Welcome Letter from Our New Office Associate

By Aaron Thomas

I’d like to start off by thanking you all for my very warm welcome to the MSTP and SUCCESS Team. So far it has been a most thrilling and welcome return to The Ohio State University. I am no stranger to Ohio State as I graduated with my BA in Comparative Ethnic and American Studies in 2007. Following graduation, I worked in the Office of Admissions as an admission counselor for the 2007-2008 recruitment season. I look forward to using these skills as we work towards recruiting another stellar class into our program.

Following my time in the office of admissions, my career took me to a Bankruptcy and Foreclosure law firm where I worked as a legal assistant for 6 years. Most recently I was employed at the Center of Vocational Alternatives assisting persons living with disabilities and mental illness reach their employment goals. While my work history may not seem exactly related, in each position that I held, I was able to gain incredible experience and skills that will be used to help in the advancement of our program.

When I am not working, I enjoy all things related to the arts. I love going to the theater, watching film, photography, clothing design, print media, and architecture. Anything creative and beautiful, I enjoy. I can also be found listening to music all day long! I enjoy most music but prefer Mariah Carey and Prince above all others. I also have a life-long passion for the culinary arts. I love cooking and exploring new cuisine and techniques, so any fun recipes to share, send them my way!

I look forward to working with each and every one of you and if you haven’t had an opportunity to stop by Graves Hall to meet me, please do so. My door is always open.
2016 MSTP WINTER RETREAT
By Tiffany King

Saturday, February 27th, 2016 was our 3rd annual MSTP Winter Retreat. We began the day with a potluck lunch with contributions from all of our students. Some students entered into our competition to be voted for the best dish. The competition was tough this year, which lead to a tie between two dishes from Kelly Regan and Kavin Fatehchand who both received gift cards to North Market, a popular market with different restaurants and shops here in Columbus. This year we were lucky enough to have Dr. Chad Wright MD, PhD and alumni of OSU who spoke on his journey and advice for our students. Following Dr. Wright we had student presentations on their science and clinical cases. The winner of an Amazon Fire tablet for best talk was Sean Reiff for his presentation on “Optimizing Bruton’s tyrosine kinase inhibitor therapy in chronic lymphocytic leukemia”. The day ended with an amazing display of our students in the talent show. Even our directors, Dr. Schlesinger and Dr. Kirschner performed a sing-a-long that involved the entire group. The talent competition was also very close and resulted in Russell Ault winning his second talent show in row with an amazing reading of a personal poem. The student participation was amazing this year and we look forward to what next year’s retreat will bring.
**Luxi Chen**: Where did you grow up and go to school?

**Phillip Horne, MD, PhD**: I am from Wyoming, Ohio, a suburb of Cincinnati. This is a small community with quality public schools, but without a strong Ivy League push. As a son of OSU alumni, and a percussion/marching band enthusiast, I applied to one school, The Ohio State University, and fortunately, was accepted. (I actually got cut during marching band tryouts the first year, but hung in and was in TBDBITL the three subsequent years.) I learned about MD/PhD training from a friend during my first year in school while studying chemistry and thought it was so crazy it just might work for me.

**LC**: Which factors made you choose OSU and the lab you trained in?

**Dr. H**: In choosing MD/PhD programs, I applied broadly and late to several schools, and ultimately chose OSU for a wide range of graduate school options at the time, familiarity with the program, people within the years ahead of me, and of course the opportunity to watch Tressel ball firsthand for several more years.

Choosing a lab was less straightforward for me. I was interested in orthopaedics, but could not merge those interests with a suitable lab. I ultimately found a great advisor, lab structure, research model, and personal interest studying cellular immunology in another surgical application of basic science research. I joined Dr. Ginny Bumgardner’s lab, who was studying T cell and B cell responses in hepatocellular and pancreatic islet acute transplant rejection, and the effects of the local immune environment in modulating those responses. Cellular immunology was a personal interest of mine, but moreover, the opportunity was great, and the advisor was even greater.

Dr. Bumgardner clearly demonstrated a genuine interest in my graduate education, my overall training trajectory, and “championed my career” (her words at one point). She was always able to stop and focus on my progress, issues, and editing my writing despite how busy she was, all to my benefit. On the other hand, she was less enthusiastic initially about my later decision to pursue orthopaedics, so I am still hoping to show her all of her efforts were not in vain. I think the advisor selection/personality is critical to a graduate trainee’s continued drive, resolve, productivity, and overall success.

**LC**: What are you doing now, career-wise?

**Dr. H**: The graduate education experience during PhD work helped me to develop and demonstrate an increased maturity level that was noticed and respected when returning to clinical training in comparison to my peers. Following graduation from medical school, I went to Duke University Medical Center for residency in Orthopaedic Surgery. I then trained at Hospital for Special Surgery in Manhattan for Spine surgery fellowship. I have since returned in August 2015 to Duke, specifically to Duke Raleigh Hospital, where I am at this point purely clinical as a spine surgeon.

**LC**: Can you describe your typical workweek?

**Dr. H**: I currently see patients 3 days a week, and have cases 1-2 days a week. I am just starting to build my practice now, but am developing plans in the near future to initiate an outcomes-based research program within Spinal surgery at Duke. I additionally hope to renew collaboration and continue work in understanding the immunologic pathways contributing to degenerative joint disease (osteoarthritis) and joint capsule synovial inflammation, in which I was involved during residency training.

**LC**: Looking back at your experiences, what advice would you give to current MD PhD students?

**Dr. H**: To current MD/PhD students, I would say: take advantage of the time during graduate school. Although it seems really busy while you are in it, just wait. Develop skills, pursue interests, fitness, ideas you come up with and don’t put off until later. You may not have even as much time later. Do well in all years of clinical education. It opens doors to have a highly regarded clinical training record. Pay attention to other physician scientists’ lives, schedules, and family balance. It is difficult, but try to develop positive examples/role models for this.

**LC**: How about advice for our graduating students who are joining the real world?

**Dr. H**: It is a long road, but each step comes with a mildly improved view. Learn as much as you can from your various mentors, not only about your field, grant writing, clinical medicine, but also about business aspects of lab and practice, finance, economy, interpersonal dynamics within a department, and getting ahead in academia. Don’t be scared to consider private practice at some point to weigh all options; do what’s right for you and your family.
The 15th Annual OSUWMC Trainee Research Day took place on April 21st, 2016. This year we had approximately 300 trainees present from the following trainee categories: undergraduates, MSTP, medical students, graduate students, residents, clinical fellows, and post-doctoral fellows. The MSTP continued to have strong student representation with 24 students presenting posters and two students winning travel awards: Kelly Regan, a fourth year student and Stephen Bergin a fifth year student in the program. Kevin Blum, a first year student in the program was invited to give an oral presentation entitled “Retooling Laser Speckle Contrast Analysis Algorithm to Enhance Non-Invasive High Resolution Laser Speckle Imaging of Cutaneous Microcirculation” during the Allen Yates Memorial Student Speaker Series. Several students were also involved in the planning and preparation for Research Day including Co-Chairs: Alecia Blaszczak and Michael Koenig, Vice-Chair: Kristina Witcher, and committee members: Kelly Regan, Jason Siu, Chris Bobba, Max Yano and Seemab Ali.

Dr. Richard Lifton the Chair of the Department of Genetics, Sterling Professor of Genetics and Internal Medicine, Founder and Executive Director of the Yale Center for Genome Analysis and Investigator of the Howard Hughes Medical Institute at Yale School of Medicine was the Keynote Speaker for this year. His talk focused on the future of personalized medicine and the benefits of genetic testing and was entitled “Genes, Genomes and the Future of Medicine.” Students from the organizing committee had the opportunity to have dinner with Dr. Lifton at the Columbus Fish Market the evening prior to the event. He talked about his career path as a physician scientist, the future direction of personalized medicine and gene sequencing technology and the importance of young investigators in making breakthrough discoveries. Throughout his time on campus, he was also able to interact with several faculty members, clinical trainees and students.

Dr. Dan Jones and Dr. David Carbone delivered two State-of-the-Art Research Faculty Updates. In alignment with the keynote speaker, they presented on “Expanding the role of genomics in the diagnosis and management of patients with cancer” and “Molecularly Targeted Therapy and Lung Cancer” respectively. Research Day also overlapped with the MSTP Second Look Weekend which allowed potential new students the opportunity to interact with current students and see the breadth of research that occurs on campus.
Looking back at these past eight years, I reflect on how life is filled with serendipity that comes at the intersection of effort, passion, and unexpected opportunities. I came to OSU interested in studying the tumor microenvironment and how cancer parasitically flourishes under the watch of a vigilant immune system. However, I ended up working with a remarkable mentor, Dr. Mark Wewers, a Pulmonary and Critical Care physician, trying to understand the immune response in times of critical illness. While understanding cancer in the context of the patient experience, both at a human and molecular level, through the holistic, “integrated” approach attracted me to OSU, I ended up in a lab and training in clinical environments that were better than I could have imagined.

When I entered the program, the late Dr. Alan Yates was transitioning from his leadership position and Dr. Larry Schlesinger was stepping forward to guide the program. Dr. Yates, who established the MD/PhD program at OSU, was a giant, intellectually and physically. His dedication to training the next generation of physician scientists through innovative approaches to a traditional curriculum brought an ethos to our program that was reflected in the students, which was around 35 at that time. With a smaller program, it was very intimate and I reflect on the guidance and time I was able to spend with students at all levels that helped me navigate through my dual training.

With the passing of the torch to Dr. Schlesinger, as well as the addition of Dr. Larry Kirschner, an invigorating vitality was infused into the program. At our Orientation Meeting, Dr. Schlesinger clearly and boldly articulated his vision for the program and his expectations and support for us. Watching the program grow stronger and become an NIH-funded MSTP is a fitting legacy to Dr. Yates and reflects Drs. Schlesinger and Kirschner’s sincerity and dedication.

Throughout this experience, the solid rock in our program is Ashley Bertran. From my first day, she has been a constant source of support, advice, and a wise perspective. I am fortunate to have her help guide me through the program. One of the hardest things that comes at the end of training is leaving those who helped get you to this point. I thank Ashley for this phenomenal experience, as it feels like only yesterday that I was an undergrad sending her emails regarding my MD/PhD application.

One piece of advice that has helped me along my journey has been to seek out excellent mentors first. While I came interested in studying tumor microenvironments, by finding Dr. Wewers (through the suggestion of Dr. Schlesinger, another excellent mentor!), I found an area of medicine I had never been exposed to and fell in love with it. This unexpected experience has reshaped the career path I am pursuing. Especially at the MD/PhD training level, acquiring the necessary thought process and skills will easily transfer once you have decided what field you will focus your career on, especially when you have a better idea of what the field actually is! With pressure to identify life-long fields of study early, I found that through trial and error, exploring your interests and trying something new, and identifying key advisors who can objectively assess your trajectory and help guide you, the chances of finding a wonderful mentor will be increased. Training at OSU was exceptional. I could not have foreseen that my passion for science and patient-centered medicine would fully be realized here at OSU. I wish you and the program continued success and serendipity. Thank you!
THINKING BACK ON MY FIRST YEAR

By: Kevin Blum

With my first year of medical school under my belt, it is interesting to look back and see what the last year has brought me. I have moved to a new state, met tons of people, learned so much, and have probably already forgotten even more. With seven more years left in the program, it can feel like I have barely just begun the long road to an MD/PhD, but that one year has been full of so many trials and accomplishments. Medical school has been exactly what everyone told me it would be, but at the same time an extremely unexpected experience. I remember being told by every student and interviewer that med school was “drinking from a firehose”, with lectures every day and tons of details to memorize. So I prepared to have lots of lectures, and study a bit more than I used to. But I wasn’t quite expecting what I got when medical started.

With an engineering background, my life for so many years has been to learn a few facts, and then use those facts to dig deep into questions and find solutions. The function of things was much more important than the details. But here in medical school, every day is lecture after lecture of facts to memorize and tricks and tidbits to learn. It seems like there are a hundred facts to learn every day. This change in learning style has been the biggest switch for me, and thanks to some tips from my classmates and students in other years, I am getting a handle on it all. I am finally starting to understand the point of these “flashcard” things so many people used in undergrad. And the pneumonics. Always more pneumonics. But even though I may whine and joke about the amount of studying, it is all worth it when I go into clinic. Spending time face to face with patients and their families, hearing their stories, and then being able to actually figure out what is going on and what I can do to help them, is a tremendously rewarding experience. The first time I heard an actual finding with my stethoscope, I beamed from ear to ear so hard you would have thought I’d won the lottery. All of the hours of lectures and small groups and practice questions were suddenly worth it for what I was able to do for that patient. Moments like that will help pull me through MS2, through Step1, through my PhD, the end of my MD, and beyond. Moments like that, and friends.

Spending time with friends, having potlucks and bad movie nights, playing games, jamming on our instruments, and overall having a wonderful time really helps to relieve stress. I am a firm believer in having fun, and always try to save a little room for it in my day. Being on stage for Night Out, playing parody songs about med school was quite a fun way to blow off steam. After a year of facts and multiple choice questions, getting back into the lab has let me reembrace my creativity and problem solving, an outlet I have greatly needed after a year of reading PowerPoints. It’s quite a different mindset to be back working on building solutions to problems, and looking for ways to improve medical care, but it gives me so much enjoyment. Going back and forth from medicine to research has shown me that this really is the path I want to be on, and that these next seven years will take me to where I want to be. I am looking forward to seeing what these next several years bring, and I am sure that no matter what challenges come along, I can get by with a little help from my friends.
Musings from the President

Zach Hing

After a few years of being in the program and one term as MSSO President, I find myself musing on the many lessons I’ve learned. Here are just two of them that I would like to share with our younger students.

1. Take advantage of MSTP program events to get to know your fellow classmates. Along with your relationship with your mentor(s), relationships with your classmates will be some of the most important connections you will make and subsequently take with you after graduation. I encourage you to put yourself out there and get to know your classmates from all years and backgrounds. They will become your future reviewers, colleagues, and most trusted collaborators. No one understands what you have gone through as a physician scientist trainee like your fellow MSTPers. Program-organized events such as the summer and winter retreats are great springboards for these types of connections. Our program continues to attract incredibly talented people from all over the country. Getting so many original thinkers in one room can serve as a nidus for incredible ideas and achievements.

2. Practice medicine and perform research with compassion. As a medical student, it can be disheartening to see how seldom modern medicine fixes or “cures” our patients. But, I think our most humbling act as medical students is when we offer a comforting hand to our patients for whom we can do nothing else. It is worth remembering the words of Dr. Edward Trudeau, a physician in the 1800s, who maintained that our goal is doctors is “to cure sometimes, to relieve often, to comfort always”. While it is a daunting path, becoming compassionate physician scientists should continue to be our ultimate goal and the only metric by which we measure our future success.

Student Awards and Achievements

- Kristina Witcher will be appointed to the Comprehensive Training in Oral and Craniofacial Sciences Program (CTOC)
- Sean Reiff was selected to present at the Department of Internal Medicine’s Clinician Scientist Trainee Research Day
- Kelly Regan and Stephen Bergin won Travel Awards for their outstanding performance at the Wexner Medical Center’s Trainee Research Day on April 21, 2016
- Kelly Regan received a Medical Alumni Society Student Grant to support her oral and poster presentations at the upcoming Molecular Medicine Tri-Conference
- Congratulations to the 2016 MSTP Leadership and Academic Achievement Winners: Russell Ault, Kevin Blum, Marcus Harrigan, Tiffany King, Nima Milani Nejad, Ansel Nalin, Bin Ni, Davin, Packer, Obada Shamaa, and Max Yano
- Luxi Chen received the 2015 ASH Abstract Achievement Award at the annual American Society of Hematology conference
- Kelly Regan received the 2016 Molecular Med Tri-Conference Student Fellowship Award to present a poster at the conference
- Giancarlo Valiente was awarded the NIH Diversity supplement grant
- Kirsten Johnson was awarded the F30 Fellowship Award
- 2016 University Fellowship Award Winners: Russell Ault, Seemaab Ali, Alex Hartlage, Lisa Heisterberg and Ansel Nalin
- 2016-2017 MSSO Officers: President – Alex Hartlage, Vice President – Kristina Witcher, Secretary – Kevin Blum, Treasurer – Ellen Lubbers
American Physician Scientist Association (APSA) Annual Meeting

By: Jillian Liu

2016 marked the 12th year for the American Physician Scientist Association (APSA) Annual Meeting in Chicago, Illinois. This meeting also held special significance, as it was the first year that APSA was officially recognized as a member of the Joint Meeting, which has historically been held by the American Society for Clinical Investigation (ASCI) and the Association of American Physicians (AAP). This honor solidifies the commitment of ASCI and AAP to the mentoring of young physician scientists, and opens the door to future opportunities for APSA members to interact and collaborate with ASCI and AAP members. This year also marked the election of our own Dr. Larry Schlesinger into the AAP (congratulations!).

In attendance was Jillian Liu (Chair of Events), Jason Siu (Events Committee), and Obada Shamaa. Some of the highlights of this year’s Joint Meeting included talks by three Nobel laureates: Peter Agre MD, Michael Brown MD, and Joseph Goldstein MD. Other notable speakers included Diane Griffin MD PhD, Anthony Fauci MD, and Huda Zoghbi MD. APSA members were encouraged to attend various breakout sessions where they could learn about Policy Issues facing Physician Scientists from the National Academy of Medicine president, Victor Dzau MD; how to balance work and life from the AAP president, Cricket Seidman MD; and which Postgraduate Opportunities are available to physician-scientist trainees from orthopedic surgeon/astronaut, Robert Satcher MD PhD. The meeting also provided trainees the opportunity to meet their peers at the top of the John Hancock and to brush shoulders with the “glitterati of American academic medicine” (as one AAP president once eloquently stated it) at both a mentoring breakfast and a black tie dessert reception.

Finally, the meeting concluded with the opportunity to hobnob with residency programs directors from 15 different institutions, including Brigham and Women’s, Massachusetts General Hospital, and the University of California Los Angeles. All-in-all, this meeting was both informative and beneficial, and I highly encourage anyone who is interested in submitting a poster to next year’s annual meeting, becoming a member of APSA, or getting more involved with APSA leadership to contact me at Jillian.Liu@physicianscientists.org!