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From the Editors:

At it's core, the Boston Children's Postdoc Association was built to bring people from different scientific, national, and racial backgrounds together to bring awareness to and advocate for the postdoc community here at Children's. Our research community is diverse, with over 60% international postdocs. It both saddens and angers us to hear about the recent uptick in hate crimes against Asian-Americans and other immigrant populations. Racism and discrimination have no part in science, and we strive to strengthen our equity, diversity, and inclusion in our events and policies.



To submit comments, articles, or ideas for future newsletters, please contact: Postdoc-publicaffairs@childrens.harvard.edu. For more information on the postdoc association, find us at:

Childrens.org
Twitter (@BCHPostdoc)
Facebook
LinkedIn

Check out our newsletter online!



The State of Academic Mentorship: Taking Stock and Charting a Brighter Future

by **Nick Hanovice**

We at the Postdoctoral Association are grateful for the exemplary mentors that are featured in this newsletter. But even as we celebrate the very best mentors in our institution, we must also remind ourselves that the state of mentorship in the scientific world is far less lustrous, and emphasize the fact that much more work at nearly every level is required to fix a very real and damaging problem that affects us all. Simply put, throughout academic science, trainees are increasingly less likely to benefit from mentors of the quality of the award winners spotlighted on page 6-7. And this has led to deep and persistent problems that kill careers before they can begin, causing long-term effects on the demographics of science and scientists.

Mentorship: what it should be

Many studies and quantitative reviews have confirmed the obvious: **mentorship is a crucial factor in propelling trainees' to successful careers in science** (e.g. Sambunjak, 2006, Mullen Fish Hutinger, 2010). Those who receive good mentorship also benefit in their development and career prospects (Paglis, Green 2006, Mullen Fish 2010), whereas those who don't suffer (Gail Lunsford, 2014, Burk Eby, 2010). Like the eponymous character in the Odyssey, a successful mentor must be many things: **a repository of knowledge, a guide into the scientific process, a facilitator of collaborations**. Above all else, the mentor must be committed to ensuring the trainee gets the training that enables them to pursue a successful career. However, in the pursuit of their own career and scientific goals, mentors can often forget or ignore their trainees' goals. In an ideal sense, the mentor is essentially donating their wisdom and training to their mentee for the betterment of the future of science--indeed, research has shown that successful mentees' publications often have less overlap with their mentors' research than unsuccessful ones (Ma et al, 2020). In an ideal world, this critical practice would be incentivized by research institutions and funding agencies, allowing research institutions to support PIs that prioritize mentorship with the time and resources to ensure trainees' growth.

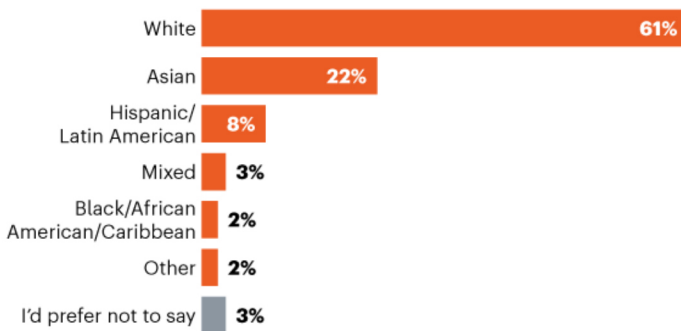
Mentorship: what it too often is

We don't live in an ideal world. In short, faculty members are hired and fired based mainly on their research productivity and funding. All too often, the rest of their responsibilities—mentoring their trainees, teaching courses, managing lab personnel, etc—are considered secondary. This leads to a situation where PIs are forced to juggle competing priorities while learning mentoring skills as they go. PIs are not hired based on the strength of their mentoring, and once hired they encounter little to no institutional support or training in mentorship, and very little accountability for ensuring their mentorship's efficacy (Meyer, 2012). While this can still lead to effective mentorship, it very often doesn't. **The pervasive power structure within academic research also discourages trainees from offering honest criticism or feedback**, lest they jeopardize their current or future career prospects. This system essentially places the onus

EXISTENTIAL DOUBTS

Postdoctoral researchers are a diverse, resilient group, but mental and emotional strain has made many question their ability to remain in science. Some have received help for anxiety and depression, but even more have never sought assistance, despite wanting to — a sign that postdocs don't always have clear access to needed services.

What is your ethnicity?*



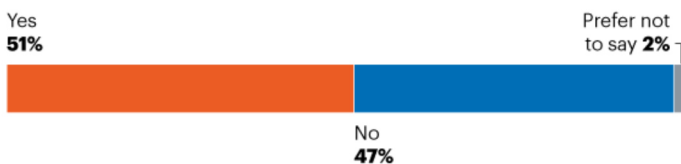
Do you consider yourself part of a minority ethnic and/or racial group?



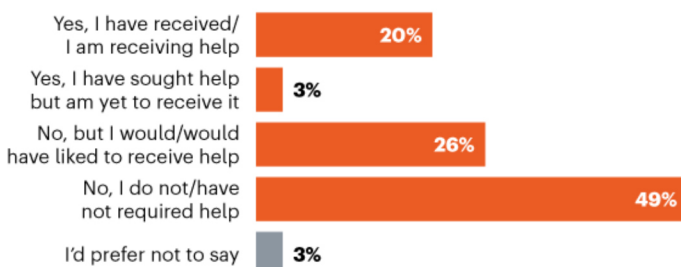
Do you experience any long-term health problems or a disability?



Have you considered leaving science because of depression, anxiety or similar issues related to your work?



Have you sought or received professional help for depression or anxiety related to your work?*



"Postdocs under pressure: 'Can I even do this any more?'" Woolston, 2020, Nature Careers Article

on the PI to prioritize mentoring above all their other responsibilities and commit themselves to constantly improving their mentorship skills independently, all while taking time away from conducting the research that will get them the grants that will secure their own future. And, **too often, postdoctoral trainees are left in the cold, leading to intolerably high**

burnout rates, mental health challenges, and scant career options (see Figure).

As with many other valuable resources, effective mentorship is systematically denied to minority groups. Despite now receiving a majority of all doctoral degrees since 2006, women hold fewer prestigious faculty positions than men (Department of Education, 2016) and are over-represented in lower-tier positions (Curtis, 2011). This is a direct result of the well-documented and still incompletely-addressed sexism that routinely deprives promising women effective mentorship and opportunities. This disparity in effective mentorship can also manifest as a racist cudgel, which causes a higher attrition rate for minorities in graduate school, and lower grant funding rates, even though minority trainees produce research that is equal to, if not more innovative than their majority peers. (Nettles & Millet, 2006), lower grant funding rates (Taffe and Gilpin, 2021) even though trainees from underrepresented minorities produce research that is equal to, if not more innovative than their majority peers (Hofstra et al, 2020). The end result is an unacceptably high barrier to success for minority trainees (Corneille et al, 2019). Beyond the obvious injustice, this is also counterproductive to scientific progress as a whole. **We all suffer when worthy scientists are prevented from making the breakthroughs and discoveries that they are capable of.**

How Do We Improve?

These observations are not new, nor are the calls to address this situation. There is a depressingly long and repetitive body of literature across the last several decades charting these problems and proposing solutions. These solutions are, at best, haphazardly implemented and have produced little to no lasting effects. Especially in light of recent events that have rightfully forced a reckoning of systemic racism and inequity, it is time for this cycle to end.

Fortunately, mentorship is a learned skill, and while effective fixes for these problems require systematic change and immense buy-in, they are possible. Different efforts have been made to generate recommendations backed by quantitative science that can reverse these trends and improve mentorship quality for trainees and mentors alike.

Several years ago, The National Academies of Sciences Engineering and Medicine launched a comprehensive study and meta-analysis of mentorship and offers a resource guide for mentors and institutions to better support trainees (www.nationalacademies.org/our-work/the-science-of-effective-mentoring-in-stemm).

Another report, based on input from scientific

trainees (elifesciences.org/articles/59806), puts forward a largely overlapping set of recommendations for research departments, which we agree with and will outline here:

1. Require co-mentorship arrangements to ensure adequate trainee support
2. Encourage and facilitate peer cohorts for social support and peer mentorship, especially for postdocs
3. Require meaningful mentorship training for all mentors: more than a multiple-choice course taken every other year, and with adequate support and incentives, so they do not feel like it is just another distraction from their grantsmanship
4. Require anonymous exit surveys from all trainees and staff. Importantly, they should publish their findings and act on them promptly
5. Provide trainees with clear guidelines and timelines so that career stage advancement does not solely depend on the trainees' single adviser or committee
6. Transparent salary and benefits for all trainees
7. Career and professional development resources so that trainees can independently explore their career options

Special attention must be paid to ensuring that minorities receive effective mentorship that can help them overcome the systematic racism present in science and addresses the issues that can arise from this (www.embopress.org/doi/abs/10.15252/embr.202051269), and a host of other problems regarding grant evaluations are required as well. But for now, we hold that these recommendations form a good starting point for postdocs to advocate for themselves within their labs and institutions.

As a starting point for thinking about where your mentorship experience could improve, consider taking this survey: mentoringfuturesci.net/index.php/evaluate/. Let us know how your experience grades out!

We at the PDA know that these solutions demand hard work, difficult conversations, and consistent effort. But we are committed to ensuring that everyone in our community, and all those wishing to join our postdoc community, can get a fair shot at success. If you have encountered any issues with mentorship, please reach out to us, and we will do everything we can to help.

To begin to effect this change, the PDA will continue to offer these resources and have re-committed ourselves to organizing high-quality workshops and mentoring events so that we can collectively become the change we want to see in the mentoring world together!

Postdocs: As Mentors

by Julie Sesen, Cynthia Kanagaratham, and Sreya Ghosh

To "evaluate" postdocs' mentoring skills, we interviewed Research Assistants who directly worked with postdocs and asked them about their experiences.

Their overall experiences were positive: *"At first, it was kind of intimidating because I knew nothing about the project, but I am a lot more informed and comfortable now."* The respondents usually start by shadowing and learning the postdoc's experiments and circulating in the lab. After a few months, they got more and more independent, took leadership of their day, and ultimately took ownership of their project. *"Overall, the experience of being mentored by a postdoc has been good. My postdoc has been there for me personally and professionally."*

For some, communication with their mentors was made naturally: *"They answer whatever questions I have or anything that I don't understand and help me gain more knowledge not only in the project itself but also about science."* However, others needed more guidance to learn the basics *"I had to complement what I learned in the lab with some reading to understand the basics of some techniques."*

All agreed that discussions with postdocs were beneficial in directing them in their future career goals: *"It is very interesting because you get to talk to postdocs and see their vision of academia."*, *"They also let me focus on what I want to do in the future,"* *"He has not only helped me grow in my current position but also advised me on choosing the best grad school program that fits my skills and ambitions."*

We then asked how postdocs could improve their mentoring skills. Some RAs look for more direct guidance from postdocs and appreciate those that have the patience to teach the basics of specific techniques. Some prefer to be assigned interesting papers and resources to read to complement what they learn in the lab. **Overall, good communication is vital in order to understand mutual needs of both mentor and mentee. There must be a balance between being present while allowing RAs to have their independence.** RAs often have other work and pursue their own research projects and career development activities.

To understand how postdocs perceive their own mentoring skills, we interviewed the Co-Chair of the PDA Mentoring Committee, Jie Zheng (**JZ**), and our Co-President, Sreya Ghosh (**SG**), to understand their experience mentoring RAs, interns, and undergrads in the lab.

Describe your experience mentoring students in the lab. What challenges did you encounter?

JZ: I enjoy the experience of mentoring. It inspires me with out-of-the-box thinking and prepares me for establishing my independent research lab in the future. The biggest challenge I have encountered so far is to set appropriate milestones for the project. The difficulty of the assigned tasks should be well considered, so mentees can stay comfortable and motivated during the learning process.

SG: Mentoring, in general, is an exhilarating and humbling experience. A process where you learn while you teach. The major challenge, in my opinion, is understanding what the primary goal of the relationship is for the mentor and mentee alike. No two mentees or students are alike in personality or their mentoring needs - I have learned to adapt my style according to what suits each individual the best.

Did you receive any mentoring training?

JZ: I haven't received any formal mentoring training yet. I have been mainly learning from my previous and current PIs' mentoring strategies. Meanwhile, I participated in the mentoring circle program hosted by the Associate for Women in Science Massachusetts Chapter. As a mentee there, I have also received excellent advice on mentoring skills.

SG: I did not take any formal course for mentoring, but I have learned by example. I have actively observed my mentors and my peers' mentoring styles and had direct conversations with my students to gauge their needs.

What do you think you have to improve to be a good mentor?

JZ: I think "defining clear expectations from/for mentees" is the part I should improve the most. A perfect match between the expectations from both sides is the foundation for a rewarding mentor-mentee relationship. I hope to attend relevant workshops to improve my interviewing skills for candidate screening and evaluation.

SG: Multitasking is an essential tool for a good mentor, and one can always have more patience while teaching or mentoring.

What qualities do you look for in a mentor?

JZ: Patient and respectful, enthusiasm for sharing and mentoring, good at giving and receiving feedback, have mentors of their own.

SG: For me, a mentor is someone who listens, is proactive, supportive, and invested. Real interest and investment in one's mentee's progress, success, and growth make a great mentor.

RA-Fellow Mentoring Program

by Kimberly Wong

This Spring, the **PDA** and **PRADA** (Program for Research Assistant Development and Achievement) are launching a new Mentoring Program with the goal of bringing **Clinical and Basic Research Fellows** together with **Research Assistants and Coordinators** for career development advice! We interviewed the PRADA Co-directors: Becca Spigel, Clinical Research Assistant II in the Adolescent Medicine Division & Qi Yu, Research Technologist in Camargo lab (HemOnc /Stem Cell Program).

They were motivated to create the Mentorship Program because, as Qi describes *"The program is made to benefit both mentees and mentors. Mentees will learn from research and clinical fellows' experience and career development, and mentors will develop their mentoring skills, crucial for their career evolution and being tomorrow's leaders. This is a mutual interest between PRADA and PDA, and this opportunity will benefit both of our members."*

Becca also notes that *"as Research Assistants and Coordinators, we aspire to pursue a Ph.D. or enter Med School to become clinicians. Thus we wanted to take advantage of the people surrounding us to help us reach our goals."* While commitments and interests can vary between different mentor-mentee pairs, discussions can include topics such as career decisions, learning new skills, preparing applications to new programs, and guidance on preparing Cvs, resumes, or personnel statements. *"We hope that mentees can benefit from someone with older experience and help them get to the next stage of their careers. Especially to have someone to discuss how to be more competitive for applications or opportunities, expand their network, and form their career goals and plans. Postdocs will practice their career mentoring skills as well."*

Together the PDA and PRADA registered mentees and mentors who we interested in participating in this first 6 month cycle. *"Everything is volunteer, and we don't want for them to think that this is a burden. We want members to actually enjoy the experience."*

This year, meetings will be held virtually, but later this year or next year, we all hope that the duos and trios can meet in person. *"We hope this will be a casual and fun experience for both mentees and mentors."* Next year, we are hoping to align it better with the academic year so having a new cohort of mentees and mentors around August or September, so if you are interested in participating, look out for our emails in the Fall!

Teaching experience: Spotlight on Chloe Baron, PhD



"Communicating science to different audiences, ..., is a crucial part of being a scientist!"

Tell us a little bit about yourself and your science background.

I was born and raised in France where I got my Bachelors in life science and Masters in molecular and cellular biology. After 5 years of studying in Paris, I moved to the Netherlands for an internship opportunity in Rotterdam. From there, I decided to stay in the country of bikes and constant rain to do my PhD at the Hubrecht Institute in Utrecht, in the lab of Alexander van Oudenaarden. The focus of my work was (and still is!) hematopoietic stem cells, single-cell transcriptomics, and genetic lineage tracing. After 5 years in Utrecht, I decided to come to Boston for a postdoc in the Zon lab and continue to work on hematopoiesis and lineage tracing in zebrafish.

What kind of teaching experience do you have?

My teaching experience before coming to Boston was quite slim. I only had sporadically tutored high school students during my studies and mentored master students in my PhD lab. Since I started in the Zon lab in the summer of 2019, I've been a volunteer for MassBioEd and BioEyes, two Massachusetts organizations that foster science and biotechnology education. I volunteer to teach middle and high school students about scientific research and careers in STEM. Next, Alicia McConnell and I have developed a two-week high school virtual research experience (www.zonlab.org/camp-zon). After a first successful year, we are now expanding Camp Zon to welcome 30 students, have secured funding to pay our students and our main goal going forward is to increase diversity. Additionally, for this spring semester, I am the lead teaching assistant for a Harvard course directed by Drs. Zon and Breault. In this course, I am leading a weekly journal club with a group of undergraduates and coordinating various course logistics. Finally, in the lab, I am teaching and mentoring on a daily basis, from rotation students to technicians.

What motivated you to develop your teaching skills?

I've always been very interested in teaching and mentoring. Also, I believe communicating science to different audiences, expert or not, young or not so

young, is a crucial part of being a scientist! When I started at BCH, I instantly realized how dense the scientific community is. It is a striking change coming from a small research institute nearby one university and one hospital. Here, the scale is so much larger and so are the opportunities. Right away, I knew this was the right place to expand my research horizons and start exploring other aspects of the job, including teaching.

How did you find those opportunities?

I was extremely fortunate to meet and bond quickly with another postdoc in the Zon lab, Alicia McConnell. Alicia is not only a wonderful scientist, but she is also passionate about teaching and outreach. Learning about all the initiatives she is part of and developed from scratch was inspiring and I wanted to join in on the action. Together, we took her Camp Zon initiative to the next level and made it a paid virtual summer experience for high school students. We also build lectures and teach as a team for MassBioEd and BioEyes. Crucially, my PI, Dr. Len Zon, is extremely supportive of my teaching aspirations and is actively suggesting and offering new opportunities as they arise.

What would be your advice to postdocs willing to acquire such skills?

Ask around about teaching opportunities. I am extremely fortunate to have met Alicia. She shared all her teaching experiences with me and inspired me to get involved! I would have not found all these opportunities on my own. Also, do some research. There are many organizations like MassBioEd and BioEyes, and they are constantly looking for volunteers. Once you have built a relationship with these organizations, finding new teaching opportunities becomes easier. There is and will always be a need for passionate scientists willing to inspire curious and eager students.

What are the next steps for you in terms of teaching?

Developing further and running an even better Camp Zon is my focus for 2021. Alicia and I are working hard to make the camp accessible to diverse students from everywhere around Massachusetts. We teamed up with the wonderful COACH program here at BCH. With their help, we are advertising and recruiting widely to meet our diversity goals. We hope to also see the pandemic improve by the end of the year to be able to welcome the classes we met virtually this year in the lab. A Zon lab experience is never complete without a zebrafish facility tour and a peek at a developing embryo under the microscope!

Postdocs as Mentees: All-Star Mentoring Night Recap

By Jie Zheng & Mrinmoy Das

On November 5th 2020 the **8th edition of the All Star Mentoring event was held**. Like most events in 2020, the event took place over Zoom. The Mentoring committee of the Boston Children's Postdoc Association overcame the challenges of a virtual event and succeeded in providing highly interactive opportunities between **over 40 postdocs and 12 mentors** using the Zoom breakout room feature.

Our fantastic former Mentoring co-chair and organizer of the last 4 All-Star Mentoring events, *Hazel Wilkie*, kicked off our night's events! We were then proud to welcome **Gus Cervini**, VP of Research Administration at BCH.

Gus first thanked all the postdocs and researchers for their scientific contributions and their support for a positive mentoring environment at BCH. Gus then announced two winners of the **2020 BCH PDA Best Mentoring Award**. *The awardees were nominated by their postdoc fellows for going above and beyond in their commitment to mentoring.*



The **JFP Ullmann Mentoring Award**, in tribute to Jeremy Ullmann, a postdoc at BCH and active member of the Mentoring Committee who suddenly passed away in February 2019, was awarded to **Melissa Putman, MD** (Division of Endocrinology and Department of Pediatrics).

The **Postdoctoral Association Best Mentor Award**, awarded to Best Gus also awarded **William (Bill) Pu, MD** (Department of Cardiology). You can relive Gus' talk and the Best Mentors' announcement on our Twitter page <https://twitter.com/BCHPostDoc>. You can also get to know the 2020 Best Mentors by reading our Q and A session with them in an article to be published next month!

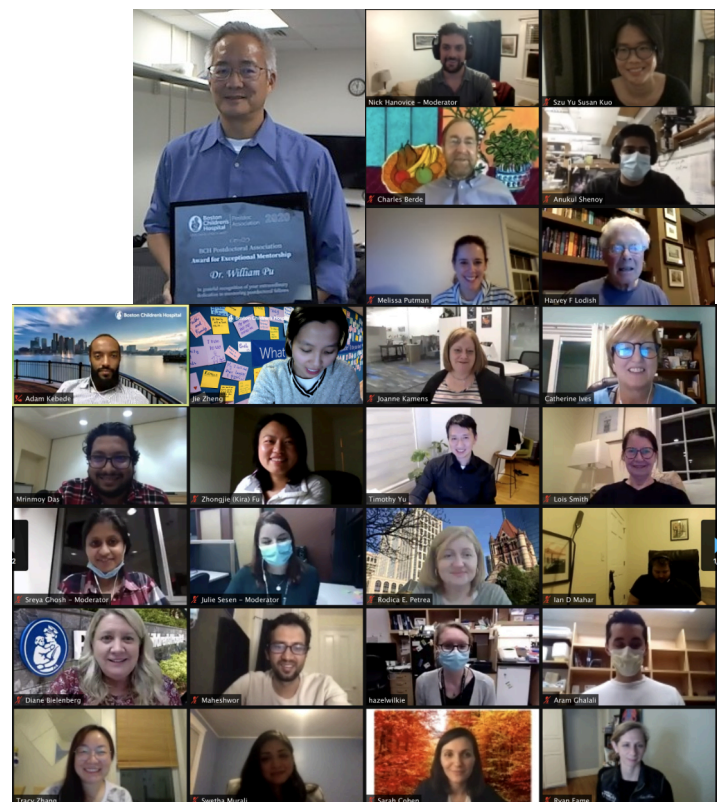
Congratulations to our Best Mentor Award winners: Dr. Melissa Putman and Dr. William Pu!

It certainly was a great honor to have received the BCH Postdoctoral Association's "Best Mentor" award. Mentoring the next generation of scientists is one of the biggest responsibilities and pleasures of being a PI. It is a role that PIs put a lot of energy and time into, with the reward being the opportunity to see your trainees grow and develop into productive independent scientists. To have received an award for these efforts was an unexpected and very pleasant surprise. I'd like to take this opportunity to thank all of the members of my lab past and present who have made it possible for me to receive this award.

- Dr. Bill Pu

The award session set the stage for an evening of lively discussions between our mentors and postdocs. Jie Zheng, a newly recruited Mentoring co-chair, divided the mentors and postdocs into six breakout rooms and then switched the mentors to a different breakout room every 30 minutes. This ensured that the postdocs could receive career development suggestions from three mentors with diverse backgrounds.

Among the 12 mentors who attended the 2020 event, seven were from academia: **Diane Bielenberg, Lois Smith, Melissa Putman, Tim Yu, William Pu and Charles Berde** (BCH), and **Harvey Lodish** (MIT); and three were from industry, **Sarah Cohen** (X4 Pharmaceuticals), **Joanne Kamens** (Addgene) and **Swetha Murali** (Flagship Pioneering). We also welcomed an editor at Cell, **Sri Devi Narasimhan**, and the Senior Director of Business Development and Licensing for



the BCH Technology & Innovation Development Office (TIDO), **Catherine Ives**.

All too soon, it was time to draw the evening to a close. It was a bittersweet moment for the Mentoring Committee as this was the last All-Star event for our Mentoring Committee Co-Chair Hazel Wilkie, who has been a key player in organizing this event over the previous four years. She has always been a hard-working committee member who brought creative new ideas to our Mentoring Committee. We were lucky to have the opportunity to work with her. We will miss her very much and wish her all the best in her future endeavors. We know that whatever the future holds, she will excel and continue to be successful. Thank you for your hard work, Hazel!

The Mentoring Committee would like to take this opportunity to give a final thank you to all the mentors who attended the All-Star Event – we couldn't have done it without you! And to all the postdocs who participated in the event and made the months of planning and organizing all worthwhile – we hope to see you again next year!

Upcoming Events:

Look out for our emails and subscribe to our calendar to find out about new events: tinyurl.com/BCHP-DAcalendar

- **March 25: PDA Game Night** featuring Jackbox games. Register now: bchgamenight.eventbrite.com
- **April: BioRxiv vs. Journal Publications** - details TBA!
- **June: Young Minds Science Review** - Science for kids, reviewed by kids! Details for the live science presentations and review will be announced soon!
- **Every 3rd Wednesdays @ 1 pm: Career Journal Club** with Dr. Jim Gould and Dr. Lu-Ann Pozzi

Recent Events

- CD: Chalk talk
- CD: Exploring career opportunities in Industry
- NOC: Valentine's Poem (*winner below!*)
- International Day of Women & Girls in Science
- Womxn in Science with PRADA
- CD: LinkedIn Seminar - March 11th

Ephemeris

By Alexis Caulier

As a butterfly we call an ephemere
 You landed on my hand at the end of summer
 From all of the flowers you have met in the world
 You picked my petals as they were growing old

From the tiny gardens where blooms the brightest rose
 From the shiniest fields where sunflowers arose
 From delicate iris surrounding crystal ponds
 I was a fleur-des-champs, and of the palest ones

You might have been tired that you stopped on my crown
 I, among all blossoms for your wings to lay down
 I withered in the wind and expected no more
 Than fading at the sun then falling on the floor

I shared my corolla offering you some rest
 Together fell asleep to rhythm of our breath
 Sun's heat embraced our sleep as rippling in the wind
 I lost half of my years turning me back to teen

How long I cradled you, or was it just a dream?
 A sunshine woke me up softly touching my skin.

I barely blinked eyes that you have flown away
 I felt it was a life, when it lasted a day.

International Day of Women and Girls in Science

BCH Postdoc Achievements!

If you would like to share a recently published a paper or award recieved, contact us at postdoc-publicaffairs@chil-drens.harvard.edu (provide your full name, lab, title and journal for publications and information on sponsor for awards). Congrats to the authors and awardees!

Publications from BCH Postdocs

Allie Wroblewski (Cardiac Neurodevelopmental Program) published: "Elevating the Voices of Girls in Custody for Improved Treatment and Systemic Change in the Juvenile Justice System" in American J. of Community Psychology. 2020. [\[Link\]](#)

Victor Fattori, Rogers lab (Vascular Biology Program) published a review: "Neuroimmune communication in infection and pain: Friends or foes?" in Immunology letters. 2021. [\[Link\]](#)

Georgios Ntolkeras, (Fetal-Neonatal Neuroimaging Developmental Science Center) published: "Development, validation, and pilot MRI safety study of a high-resolution, open source, whole body pediatric numerical simulation model" in PLOS One. 2021. [\[Link\]](#)

Nader Morshed, Steven lab published: "Phosphoproteomics identifies microglial Siglec-F inflammatory response during neurodegeneration" in Mol. Sys. Biol. 2020. [\[Link\]](#)

Martina Lundberg Slingsby, Italiano lab (Vascular Biology Program) published: "Sequence-specific 2'-O-methoxyethyl antisense oligonucleotides activate human platelets through glycoprotein VI, triggering formation of platelet-leukocyte aggregates" in Haematologica. 2021. [\[Link\]](#)

Huixin Xu & Ryann Fame, Lehtinen lab (Pathology) and 3 other [#BCHPostdocs](#) co-authors, **Cameron Sadegh** (Pathology), **Jason Sutin** (Pediatrics), **Jin Cui** (Pathology) published: "Choroid plexus NKCC1 mediates cerebrospinal fluid clearance during mouse early postnatal development". In Nat Commun. 2021. [\[Link\]](#)

Keerthana Deepti Karunakaran (Department of Anesthesiology, Critical Care and Pain Medicine) published 3 papers:

1. "Mechanisms Underlying Unconscious Processing and Their Alterations in Post-traumatic Stress Disorder: Neuroimaging of Zero Monetary Outcomes Contextually Framed as "No Losses" vs. "No Gains" in Frontiers in Neuroscience. 2021. [\[Link\]](#)

2. "Suppressed prefrontal cortex oscillations associate with clinical pain in fibrodysplasia ossificans progressiva" in Orphanet Journal of Rare Diseases. 2021. [\[Link\]](#)

3. "Relationship Between Age and Cerebral Hemodynamic Response to Breath Holding: A Functional Near-Infrared Spectroscopy Study" in Brain Topography. 2021. [\[Link\]](#)

Julie Sesen, Smith lab (Vascular Biology Program) published: "Neogenin is Highly Expressed in Diffuse Intrinsic Pontine Glioma and Influences Tumor Invasion" in Brain Research Journal. 2021. [\[Link\]](#)

Margherita Mencattelli, Dupont Lab (Cardiovascular Surgery) & **Abhijit Mondal**, Kaza Lab (Cardiovascular Surgery) published: "In Vivo Molding of Airway Stents" in Advanced Functional Materials. 2021. [\[Link\]](#)

Maria N. Barrachina, Machlus lab (Vascular biology program) published: "Phosphoproteomic Analysis of Platelets in Severe Obesity Uncovers Platelet Reactivity and Signaling Pathways Alterations" in ATVB. 2021. [\[Link\]](#)

Tojo Nakayama, Yu Lab (Genetics and Genomics) published: "Disruption of RFX family transcription factors causes autism, attention-deficit/hyperactivity disorder, intellectual disability, and dysregulated behavior" in Genetics in Medicine. 2021. [\[Link\]](#)

Chang Cao, Fleming lab (Pathology) published: "Maternal Iron Deficiency Modulates Placental Transcriptome and Proteome in Mid-Gestation of Mouse Pregnancy" in Journal of Nutrition. 2021. [\[Link\]](#)

Awards to BCH Postdocs

Jeffrey Stout (Fetal-Neonatal Neuroimaging and Developmental Science Center) won a Thrasher Early Career Award for his project entitled "Hemodynamic MRI metrics to assess ischemic risk and predict surgical outcome in moyamoya disease". [\[Link\]](#)

Huixin Xu, Lehtinen lab (Pathology) won a William Randolph Hearst Fellowship award for 2021.

OUR TEAM

PDA EXECUTIVE BOARD: Kimberly Wong and Sreya Ghosh (co-presidents), Julie Sesen (treasurer), Caroline Schuster-Kubaczka (secretary)



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