The CCR-FYI Association is supported by the Center for Cancer Training (CCT) and CCR Office of the Director, National Cancer Institute.

CCR Fellows & Young Investigators Newsletter

Center for Cancer Research
Volume 22, Issue 1

Happy new year, CCR-FYI! As we welcome the new year, let's reflect on the previous year's achievements. CCR fellows and staff have by all measures exceeded expectations, with research, professional, and social activity roaring back after the worst of the pandemic has subsided. As some of us meet again with friends, loved ones, and other people over the break, it remains important to stay vigilant about our health and safety. In the meantime, we've compiled an edition full of exciting and important information for our trainees seeking to advance themselves professionally. This season, we present articles on a diverse array of topics relevant to biomedical research trainees, from developing resilience to health equity to academia-industry transitions. We hope you enjoy reading our latest edition of the newsletter.
– Shivalee Duduskar and Suraj Joshi, Co-Editors-in-Chief

Table of Contents

Lessons learned from the "Becoming a Resilient Scientist" series

by: Rebekah Mikeasky

Responsibility management is a reoccurring challenge in the workplace, and challenges associated with peer interactions and expectations are a common source of stress. Increasingly in academia, it has been acknowledged that scientists are especially prone to the ill-effects of chronic stress, as a result of training that focuses primarily on academic skill development. To address a lack of resilience skills in trainees, the NIH created their "Becoming a Resilient Scientist Series (BRS)."

Led by Office of Intramural Training and Education (OITE) Director Dr. Sharon Milgram, the "Becoming a Resilient Scientist Series" is a five-webinar series with group discussions designed to cultivate skills necessary for adversity adaptation and individual growth within science. Each webinar is 1.5-2 hours long and covers under-discussed topics ranging from imposter fears to self-advocacy. The webinar recordings from the 2021 series are available on the NIH OITE YouTube Channel at https://www.youtube.com/playlist?list=PLxnpU66KqCcj7jaeO7nzPNeZUJ0obXK-j. I was excited to work towards resiliency as a part of this series. Here are my thoughts on what I experienced and learned:

The first webinar, titled, "An Introduction to Resilience and Wellness," was introspective. As an attendee, I was required to examine my thoughts, behaviors, emotions, and consider my response to conflict. Though the webinar emphasized understanding one's strengths and weaknesses, I appreciated the candid discussion about the often-negative impacts of workplace culture, society, and family on the self. Coming out of the lecture, I was more mindful of how I respond under duress and the steps I could take to engage constructively with destructive habits.

The second webinar titled, "Exploring our Self-Talk: Cognitive Distortions and Imposter Fears," required attendees to think and reflect on the narratives we and others construct, referred to as cognitive distortions. I was astonished at the existence of negative and positive cognitive distortions since I had assumed only negative thoughts were worth addressing as they caused significant stress to individuals. However, I realized positive distortions, including approaching conflicts with an overly positive mindset, could be just as harmful since such mindsets prevented individuals from engaging with an eminent obstacle while offering short-term comfort. Self-awareness, emotional regulation, and narrative reframing were all introduced during the series as means of addressing cognitive distortions.

The third webinar titled, "Self-Advocacy and Assertiveness for Scientists," discussed the skills and tools necessary to be assertive. Building assertiveness was described as process involving extensive reflection on our perception of self, our view of conflict, and our communication style. It is dependent on our ability to self-regulate and comprehend the situation without being overwhelmed. One tool recommended was journaling, which I have used to ground my thoughts regarding interactions at work. To me, the most profound

portion of this seminar was the discussion on anger, frustration, and irritation. In the past, I have typically dismissed such feelings, but I realized I can use them to recognize areas where I am dissatisfied and comprehend why I feel that way.

The fourth webinar titled, "Developing Feedback Resilience," continued to build upon the skills and strategies introduced in the first three seminars. We were asked to determine our default communication style and how it influenced the type of feedback being given/received. I found it useful since it helped me understand how I, a person with an analytical/reflective communication style, could be perceived by others. We were also asked to think about our feedback responses and how to manage emotions when receiving advice. I appreciated the emphasis on reflecting on the past, present, and future to facilitate learning after hearing critical feedback.

The final webinar titled, "Managing Up to Maximize Mentoring Relationships," discussed mentorship, mentorship needs, and work styles. The primary focus of this seminar was selecting mentors outside of one's PI to ensure one's mentorship needs are being met. While I am not in academia anymore, I found the discussion on mentor networking applicable to my current experience at the NCI. Often, mentoring needs cannot be fulfilled by a single person. As such, it makes sense to reach out to and evaluate multiple individuals to ensure you are being supported in the ways you need to thrive best. Overall, attending the "Becoming a Resilient Scientist" Series was a fruitful experience. As a result of my attendance, I have a greater understanding of my communication and workplace styles, my needs in the workplace, and ways I can approach having my needs met. I believe these tools can improve our stress management skills in the workplace and beyond.

Starting in the new lab

by: Shivalee Duduskar

New lab, New rules, New People!!!

As I write up this article, it has been a month since I started working in National Cancer Institute, Frederick, Maryland. In the past few years, I have changed two labs on two different continents. Starting and settling in any lab can be exciting and scary at the same time as each has its own way of working. Following are the points you need to consider while starting in a new lab.

1. **Introduce yourself and get to know the people around:**
   This is the best time to get to know people, especially your lab members. Even though you may have spoken to them in the interview session there is no harm in introducing yourself again. It's important to continue making new connections and letting others get to know you as well Open a conversation stating that you are a new

fellow in a lab and give them your background.

2. **Navigate your new lab and workplace:**
   Generally, on your first day, the lab manager gives you a tour of the lab locating the work areas (for example tissue culture rooms, sterile areas, and the freezers) and even the campus. This will help you to move forward independently.

3. **Seek training with your administration:**
   Contact the administration and notify them that you have joined. Then, ask them for the onboarding training if they have one. Compared to the previous labs I have worked, NIH has about 60 hours of training and orientation. Try to find out the mandatory training and safety instructions.

4. **Ask every possible question:**
   No question is a stupid question. As a new fellow, you are likely to do your job better if you know what to do. By asking your leaders and peers for new information, you'll get up to speed quickly. But in your first weeks, you want to find the right time to ask questions.

5. **Find Potential Mentors:**
   Identify potential mentors within your lab and get to know them. Consider senior staff as well as strong performers in positions at your level and/or one level above you. While you should recognize that these people are likely quite busy, asking to grab a coffee or simply taking a walk together can be a great start.

6. **Define initial expectations with your supervisor:**
   During the first few weeks, you and your supervisor should take the time to clarify your mutual expectations. This includes understanding how you will work together, how you will get the resources you need to do your job well and how your job performance will be assessed.

7. **Read! Read! Read!**
   This is the incubation time you will have to get to know the subject and the research area. Read all the previous papers from the lab especially the one which you are going to take over. Trust me you won't get this time again.

8. **Be proactive:**
   Ask questions in the lab meeting, give suggestions to your fellow members, and show that you are the right fit for the position. Also, be involved in the scientific discussions and build a connection.

9. **Take it slow:**
   Slow starts are always better than rushing to the bench. Understand and know your field, know your project, and then start working. Know the system in the lab before you plan your first experiment.

10. **Take care of yourself:**
    Believing in yourself is key to succeeding in a new job. You will undoubtedly face frustrations and make mistakes as you're adjusting. Don't fixate on what you have yet to accomplish. Focus instead on how far you've already come and where your hard work will take you next.
    After all, from a pool of candidates, your new employer chose you for this job—you've got this.

Frederick Diversity Committee: Steps to Success from PIs, Fireside Chat with Dr. Francis O'Reilly

by: Mukta Nag

The Frederick Diversity Committee (FDC) is a fellow-led and run group that aims to build a diverse scientific community of fellows in National Cancer Institute (NCI) Frederick to celebrate inclusion, promote productivity, work-life balance, and career exploration. The FDC generates opportunities for the fellows, trainees, and post-bacs to engage in various in-person and virtual events that promote personal growth, professional development, career exploration, networking, and mentorship avenues.

The "*Fireside Chat Series Steps to Success from PIs*" is one of the events organized by the FDC aimed at bridging the gap between the trainees and the PIs within the Frederick campus. Aptly named, this event is a personal and interactive discussion between the guest PI and the FDC moderator in the presence of an audience, paying homage to the first ever fireside chat series in the form of evening radio briefings by the 32nd President of USA, Franklin D. Roosevelt in the 1930's. These candid conversations provide insights into the guest PI's career trajectory, the challenges faced by them to become established PIs, their thoughts on work-life balance, and effective mentor-mentee relationships among other topics. In the relaxed setting of this event, early-career scientists in the audience get an opportunity to directly address their burning questions to the PIs, likely serving as the foundation for an effective mentor-mentee relationship in the future. These events not only benefit the trainees but also provide the PIs a platform to get acquainted with the technical expertise and skillset of trainees across the entire campus. Open exchange of experiences, ideas, successes, and failures via such events is vital for building a synergistic and stronger scientific community within the Frederick campus.

In the most recent FDC Fireside chat held on August 29th, 2022, a tenure-track Stadtman Investigator in the Center for Structural Biology, Dr. Francis J. O'Reilly, was invited to be the guest PI. Dr. O'Reilly joined the NCI in 2022 as the head of the Structural Systems Biology Section. He is a structural biologist with a research interest in discovering and structurally characterizing protein complexes inside cells through combining structural proteomics, electron microscopy, and integrative modeling. His lab focuses on developing state-of-the-art crosslinking mass spectrometry tools to identify structural changes linked to various diseases, particularly cancer.

Dr. O'Reilly's enthusiasm for science was palpable from the start of the in-person Fireside Chat event. He obtained his bachelor's and master's degrees from University of Edinburgh gaining expertise in biochemistry and X-ray crystallography. He earned his Ph.D. in structural biology at the EMBL-Heidelberg, Germany followed by post-doctoral training in cross-linking mass spectrometry from the Technical University of Berlin, Germany. With such a diverse educational background from multiple countries, Dr. O'Reilly's brought a stimulating discussion to life during the event.

As a new addition to the NCI family, Dr. O'Reilly shared the process and his experience on setting up a new lab at NCI Frederick. While discussing some of his personal challenges in moving to a new country with his family, he gave valuable

insights into the differences in the educational system, the employment opportunities, and the research infrastructure landscape across each of the countries he had worked in. He shared his vision of running his new lab group akin to a startup company. He envisions a set up where his lab members take ownership of projects while also steering lab operations if interested, thereby developing managerial and leadership skills that are vital for career advancement. He emphasized on the need for transparent communication between the PIs and the lab members to ensure the projects including the lab environment are exciting and engaging to maximize productivity. He also stressed on the value of tailoring the lab experience to the needs of the lab members to foster a positive and collaborative work environment. Through personal anecdotes, Dr. O'Reilly highlighted the critical role of reviewing manuscripts, presenting at conferences, effective networking, setting up collaborations, taking initiative in non-research tasks, managing lab funds, and mentoring students during early-stage of career to prepare for a PI position in the future. His philosophy of treating lab members and early-stage scientists as colleagues instead of trainees gave a refreshing perspective to the traditional mentor-mentee relationship. Overall, Dr. O'Reilly's infectious energy and candor reinvigorated our love for science and boosted our morale to work towards our career goals.

Fireside chats held by the FDC, therefore, provide a glimpse into the lives of PIs that we are not exposed to otherwise. This unique experience not only allows us to learn from their experiences but also enables us to develop a connection with a potential mentor outside of our labs. It allows both PIs and trainees to feel more connected as a part of the larger scientific community within the NCI at Frederick.

To learn about the next Fireside Chat event, keep a look out for email event announcements and check out the event list on the FDC website: https://ncifrederick.cancer.gov/diversity/Events.aspx.

Hope to see you at the next FDC Fireside Chat!

Chemistry in Kazakhstan: An Interview with Dr. John Beutler of the Molecular Targets Program (MTP)

by: Matthew Yohannes

Interview with Dr. John Beutler:

During this interview, my goal was to gain some insight into how international collaborations between institutions can help develop valuable relationships that propel novel research and fuel discoveries. Dr. Beutler is a staff scientist and leader in the Chemical Diversity and Development section in the Molecular Targets Program (MTP) within the National Cancer Institute. Within the MTP, Dr. Beutler is responsible for developing a natural products compound library and oversees the projects which match screening and chemistry. His search for novel plants and microbes to enhance the diversity of the MTP chemical library has led to him to unique areas of the world, including Kazakhstan. Throughout this interview, it became clear that these collaborative partnerships can mutually benefit researchers because they allow for the exchange of fresh ideas and new perspectives between individuals that come from different countries and cultural backgrounds.

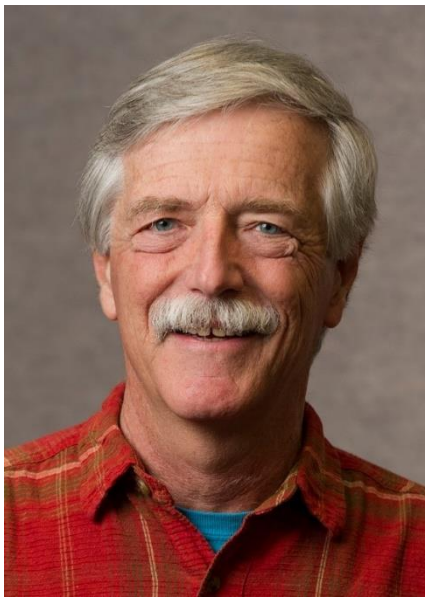


Photo of Dr. John Beutler.

Question #1:

For those who are unfamiliar with natural products chemistry, why do you think it's an important field? What made you interested in it?

Answer:

I was educated at the Philadelphia College of Pharmacy and Science, and my thesis advisor was Ara Der Marderosian. I did my master's thesis on marijuana chemistry and *Cannabis* breeding. Thereafter, I began my PhD and studied poison mushrooms, specifically, *Amanita muscaria*. I collected mushrooms in the pine barrens of New Jersey, extracted and then examined them with chromatography to detect the compounds that were there. I later pursued a post-doctoral fellowship at Northeastern University in Boston with Phillip LeQuesne, a synthetic and natural products chemist with a research interest in indole alkaloids. I later completed a second post-doctoral fellowship in Houston at the University of Texas Medical School, where I studied the pharmacology of an alkaloid, securinine, that I had worked on at Auburn. In 1984, I came to NCI, and worked in the Fermentation Program. As a graduate student, I wasn't particularly interested in cancer. However, this changed with advancements in cancer biology in the 1980's. The surge in discovery of growth factors and pathways modulated in cancer piqued my interest that natural products still have a lot to offer to drug discovery in the modern era, including in cancer research.

When it comes to tackling challenging problems in drug discovery**,** overall, I think that we are an applied group of people. In the old days, people looked at plant phytochemistry and said, "what's in this?" Would have to get lucky if any of that ended up in a pharmacy. Our ability to do structure elucidation and more rapid purification and

biological assays has ramped up our abilities a lot.

Dr. Beutler's team conducting field work.

Question #2:

What drove your decision to visit Kazakhstan specifically? What was your purpose for being there?

Answer:

There was a large program (or fermentation facility) that grew huge quantities of viruses and bacteria in Kazakhstan and continued a large project making biological weapons. The US State Department set up a program intended to fund scientists doing non-weapon work.

At some point this facility in Kazakhstan that had biological and chemical capabilities had contacted us. The question was, what can we do with it, and how can we make this a useful situation for everybody? This was supporting several different biological weapons scientists. We arranged for a botanist in Kazakhstan to collect indigenous or endemic plants, and for these to be extracted. These were things that might not have been seen previously. This was done despite the National Cancer Institute having the largest collection of plants for biological testing (i.e., over 30,000 distinct species and 150,000 different extracts of each). We hadn't collected much in that area, so there was a gap in our collection that it made sense to fill.

In the process, we got to know other people who were interested in studying bacteria that lived in extreme environments (i.e., high, or low pH, or salt). A lot of people thought that would be another interesting niche to get into. And we got to meet with folks in the old capital, Almaty, to get involved in that niche. But we did find interesting chemical structures in the extremophiles which we haven't published yet. The folks in Kazakhstan have been funded to do more collaborating with our lab in our assays at NCI. Kazakhstan has excellent scientists.

Question #3:

What went well during your trip?

Answer:

So far, I have traveled there three times, once on my own. The people whom I traveled with included Jim McMahon, my former supervisor, and our Russian-born IT professional Katya Goncharova. It was fun having someone who knew the science (she has a Ph.D. in cell biology) and was an ultra-helpful translator. The cultural context was interesting because it involved the Kazakhs, people who were there for thousands of years, as well as the Russians who colonized it from the days of Catherine the Great onward.

Question #4:

Dr. Beutler's research team.

What were potential difficulties when it came to conducting research abroad? What were some rough patches that you encountered during your travels?

Answer:

The main challenge was being able to translate and learn to efficiently communicate.

In Stepnogorsk, where the biological weapons facility had been, we wanted to build the capacity for doing science. There were chemists with good training, but they didn't have the equipment to do everything they needed. So, we purchased and prepared an HPLC (High-Performance Liquid Chromatography) instrument. It was the same model that we had in our lab, and we got a good price on it used, and then shipped it over to Kazakhstan. As far as I know, it's still being used.

Later, we also had one of the people from Stepnogorsk spend six weeks in the MTP. Essentially, there was an exchange of knowledge, research materials, and testing.

Question #5:

So, how did your work over there relate to the projects you are pursuing here?

Answer:

One of my jobs is to ensure that we have the broadest possible diversity of chemistry in our screening libraries which reflects the broader biology of the source. With 300 microbial extracts to test, and a hit rate in a good assay of less than 1%, and finding something meaningful a 1 in 10,000 chance, the chances are limited. But you can't rule anything out.

Question #6:

What are interesting or unique aspects of Kazakhstan's culture that you learned about?

Answer:

We had a meal with one of the researchers in Stepnogorsk, and we stayed for a night at his parents' house. His mother served us a meal of horsemeat, which is a delicacy in Kazakhstan. It's like Thanksgiving turkey in terms of cultural significance. Kazakhstan is where horses were domesticated. The cultural stuff is interesting, and the Russian and Kazakh culture interact in dynamic ways. However, the Kazakh folks were very friendly.

Question #7:

What is the next step in terms of the progression of your current projects? Especially, after all these collaborations, research, and travel?

Answer:

Not that much travel is on my horizon. I still have ten active collaborations at this point with different labs. I also plan on continuing to maintain the lab, and make sure things are completed. I look forward to going on vacation just for fun – because when you're going to places for science you have

more obligations as a guest in the host country you are visiting, as well as to our government.

Conclusion:

My hope is that this interview could help to provide interesting insights into the nature of international collaborations between scientists. As Dr. Beutler explained, collaborations between researchers can lead to the sharing of resources, knowledge, and skills. Moreover, it can not only mutually benefit both groups, but also lead to insights that can push research in new directions.

NCI Fellows Celebrate Nelson Mandela Day with a Panel on Global Health Equity

by: Margarita Correa-Mendez, Jack Murphy, Waruiru Mburu, and Francine Baker

In the context of broader equity and inclusion efforts that are ongoing at NIH and NCI, the NCI Fellows' Global Health Interest Group (GHIG) hosted a virtual panel on diversity, equity, and inclusion in global health in celebration of Nelson Mandela International Day (July 18th). The GHIG seeks to create a stronger community of fellows at all career stages who are interested in global health research and support opportunities to enrich our training at NCI.

The panel provided the opportunity to engage in meaningful dialogue with global health experts, spotlighting critical issues on diversity, equity, and inclusion in global health research, practices that we should be sensitive to, and specific actions that we can take individually and as a research community. We were joined by Dr. Laetitia Rispel from the University of the Witwatersrand, Johannesburg in South Africa, Dr. Arachu Castro from Tulane University School of Public Health & Tropical Medicine in the US, Dr. Ravi Kannan from Cachar Cancer Hospital and Research Centre in India and Dr. Evelyn Gitau from the African Population and Health Research Center in Kenya. The panelists raised multiple critical points for achieving equity in global health: the need to understand the communities, have research questions arise from the community, and the importance of developing local capacities to achieve sustainable health equity. The full

recording of the global health equity panel can be viewed here.

As trainees and early-stage investigators we found it important to emphasize three pivotal calls to action made by the panelists that are critical for us to act upon as we move our careers forward. First, recognize the participatory nature of research and commit to engaging local capacities at every step of the research process. Second, ensure that researchers from the country where the research is conducted are included as authors on publications. Third, as we conduct our work and plan to publish, we must ensure that research and publications produced outside of high-income regions are considered and appropriately cited. Finally, achieving equity and inclusion in our work requires a critical self-awareness to ensure that we are not reinforcing inequities in the way that we conduct our research and publish our work. We must make a conscious effort to interact with others to level the playing field.

The panel highlighted that achieving equity requires a commitment to strengthen a diverse research ecosystem, so that researchers working on health issues that impact the most vulnerable populations globally are "properly equipped to transform lives at a local level" regardless of geographic location, race, or gender. Dr. Satish Gopal, Director of the NCI Center for Global Health, kicked off the event with a quote by Nelson Mandela: "Education is the most powerful weapon which you can use to change this world." We celebrate the NIH' and NCI's commitment to train and mentor early career investigators and facilitate ongoing conversations to achieve equity, diversity, and inclusion in research.

If you are interested in learning more or joining the NCI Fellows' Global Health Interest Group, please email us at NCIGHIG@nih.gov.

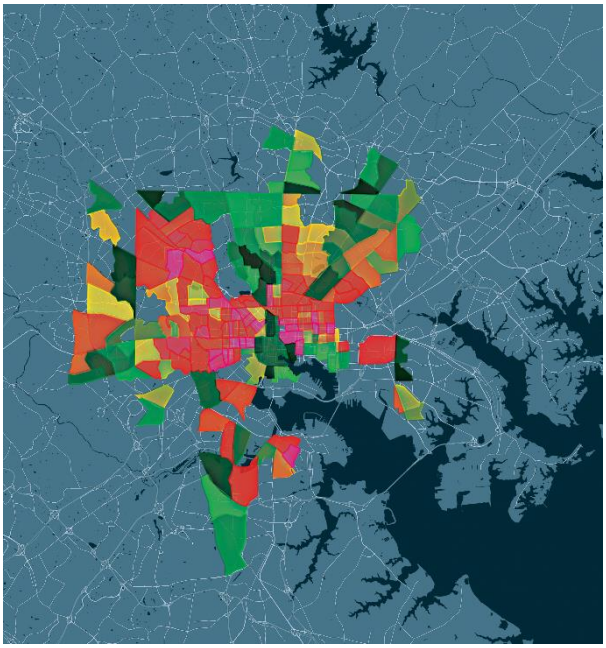
The Center for Cancer Research (CCR)-Division of Cancer Epidemiology & Genetics (DCEG) Inaugural Health Disparity Workshop

By: Jongeun Rhee, Brittany Lord, and Francine Baker

Cancer health disparities affect millions of people across the United States (U.S.). These disparities remain deeply entrenched in the U.S. health care system and disproportionally affect underserved and underrepresented populations. Disparities in cancer burden are evident by race/ethnicity, socioeconomic and cultural background, geography, gender, sexual orientation, and immigrant status among others.

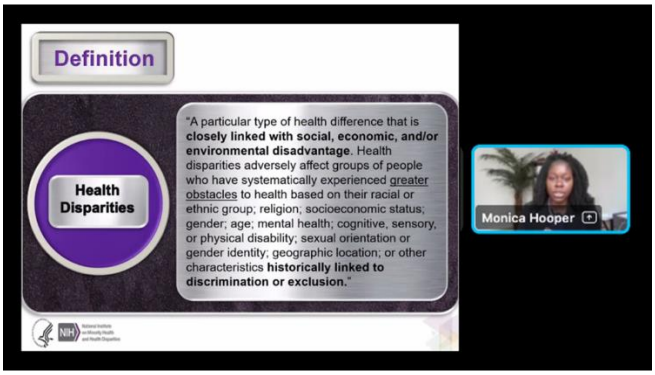
The elimination of cancer health disparities is a National Cancer Institute (NCI) research priority, with the aim of achieving health equity and reducing the overall cancer burden in the U.S. NCI seeks to accomplish this goal by providing support to expand cancer health disparities research within the extramural and intramural research programs. As part of intramural research, the NCIs Center for Cancer Research (CCR) and Division of Cancer Epidemiology and Genetics (DCEG) collaborated to co-organize the Inaugural CCR-DCEG Health Disparity Workshop. The workshop was organized

due to the significance of addressing disparities in health care and cancer research.



Color-coded map used to capture different Census tracts in Maryland and how socioeconomic risk factors for cancer can differ based on neighborhood/location.

The CCR-DCEG Inaugural Health Disparity Workshop was successfully held for two days, May 25-26, 2022, with over 200 participants from intramural and extramural communities. This workshop was co-organized by joint efforts among the CCR Health Disparity Steering Committee, DCEG Cancer Health Disparities Working Group, and DCEG Fellows' Cancer Health Disparities Interest Group. The aim of the workshop was to: communicate the expectations of health disparity research, discuss resources to investigate cancer health disparities, highlight opportunities for collaborations, and innovate future avenues to address health care disparities.



Dr. Monica Hooper, Deputy Director at the National Institute of Minority Health and Health Disparities presented key definitions and discussed the importance of conducting health disparities research beyond using the biological race model.

On the first day, Dr. Stefan Ambs (CCR) and Dr. Jiyeon Choi (DCEG) started the workshop with opening remarks introducing emerging cancer health disparities research and funding opportunities within the NCI intramural program. Dr. Monica Webb Hooper, Deputy Director at the National Institute of Minority Health and Health Disparities (NIMHD) presented key definitions (e.g., population differences, health disparities, etc.), and discussed the importance of conducting health disparities research beyond using the biological race model, which fails to consider upstream determinants of health and life expectancy (see NIMHD Research Framework). Dr. Jill Barnholtz-Sloan introduced strengths and limitations of numerous data sources (e.g., cancer registries, administrative claims, electronic health records) that health disparities investigators could utilize. Dr. Montserrat García-Closas introduced the DCEG Confluence Data Platform, a large international project to study genetic susceptibilities for breast cancer in women and men of multiple ancestries, and the Connect for Cancer Prevention Study, a new prospective cohort of over 200,000 adults in the U.S., with particular efforts to promote participation of individuals from diverse backgrounds and geographic areas. Dr. Clayton Yates, Professor of Biology and

Director of the Center for Biomedical Research at Tuskegee University, emphasized the importance of collaborating with Historically Black Colleges and Universities in health disparities research.

The second day of the workshop was opened by Dr. M. Constanza Camargo (DCEG) and Dr. Ramya Ramaswami (CCR) summarizing active discussions from the first day. Dr. Jongeun Rhee from the DCEG Fellows' Cancer Health Disparities Interest Group introduced history and recent activities of the interest group and funding opportunities for NIH fellows to conduct health disparities research. Dr. James Lillard, Professor and Senior Associate Dean of the Morehouse School of Medicine, emphasized the collection of data on social determinants of health, which affect patient care and well-being. He presented successful examples of partnerships between NCI and various industries to generate socio-clinico-genomic data for cancer health disparities research. Dr. Stefan Ambs, Senior Investigator in the Laboratory of Human Carcinogenesis at NCI-CCR, shared ongoing research projects using NCI-Maryland Breast and Prostate Cancer Case-Control Studies. Dr. Yvonne Eaglehouse, Assistant Professor of the Murtha Cancer Center Research Program, Uniformed Services University of the Health Sciences, introduced data sources in the Military Health System and her research on racial comparisons in breast, colon, and gynecologic cancer treatment. Finally, Dr. Rachel Ellsworth, Director of the Translational Breast Research at Windber Research Institute, shared her research on genetic testing in non-Hispanic Black women with breast cancer treated within an equal-access health care system. The workshop ended with a crucial discussion of barriers to health disparities research, including lack of data representing minoritized groups, a need for more health disparities investigators from minoritized communities, and recommendations on how to recruit and retain a diverse workforce. In addition, approaches on how to collaborate with respect and an open mind were discussed.

The workshop highlighted health disparities research conducted by postdoctoral fellows and investigators at NCI as follows: From CCR, Dr. Ismail Baris Turkbey, Senior Clinician at Molecular Imaging Branch, Dr. Brid M. Ryan, former Earl Stadtman Investigator, and Dr. Brittany Lord (CCR & DCEG), Postdoctoral Fellow, Laboratory of Human Carcinogenesis and Integrative Tumor Epidemiology Branch. From DCEG, Dr. Cody Ramin, Research Fellow, Radiation Epidemiology Branch, Dr. Jacqueline Vo, Postdoctoral Fellow, Radiation Epidemiology Branch, Dr. Jessica Madrigal, Research Fellow, Occupational and Environmental Epidemiology Branch, and Dr. Megan Clarke, Earl Stadtman Investigator, Clinical Genetics Branch. Each session was moderated by CCR and DCEG fellows and investigators including Drs. Padma Sheila Rajagopal, Gieira Jones, Wayne Lawrence, and Sarah Jackson. More details can be found on the website.

The workshop organizing committee is currently making plans for the 4th NCI Symposium on Cancer Health Disparities scheduled for April 2023.

Transitioning from Academia to Industry? The NIH has your back

by: Omar Jose

In recent years, more scientists have been transitioning from academia to industry. The reasons behind this trend are many and complex, but the most prominent are the widespread funding shortages, the intense competition for faculty jobs, and the work-life disruptions caused by the pandemic. In addition, scientists who work in industry are more satisfied and better paid than their colleagues in academia, according to the results of Nature's 2021 salary and satisfaction survey. Fewer than half of the respondents from academia reported feeling positive about their career prospects. These aspects are therefore leading to more researchers going into industry following their post-graduate education.

Due to this shift in scientific careers, it is even more important to both seek out and offer the necessary resources to fellows who are beginning to transition to their independent careers. If you are interested in pursuing a career in industry once your postbaccalaureate or postdoctoral fellowship is over, the NIH offers a wide variety of resources that will help you explore the many different roles available in an industry setting, and gain some of the necessary skills to get the job that you want. The Office of Intramural Training & Education (OITE) is a great place to start. OITE offers several online courses where you will learn how to network, build a resume, write a cover letter, polish your LinkedIn profile, interview, and even negotiate your salary once you get a job offer. Alternatively, if you believe that you need personalized assistance, you can make an online appointment with a career counselor at the Career Services Center. Career counselors are professionals with plenty of experience in these topics and are always willing to guide the fellows to acquire the skills needed for their career.

On the other hand, the Office of Training and Education (OTE) in the Center for Cancer Training (CCT) at the NCI hosts a bi-yearly workshop, Preparing for Science-Based Non-Traditional Careers, where speakers from different pharmaceutical industries and government organizations share their professional experiences with NIH fellows. It's important to mention that most of these speakers hold a Ph.D. and have postdoctoral training, and therefore, they can provide helpful tips on how to transition successfully from an academic position to your first industry job.

Another excellent resource is the course "SciPhD Business of Science Certificate Program." Hosted by the CCT and instructed by the SciPhD group, this course helps fellows get business-ready by teaching them the necessary skills to become competitive and successful in an industry job market. This five-session workshop includes lectures, as well as individual and group exercises. Attendance to all the sessions grants the fellows a certificate of completion and a permanent free license to the SciPhD's web application Flamingo. This invaluable tool will help you analyze job ads, generate a draft targeted resume, and likely land your first job. Moreover, successful completion of the Business of Science course allows fellows to enroll in the NCI "Explore On-Site (EXPOSE) Program," which provides the opportunity to visit local companies and organizations where you can talk with professionals working in your field of interest.

Although it will take some time and patience, transitioning from academia to industry doesn't

have to be a daunting task, and you are not alone in this journey. The NIH offers plenty of excellent tools to help you, so feel free to use them. I wish you the best of luck in the next step of your career!

Resources:

1. Nature's 2021 salary and satisfaction survey
2. Office of Intramural Training & Education
3. Career Services Center
4. Preparing for Science-Based Non-Traditional Careers
5. SCIPHD

Programs of Interest for Trainees:

NIH NATIONAL CANCER INSTITUTE

Sallie Rosen Kaplan Postdoctoral Fellowship for Women Scientists in Cancer Research (SRK Program)

What happens during the transition from trainee to Independence? How do we better retain and advance the careers of women in science? How can we better face the competitive nature of the job market?

SRK Program Provides

• Leadership skills • Confidence building• Additional mentorship • Networking Opportunities • Peer-to-peer connections

SRK Program Elements

• 30-week professional coaching with customized program • Monthly meeting with second mentor selected from senior women in government, academia, or industry • Additional workshops by NCI Office of Workforce and Professional Development • Additional coaching on presentation and communication skills • Career development panel discussion • Grantsmanship seminar

For more information:

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

NIH NATIONAL CANCER INSTITUTE Center for Cancer Training

Frederick Diversity Committee FDC

Frederick Diversity Committee

Promoting Diversity

FDC Mission and Goals:

Celebrate diversity and inclusion on the Frederick campus

Promote productivity, work-life balance and career satisfaction

Meetings:

every 3rd Friday of the month at 1pm

Benefits:

Personal and Professional Development

Career Exploration and Enrichment

Networking

Mentorship

More information can be found at https://ncifrederick.cancer.gov/Diversity

Join the Fellows and Young Investigators Steering Committee!

Are you interested in networking with other fellows, exploring alternative careers in science, gaining marketable skills, or giving back to the community? Join the CCR-FYI SC! Meetings are held monthly in Bethesda and Frederick on the last Thursday of the month, at 11am.

Providing Valuable Training Experiences for CCR Fellows

For more information, please contact:
yilun.sun@nih.gov or ramesh.chingle@nih.gov

NIH NATIONAL CANCER INSTITUTE
Center for Cancer Research

23rd Annual CCR Fellows and Young Investigators Colloquium

Drugging the Undruggable: Novel Targets and Targeted Therapeutic Strategies

HOLD THE DATE

Thursday and Friday, May 4th and May 5th, 2023

NCI Shady Grove Campus, Rockville, MD

Registration Deadline: April 7th, 2023

For Registration Site, Scan QR Code

https://bit.ly/CCRFYIColloquium

Oral and Poster Presentations – Career Networking and Development workshops – Keynote Speakers – Outstanding Postdoctoral Fellow Presentation – Survivor Speaker – Travel Award

Supported by CCT Office of Training and Education and CCR Office of the Director