THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER

MEDICAL SCIENTIST TRAINING PROGRAM FALL 2020 NEWSLETTER

In this edition:

Director's letter pa	ige 2
MSSO Officer Statement pa	age 3
Autocross in Medical School pa	ige 3
MSTP LIT(erature) Club pa	ige 5
MSTP Answers Call to Improve Diversity pa	age 6
Meet the Entering Class of 2020 pa	ige 7
Alumna Interview – Meet Dr. Copley pa	age 10
Student Updates pa	age 13



Student Authors

Daniela Jimenez-Harrison Kyleigh Rodgers Tiffany King Sabrina Mackey-Alfonso *Editor*: Rebecca Glowinski

Archived newsletters can be found on the MSTP website: <u>medicine.osu.edu/mstp</u>

Contact

OSU MSTP 1072 Graves Hall 333 W. 10th Ave Columbus, OH 43210 (614) 292-7790 mdphd@osumc.edu

Follow us on Twitter! <u>@OhioStateMSTP</u>

1



Our first ever virtual summer retreat, where we all gathered on Zoom to check in and talk about the program and dual-degree training!

Director's Comments

Our program is growing! We've added Dr. James Rocco, MD, PhD, Chair of ENT, as co-Director of the MSTP program. He is joining Dr. Lawrence Kirschner MD, PhD (Director) and myself (Associate Director) to round out the leadership team. We extend him a warm welcome. Dr. Rocco is an accomplished Surgeon Scientist and is eager to provide mentorship and guidance to our students.

Our MSTP program has gone through this pandemic with strength and flexibility. Several examples come to mind: Our program director Ashley Bertran and coordinator Don Ntontolo have worked hard to

coordinate virtual interviews for our applicants. Their efforts are remarkable and much appreciated. Our MSSO seminar series has gone virtual, and is now a weekly opportunity to gather together and learn. We have taken this as an opportunity to bring in speakers from coast-to-coast, including alumnae Dr. Erin Longbrake, MD, PhD (Assistant Professor of Neurology, Yale University), and New **England Journal of Medicine** Editor-in-Chief Eric Rubin. MD, PhD.

Students have been leading volunteer efforts including actively working on COVID-19 research and initiating a monthly Anti-Racism book club. We deeply appreciate their contributions. We will also be holding a virtual holiday party in December, and continue to come together as Buckeyes to help each other through these challenging times.

-Tamar Gur, MD, PhD, Associate Director OSUCOM MSTP





MSSO Officers' Statement

It's been an interesting year, to put it mildly. In lieu of being one more person reminding you of how extraordinary the times are right now, we'll simply leave it there. But we're appreciative of everyone's continued effort and engagement in the program over the past months. We are especially appreciative of everyone who provided us with feedback through our survey over the summer. From the comments, several key themes stood out to us as areas of improvement: first and foremost, the importance of strengthening our MSTP community. We've been working with our very first Social Committee Chair to implement more opportunities for interaction between cohorts. We're also focusing on recognizing students for their accomplishments, including nonacademic ones, through the Impact Factor Award.

Secondly, students reiterated their desire for transparency in our operations. We have been striving to be as transparent in our process as we can, beginning with publishing all meeting minutes so students know exactly what was discussed and what our plans

MSSO Officers' Statement (continued)

are moving forward. We also attempted to be as open as possible in publicizing the feedback we did receive, so the student body can hold us to the improvements that we promise. And we've continued the practice of weekly announcements for regular communication to students.

Finally, we're also focused on improving mentorship within the program. We've been working to improve the peer grant review program and updated the F30/F31 grant database so that all NIH institutions are represented, to ensure that all students who want examples of grants will have access to grants in their field. We're working to standardize peer-to-peer panels for mentorship on things such as Step 1, candidacy, and the return to M3.

The most apparent change we have implemented as a new board has been the continued virtual MSSO schedule and alternating student and faculty speakers. However, we recognize that as representatives of our MSTP student body, we also have a broader goal of facilitating changes that evolve our program into a more supportive and inclusive academic and social atmosphere. In the next several months, we hope to center our future initiatives around this common idea and work toward our goals with our peers and MSTP Leadership.

-Akila, Becca, Chris, Daniela, & Michael

Autocross in Medical School

If you told me summer 2019 that I would be car racing, I would say you're crazy. Before my introduction to autocross, I would not have considered myself a car expert (I am still not) or even someone with an interest. I wasn't watching NASCAR or following the Daytona 500 even though it is only an hour away from where I grew up. I was told cars and racing were for boys, and I didn't question it.

All of that considered, how did I become one of the co-founders of OSU's Autocross Club?

First, I'll give you a rundown of autocross. It is a timed competition in which drivers navigate one at a time through an obstacle course of cones. It is all about handling and maneuverability of the car. The course is usually 60 seconds or less and cones add to your time (2 seconds per cone you hit). You get somewhere between 4-7 runs each event. There is a timing adjustment made for each car based on their mods and specs, meaning it is about the driver and not a competition based on who has the nicest and fastest car.



The OSU Autocross Team, at an event this past summer.

So, how did I get involved? Somehow in my Learning Community group I brought up that I grew up driving only manual cars. A girl in my LC group heard this and started excitedly talking to me about autocross, a sport she had been doing for a couple years. One thing led to another, and by the end of the night she invited me to drive her Volkswagen GTI around the block, changing

Autocross in Medical School (continued)

settings and asking if I could feel the difference in car handling. She could tell I had a natural feel for cars and invited me to an event. I told her I would just ride along to see what it was like. Plus, I drove a Honda Insight, a hybrid car. I was not cut out for it. A couple days later, she came back to me a told me she already signed me up for the event. I was driving, and I was going to codrive her car.

Two weeks later, I drove in my first event and trophied in the novice class. To my surprise, I quickly realized how much I enjoyed the sport and wanted to come back for more. So I did. I met another girl in our med school class who also happened to autocross and co-drove her car, a Civic Si, at my second event. The three of us became best friends and began talking about starting up a club.

However, things weren't that easy. One thing that struck me at the event, was the lack of women representation. There were nearly 200 people at my first event, and I was one of about 5 women. Plus, Gina brought one of her med school friends along, so we accounted for 3 of them. I was lucky. I had Gina by my side. She had already paved the way in the Ohio autocross regions and found people who were excited about having young women join. But this wasn't the case with her first experience in



Sabrina driving a course during an autocross competition.

New York. It ended with a guy yelling at her that she didn't belong, that she wasn't cut out for it and should quit. Gina is one of the fastest people in her class. She trophies regularly and has sheer natural talent that gets noticed by everyone. However, because she is a girl, she was bullied. She almost quit entirely, but the love of the sport brought her back. This, however, was after a year-long hiatus.

If I didn't have her at my first event, things might have gone different for me too. I got noticed by a guy in the novice class who was racing with me. He had done motorcross and a couple autocross events before this one. He, a 40 year old Marine Vet, was enraged that a young girl at her first event was beating him. He tried to play it off as making jokes, but he harassed me and made excuses as to why I was doing better than him. He told me it was my circumstances: the tires, the scoring adjustments, Gina's coaching, the car set up, etc. that made the difference, not my driving skill. He made rude gestures and pestered my friends for my times. There was another guy who ranked between us. I don't think he ever talked to him. At the second event, he immediately found me and started talking up his game. He continued to harass me throughout the event and bragged when he realized he did better than me. Luckily. had friends who shielded me and made me feel so comfortable and confident, that his words bounced right off of me. I was able to see him for what he was: a weak man who was terrified that a girl beat him.

We started this autocross club to spread our excitement about the sport and to provide a safe space for women to get involved in a heavily male dominated sport. I went to an event where I was one of three women. We have looked through previous rosters where there was only one. Unfortunately, the harassment we faced is not uncommon. Gina has told me about other women's experiences. There is even a separate class called Ladies Class that is starting to be

Autocross in Medical School (continued)

phased out, but still exists at every region. It is partially engrained into the culture of the sport.

I am not trying to make it sound like everyone is that way. I have found an amazing community and met so many people incredible people, but that does not mean the problem does not exist. Slowly, the culture is changing. The organizers at the Cincinnati autocross club offered to ban the man who harassed me when Gina told them what happened. They are committed to promoting a welcoming and supportive atmosphere and are succeeding. There also is a national movement called Driving Forward Together that promotes women in autocross. Gina is now a DFT outreach point person. I am hoping our club can help further this movement. We have hosted two main events this season, and our club is gaining traction and a committed roster. Luckily autocross is already socially distanced, and so has been in accordance with COVID restrictions.

If anyone at all, male or female, is interested in joining, know that you have a community here at OSU. We will help coach and support you. Don't think the same way I did. You can autocross. It might not be as crazy as you think.

-Sabrina Mackey-Alfonso

If you're interested:

Facebook: https://www.facebook.com/groups/200072667858402

Or email: sabrina.mackey-alfonso@osumc.edu

MSTP LIT(erature) Club

The year of 2020 has been one of uncertainty, introspection, and personal improvement. Those in our program were rocked following the deaths of George Floyd and Breonna Taylor among many others. Subsequent protests sparked across the nation instilled in us to create a program in the MSTP to culturally educate ourselves while also providing a soft outlet for frustrations, emotion, and feeling. The students and leadership including Aaron Thomas, from the Office of Diversity and Inclusion, reflected on the Program's efforts to support and expand our diverse student body during that harrowing time. There was a strong desire to increase the richness of background in our education as physicianscientists at Ohio State University. As a response, we developed the MSTP Literature Club to supplement our studies from a cultural perspective through incorporation of literature from a wide range of diverse voices. These voices represent those we hear and learn from daily: The individuals they represent are embedded within and compose our academic lives, communities, and also our families.



Book club attendees meeting to discuss the book *Black Man in* a White Coat: A Doctor's Reflections on Race and Medicine

The main goal in developing our literature list was to include an expansive and inclusive background from which to submerge ourselves and learn. From

MSTP LIT(erature) Club (continued)

Michelle Obama's memoir "Becoming" to "The House of Broken Angels" by Luis Albeto Urrea, we've put together a complete list of fiction and non-fiction to inspire thoughtful conversations when we meet each month. The second goal was to create a safe space for conversation about culture in order to draw open those difficult topics that are important in moving our profession forward in an inclusive and welcoming way.

Overall, our Literature Club has been operating for a few months and we are excited to report the attendance of not only many of our students, but also our leadership. This has allowed us to feel connected on a level that is more than academic; It's allowed us to bond together in a common goal to promote inclusion, openness of thought, and cultural education for future physician-scientists.

-Daniela Jimenez-Harison & Kyleigh Rodgers

MSTP Answers Call to Improve Diversity

This article was originally published in the October 2020 edition of The Office for Diversity and Inclusion Newsletter

MSTP admissions consideration begins when we receive students' applications through AMCAS, after students designate their application to our MSTP. Students' primary and secondary applications are reviewed by program faculty, who ultimately determine whether they are granted an interview. We hold 4 interviewing sessions that last approximately 3 days. Throughout their time here, prospective admits interact with current students at breakfast, lunch and two dinners – one of which are held at one of our director's homes. Interviewing students have 6 interviews: 2 with current students, 3 with faculty and one with our directors. These interview sessions are packed with a lot of information and student engagement. Our ultimate goal has been to allow interviewing students to get to know our program through current scholars and potential future colleagues.

Early in 2020, our Medical Scientist Training Program (MSTP) began discussions about revamping our interview sessions, which are led by our associated director Dr. Tamar Gur. Kylene Daily and I were elected as recruitment chairs to assist with these efforts. Due to the global COVID pandemic and a national wave of awareness and call to address institutional racism, we have been presented with opportunities to address new and old challenges our program faces with recruiting diverse physician-scientists.

During the summer, we partnered with Aaron Thomas, who led out MSTP in discussions about the culture of our program and how we can strive to be more inclusive; specifically during out interviewing sessions to increase diversity of matriculating students. From these discussions, we cataloged an action-plan and began implementing changes for our current admissions cycle. First, more faculty are included in the initial screening of applicants to improve the time and depth spent reviewing applications. Next, we updated our student interview evaluation form that allows applicants to talk from the perspective of their own experiences and how they add to and/or value diverse spaces. We also have included virtual breakout sessions and have made more intentional efforts to have under-represented in medicine students in our MSTP present and engage with interviewing students. Finally, we have invited ODI to speak to our students to discuss their roles and support

MSTP Answers Call... (continued)

of students. We intentionally have ODI present a live interactive session and not a pre-recorded video, to emphasize the value in diversity for OSUCOM and our MSTP.

Our future plans are to increase the transparency of our admissions process internally as well as add more descriptive student metrics listed publicly on our website. We also plan to seek opportunities to recruit at HBCUs and other universities that have pathway programs for minority students interested in MD/PhD programs. With the assistance of our strong ODI, we will continue to pursue and improve our outreach and recruitment of diversity for our MSTP. Out leadership is committed to the persistent work to create a MSTP that is invested in recruiting, training and empowering students of color who will more science and medicine forward for future generations.

-Tiffany King

Meet the Entering Class of 2020

Colin Angell

"I grew up in Midland, Michigan. While in high school, I had the opportunity to work as a hospice volunteer. This early exposure to direct patient care had a tremendous impact on me and taught me the importance of a patient-centered approach to healthcare. For my undergraduate training, I attended at The Ohio State University. I studied Biomedical



Science and earned a Bachelor of Science in May 2020. As an undergraduate, I was a member of Dr. Federica Accornero's lab where I studied the striated musclespecific protein, melusin in the context of muscular dystrophy. My hope is to combine my passion for patient care and scientific inquiry through pursuing a career as a physician scientist. Currently, I am interested in translational therapeutics for cancer, where I am particularly interested in studying these questions from a molecular and biochemical perspective. Outside of school, I enjoy strength and endurance training. Although I am no longer a competitive athlete, I still love

pushing myself physically and working toward new athletic goals."

Geoffrey Carney-Knisely

"I was born and raised just outside Burlington, VT. I attended the College of Wooster in Wooster, OH, where I received a Bachelor of Arts in Sociology and in Biochemistry/Molecular Biology. I participated in varsity Cross-Country and

Track and Field while in College and was an active volunteer at Wooster Community Hospital. While I was in College, I interned at the Vermont Department of Health which sparked my interest in Public Health. Through my studies and experiences, I became interested in exploring the significance of health behaviors, this led me to join a project led by Amy Ferketich and Mari Brinkman at Ohio State in the field of Tobacco Control. Outside of the classroom, I still love to run – both for fun and competitively. I also enjoy baking and exploring the many metroparks Columbus has to offer with my dog Achilles."



Rachel Dreher

"I was born in Colorado and grew up right outside Boulder in Louisville, CO. Prior to college I had trained in ballet for 14 years, which took up most of my time, but I also loved to hike and adventure in the mountains that were right in my backyard. I attended Washington University in St. Louis for undergrad where I transitioned from dance to playing ultimate frisbee. Turns out I enjoyed the team aspect and I was a better athlete when I did not have to look graceful as well. In addition, I was a member of Gateway to



the Great Outdoors which taught middle school students about environmental sustainability and outdoor education. I worked in genetics research for 2.5 years in undergrad and then spent a gap year working in biochemical research. During my gap year I also got into climbing and running and I am currently training my kitten, Theo, to be an adventure cat that will hike and camp with me one day. Post - COVID, I hope to be able to explore the restaurant scene in Columbus and see some of my favorite artists (Sara Bareilles, Quinn XCII, Valley, Jon Bellion, etc) live again."

Jacelyn Greenwald



"I grew up in PA/NJ and attended Cornell University, where I earned a degree in chemistry and chemical biology. During my undergrad years I was a chemistry tutor, researcher and manager of the fitness centers on campus. My research project involved developing a method of reliable and replicable protein sample preparation for magnetic resonance force microscopy. After graduating, I spent two years in Manhattan, researching mesenchymal stem cells in patients with progressive multiple sclerosis as part of a phase II clinical trial. After doing research in both physical chemistry and neuroscience, I am looking to merge my interests to look at the structure and function of proteins implicated in muscular dystrophy. Outside of

academics I enjoy weightlifting, cuddling with my cats and dog, hiking, reading and trying to get my plants to grow (work in progress)."

Bella Lee

"Darien, Illinois is my hometown. My childhood summers spent covered in mosquito bites were the impetus for my exploration of the relationship between the human body and the environment (self v. nonself): namely, my hatred of mosquitos and my moderately severe allergic reaction to them. I moved in my early teens to attend boarding school in

Culver, Indiana (but I didn't escape the mosquitoes...). After graduating high school, I moved even further away to attend Harvey Mudd College, where I earned a joint degree in biology and chemistry. In my senior spring, I took an immunology course that crystallized my childhood musings and inspired me to dive deeper into immunological research. I took two gap years in between college and medical school, where I worked as an RA I at A2 Biotherapeutics, a start-up biotechnology company north of Los Angeles, working in cancer immunotherapy. During this time, I also scribed and interpreted at a Spanish-speaking free clinic and tackled food insecurity through a volunteer organization called Food Forward. My gap year experiences doing more translational research, gaining significant clinical experiences, and



meeting a key MD/PhD mentor led me to apply to MD/PhD programs. Outside of work and school, I can be found hanging out with my cat Toro, running very slowly, trying new recipes, and playing board games!"

Seraph Lin



"I was born in Taichung, Taiwan, and immigrated to Los Angeles with my family when I was two years old. I attended the University of California, Irvine, where I earned a Bachelor of Music in Piano Performance in 2013. After graduation, I worked as a professional musician for many years. Due to some personal experiences during this time, I decided to change careers from music to medicine. I was a postbaccalaureate fellow at the National Cancer Institute from 2017-2020, where I conducted research in the lab of Dr. Ludmila Prokunina-Olsson, studying genome-wide association study-identified genomic regions associated with bladder

cancer risk. Outside of the work and school, I love spending time with my two rescue pups, playing video games, reading, and making music!"

Alexia Martin

"I grew up in the suburbs of Minneapolis, Minnesota. I attended the University of Minnesota, Twin Cities where I completed my Bachelor of Science in Microbiology. Here, I joined Dr. Gary Dunny's lab examining the role of extracellular DNA in

enterococcal biofilms and characterizing the role of autolysins in eDNA release. Subsequently, I obtained my Master of Public Health in Epidemiology with a minor in Biostatistics from the University of Minnesota, School of Public Health. I completed my thesis in Dr. Amy Linabery's lab at Children's of Minnesota investigating pediatric mild traumatic brain injury recovery using time-to-event and generalized linear mixed effect modelling and participated in the Uganda Research Training Collaborative examining surgical antibiotic prophylaxis in the context of antimicrobial resistance. During this time, I also worked at the Minnesota Department of Health in the division of Infectious Disease Epidemiology, Prevention, and Control conducting case interviews and outbreak



investigations. Going forward, I hope to integrate microbiologic techniques and statistical analyses to investigate bacterial biofilms and antimicrobial resistance towards identification of useful therapeutics. Outside of research, I have two amazing dogs – Riley and Francis – who I love to go hiking, take agility for fun classes with, and visits to long term care facilities!"

Jude Tunyi

"I am from Seattle, Washington. I attended the University of Washington-Seattle where I earned a Bachelor's of Science in Biochemistry with a minor in Chemistry. I did computational research simulating nanoparticles that can cross the blood-brain barrier which is what got me interested in neuroscience. After college, I spent two years doing computational and experimental research at the NIH National Heart, Lung and Blood Institute on creating peptide mimetics that can be delivered therapeutically to improve the "good" cholesterol that an individual has. I also took a gap year to do a Fulbright in Tampere, Finland where I studied as part of a Master's program in Biomedical Technology with an emphasis in Bioinformatics. It was



during my Fulbright where I improved my computational technical knowledge as well as picking up new hobbies and cultivating existing passions. I joined the debate society and participated in debate competitions. I also continued and expanded my interests in cooking by trying and adding new recipes to my repertoire. I also am a big trivia fan and hope to continue that going forward. A fun fact is I got to experience the Northern lights as well as a Finnish winter. Going forward, my research will be focused on modeling dopaminergic neurons undergoing reinforcement learning to further understand how organisms learn about rewards and punishments in relation to different states of their environment."

Raven Vella

"I was born in Corvallis, OR but soon moved to Simsbury, CT where I grew up. I attended the University of Connecticut where I earned a bachelor's of science in Structural Biology and Biophysics and a bachelor's of arts in Spanish. I was the

director of America Reads and also volunteered with Collegiate Health Service Corps. During college, I became interested in computer science and have decided to pursue research in computational biology. I worked in two labs focused on biostatistical analysis of RNA data. My undergraduate thesis focused on mRNA profiles of cancer patients correlated with their survival. I hope to work on multi-omic data sets during my PhD. In my free time, I enjoy cooking, reading, running, and hiking. I recently adopted my cat Shego, who I have lots of fun with. I'm very excited to be here at OSU!"



Branden Verosky

"I grew up in Elizabeth, a small town in southwestern Pennsylvania. I then attended The Ohio State University initially studying



biology as a pre-med but quickly became interested in neuroscience after a summer volunteering and shadowing in the neurology outpatient clinic at the University of Pittsburgh Medical Center. To pursue my interest in understanding brain-based disorders, I decided to obtain my Bachelor of Science degree in cellular and molecular neuroscience and also began research as an undergraduate in the lab of Dr. Kathryn Lenz in the Department of Psychology. During my time in the lab, I studied the role that microglia have in brain development and long-term behavior through their regulation of myelination using a rodent model. Through these research and clinical experiences, I became interested in further understanding the underappreciated role

that the immune system has in the developmental origins of neurological and psychiatric disorders. This has ultimately led me to pursue a career as a medical scientist. Outside of work, I enjoy spending time outdoors, mostly rock climbing, hiking, and skiing, and when I can't get outside, I enjoy trying new foods, reading, and spending time with friends."

Alumna Interview – Meet Dr. LaRae Copley!

Dr. LaRae Copley is an alumna of The OSU MSTP, and is currently the Chief of Psychiatry at OSU's Counseling and Consultation Service. She chatted with editor Rebecca Glowinski in November about her current practice and the path she took throughout her training.

So to start us off, can you tell me about where you grew up, your background, etc?

Sure! I grew up in Hilliard, Ohio. I went to Ohio State for my undergraduate work. I got an undergraduate degree in Pharmacy, which at the time was a licensable degree. I used to practice as a registered pharmacist while I was a M1/M2, working at Nationwide Children's Hospital on weekends, at their outpatient pharmacy.

In undergrad, I worked in Dr. Bob Brueggemier's lab in the College of Pharmacy, testing potential breast cancer drugs, and really loved research. But when I started seeing patients, I really enjoyed that too, and remember thinking, "maybe I should pursue medicine too." It made sense to me that these two things married together well.

I applied to med school at the last possible

moment and learned about MST programs Alumna Interview (continued)

from a pharmacy professor through a casual conversation. I didn't spend my whole undergraduate degree trying to build a perfect medical school application. I only applied to 3 MD/PhD programs, I think mostly because I really wanted to stay at OSU. And I did! I ended up being really glad I went to school where I grew up, because it was good to have family around.

Were there any particularly memorable or pivotal moments from your training you can remember?

I have a couple. I remember very clearly when I decided I would become a psychiatrist - there were 2 moments that happened in really close succession. As an M3, I was at a community hospital, not rotating in psychiatry. We were caring for a young man who had made a suicide attempt, and a very severe one at that. He was very angry he had survived, and really wasn't talking to people about what was going on. Every day, the team I was rounding with would go in and look at his kidney and liver levels, and talk about how he was getting better and wouldn't need a transplant. But every night, he was acting out to the nurses and our staff, he was yelling at the team on night rounds, and he wouldn't tell people what was going on with him. It was just amazing to me that from the team perspective he was doing better, but I was thinking "wait a second, he's not ok. This is not what 'ok' looks like." I started to understand that those were the patients I really liked, the ones struggling with something I couldn't immediately see. I could spend a little extra time with those patients and get them to tell me what was going on, and sometimes I would have colleagues who didn't enjoy the same.

In a similar timeframe, I was an M3 in the emergency department and was working with an ER resident treating a very young woman who we thought had likely made a suicide attempt via MVA. She denied



LaRae Copley, MD, PhD, is the current Chief of Psychiatry at The OSU Counseling and Consultation Services.

everything to my resident, so I said, "I'm just going to go back in there and ask again." And she told me the whole story - that this was a suicide attempt, conflicts with her parents - a lot of things. It became clear to me that there was something that drew me to these patients, and there was something that was disarming about me, that made me safe to talk to.

Those two events happened within a couple weeks of each other, and so I ended up thinking, "maybe I should be a psychiatrist?" I didn't do a PhD in anything related to neuroscience, but I let my interests guide me. I would have never said as an MD/PhD student that this is what I'd end up doing.

So what did your path end up looking like?

I completed my PhD in Molecular, Cellular and Developmental Biology under the mentorship of Gail Herman, MD/PhD at Nationwide Children's. I stayed at Ohio State for General Psychiatry Residency, and then I did a fellowship at NCH in Child and Adolescent Psychiatry. I realized I really loved to work with teenagers and young adults, and that I just didn't have as much of a knack with younger kids. So I decided that I was going to try to take a position working with transitional adults! A lot of times you get to be their first psychiatrist; you see the first psychotic breaks and the first episodes. I really liked that. You have a real opportunity to help people who have a lot of stigma around their concerns. I thought if you could meet a psychiatrist who seemed really caring and helpful, then hopefully that would

set you up to continue working with Alumna Interview (continued)

providers for these illnesses that often need long term management.

I got very lucky that right as I was leaving fellowship, a position was opening at the counseling center at Ohio State! I'm a lifelong buckeye. I've worked for about 10 years at Counseling and Consultation Service within the Office of Student Life and now serve as Chief of Psychiatry there. All of my patients are college students, and I get to work with a great group of multidisciplinary folks - clinicians from all different disciplines, and a large group of trainees- residents, social work trainees, psychology interns. I get to do a lot of teaching, and a fair amount of administrative work. I ended up being a higher ed/administrative/teaching clinician instead of running a lab.

Can you tell me a little bit of what your practice entails, and what your day to day looks like?

Absolutely. I decided I work better at night, so I come in late, and stay late. Because I'm a psychiatrist, I have to "practice what I preach," so I try to take really good care of myself and that is part of it for me. Typically, I would get to work, do case conference work with trainees and see my patients for the morning. In the afternoon, I may have tasks such as meeting with our psychiatry team or providing psychodynamic supervision for residents, and later in the day I see more patients. It's a really good mix of clinical work, administrative work, and some training!

What do you feel like the most rewarding aspect of your position is?

My patients, for sure. Springtime is the best time of year, when I can see which of my patients graduated, got married, got into graduate school, etc. I get a call every match day from patients telling me where they're going. I've looked at other positions that were purely administrative or all education. I like teaching a lot, more than I ever thought I would, but it would be really hard for me to not do any patient work.

Is there anything about your training or career path that you would change if you could go back?

That's a hard one. Hindsight is 20/20, but I don't think so. I've had people say to me, "you don't do research, do you wish you hadn't done your PhD?" But I enjoy thinking critically, I enjoy the lessons science taught me, and I think in every experience, you take what you want from it and leave the rest. It's not that I don't like science, I just don't think I have the right temperament or personality to run a lab. That was an important thing to learn about myself. One of the ways I "use my PhD," has been completely unanticipated. I treat a lot of graduate students, many struggling in their program of study, regardless of discipline. I speak their language, understand their stressors and can offer ideas based on some of my own educational experiences.

Was there any particular reason you didn't want to pursue the dual-degree, physicianscientist career? Or it was that you didn't want to be running a lab?

I got so interested in doing a lot of clinical work and really honing that skill. It wasn't about not liking something, it was about liking something else a lot more.

Do you have any advice that you could give to current MSTP students who are thinking about their careers and exploring what they want to do?

Be open to everything around you. Meet a lot of people. When I was a student, there was a sense that there was only one way to get where you thought you wanted to go. It really took meeting a lot of people and talking about choices they made, for me to understand that's not always the case. As an MD/PhD student, you're very capable your bottleneck is not your ability, it's your time and how you choose to spend it. Do something because it feeds and contents you and gives you a sense of purpose.

Awards and Honors

Markus Harrigan - F31

Matt Lordo (1st), Ansel Nalin (2nd tie), and Wesley Wang (2nd tie) – Department of Pathology Research Retreat Poster Presentations (Experimental Category)

Publications

Blaszczak AM, Bernier M, Wright VP, et al. Obesogenic Memory Maintains Adipose Tissue Inflammation and Insulin Resistance. Immunometabolism. 2020;2(3):e200023. doi: 10.20900/immunometab20200023.

Blaszczak AM, Krishna SG, Hart PA, et al. Class III obesity rather than metabolic syndrome impacts clinical outcomes of acute pancreatitis: A propensity score weighted analysis. Pancreatology. 2020 Oct;20(7):1287-1295. doi: 10.1016/j.pan.2020.08.011.

Wu YL, Szafron JM, **Blum KM**, et al. Electrospun Tissue-Engineered Arterial Graft Thickness Affects Long-Term Composition and Mechanics. Tissue Eng Part A. 2020 Sep 30. doi: 10.1089/ten.TEA.2020.0166.

Matsuzaki Y, Iwaki R, Reinhardt JW, Chang YC, Miyamoto S, Kelly J, Zbinden J, **Blum K**, et al. The effect of pore diameter on neotissue formation in electrospun biodegradable tissue-engineered arterial grafts in a large animal model. Acta Biomater. 2020 Oct 1;115:176-184. doi: 10.1016/j.actbio.2020.08.011.

Zakko J, **Blum KM**, Drews JD, et al. Development of Tissue Engineered Heart Valves for Percutaneous Transcatheter Delivery in a Fetal Ovine Model. JACC Basic Transl Sci. 2020 Jul 29;5(8):815-828. doi: 10.1016/j.jacbts.2020.06.009.

Matsuzaki Y, Miyamoto S, Miyachi H, Iwaki R, Shoji T, **Blum K**, et al. Improvement of Novel Small-Diameter Tissue Engineered Arterial Graft with Heparin Conjugation. Ann Thorac Surg. 2020 Sep 15:S0003-4975(20)31473-9. doi: 10.1016/j.athoracsur.2020.06.112.

Mirhaidari GJM, Barker JC, Zbinden JC, Santantonio BM, Chang YC, Best CA, Reinhardt JW, **Blum KM**, Yi T, Breuer CK. Tissue Engineered Vascular Graft Recipient Interleukin 10 Status Is Critical for Preventing Thrombosis. Adv Healthc Mater. 2020 Dec;9(24):e2001094. doi: 10.1002/adhm.202001094.

Zbinden JC, **Blum KM**, Berman AG, et al. Effects of Braiding Parameters on Tissue Engineered Vascular Graft Development. Adv Healthc Mater. 2020 Dec;9(24):e2001093. doi: 10.1002/adhm.202001093.

Mikhailov AV, Kalyanasundaram A, Li N, Scott SS, Artiga EJ, Subr MM, Zhao J, **Hansen BJ**, Hummel JD, Fedorov VV. Comprehensive evaluation of electrophysiological and 3D structural features of human atrial myocardium with insights on atrial fibrillation maintenance mechanisms. J Mol Cell Cardiol. 2020 Oct 29;151:56-71. doi: 10.1016/j.yjmcc.2020.10.012.

Hansen BJ, Zhao J, Helfrich KM, et al. Unmasking Arrhythmogenic Hubs of Reentry Driving Persistent Atrial Fibrillation for Patient-Specific Treatment. J Am Heart Assoc. 2020 Oct 20;9(19):e017789. doi: 10.1161/JAHA.120.017789.

Zolotarev AM, Hansen BJ, Ivanova EA, et al. Optical Mapping-Validated Machine Learning Improves Atrial Fibrillation Driver Detection by Multi-Electrode Mapping. Circ Arrhythm Electrophysiol. 2020 Oct;13(10):e008249. doi: 10.1161/CIRCEP.119.008249.

Abraham RS, Marshall JM, Kuehn HS, Rueda CM, Gibbs A, Guider W, Stewart C, Rosenzweig SD, Wang H, Jean S, Peeples M, **King T**, et al. Severe SARS-CoV-2 disease in the context of a NF- κ B2 loss-of-function pathogenic variant. J Allergy Clin Immunol. 2020 Sep 30:S0091-6749(20)31331-2. doi: 10.1016/j.jaci.2020.09.020.

Nalin AP, Kowalski JJ, Sprague AC, et al. Notch Regulates Innate Lymphoid Cell Plasticity during Human NK Cell Development. J Immunol. 2020 Nov 15;205(10):2679-2693. doi: 10.4049/jimmunol.2000434.

Brinton LT, Zhang P, Williams K, Canfield D, Orwick S, **Sher S**, et al. Synergistic effect of BCL2 and FLT3 co-inhibition in acute myeloid leukemia. J Hematol Oncol. 2020 Oct 19;13(1):139. doi: 10.1186/s13045-020-00973-4.

Larue RC, Xing E, Kenney AD, Zhang Y, **Tuazon JA**, et al. Rationally Designed ACE2-Derived Peptides Inhibit SARS-CoV-2. Bioconjug Chem. 2021 Jan 20;32(1):215-223. doi: 10.1021/acs.bioconjchem.0c00664.

Sloan EA, Chiang J, Villanueva-Meyer JE, Alexandrescu S, Eschbacher JM, **Wang W**, et al. Intracranial mesenchymal tumor with FET-CREB fusion - a unifying diagnosis for the spectrum of intracranial myxoid mesenchymal tumors and angiomatoid fibrous histiocytoma-like neoplasms. Brain Pathol. 2020 Nov 3:e12918. doi: 10.1111/bpa.12918.

Wang W, Alzate-Correa D, Alves MJ, et al. Machine learning-based data analytic approaches for evaluating post-natal mouse respiratory physiological evolution. Respir Physiol Neurobiol. 2021 Jan;283:103558. doi: 10.1016/j.resp.2020.103558.

Congrats to the winners of the MSTP Impact Factor Award!

This award is for students who go out of their way to be considerate/helpful to others in the MSTP, at OSU, and in the greater Columbus community!

> Christopher Ayoub Ariunaa Bayanjargal Aliyah Bennett Eileen Hu Daniela Jimenez-Harison Nicole Zalles

Professional School Orchestra

Be sure to look at the songs from the <u>National Virtual</u> <u>Medical Orchestra</u>, an online professional school orchestra consortium that Matt Lordo and Akila Venkataramany are a part of!

Alumni Updates

Congratulations to Dr. Mark Hicar on his promotion to Assistant Professor at The University at Buffalo!

Congratulations to Dr. NaTosha Gatson on her new position leading the Neuro-Oncology department at the Banner MD Anderson Cancer Center!



1072 Graves Hall <u>mdphd@osumc.edu</u> (614) 292-7790 Twitter: <u>@OhioStateMSTP</u>