As a clinical translational researcher, Dr. Citrin has one foot in the clinic and the other in the lab. I wondered if she had considered a Ph.D. before going to medical school and in fact, it had crossed her mind. The idea of a Ph.D. was appealing because she believes it teaches a distinct way of thinking. However, the reality of spending extended time away from her future husband was less appealing. They both ended up at the same medical school and the rest is history.

I appreciated her honest consideration of the degree while keeping family and relationships

in perspective. I think she's ended up with the best of both worlds at NIH. She described to me the instant gratification associated with helping patients in medicine and the delayed, larger impact on human health she hopes her research will have in the future. For example, Dr. Citrin may successfully treat 20 patients over the course of several months whereas her research may uncover something that helps multitudes in the future. A very nice balance, I agree.

In my experience, research is shaped by the people around you; they will make or break your time in the lab. I've been fortunate with team-oriented lab experiences and have kept that at the top of my priority list when transitioning to my next step. Before coming to NIH, I asked two PIs about community and collaboration here. I was pleasantly surprised to hear that NIH was a bustling collective of ambitious researchers that worked extensively together. I was curious what attracted Dr. Citrin to NIH.

Like her choice of medical school, Dr. Citrin was drawn to NIH by location and people. She began by looking in the D.C. area because of her husband's job. Her search led her to Dr. Norm Coleman at NIH, a well-respected researcher within the field of radiation oncology. While most residency research opportunities

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***“Dr. Citrin also found a supportive community at NIH in which the people were invested in her training and not just the output of papers.”***

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last a mere few months, Dr. Coleman was willing and supportive to extend her work up to a year. The additional time allowed her to explore the research in greater detail and fully understand the data. Dr. Citrin also found a supportive community at NIH in which the people were invested in her training and not just the output of papers.

Formidable mentors imprint values that we carry forward in our careers. No matter the experience, good or bad, we can all learn from the leaders in the lab. We get to decide which lab practices to adopt as we move forward. Dr. Citrin and I have both experienced great mentors. Her new role as a Women Scientist Advisor (WSA) for clinical science, places mentorship on her shoulders. Dr. Citrin provides insight to success for women scientists. We spent some time discussing one of her main concerns that she observes in her role as a WSA member.

Dr. Citrin is trying to understand the gap in ratio between women-to-men postdocs to that of tenure-track positions. She wonders why there are fewer women in tenure-track positions despite their widespread presence in postdoc positions. Are women trying and failing to obtain tenure-track positions? Or are they exiting the academic route? And if so, why?

We discussed that women tend to be intentional and driven in their goals. What do we need to feel successful? Becoming a PI may or may not be fulfill that goal. I offered that I find it difficult to see myself in a tenure-track position because I can't picture leaving the bench. She agreed that this was a valid reason echoing that she did not see her future self in the role of PI early on either. Dr. Citrin said the drift from the bench happens gradually and allows for a new perspective on the research. The scope of the lab's research broadens and each of the member's project can be guided towards a large central goal. The puzzle pieces begin to fit together and the focus shifts to how your work fits into the larger scientific community. She continues to learn from her career choice and said that the process of stepping away from the bench was like peeling back an additional layer to higher-level education. Researchers never stop learning.

Dr. Citrin's worry about tenure-track was fear of failure and she hears the same from other young women scientists. She noted that there are plenty of landmarks in medicine (or with a PhD career) where we question our success: Will I match for residency? Will I get tenure? Women seem to take the questioning one step further: What happens if I don't achieve tenure, then what? Women project far into the future,

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*“...the process of stepping away from the bench was like peeling back an additional layer to higher-level education.”*

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consider all possible outcomes, and plan accordingly. This seems wise, but is there room for “plan B” in the extremely competitive world of tenure-track ambition?

We did not reach a conclusion about combatting tenure-track fears but Dr. Citrin’s success story is an example to follow. She prefaced some advice with a comforting reflection, “Everything seems much more doable in hindsight.” I got the

sense that she maintained focus and worked hard at each step of her career but didn’t get bogged down in the ‘what ifs’ of the future. Flexibility is a life skill to practice. Try not to plan every detail because life doesn’t always cooperate. Adjust and reassess as needed but keep moving forward with confidence. Career turns and bumps are part of life; so long as we adapt, there are successes to be had.

## Guide to Resources for NIH Fellows

By Amanda Decker

As summer tends to usher in a bountiful influx of new fellows, this issue of the CCR-FYI Newsletter is a perfect opportunity to compile a list of some of the resources available to NIH fellows of any level.

### Getting Connected

Unless you’re a DC or Maryland native, starting a new job here can be disorienting. It’s important to be able to find a network of peers and to know who to contact with any questions. Thankfully, the NIH has a few tools that can help you reach whoever you’re looking for and keep you informed about events around campus.

- **Listservs** - Upon starting at NIH, you are automatically

added to the most appropriate listserv for your position, be it postbac, grad student, or postdoc. The OITE uses these listservs to disseminate information that you might find very useful, including information regarding seminars and workshops. There are other topic-specific listservs, including ones that can be used by postbacs/grad students/postdocs to contact their peers, find notices on building-wide matters, and receive announcements on core facility updates and seminar series. To search for and request access to other listservs that may be relevant to you, visit <https://list.nih.gov/>.

- **NIH Personnel** - One of the greatest advantages of

working at the NIH is the opportunity to network with researchers from nearly any area of science, even after they've moved on from the NIH. OITE's [Alumni Database](#) provides a wonderful tool to search for past fellows by name, IC, PI, or current institute. This may be a great resource for postbacs who are applying to graduate/professional schools so that they may reach out to current students and ask about their experiences. For those that might want to get in touch with current PIs or fellows, the [NIH Intramural Annual Reports](#) and [NIH Intramural Research Program](#) are great starting points to look up sections, labs, and PIs who are working in your area of interest.

- **Fellow Committees** - At the NIH, there exist committees run by the fellows to serve two purposes; 1) plan and provide events as well as foster a community, and 2) represent the interests of the fellows to the greater NIH community. Each level of fellowship has its own committee, the [Postbac Committee](#), the [Graduate Student Council](#), and the [Fellows Committee](#) (or FelCom).

### Professional Development

In addition to learning all about your field in your lab, as a fellow at the NIH, you have the opportunity to take advantage of a number of training programs. Many of these programs are focused on teaching the “soft

skills,” such as mentorship, networking, and presentation skills, that are often difficult to learn while at the bench, but are vital for your career progression.

- **Diversity Career Development Program** - The [Grants & Training](#) section of the NCI main web page is an excellent resource for current fellows. (*Editor's note: this page is maintained by the Center for Cancer Training, headed by Dr. Jonathan Wiest. Check out their other resources, including the NCI FYI Mobile App.*) The main page contains a list of all of the training opportunities available through the NCI. One such training program is designed with the goal of recruiting and building a diverse community within the institute. The [Diversity Career Development Program](#) provides seminars, focused small workshops, and career coaching (similar to the SRK fellowship discussed in another article in this edition) designed to improve leadership skills of postdoctoral trainees from underrepresented groups over the course of 10 months. Those interested should speak to their mentor about this program, since acceptance is based on mentor nomination.

- **NIH Academy** - One underutilized opportunity is the [NIH Academy](#), where current postbac fellows can engage in additional training sessions that helps to inform the future researchers and physicians of



tomorrow about disparities in healthcare. These two programs, the NIH Academy Certificate Program and NIH Academy Fellows Program give postbacs the opportunity to attend training courses and outreach activities in the community.

### **A Helping Hand**

In an ideal world, your time here at the NIH is picture perfect with nary an issue. However, a more realistic picture is that there will be a time or two when you need some assistance, be it dealing with a difficult work-life situation or stressing out over graduate school applications. Because a happy scientist produces better results, the NIH has several groups and programs that work to make your life easier and ultimately more successful.

- **The OITE Office** - The Office of Intramural Training and Education is the best place for resources for NIH fellows, particularly OITE's [Career Services Center](#). Here, fellows can receive counseling on their career goals, review application materials (resumes, CVs, personal statements, etc.), and participate in mock interviews. The OITE also offers a number of online [resources](#) for women,

visiting fellows, and individuals with disabilities. These online resources also include videotaped seminars that cover topics ranging from, choosing a mentor to resume and grant writing.

- **Keep the Thread** - [The Intramural Keep the Thread Program](#) is an effort by the NIH to facilitate temporary flexibility and assistance to postdocs in the event of intense family needs. The program is designed to help keep non-visiting postdocs in their program, rather than see them leave the lab as a result of personal hardship. This program helps to create a framework where fellows and PIs can reach a mutually agreeable compromise, which might include part-time work, telework, fee-for-service, special volunteer status, and/or re-entry facilitation.

Outlined above are only a handful for the resources available at the NIH. If you can think of some service that you want or need, the NIH is likely to offer it. For more information about these resources, contact your OITE directors Yewon Cheon (postbac), Phil Ryan (graduate student), or Lori Conlan (postdoc).

## My Experience as a Sallie Rosen Kaplan (SRK) Fellow

By Pamela Gallagher

I applied for the SRK Fellowship at the beginning of the second year of my postdoctoral training. I thought it sounded like an excellent opportunity to receive leadership training, expand my network, and pinpoint the most suitable career path for me. While the program provided the aforementioned, what I found to be the most powerful aspect of the fellowship was that it invited us to visualize our ideal careers within the context of our ideal lives.

A major component of the program was a 30-week “Career Building for Women in Science” course with Dr. Samantha Sutton, a Ph.D. scientist who has built a career as a life coach. Having been in science herself, Samantha deeply understood the common traits and beliefs that hold women back from pursuing top positions in academia and alternative scientific careers. Samantha’s coaching involved writing assignments and bi-weekly discussions that challenged each of us to thoroughly examine our strengths, weaknesses, and passions. We committed to developing healthy habits and relationships both in and out of the workplace. We also did an

evaluation of our top career choices and were assigned informational interviews to home in on the ideal career trajectories for each of us. Not only did Samantha encourage us to create a vision for our future careers, she also underscored the importance in striving for success and happiness in many facets of life.

In the first session we had with Samantha, she asked each of us to write a paragraph or two on what our ‘dream career’ looked like. Although I think about my future constantly and always aim to position myself for success, this particular exercise gave me anxiety. I worried that I didn’t have an earth-shattering vision, or that my ‘dream’ wouldn’t sound as impressive as those of the other highly accomplished women in the room. However, once I started writing, I discovered that my skills and experience fit perfectly into my vision of the future, and dreaming about my ideal career was actually quite fun. I had not written about my ‘dream career’ since grade school and found this exercise to be extremely valuable as an adult.

The work that we accomplished with Samantha was

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*“I worried that I didn’t have an earth-shattering vision, or that my ‘dream’ wouldn’t sound as impressive...”*

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*“I now have a much clearer vision of what I want my future to look like, and I have outstanding support.”*

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complemented by training sessions with NCI’s Office of Workforce Planning and Development. We completed behavioral and emotional intelligence assessments in order to heighten our self-awareness and improve our interpersonal skills. We also learned tools for becoming more effective managers and leaders.

Equally important as the individual growth I achieved through the fellowship were the relationships I built. We were each paired with a secondary mentor with whom we met on a monthly basis to discuss our career goals. I quickly formed a close bond with my secondary mentor. We continue to meet regularly, even after the fellowship graduation ceremony, and she has been amazingly supportive over the past couple of years. In Samantha’s course, we were also assigned a ‘buddy group’ to discuss our bi-weekly assignments and hold ourselves accountable for our personal commitments. I have profound

respect for the women in my buddy group, and I have loved getting to know each of them and sharing in their accomplishments. I am confident that we will offer advice and support to one another throughout our careers, and I’m looking forward to celebrating each of our many future successes.

The SRK Fellowship was an incredible opportunity for career development, leadership training, relationship building, and personal growth. I now have a much clearer vision of what I want my future to look like, and I have outstanding support. I will continue to apply what I learned to build the career and life of my dreams. I wholeheartedly recommend the SRK Fellowship to female NCI postdocs who are searching for additional training and mentorship to set and achieve powerful goals. *(Editor’s note: Special thanks to Erika Ginsburg, Center for Cancer Training, for her efforts to sustain and grow this program.)*

## Pharm.D. to Ph.D.

By Keith Schmidt

“So you mean to tell me you are turning down a 6-figure salary to go back to school? Are you out of your mind?” The words my father uttered that have been ingrained in my memory, serving as a mantra for much of the past

two years. On the verge of completing a Doctor of Pharmacy (PharmD) degree in a few months, I found myself turning down a full-time pharmacist position close to the shore of North Carolina to instead commit

myself to another 4-year program. This time, a PhD program in Clinical Pharmacology.

“Don’t you want to pay back your student loans and start settling down?” He raised some perfectly reasonable and logical questions about the direction my life was about to take. This isn’t a decision you take lightheartedly. It’s a commitment. It’s heading back into the trenches and being willing to exert yourself mentally to the maximal extent. It’s making the sacrifices, financially or socially (or both), to devote yourself to research and to, one day, make a living from the betterment of science. At the time, I was single and still eager to learn more about the methods of pharmacology. I had an idea of what I was signing up for, but nobody really understands until actually having been there. Even then, I felt I was ready for the full commitment going forward. I wanted it. I suddenly found myself in the position to pursue it. At that point, you take a leap of faith to swing for the fences, or risk facing the rest of your life thinking *what if...*

To be perfectly honest, this wasn’t just a snap decision. It was carefully cultivated over the years of my collegiate education. I would say the spark first came from a summer internship at Cold Spring Harbor in between my freshman and sophomore years. I started out learning the essentials

of benchtop laboratory techniques. I had a basic understanding of the underlying science behind the work I was doing, but felt compelled to learn more. I sought out a laboratory during my sophomore year at the University of North Carolina (UNC) Chapel Hill, eventually joining a group specialized in electron microscopy during the spring semester. I soon began to see lecture material come to life, applying many of the lessons I was learning in biochemistry and biology to real laboratory experiments. Hands-on learning proved to be far more interesting than anything I’d read in a textbook.

I spent another summer at Cold Spring Harbor, where I attended a lecture that would keep me thinking for years. The concept was simple: develop a chip array that could detect specific genetic variations among patients and determine the most appropriate therapy based on patient-specific characteristics. As an oversimplified example, the presenter used over-the-counter cough medicine. Patients would be classified based on their genetic information and would receive a specific medication most suited for their profile. While my later pharmacy education would inform me of the flaws with this approach in this instance, the idea of using genetics aid in important clinical decisions was just fascinating to me (and still is). This idea coupled with an

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***“It’s a commitment. It’s heading back into the trenches and being willing to exert yourself mentally to the maximal extent.”***

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interest to better understand the pharmacological manipulation of biochemistry were the driving factors that influenced me to apply to pharmacy school for a PharmD degree.

One of the first things I noticed when starting the PharmD program was the lack of a strong focus in molecular pharmacology. I was entirely new to the clinical aspect of pharmacy and I did not know the names of many drugs commonly dispensed in the United States. I spent much of my first year working in a retail pharmacy setting, acclimating myself to my future career field. It wasn't until the spring semester that I realized I wanted more out of my pharmacy school education. I found that much of the coursework emphasized memorization as opposed to a complete understanding of all the aspects of clinical conditions and associated pharmacotherapeutic interventions. Many of the students around me found it humorous that I would try to go beyond the required knowledge for the exam, trying to provide explanations for my answers rather than just display the ability to utter them rapidly on command. This approach, however, not only helped me learn the topics better, but also allowed me to think more in depth about how treatment could be enhanced. While I was learning about currently established methodologies in

pharmacotherapy, I also had this strong desire to be ahead of the curve and learn what was new on the horizon.

During my first year of the PharmD program, I had taken a break from laboratory work. After this hiatus, I ultimately decided to become involved in research again and I joined a laboratory focused in cancer pharmacogenomics. There, I began to delve into the primary literature, searching for germline genetic variations that could potentially be used to predict prognosis in patients with non-small cell lung cancer. I began working with patient tumor samples, analyzing the association between single nucleotide polymorphisms and clinical outcomes. The experience introduced me to translational research, and I wanted to continue attaining knowledge in this field. Unfortunately, this opportunity only lasted for 8 months; the post-doctoral fellow mentoring me switched laboratories, and the principal investigator no longer had a project for me to work on. This was a really tough blow, and I felt as if I had not satisfied the needs of my mentors. Looking back on it now, I now realize it was not personal, but rather a result of a laboratory in transition. Nonetheless, I spent much of my winter break in the middle of my second year in the PharmD program searching for another

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*“Many of the students around me found it humorous that I would try to go beyond the required knowledge for the exam.”*

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laboratory to continue part-time research.

Eventually, I found a laboratory, but with a focus I never thought I would enjoy: medicinal chemistry. While medicinal chemistry courses were among my favorite classes in pharmacy school, my role in the laboratory involved synthesizing novel chemical compounds. In the past, I had loathed the organic chemistry and synthetic chemistry laboratory coursework I was required to take for my undergraduate degree, so, at first, I was apprehensive. I soon, however, found myself catching on quickly to new laboratory techniques, devising synthetic schemes to generate desired compounds that could specifically bind to a protein involved in epigenetic regulation. During the notoriously difficult spring semester of the PharmD second year, I found myself enthralled with my research project, pushing the limits of my time management skills by spending 20-30 hours a week in the laboratory. I was not only invigorated by the laboratory work, but was also captivated by the literature in the field. Being involved in the very early phases of drug development provided me with a perspective different from the clinically focused PharmD program; in a way, it also helped enhance my understanding of pharmacotherapy. I also received excellent mentorship from the Principal Investigator, who met

with me once a week to discuss experiments and learning objectives. These experiences made this year and a half that I spent in this laboratory the most cherished time of my pharmacy school education.

While I enjoyed the laboratory a great deal, a PhD program was not on the list of potential career decisions I was contemplating during my 4<sup>th</sup> year of pharmacy school. In fact, I was avoiding the PhD option entirely, as I was not interested in spending another 4 to 5 years working towards a degree. I much rather preferred a 2-year industry fellowship or a clinical residency. I sought out several faculty members to discuss potential training routes and each one would come to the same conclusion: a PhD program is your best option. I was reluctant to take the advice, thinking there had to be another more reasonable route. I filled out applications for many fellowship and residency programs, many of which were wide ranging in scope and learning objectives. None of them completely interested me, but I thought I could work around this major issue and still make the programs work for me. In retrospect, it was like trying to fit a square peg into a round hole. Thinking that I would not find the perfect fit, I tentatively agreed to work for Rite Aid Pharmacy in Wilmington, NC. It seemed crazy that a job with a 6-figure salary would be the last resort, but I

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***“Being involved in the very early phases of drug development provided me with a perspective different from the clinically focused PharmD program.”***

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knew I wanted to continue my education. It was just a matter of satisfying my demands in a post-graduate program, which was beginning to seem impossible.

The January of 2015 was probably the biggest emotional roller coaster of my life. I filed many applications but saw a good number of them unanswered or come back rejected. It was becoming evident that my resume was not the best fit for many of the programs I applied for. I had spent so much of my time on research that the transition into a clinical residency program or industry fellowship, programs with different objectives not solely focused in clinical research methodology or design, seemed illogical. At the time, I was rotating with Dr. William D. Figg in the Clinical Pharmacology Program at the National Cancer Institute. Although I was ecstatic about starting this rotation, I found myself spending a great deal of my time dwelling on my future. To cope with the prospect of failure, I did what was familiar to me and became absorbed in the laboratory work associated with the rotation. I began learning the instrumentation and analytic methodologies used in pharmacokinetic assessment of drugs being investigated in clinical trials. I was also given the opportunity to shadow in the clinic and observe how laboratory hypotheses were integrated into proposed patient therapies under investigation. All the aspects of

translational research I observed during this rotation absolutely fascinated me. Suddenly, I saw all of my interests, including pharmacogenomics, oncology, preclinical drug assessment and clinical research, collide in one place. I then began to think, *who cares about these applications, imagine if I could start working here...*

“Are you 100% sure that you want to do this?” my father proclaimed over the phone on a day I recall with impeccable detail. It was the last week of my rotation, and I was to have a discussion with Dr. Figg to talk about my future. Dr. Figg, like my faculty mentors at pharmacy school, had questioned my reluctance to pursue a PhD from day one. Going into the rotation, I anticipated a conversation about applying graduate school would arise, so I was almost prepared to combat the issue when communicating with him. The conversation started with a discussion about how well the rotation catered to my interests and, almost like *deja vu*, shifted to a discussion about how a tailored PhD program could suit my needs perfectly. A familiar discussion continued to progress, as I pushed back with my idea for a shorter fellowship program, until something unexpected happened. I was stunned when he offered me a position in his laboratory on the spot, giving me the option of a two-year fellowship or a 4-year PhD

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***“Suddenly, I saw all of my interests, including pharmacogenomics, oncology, preclinical drug assessment and clinical research, collide in one place.”***

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program. I thought about it for about 5 seconds before the word “yes” just came out of my mouth. I just asked for time to decide between the 2 options. It was not soon after leaving his office that I knew I had to choose the PhD option.

My father did his best to shed logic on the whole situation, but our senses of rationality were completely opposed. All I could think about was the advice of a faculty member at pharmacy school who strongly emphasized the importance of a 5-year plan. *Where do you see yourself in 5 years? Will you be happy in this role and be satisfied?* I imagined myself working at Rite Aid 5 years down the road. While I loved interacting with patients in a retail pharmacy setting, I couldn't avoid thinking I would sacrifice the educational opportunity of a life time simply for more financial stability. I then imagined myself doing a residency or a fellowship, but the programs I could interview for wouldn't provide me with the skills that suited the career path I envisioned.

The offer to work for the Clinical Pharmacology Program at the NCI? It was almost a no-brainer. Sure, this was another 4 years of training, I would have to put off paying back my loans to a later day, and my social life would likely take a hit. But as far as the 5-year plan? I envisioned a career in drug development,

being a versatile researcher with the ability to go between the laboratory and clinic. The perfect training opportunity to get me there was staring me directly in the face. Despite all the resistance to joining a PhD program, I came to the realization it was the only option that made sense. Essentially, such a program was the only vehicle to get me on the path to fulfill the career path I envisioned, a fact I spent months denying yet I was now willing to accept.

“Dad, I know where you are coming from, but you need to understand this is something I need to do. I am willing to make everything else work around it. This is exactly what I've been looking for, I cannot turn this down!” It took me more than those sentences to explain the significance this program had on my future. While I first wondered why I instantly decided on this program, I know now that the decision, in a way, was years in the making. It was something I thought about every day for years while working in multiple laboratories. I would think about the projects I could work on as a graduate student. Even during classes, I would be wondering what I could be doing in the laboratory with my time if I could only skip classes for a week. Had I decided to work for Rite Aid and not chosen the PhD route, I would probably have had similar thoughts 5 years down the road. When there is true passion and

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***“I think knowing what you want to get out of a PhD program... is more than half of the battle.”***

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*“I envisioned a career in drug development, being a versatile researcher with the ability to go between the laboratory and clinic.”*

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determination, acting on it becomes a simple decision, regardless of what consequences lie ahead. It should almost not require thinking.

I’m currently in the second year of my program, a joint graduate partnership with Utrecht University and the NCI. To say the road has been easy thus far would be inaccurate. I’ve seen myself fail more times than I can count, but every day I wake up willing to jump back in with no hesitation. It is a lot of effort, but I think the avenues it will open will be invaluable to the pursuit of my perfect career. I’ll say the PhD route is not for everyone, and requires critical decision making to ensure this route is appropriate, especially following a rigorous PharmD program. For those considering a similar route to mine, I think knowing what you want to get out of a PhD program and the specific research you would like to conduct is more than half of the battle. It took me years to figure out the research field that was right for me. I’ll easily say that my current research objectives and interests are VASTLY different from those as an undergrad. Despite the occasional frustrations, I’m very thankful I received a PharmD; it has not only laid the groundwork

for what I’m doing currently, but also sculpted how I think on a daily basis. I think a PhD is appropriate for those who are interested in expanding their role as a healthcare provider and venturing into clinical and translational research.

As far as my father goes, he still thinks I’m insane. At least he respects my conviction and supports my decision (only after I convinced him further...). Some decisions in life are not meant to be easy, often requiring a great deal of foresight and rigorous analysis. Other critical decisions can just develop on their own over longer periods, so when the time arrives, the answer is just blatantly obvious, even if a level of denial is in play. Being stubborn to detail yet open to new ideas, an aspect of my personality I take great pride in, was likely a crucial factor that made this major career decision even a possibility. I still have a long way to go, but I have already learned so much about myself and about life during my journey over the past 10 years. I live in anticipation of the opportunities that lie ahead of me, so long as I persist with due diligence. I also look forward to seeing where my current 5-year plan will take me.

# Five Reasons Why Frederick, Maryland Is an Awesome Place to Live

By Justin Kaplan

While most incoming NIH researchers have undoubtedly heard of Bethesda, Maryland, many are not familiar with Frederick, Maryland—a city that hosts many of the National Cancer Institute’s departments and labs. If you are a scientist unsure about living or working in Frederick, here are 5 reasons to get excited for your move to this hidden gem!

## Safe, Community Feel

Whether living downtown, next to Fort Detrick, or in a rural neighborhood 20 minutes away, Frederick exudes a safe, family-friendly vibe that makes you feel welcome. You will be pleasantly surprised by the cultural heterogeneity of each unique neighborhood in Frederick, which was ranked in 2016 as the 8<sup>th</sup> Most Diverse City in America. You’ll also realize how great having friendly neighbors can be when it’s time to shovel snow.

## Cost of Living

As Frederick is not on the D.C. Metro line, the cost of living is dramatically lower when compared to nearby cities like Rockville, Gaithersburg, or Bethesda. Try comparing the

rent per month of your ideal D.C. suburb apartment to a similar one in Frederick. You may be surprised at how much money you could be saving! Furthermore, finding parking is *never* an issue.

## Proximity to D.C. and Baltimore

Nearly equidistant (<1 hour) from two very exciting metropolitan areas, Frederick is the perfect location for those interested in the perks living near urban hubs offers. From exploring museums on the National Mall in D.C., to seeing your favorite band play at Pier 6 Pavilion in Baltimore’s beautiful Inner Harbor, you will never find yourself bored.

## Thriving Restaurant Scene

If you ask any longtime resident of Frederick what has changed the most in the past decades, they will likely tell you the now-flourishing restaurant scene. Frederick is quickly becoming a haven for foodies! From authentic ethnic food staples like Lucky Corner Vietnamese Cuisine or Modern Asia to gourmet (and expensive) options like Volt, this small city is booming with great food.

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*“Frederick... was ranked in 2016 as the 8<sup>th</sup> Most Diverse City in America.”*

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## Shopping

Downtown Frederick is bursting with vibrant shops selling everything from fancy teas and handmade soaps to vintage records and comic books. I have spent many weekends exploring downtown, and still have not

made it to all the stores! If small kitschy businesses are not your thing, fear not: there are 3 nearby outlet malls to satisfy your retail needs. The city also sponsors events like First Saturday, where shops stay open late and bands play live music on Market Street or at nearby Baker Park.

# The Expat's Experience

## Part One: Arrival

### By Christopher Rice

I still remember my own experiences of arriving in the USA very clearly. Despite many drawn-out months of paperwork and red tape, I recollect the precise moment that the whole experience hit me. I remember the violent jolts as the plane bounced on the turbulent humid air which DC seems notorious for in the summer. I looked out the window and saw rivers of traffic glinting in the June sunlight. I was suddenly and keenly aware of the unfamiliar shapes of the buildings and cars, the strange road signs, the large trucks. It hit me then with certainty for the first time: I am moving to a new country. Stepping out of the air-conditioned terminal, a relentless sun burned down and rippling mirages crested every car in the parking lot. The climate was instantly unbearable; DC was experiencing 90% humidity and temperatures around 90°F (32°C). I was shocked by how

alien the world I had stepped into was and already started to question whether this had been the correct move.

In my first months here, the people I met socially were nearly exclusively European expats and our conversations often gravitated towards things we found strange or difficult about our new surroundings. I became fascinated by the predicament faced by early career scientists, particularly foreign nationals, who must deal with establishing a new life and fledgling career all whilst facing an extremely uncertain future. To construct this three-part series of articles, I asked several expats for their experiences of moving and living in the DC metro area. The results were, of course, greatly varied; however, these articles will discuss some of the topics that were commonly raised by the small pool of fellows

questioned. This article discusses some of the challenges that your foreign co-workers may experience during the transition to their new lives.

***“Three parts career advancement, one part the NIH prestige, with a dash of explorer’s curiosity.” –JB, UK***

I moved to the United States because I was looking for an adventure. At first, I was unsure about making the move, but then an old friend posed this question: ***‘In ten years-time which will you look back on and regret not doing?’*** After that the decision was obvious, and here I am. We all arrive at the decision to relocate for our own reasons. When questioned, overwhelmingly, fellows said that moving to work in the NIH was a fantastic opportunity to further their careers and experience a new culture. However, many also raised the necessity to move due to poor job prospects back home and the advantage that completing a position abroad adds to your résumé.

***“To have access to permanent positions in academia, the French government strongly ask (scientists) to have a work experience abroad. The economic situation in Europe also made the USA super attractive!”- LS, France.***

Despite the prior knowledge that you will be moving within a few months, it

always seems to come down to a panic-packing session the night before. Something that is perhaps taken for granted, is that many of us had to end our one. Everything you own is either stored, sold, or thrown away.

***“When you come to a new country with 2 pieces of luggage, everything is a challenge.” –M, Puerto Rico***

For many, not only do they give up their possessions but also their own language. Although many foreign nationals have a great understanding of English before moving, having to speak it full-time can be extremely challenging.

***“English is not my mother tongue and I was far from fluent... Social relations are affected by that: You can’t say what you want to say because you don’t have the vocabulary and so end up saying approximate words that do not really reflect what you think... people don’t get to know your real personality.” LS, France.***

However, effective communication is not always as simple as a good knowledge of English, but also understanding how the language is used to communicate in the United States.

***“Communicating correctly (besides language barrier) was very challenging. Here, people talk in a more***

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***“...effective communication is not always as simple as a good knowledge of English...”***

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***polite, shallow and less honest way compared to Spain. It took me a good amount of time to correctly interpret what exactly people mean.... It is not my lack of proper English, it is the way people handle language to deal with other people every day.” –A, Spain.***

Almost universally, fellows found some of the initial hurdles of paperwork the most stressful. It is very hard to get established in the USA without a social security number, phone number, a permanent address, or bank account --things taken for granted by most service representatives that you might have to contact.

***“You need a social security number, that takes weeks to get, to be allowed to rent an apartment. Take a phone plan, open a bank account.... You are asked for your credit history to rent an***

***apartment, to buy a new phone... but obviously, we don’t have any of it.” - LS, France.***

The pressures discussed here can take quite a toll on visiting scientists and, although most eventually learn to adjust, this transition can be very stressful. Support networks for visiting fellows, both inside and outside the laboratory, are very important for a smooth transition and an enjoyable time spent living and working by the capital. In the following two installments of this series, we will discuss the positive and negative aspects of everyday life in a new country, the future plans of our interviewees and suggestions for improvements that could be made to the visiting fellows’ experience.

(Capitol Building photo by Helen Brooks, FDA Fellow)





## SALLIE ROSEN KAPLAN POSTDOCTORAL FELLOWSHIP FOR WOMEN

*Enhancing personal and professional development*

**APPLICATIONS OPEN  
EARLY SEPTEMBER!!!**

### About:

The SRK postdoctoral fellowship for women scientists is a highly competitive, unpaid, one-year long program aimed to help prepare NCI's female postdoctoral fellows for the competitive nature of the job market and transition to an independent research career.

### Highlights:

This selective program includes a 30-week workshop with a life coach; mentoring opportunities with successful women scientists from government, academia, and industry; networking with a community of peers; seminars on communication and presentation skills leadership, managing people, grantsmanship, etc.

### Qualifications:

This program is for current female NCI postdoctoral fellows training at NCI's intramural research settings located in Bethesda, Rockville, Gaithersburg, and Frederick (Maryland), with at least 12 months remaining on your fellowship appointment at the time of acceptance in mid-November.

"THE COURSE IS AMAZING AND HAS DONE AMAZING THINGS FOR MY LIFE IN AND OUTSIDE OF THE WORKPLACE. I HAVE A NEWFOUND CONFIDENCE AND IT FEELS GREAT!"

-CURRENT SRK FELLOW

"THE WORKSHOP IS ACTUALLY EXCEEDING MY EXPECTATIONS, AND I AM ALREADY APPLYING THE SKILLS WE ARE LEARNING INTO MY EVERYDAY LIFE."

-FORMER SRK FELLOW

### CAMPUSES

Bethesda  
Frederick  
Rockville  
Gaithersburg

### HIGHLIGHTS

Life coaching  
Personal mentoring  
Career networking  
Communication training  
Presentation skill building  
Leadership training  
Management training  
Grantsmanship

Please check the website for updates and additional information:

[HTTP://WWW.CANCER.GOV/GRANTS-TRAINING/TRAINING/AT-NCI/SRK](http://www.cancer.gov/grants-training/training/at-nci/srk)

## The Impact of CCR-FYI

By Melissa Victoria Fernandez

Science research can, and often is, a lonely field. While in the later years of graduate school, it was not uncommon to go for days without uttering a word to a single person. Consequently, I had no sense of community or belonging to the field of science even though

every moment of my life and decision I made pertained to accelerating my research and contributing to the field of virology. I recently pondered if this could possibly be holding back my career... upon speaking to many of you this past year, I



learned this is not a unique situation.

Upon joining the NCI, I learned of this group called the CCR-FYI. Orientation was a barrage of information but the CCR-FYI stood out. This group seemed to be a source of ample opportunity to build leadership skills and to social network – two important pieces of the training experience that did not translate during my education. I fought my instinct to hide in the lab and joined the steering committee only to quickly realize that the CCR-FYI truly works hard to advocate for fellows of all levels and translate their needs into action. For example, our fellows need work-life balance so we work hard to plan periodic social experiences and social networking meet-ups to give our fellows opportunities to blow off steam and get clarity on the difficult aspects of their work. Our fellows need to network with recruiters and learn about career opportunities, so every year we commit ourselves to recruiting companies to participate in the annual CCR-FYI Colloquium and meet face-to-face with postdocs who are on the job market. Our fellows need travel awards and platforms to practice their presentation skills, so we organize a two-day science colloquium to give postdocs, graduate students, and postdocs a platform to give oral and poster

presentations. Furthermore, we organize the periodic Frederick Seminar Series and Bethesda PASS (Presentation and Seminar Skills) where fellows can practice their talk on an audience and obtain feedback. And lastly our fellows need liaisons that advocate for them to the National Postdoc Association (NPA), the director of NCI (Dr. Lowy) and the CCR (Dr. Misteli), and finally the CCR Office of Training & Education (OTE) and the NIH Office of Intramural Training & Education (OITE) - which are NOT the same thing!

By joining the CCR-FYI I have gained on-the-job training and experience with leading a group of diverse people while also making new friends in a new town. I am passionately advertising to new and senior fellows about the work we do and how getting involved can change their lives. I have become a cheerleader for science and the hard work we all do to better our world while tackling the most difficult and important questions in public health. And finally, I belong to – and engage with daily - a diverse and passionate community of scientists. Volunteering with the CCR-FYI has changed my life and I am certain if you volunteer as well, it can improve yours.

On behalf of the CCR-FYI, we look forward to working with you and for you.

MARK YOUR CALENDARS



# 2018 COLLOQUIUM

Thursday and Friday, March 1<sup>st</sup>-2<sup>nd</sup>  
NCI Shady Grove Campus, Rockville MD

Oral and Poster Presentations • Career Networking and  
Development Workshops • Keynote Speakers • Outstanding  
Post Doc. Presentation • Survivor Speaker •

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