The NICHD Connection

The Rekindled Researcher
By Anna Roberts-Pilgrim, PhD

I completed my first postdoc and moved from the Midwest to Northern Virginia with a one-month-old baby and a four year old. I was still trying to adjust to the elevated cost of living, but going back to work was not on my radar; as a family we decided that I would stay home with the kids for a while. I thought my career was over. Although no one said it directly, I remember whispers about students and fellows who left science and were shunned to the non-academic world forever. Four years later, I got a position as a postdoctoral fellow at the NIH. If you are struggling with pressing that pause button, here are some things that I tried that may help you through your decision, based on my personal experiences and research.

About three years into my life as a caretaker, I thought it would be a good time to ease back into the scientific workforce—after all, my youngest was starting preschool. After being turned down a few times, I finally connected with a previous collaborator at the NIH and volunteered to help with whatever his group needed, no strings attached. Initially, I volunteered five hours a week, then 10, and a full day here and there when my husband had a day off work. Somewhere in the middle of that year, the idea of a full-time research position was pitched by my PI, and I gladly accepted.

If you decide to pause your scientific career to care for a loved one, the key is to keep plugged into science! When re-entering the workplace, a perspective employer wants to see that you still have current knowledge of your field and that you are aware of the progress that has been made. They also want to see that although you have been away from the bench, you have still been involved with the scientific community. From a practical point of view, a PI wants to know if it will take a long time for you to catch up with current research, if it will take you a comparatively longer time to get back into the swing of bench-work, and if you will be committed to the project.

How do you do this? Well, I kept my American Association for the Advancement of Science (AAAS) membership active and received periodical science magazines such as Science and The Scientist. You may want to subscribe to your field-specific journal or another field that you are interested in learning more about. Don’t

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Letter from the Editor

When I was at the bench, I used to observe my colleagues and wonder how they always seemed to get it right. Their gels were clean. Their images looked great. They seemed to know all the names in the field, both established and newcomers to the scene. If my former lab mates are reading this letter, I'm sure they will be surprised! I think I managed to air a sense of confidence most of the time. Behind the cool, I wasn't quite sure I wanted to be at the bench anymore. I didn't know when I should start a family. And I was uncertain about the quality of my skill sets. I was dealing with a lot of tough topics. But having put together the past three issues of this newsletter, I now realize: so were they.

From postbac to postdoc, every fellow at the NICHD is dealing with something. We covered a handful of subjects during our “Tough Topics” series, including research hype, progress problems, postdoc project carryover, and presentation before publication (alliteration unintentional, I promise). But the potential number of tough topics stretches far beyond what this newsletter can handle. Thankfully, you have access to answers all around you. Talk to your colleagues and mentors. Many of them have encountered your problem at some point in their own careers. And if not, you can seek out an answer together.

For our third and final tough topics issue, we are given generous access to the personal experience of postdoctoral fellow Dr. Anna Roberts-Pilgrim. I can’t think of a tougher topic than the decision to leave the workforce altogether with the plan to return years later. For Dr. Roberts-Pilgrim, being at home to raise her young family was the right decision for her, even with “whispers [of being] shunned to the non-academic world forever.” Yet, the whispers were wrong, and she successfully navigated her way back to the lab. Dr. Roberts-Pilgrim recounts the steps she took that allowed her to re-enter research after “pressing the pause button.”

NICHD graduate student Justin Demmerle, 2018 Graduate Student Research Award recipient, writes about the life-shaping power that good mentorship has had on him when faced with difficult decisions. Fittingly, Demmerle’s mentor, Dr. Todd Macfarlan, won a 2018 NIH-Wide Outstanding Mentor Award. Inside, Demmerle shares what Dr. Macfarian taught him about being a good mentor, from a mentee’s perspective.

Looking back at those days in the lab when I questioned my career decisions, I realize that my peers and mentors helped guide me to a science career that I love. If you absorb just one idea from our tough topics series, I hope it’s that problems are not solved in a vacuum. Reach out. Ask questions. Engage with your colleagues. Rest assured, one day, someone will come seeking your guidance too.

Your Editor in Chief,
Shana R. Spindler, PhD

Interested in writing for the newsletter? Contact our editor at Shana.Spindler@gmail.com.
underestimate the power of more general science journals like *Biotechnology* or *Popular Science*. Although they may not be in your specific area of study, they provide information on trends happening in the science community as a whole.

Advantages of reading wide-ranging journals? They give you the ability to talk broader science and may spark new ideas to apply to old problems. Plus, these topics usually come up around the lab bench and during lab meeting lag times.

Another resource for staying up-to-date is podcasts. I listened to NPR’s *Science Friday* every week, and although some topics were not interesting to me at all, it allowed me to connect to the broader scientific community. *Science Vs.* and *Beauty Brains* are a few others that may be interesting to you, but there are a whole world of podcasts that are available with a little digging, and are generally free.

What else can you do to show that you haven’t abandoned science? You can attend conferences in your field. This usually comes with a larger price tag and a few days of commitment but is well worth the investment. Volunteering your time to scientific committees and boards also provides great opportunities. Science.org, Idealist.com, and scientific society websites are good starting places for finding volunteer positions. Because I was still a part of AAAS, I took part in the AAAS Senior Scientists and Engineers STEM Volunteer Program and taught science at my daughter’s school.

If you can’t find the type of volunteering opportunities that you want, then create one! Call or email interesting organizations to see if there is something you can help with. Finding the guts to cold-call may be difficult, but it can be very rewarding. If possible, find a PI that is willing to let you volunteer for a few hours a week to genotype, make reagents, or attend a weekly lab meeting to keep you abreast in your field. I volunteered with my current PI nearly a year before I was offered a full-time postdoctoral fellow position.
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The list of potential volunteer opportunities is vast: organize or participate in the local science fair, join science outreach activities, partake in grant review committees, offer consulting services, try out freelance scientific writing, and the list goes on! Your scientific network will grow and you may even find that you enjoy something more than bench-science.

Volunteering, like anything else, can take over your life. Don’t overcommit yourself. Be practical with your limitations—set boundaries and stick to them so you earn a reputation of dependability, and don’t be afraid to say no when things don’t work out with your schedule. Set time aside every day or week to read scientific materials or listen to podcasts. If you don’t protect that time, you won’t ever get around to it.

Even if you take a break from the bench, remember that you STILL have something to bring to the table! You can show that you have been invested in your field, and that you are organized, committed, consistent and reliable. Time away from active research may not be right for everyone’s situation, but I hope my experience shows that there is life after a scientific career pause!
NICHD Graduate Student Research Symposium Awardees—Macfarlan Lab Shines

During the 14th Annual NIH Graduate Student Research Symposium, NICHD graduate student Justin Demmerle and his mentor, Dr. Todd Macfarlan, both received awards in recognition of their contributions to the NIH.

Justin Demmerle, NIH-Oxford Scholar in the Macfarlan lab (NICHD) and Schermelleh lab (University of Oxford), received the Graduate Student Research Award in Biochemistry/Developmental/Cell & Molecular Biology. Upon nomination by Demmerle, Dr. Macfarlan received a 2018 Outstanding Mentor Award in recognition of his approach and dedication to mentoring trainees in his lab.

We invite you to learn about what makes Dr. Macfarlan’s mentorship stand out from the rest, from the point of view of his mentee.

THE DIFFERENCE BETWEEN A GOOD MENTOR AND A GREAT ONE
By Justin Demmerle

Effective mentorship is challenging at the best of times. Striking the delicate balance between hands-off encouragement and individualized engagement is even trickier for my supervisor, Dr. Todd Macfarlan, because I am a PhD student in a dual program. As a member of the NIH-OxCam program, I participate in labs at both Oxford University in the United Kingdom and at the National Institutes of Health. Two sets of paperwork, two environments, two advisors—each with their own expectations. During two particular instances, Dr. Macfarlan struck a mentoring balance that benefited my graduate career, and I hope my story, from the mentee perspective, offers insight for mentors in similar roles.

During my second year in graduate school—after one year in the Macfarlan lab—I needed to return to Oxford to complete experiments for ongoing work that intersected only partially with my work at the NIH. As I discussed this with Dr. Macfarlan, he wondered how I could continue my experiments in the other lab, but he actively listened to and considered my six-month plan. It must have been frustrating to have a student (continued on page 6)
NICHD Graduate Student Research Symposium Awardees—Macfarlan Lab Shines
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leave to work in a different location, on an altogether different technique, with a different supervisor. This can be a source of tension for many students in this type of situation. However, Dr. Macfarlan was able to keep my research ambitions in perspective, accepted what I needed to do, and agreed to keep up regular communication while I was away. As deeply involved as he had been up to that point, he realized that it was necessary to step back at this juncture. If this had not happened, it could have made for a difficult experience. He navigated it with aplomb, and my six months away resulted in completion of the project, and a significant publication with my lab in Oxford.

During my second year in the Macfarlan lab, I was working on a project with an ambitious combination of techniques, including one that only a few labs had ever performed. At the end of my second year in the lab, I had not performed the experiment successfully and was having difficulty with other more standard assays as well. I was discouraged about our biological system, the overall aims of the project, and most importantly, my ability to perform the necessary experiments. Dr. Macfarlan recognized this and gave me the encouragement that I needed. He told me that he had faith in my hands, and that I needed to have that faith as well. If I was having problems, I should come speak with him more frequently, utilize the institutional knowledge of others in our group, and most importantly not give up. It was exactly the kind of “leaning in” that I needed. We moved past the initial methodology, found a newer approach that was significantly more feasible, and I regained my confidence. It was Dr. Macfarlan’s willingness to double down on a student with doubts that made the difference.

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When describing effective mentorship, it can be difficult to explain what exactly, besides a good attitude or a generous personality, can differentiate between an adequate mentor and a great one. I think it comes down to developing an understanding about when to press harder and when to let the mentee exercise their own initiative, despite the outcome perhaps not being the mentor’s first choice. I have been extremely fortunate that my mentor has shown a balance between leaning in and stepping back, and has known when to do each. Being able to raise tough topics—and knowing that the response will be measured and appropriate—has been an invaluable experience in my graduate education, and it has deeply informed my decision to stay in academia and serve as an effective mentor to others. There is no perfect formula, but experiencing this balance in real time is the best education in mentorship I could have asked for.

Recognizing NICHD Grads from 2017!

Congratulations to NICHD graduate Dr. Gregory (Graham) D. Marquart, who completed the NIH Graduate Partnerships Program (GPP) last year. Dr. Marquart studied the “Construction and Utilization of Digital Brain Atlases in Larval Zebrafish” in the labs of Dr. Harold A. Burgess (NICHD) and Dr. Jens Herberholz (University of Maryland, College Park).

Dr. Marquart is wrapping up a couple projects in the Burgess lab, after which he’s hoping to start a postdoc abroad!
Tough Topic from the OITE Careers Blog
Archives: Scientists as Parents

If you are concerned about when or if to start a family, your best resources might be the fellows around you. The NIH Office of Intramural Training and Education (OITE) queried several graduate students, postdocs, and clinical fellows about their experiences with this tough topic. In particular, the OITE addressed three questions in their “Scientists as Parents: A Balancing Act” series:

**Question #1:** Why was this a good time for you to start a family?
**Question #2:** What were the challenges you faced?
**Question #3:** Do you have any advice for NIH trainees thinking about starting a family?

We encourage you to look through the blog posts if this is a topic of interest for you!

*And while you’re at it:*
**Check Out These Upcoming NIH-Wide OITE Events**
To register, please follow the links below:

**TUESDAY, APRIL 24, 1 – 3 PM**
**Success in Graduate School**
Building 35, Room 610
Speaker(s): Sharon Milgram, PhD, Director, OITE

**WEDNESDAY, APRIL 25 & TUESDAYS, MAY 1, 8, 15, 22 & 29**
**Diversity and Inclusion in a Multicultural Society (6 sessions)**
See link above for locations and times
Speaker(s): Michael Sheridan, PhD, OITE Special Advisor for Diversity and Wellness Programs

**WEDNESDAY, APRIL 25, 11 AM – 1 PM**
**Industry: Negotiating Offers and Making the Transition**
Building 49, Room 1A50
Speaker(s): Lori Conlan, PhD, Director, Office of Postdoctoral Services

**FRIDAY, APRIL 27, 1 – 4 PM**
**Workplace Dynamics V: Diversity in a Multicultural Society**
Building 50, Room 1227
Speaker(s): Sharon Milgram, PhD, Director, OITE
The Rep Report

By Suna Gulay, PhD

As the current NICHD Basic Sciences Representative, I represent NICHD postdoctoral fellows at the 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 suna.gulay@nih.gov!

In March, the National Institute of General Medical Sciences (NIGMS) Postdoctoral Research Associate (PRAT) program and the Office of Intramural Training and Education (OITE) co-sponsored the career development event “PhD to NPR: Careers in Science Communication and Tips for Communicating your Research.” The speaker, Madeline Sofia, PhD, works as an assistant producer for the NPR series “Joe’s Big Idea.” She talked about her experience transitioning to science communication and shared information about Friends of Joe’s Big Idea, a community aiming to help scientists become better communicators. Watch the recorded event here.

Data science-related careers might be enticing to many of you as more and more labs throughout NICHD and NIH employ next generation sequencing and related high throughput methodologies, allowing their trainees to gain hands-on experience with various computer languages and data visualization approaches. In accordance with this, the FelCom Career Development Subcommittee held the panel “Careers in Big Data and Data Science.” The panelists, who work at various NIH offices, shared their experiences finding their current positions and talked about what their jobs entail. The panelists indicated the need to have a genuine interest in the development of computational tools and statistical methods. Their jobs also require a lot of meetings and communication with NIH investigators and directors. If interested, the NIH-DATASCIENCE-L listserv is a good place to start looking for related detail positions and networking opportunities. To gain more experience with coding, you might want to look into Data Carpentry’s lessons and NCBI’s Hackathons.

The Visiting Fellows Committee hosted a Brown Bag Seminar with NIH Federal Credit Union (FCU), titled “Financial Solutions for NIH Fellows.” Learn more about NIH FCU’s Fellows Advantage Program here, including bank accounts, credit cards, and mortgage loans they offer to NIH trainees. Also, learn about managing your finances through their free online tools and resources here.
Life Outside Lab

Pi Day Pie Competition
MARCH 14, 2018
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PHOTOS BY JEREMY SWAN

Left to right: Most Unique winner Jacob Balenson (Spicy Lamb Pie); First Place winner Debbie Brock (Taco Pie); People’s Choice winner Layla Esposito (Crack Pie); Second Place winner Angela Wish (Key Lime Pie); Best Savory Pie winner Mahua Mukhopadhyay (Tuna Shami Kabab Pie); Third Place winner Jessica Wu (Snickers Caramel Pie); Dave Songco, NICHD CIO.
April Announcements

DR. KAREN HAASE NAMED WOMEN SCIENTIST ADVISORY (WSA) SCHOLAR
Dr. Karen Plevock Haase, an NICHD fellow in the lab of Dr. Mary Dasso, was selected as one of the 2018 NIH WSA scholars for her excellence in research.

The WSA committee represents the interest of women scientists by raising awareness of the issues they face, and working to improve the representation of women in investigator positions at the NIH. Women Scientist Advisory scholars are selected every year from a competitive pool of women awarded the Fellows Award for Research Excellence (FARE).

Be sure to congratulate Dr. Plevock Haase for this outstanding accomplishment when you see her!

FELLOWS SOCIAL NETWORKING EVENT
The NICHD Fellows Advisory Committee will host its next Fellows Social Networking (FSN) event on Thursday, May 24, from 5:30 – 7:30 PM, at Tapp'd, a local restaurant in Bethesda.

This is a great opportunity for the NICHD fellows community to socialize and network with each other (with good food!) in an enjoyable environment. All current trainees within the institute are welcome.

Please send Dr. Yvette Pittman (yvette.pittman@nih.gov) a quick note if you plan to attend this event.

RECRUITING NICHD JUDGES FOR THE 2018 NIH POSTBAC POSTER DAY!
Please contact Dr. Yvette Pittman at yvette.pittman@nih.gov if you would like to help judge the NICHD postbaccalaureate fellows’ posters in May. We would like to recruit a few postdoc and graduate student judges to visit about five posters each, and attend a meeting to select the three “best poster” winners for 2018. This can be a great learning experience for both the judges and postbac trainees!

Postbac Poster Day will take place on Wednesday, May 2. For more information about the event, please visit https://www.training.nih.gov/postbac_poster_day.

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April Announcements  
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FELLOWS INTRAMURAL GRANTS SUPPLEMENT (FIGS) AWARD ONGOING  
Grant writing is important for professional development during your postdoctoral training.

The objective of the NICHD FIGS program is to encourage fellows in the Division of Intramural Research (DIR) to apply for competitive funding from intramural NIH or outside organizations and agencies, in order to develop your skills in grantsmanship and in support of your career development. Award recipients are contributing to the DIR by bringing in additional funding and resources and this merit deserves recognition from the institute!

ELIGIBILITY:  
Postdoctoral, visiting, and clinical fellows of NICHD

TERMS:  
The grant for which the fellow applies must be a competitive award of $30,000 or more. The fellow must be the primary applicant on the grant application; or, in exceptional cases, the co-investigator.

AWARDS:  
The Scientific Director must sign off on submissions prior to them going forward (see NICHD DIR Grants Administration Policy). The fellow must provide confirmation of receipt of the application by the awarding agency to the Office of Education.

A $250 one-time stipend increase (limited to 2 applications maximum per year), is processed at the time of the fellow’s renewal. For applications that result in an award, the fellow receives a one-time $1,000 stipend increase.

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April Announcements
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DUE THIS MONTH: GENETICS POLICY, EDUCATION FELLOWSHIPS APPLICATIONS

From the American Society of Human Genetics website:
Applications are currently being accepted for the 2018 Genetics and Public Policy, and Genetics Education and Engagement fellowships. The application deadline for both opportunities is Friday, April 27.

These fellowships are cosponsored by the American Society of Human Genetics (ASHG) and the National Human Genome Research Institute (NHGRI).

The Genetics and Public Policy Fellowship is designed as a bridge for genetics professionals wishing to transition to a policy career. This unique fellowship provides three separate types of policy experience: within NHGRI’s Policy and Program Analysis Branch; on Capitol Hill serving elected officials in the Legislative Branch; and at ASHG in the non-profit science advocacy sector.

The Genetics Education and Engagement fellowship program is designed for genetics professionals (or life scientists with substantial experience in genetics or genomics) who: have an advanced degree, are early in their careers, and are interested in developing and implementing genetic and genomic literacy, engagement, diversity, and/or professional development initiatives for audiences at all educational or career levels. The fellow will participate in rotations at the NHGRI and ASHG, and typically a third organization involved in genetic and genomic literacy, engagement, diversity, or professional development.

For more information, and to apply, visit Genetics & Public Policy Fellowship and Genetics Education & Engagement Fellowship.

EARTH DAY CELEBRATION: NICHD VOLUNTEERS NEEDED

The NIH will celebrate Earth Day in conjunction with Take Your Child to Work Day on April 26, 2018. We need 8-10 volunteers at the NICHD booth to distribute vegetables/flower seeds/seedlings to children. Please contact Ajay Sharma at sharmaaj@mail.nih.gov for more information.

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April Announcements
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SAVE THE DATE: MAY 18, GRANT WRITING SESSION FOR IRF APPLICANTS
Funding opportunity for all NICHD fellows

Last year, DIR launched the Intramural Research Fellowship (IRF), a competitive research funding opportunity for NICHD postdoctoral, visiting, and clinical fellows. Its main objective is to promote grant writing among our intramural trainees, while enhancing awareness of the various components of an NIH grant application. The IRF submission date is Monday, August 6, 2018.

For all prospective applicants, the Office of Education will offer a training session on Friday, May 18, in Building 31, conference room 2A48 (A-wing, 2nd floor), from 10 AM to 12 noon. We will cover various components of an NIH grant, details about the application and review processes, and tips on preparing an IRF application. Attendance at this training session is a requirement for submission.

For more information on the IRF, please visit NICHD Intramural Research Fellowship.

RESPONSIBLE CONDUCT OF RESEARCH (RCR) MANDATORY TRAINING
“Discussion of Ethical Research Practices: Making Good Choices”

Mandatory for all NICHD fellows who started after January 1, 2017.

As part of the new RCR requirements, all NICHD fellows must complete 8 hours of training within their initial two years. This training session (2 training hours) will be held on Thursday, May 31, 1:30 – 3 PM, in Building 31, conference room 2A48 (A-wing, 2nd floor).

Led by Dr. Erin Walsh, this session will begin with a brief discussion of pre-assigned reading materials, followed by small group, team-based learning exercises involving research ethics cases that promote discussions of fabrication, falsification, and plagiarism. It will end with a discussion on good practices of data management and presentation, including lab notebooks—both physical and electronic.

Reading assignments and case studies will be sent by email prior to the session. Please contact Dr. Yvette Pittman (yvette.pittman@nih.gov) by Monday, May 21, if you are planning to attend this mandatory session.
April Events

TUESDAY, APRIL 3, 12 – 1:30 PM
Applying to Medical or Graduate School Soon?
A Lunchtime Session for Postbacs

The Office of Education is hosting a career panel session to answer your questions about applying and interviewing for graduate or medical school. Several panelists at various academic levels will be there to share with you their experiences of transitioning to professional school.

This event requires registration. Please contact Dr. Yvette Pittman (yvette.pittman@nih.gov).

FRIDAY, APRIL 20, 9 AM – 5 PM
The 14th Annual Meeting for Postdoctoral, Clinical, and Visiting Fellows
Smithsonian National Museum of the American Indian

This meeting will allow you to step away from the lab for a day to network with your NICHD colleagues, participate in a career exploration session, and learn more about the recent developments in our intramural research programs.

Agenda and additional information is available at http://retreat.nichd.nih.gov.

See you there!

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April Events
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THURSDAY, APRIL 26, 9 AM – 4 PM
NIH 24th Annual “Take Your Child to Work Day”

Bring your children in grades 1-12 and inspire them to explore career paths in science and public service at our nation’s biomedical research agency. Together, you and your children can choose from over 100 activities, from exploring NIH labs and technology, to being a hands-on genetic researcher, to learning about the day-to-day life of social workers, chemists, dieticians, peer reviewers and more.

Please visit the Office of Research Services website for more information.

THURSDAY, APRIL 26, 10 AM – 2 PM
NIH 2018 Earth Day Celebrations
Natcher Conference Center (Building 45)

More information available online at Earth Day 2018 and NIH-Bethesda Earth Day.

Pi Day Key
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1. Spicy Lamb Pie
2. Crunch Top Apple Pie
3. Snickers Caramel Pie
4. Key Lime Pie
5. Toll House Pie
6. Cheesecake Apple Pie with Snickerdoodle Crust
7. Crack Pie
8. Curried Chicken Pot Pie
9. Lemon Lush Pie
10. Tuna Shami Kabab
11. Chocolate Pecan Bourbon Pie
12. Pear Galette
13. Lemon Pie
14. Mac & Cheese Pie
15. Strawberry/Blueberry Pie
16. Mocha Pecan Pie
17. Taco Pie
18. Salted Chocolate-Caramel Pie
19. Tiramisu Pie
20. Dutch Apple Pie
21. Heavenly Blueberry Pie