Interesting Opportunity: Mentoring the Next Generation

By Mor Alkaslasi

What major should I choose to become a doctor? What do I do if I don’t get into a top school? What other options do I have besides medical school? These are the questions local high school students interested in STEM are asking, and PATHS is here to answer them.

The Program for Advancing the Health Sciences, or PATHS, is a local mentorship program for high school students interested in careers in the biomedical sciences. We work with local school districts, currently Prince George’s County and Alexandria City, to pair high school students with local working professionals in their fields of interest. These mentors engage with students throughout the school year, helping them navigate their courses and explore their career options.

Beyond direct mentorship, we offer monthly workshops covering topics in professional and academic development. For example, we run workshops on how to write a resume and how to build time management skills. We also host career seminars to introduce students to the less prominent health-related careers, such as speech-language pathology and public health. Our goal is to provide students with information we gathered outside of the classroom while pursuing our own chosen careers.

But how did we get here?

In 2019, I was a new predoctoral fellow at the NIH looking for outreach opportunities. That’s when I came across the Prince George’s County Public Schools (PGCPS) Health and Biosciences Mentorship Program (the precursor to PATHS).

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Letter from the Editor

One of the most difficult aspects during the pandemic, for me, has been trying to maintain a sense of community. There is a social fabric we all weave for ourselves. A blanket we hug during times of need and dance with during times of celebration. But during the pandemic, distanced in our individual homes, it's too easy to fold that blanket and place it on a shelf, waiting for a safer time to emerge. To honor the importance of our social network, we focus this month’s newsletter on building and maintaining our community—even during an ongoing pandemic.

I hope you find this issue as inspirational as I have. You will learn about how graduate student Mor Alkaslasi (Le Pichon lab) helped create a much-needed mentorship community for local high school students who are interested in STEM careers. Postbac Celine Kisimba shares information about how to craft a diversity statement for professional school applications as a recap from a Postbac Seminar Series session, emphasizing the importance of equity, diversity, and inclusion in research and the scientific community. And gather a few words of wisdom about job interviews from scientists who joined the ranks of academia.

We can't have a community-focused issue without highlighting the exciting work of our own community. Check out our Fellows Award for Research Excellence (FARE) recipients and Scientific Interest Group (SIG) winners on page 7. Congratulations to all! Every month you can find additional career development and award opportunities in our Rep Report and announcements.

If the fabric of your social network is still folded on the shelf, it's time to pull it back out. Through virtual and other safe avenues, find your community. Build your network. Maintain those relationships. You’ll be happy you did.

Your Editor in Chief,
Shana R. Spindler, PhD

Do you have questions, comments, or ideas for this newsletter? Please contact our editor at shana.spindler@nih.gov.
Interesting Opportunity: Mentoring the Next Generation
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The program had been established the year before by the PGCPS Health and Biosciences Advisory Committee to serve an unmet need among their students for real-world guidance. On my first day with the program, mentors were asked to serve on a committee to help revitalize the program. Thinking this would be a small additional commitment, I and five other NIH postbacs and graduate students volunteered.

Over the next year, we put together engaging content to introduce students to the information and skills they would need to succeed in their fields of interest. When our last few sessions of that year were nearly canceled due to the global pandemic, we stepped up and shifted into a virtual format, leading to the formation of PATHS. This is how Brittany Sincox, a graduate student in the University College of London-Graduate Partnership Program, and I became co-directors of a regional mentorship program for high school students interested in STEM.

The next year was a whirlwind for the growth of PATHS:

- We implemented a college application workshop and several career seminars presented by working professionals from all over the country (we even got Nobel Prize winner Dr. Jennifer Doudna, Professor of Chemistry, Biochemistry, and Molecular Biology at University of California, Berkley, to tell us about her career path!).
- We expanded PATHS into Alexandria City Public Schools, where we work with students in the Governor’s Health Sciences Academy in partnership with the George Washington University.
- We guided a group of students through a hypothesis-driven, mentored science project. Students also presented their work in a virtual platform called GatherTown.
- We placed top students in summer internships at a local healthcare company, Family Choice Healthcare, and at Georgetown University.
- And we created a website and expanded our networks, bringing us one step closer to our big dream: partnering with local pharmaceutical companies to provide hands-on experiences for our students.

But it isn’t just the two of us. It’s the hundreds of volunteers from local institutions who want to mentor the next generation. It’s the NIH fellows who contribute their time to be part of our committees, bringing in new ideas and making this program what it is. We are 100% volunteer-driven, and we’re here to guide the next generation of scientists and healthcare professionals down their paths.

Our mentor sign up is closed for this academic year, but if you know someone in a unique health-related career who is interested in speaking at a career seminar, or you would like to find out about more ways to work with us, check out our website and contact us at pathsdirectors@gmail.com!
Unlocking Diversity Statements

By Celine Kisimba

As many postbacs prepare their professional school applications, the theme of diversity is at the forefront of countless essay prompts. In a rapidly evolving world, equity, diversity, and inclusion (or EDI) are important concepts that bolster professional and personal development. Everyone has a role within EDI, and while diversity can be a broad topic to tackle, applicants can unlock a diversity statement that works for them.

This summer, Dr. Triesta Fowler, NICHD Office of Communication Director of Communications and Outreach, led a virtual seminar where she discussed:

» Different components of diversity,
» The importance of including your trajectory in diversity statements, and
» Common mistakes applicants should avoid when writing a diversity statement.

When you first hear the word diversity, you might think of race, gender, and ethnicity. But it’s important to realize that diversity can also be found in areas such as socioeconomic status, and life experiences. Taking the time to figure out which aspects of diversity apply to your personal experience, and professional journey can help you craft a diversity statement that is unique and authentic to you.

Dr. Fowler emphasized that the admissions committee looks for your trajectory in a diversity statement. Your trajectory begins with your background and identity, moves into how that background influences your commitment to diversity, and then shows how you will continue with a commitment to diversity in professional school and beyond. It is important to tap into the story that makes you unique, authentic, and adequately expresses your future goals. It is imperative to research the prospective institution’s mission statement to find ways you can relate your goals to their mission and to determine if the school is a good fit for you.

According to Dr. Fowler, common mistakes applicants make in a diversity statement include not being specific, not telling the truth, and repeating what is in their personal statement. Simply stating that you prioritize diversity is not sufficient. Using concrete examples to highlight how you have approached diversity in the past and, most importantly, reflecting on those actions is the best way to shape your diversity statement.

While writing diversity statements can seem like a daunting task, using Dr. Fowler’s advice can help you identify the story that makes you unique and apply it to your professional and personal goals. On behalf of the NICHD postbacs, we thank Dr. Fowler for taking the time to clarify what a diversity statement is and encouraging us to share and reflect on our stories.
Workshop Words of Wisdom: Discussing Academic Jobs

On August 24, the NICHD Office of Education offered a professional development workshop for fellows who are interested in academic careers. During the small-group discussion, held via Zoom, tenure-track investigators working in research- and teaching-intensive institutions shared their experiences in their positions. Enjoy a few words of wisdom on applying and interviewing for academic jobs from the three speakers.

JASON WESTER, PhD
Assistant Professor, Ohio State University College of Medicine
Dr. Wester is a former postdoc of the McBain lab, where he began applying for academic jobs during his fifth year.

“You’ll always find a reason you’re not competitive enough, but don’t use excuses to wait. Just dive right in and see what happens,” Dr. Wester said. “They want someone who has good ideas, who’s going to compliment what their group does. You need to bring a new angle to what that group is doing. You need to sell them on [how] what you’re doing is cutting edge and exciting. It’s not about what techniques you know, but what you’re going to do with them.”

DANIEL DENMAN, PhD
Assistant Professor, University of Colorado School of Medicine
Dr. Denman has a research-intensive academic job. When he was awarded his K99/R00 funding after accepting his academic position, he deferred for a year to meet the mentored training component of the grant.

“The fact that I had applied for funding was just as important as if I had gotten it. It showed I was engaged in the system,” Dr. Denman emphasized.

KEITH FEIGENSON, PhD
Assistant Professor of Psychology, Albright College
Dr. Feigenson is in a teaching-intensive position, where he finds satisfaction in teaching students the true meaning of science through research practice.

“You have to fail sometimes to learn how to succeed,” Dr. Feigenson assured. “Don’t worry about that. It’s a learning experience. The first interview is usually the one that’s most stressful. Once you know what to expect, it comes easier… If you get the in-person interview, you are competitive. That’s how you know you made it over the hump.”
The Rep Report

By Lauren Walling, PhD

As the current NICHD Basic Sciences Institutes and Centers (IC) Representative, I represent NICHD postdoctoral fellows at the Fellows Committee (FelCom) meeting every month and share the latest news with you here. Do you have a concern or question that you want brought up at the next meeting? Contact me at lauren.walling@nih.gov!

The Outreach Liaison announced opportunities for fellows to share their work with the greater NIH community:

» Research fellows and postdocs can have their research profiled on the “I Am Intramural” blog.
» Postbacs, graduate students, postdocs, and research fellows can share their research in a simple and engaging way as part of a series of short videos called “SciBites.”

If you are interested in these opportunities, please reach out to Alison Jane Martingano (alisonjane.martingano@nih.gov).

OITE recently posted their fall workshop schedule, which includes many opportunities for career development and wellness activities. These include:

» Workshops on preparing for academic and industry jobs
» Career planning and job search strategies
» Diversity and inclusion seminars
» The “Becoming a Resilient Scientist” series

Register for these workshops on the OITE events page (https://www.training.nih.gov/events/upcoming).

Several FelCom subcommittees are looking for additional members. These include:

» Health and Recreation Subcommittee (tiffany.zarella@nih.gov)
» Service and Outreach Subcommittee (kristen.warren@nih.gov)
» Social Committee (nicholas.madian@nih.gov)
» Visiting Fellows Committee (zeni.wu@nih.gov or harrison.daly@nih.gov)

Please reach out to the respective FelCom chairs listed above if you are interested in joining.
Congratulations to the NICHD FARE 2022 Recipients

Congratulations to all fellows who received the annual Fellows Award for Research Excellence (FARE) for the 2022 competition. FARE is an NIH-wide competition that recognizes the important research of intramural fellows. We extend sincere congratulations to our 15 winners as well as a special thanks to all NICHD fellows who submitted an abstract and shared their research with the intramural community.

Announcing the 2022 NICHD FARE recipients (and their NICHD mentors):

Richard Elliot Murphy, PhD (Banerjee) – “Biochemical characterization of viral substrate recognition by DHHC protein acyltransferases”

Vinay Sharma, PhD (Loh) – “A novel mechanism requiring neurotrophic factor-α1 interaction with serotonin receptor HTR1E to protect cells against cytotoxicity via β-arrestin/ERK-BCL2 signaling”

Shreeta Chakraborty, PhD (Rocha) – “The Sox2 locus is resistant to disruptions in CTCF-Cohesin mediated looping during early mouse development”

Miranda Marvel, PhD (Weinstein) – “Epigenetic regulation of zebrafish neurodevelopment via the lysine-specific histone demethylase Kdm4ab”

Abhinav Sur, PhD (Farrell) – “Simultaneous profiling of transcriptional cascades during zebrafish embryogenesis using single cell RNA sequencing: Insights into molecular regulation of endodermal fate decisions”

Pablo Vidal-Ribas Belil, PhD (Gilman) – “Examining the Fetal Origins of Suicide Mortality in a Large U.S. Pregnancy Cohort”

Sonia Robinson, PhD (Yeung) – “Age of juice introduction and childhood weight status at 7-9 years old”

Abhisek Saha, PhD (Sundaram) – “A multi-pollutant assessment of preconception persistent endocrine disrupting chemicals and human fecundity”

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Congratulations to the NICHD FARE 2022 Recipients
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Maziar Rahmani, MD, PhD (Weinstein) – “A novel in vivo screen in zebrafish identifies circadian clock gene network as molecular mediators of glycemic memory in diabetic vasculopathy”

Guillaume Gaud, PhD (Love) – “An unexpected inhibitory role of CD3zeta ITAMs in TCR signaling”

Philip Adams, PhD (Storz) – “RNA-mediated regulation in the Lyme-disease pathogen Borrelia burgdorferi”

Mor Alkaslasi, BS (Le Pichon) – “Single nucleus RNA-sequencing defines unexpected diversity of cholinergic neuron types in the adult mouse spinal cord”

Avisek Mondal, PhD (Mukherjee) – “Dysregulated lysosomal Ca++-homeostasis impairs autophagy contributing to neurodegeneration in INCL mouse model”

Insung Kang, PhD (Porter) – “An iPSC-derived, inducible neuronal model of Niemann-Pick disease, type C1”

Megan Parker, MS (Yanovski) – “State Negative Affect in Relation to Loss-Of-Control Eating among Youth in the Natural Environment”

NICHD 2022 SIG AWARDEES
The Scientific Interest Group (SIG) Awards provide an opportunity for fellows to showcase their research to the wider scientific community. Participating Scientific Interest Groups select an abstract from the FARE competition that they deem of high scientific merit and invite the winning fellows to present their work at one of the SIG meetings.

Congratulations to our two NICHD fellows who received SIG awards during the FARE 2022 competition!

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<th>SHREETA CHAKRABORTY, PhD (Rocha lab)</th>
<th>Developmental Biology Scientific Interest Group</th>
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<th>ABHINAV SUR, PhD (Farrell lab)</th>
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October Announcements

NICHD SUMMER INTERN AUSTIN GABLE FEATURED IN IRP BLOG
NICHD summer intern Austin Gable (Le Pichon laboratory), plus several other NIH summer interns, were featured by the Intramural Research Program (IRP) in an article about this year’s Summer Presentation Week. Learn about Austin’s love of English and science, plus his ongoing investigation into traumatic brain injury, in the “I am Intramural” blog post feature.

NCI TECHNOLOGY TRANSFER AMBASSADORS PROGRAM ACCEPTING APPLICATIONS
*Deadline to apply is Monday, November 1*

The NCI Technology Transfer Ambassadors Program (TTAP) is open to NIH postdoctoral trainees, staff scientists, and staff clinicians, and *NEW* for 2022, NIH postbacs and graduate students can also apply!

TTAP is a hybrid training/mentoring program that offers participants the opportunity to augment their current research activities with 5-8 hours/week hands-on training in biomedical invention development, commercialization, and entrepreneurship. Find more information for the program at https://techtransfer.cancer.gov/aboutttc/ambassadors.

Application & Deadline:
If you are interested in joining TTAP, download the application from the website and return with the requested materials to TT_Ambassadors@mail.nih.gov by Monday, November 1, 2021. Questions and inquiries can also be sent to this address.

NEW DATE FOR DIPHR & DIR JOINT SCIENTIFIC RETREAT: NOVEMBER 5, 2021
Please join us for the annual DIPHR & DIR Joint Scientific Retreat, which will be held virtually this year. We strongly encourage all NICHD intramural researchers, PIs, and lab members to attend as we celebrate our research achievements and try to spark new ideas and collaborations.

You are invited to submit your poster registration at https://dir.nichd.nih.gov. The deadline for poster registration is Friday, October 22. For questions about posters or the retreat, please contact Ms. Amaressa Abiodun at amaressa.abiodun@nih.gov.
October Events

WEDNESDAY, OCTOBER 20, 1–2 PM
Interviewing for Professional School
Scott Morgan, Public Speaking Coach

In this engaging virtual workshop with public speaking coach Scott Morgan, postbac fellows will explore:
» Tips to help you prepare for your interviews and present yourself professionally
» Types/examples of questions you can expect
» Strategies for delivering your best answers
» Types of questions to ask your interviewers
» Adapting your interviewing skills to virtual platforms during the COVID-19 pandemic

If you are interested in joining the class, please email Katherine Lamb (katherine.lamb@nih.gov).

ONGOING EVENTS AROUND CAMPUS

NIH-Wide Office of Intramural Training and Education (OITE) Events
For more information and registration, please visit Upcoming OITE Events.

NIH Library Training and Events
For more information and registration, please visit the NIH Library Calendar.