

2021 Recruitment

JANUARY 10-12TH 2020



 **UNC** | SCHOOL OF
MEDICINE
MD-PHD PROGRAM

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DIRECTORS' WELCOME

DEAR 2021 UNC MSTP APPLICANTS,

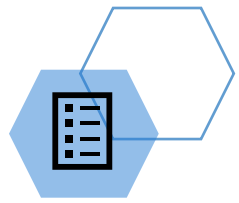
Warmest greetings to all of you! We are excited for you to meet our UNC MD-PhD community virtually. Although we know the virtual visit is not ideal for anyone, we have worked very hard as a leadership team in conjunction with our amazing students to prepare an exciting and interactive program despite the virtual circumstances. We are confident that you will learn about our UNC MD-PhD program, and be impressed with our ability to train students in virtually all areas of medicine and public health. We also know that even in a virtual environment, you will get a feel for why we love our community of smart, resilient, compassionate, and diverse people. We would have loved to have you here and “show off” our beautiful campus and see our research labs and hospitals, but that will surely happen in the future! We are truly fortunate to live and work in such a beautiful and nurturing environment.

We know that each of you are highly accomplished. We have read about your research experiences, and your essays, and know that all of you are motivated to change the world. We are optimistic for the future. Indeed, this is an amazing time to become a physician scientist. We can't wait to meet you! -Toni & Mohanish

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SCHEDULE



SUNDAY, JANUARY 10

1:00 PM Welcome & Program Presentation

UNC MSTP interviews begin on Sunday afternoon. We will start with brief introductions followed by a Program Presentation. There will be time at the end to run through the interview agenda and answer questions.

6:00 PM Meet and Greet with Current Students

Current MD/PhD students have organized small group sessions in a format where candidates can feel comfortable getting to know our students and asking questions about the program.

MONDAY, JANUARY 11

Experience UNC

You will be getting to know the MD Program and participating in medical school interviews.

Group 1: 7:30 AM Check in and ID verification (Make sure you have your government ID)

8 – 9 AM Orientation

9 – 10 AM First Interview session (either traditional interview, or group activity)

10 – 11 AM Second Interview session (switch to either traditional interview, or group)

Group 2: 10:30 AM Check-In and Identity Verification

11 – 12 PM Orientation

12 – 1 PM First Interview session (either traditional interview, or group activity)

1 – 2 PM Second Interview session (switch to either traditional interview, or group)

2 – 3:45 PM Small group meetings with program Co-Directors (Groups A-C)

Candidates will be assigned to a group of 5 to meet with Directors for 35 minutes.

4 – 5 PM Meet with Current Students by Research Interest

Candidates will meet in small groups with current MD/PhD students in their research areas of interest.

TUESDAY, JANUARY 12

9 AM – 2 PM Research Faculty Interviews

The majority of the day will be spent participating in research interviews and learning more about the breadth of research opportunities available here at UNC.

2:50 – 4 PM Small group meetings with program Co-Directors (Groups D & E)

Candidates will be assigned to a group of 5 to meet with Directors for 35 minutes.

4 – 5 PM Student Panel

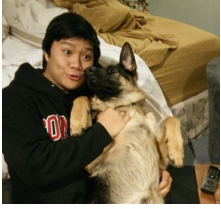
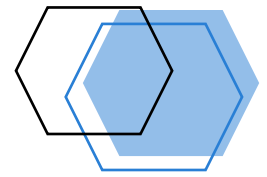
Current MD/PhD students will discuss a variety of topics related to training at UNC and living in Chapel Hill.

5 – 5:30 PM Wrap Up and Goodbyes

This session will be led by program Co-Directors. There will be time for Q & A.

FIRST YEAR STUDENTS

MEET OUR NEWEST STUDENTS!



Chelston Ang

Hometown: Wantagh, NY
Interesting Fact: I once ate four third-lb burgers in one sitting and won a T-shirt.



Loren Barcenas

Hometown is Boca Raton, Florida
Interesting Fact: I have traveled to every continent except for Antarctica.



Thomas Collins

Hometown: Chagrin Falls, Ohio
Interesting Fact: I am one of 5 kids, 30 cousins, and 3 Thomas Collins's



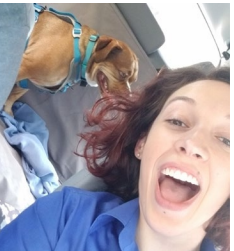
Sean Connelly

Hometown: Barnegat Light, NJ
Interesting Fact: I grew up a few blocks away from a lighthouse



Jeremy Fine

Hometown: Glenview, IL
Interesting Fact: I taught myself how to play the drums last year!



Amber Gomez

Hometown: Alameda, CA
Interesting Fact: I had jaw surgery a few years ago and never got the feeling back in my chin so I can never tell if I have food on my face!



Monica Lyons

Hometown: Concord, MA
Interesting Fact: I have a black belt in Taekwondo



Kyle Pellegrino

Hometown: Bayside, Queens in NYC
Interesting Fact: I once attempted to eat a six pound bowl of pho and was about half-way through when I realized I had made a terrible, and expensive, mistake..



Cambray Smith

Hometown: Wyoming, OH
Interesting Fact: I've roller-bladed a half marathon (very slowly)



Matthew Sutcliff

Hometown: Cumberland, Rhode Island
Interesting Fact: I played Aladdin for my 5th grade school play. I can't sing or act so I feel bad for my parents who had to watch that!



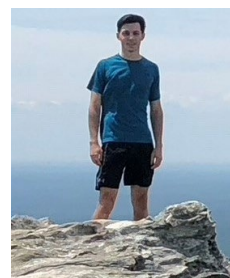
Paige Takasugi

Hometown: Wilder, Idaho
Interesting Fact: I'll do anything to be outdoors! I love hiking, biking, camping & hoping to add surfing to the list soon! The beach may not seem close to some, but this is the closest I've ever lived!



Lizzy Thomas

Hometown: Los Angeles, CA
Interesting Fact: I didn't get my ears pierced until I was 23, and I got them pierced in Taiwan



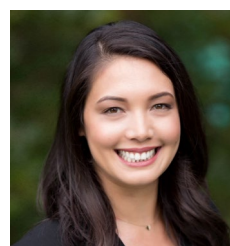
Matthew Vander Ploeg

Hometown: Muskegon, MI
Interesting Fact: I hate bacon. I used to love it as a kid, but one day in middle school it hit different and I haven't had any since.



Catherine Li (2nd yr PhD-Epi)

Hometown: Fremont, CA
Interesting Fact: I eat two hardboiled eggs for good luck on the days I have exams.



Alisa Wallach (NIH GPP)

Hometown: Palo Alto, CA
Interesting Fact: My Dad taught me how to fly fish at a very young age. Fishing in the Spanish Pyrenees Mountains has been one of our most memorable trips!

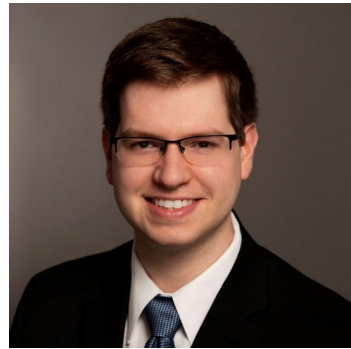
GRADUATING STUDENTS

Best part about UNC MSTP



Alex Carlson-Neuroscience

The community of people. Whether it be in monthly case conference discussions, weekend hang outs, mock review panels, or the annual beach retreat, this is a group that cares deeply—not only about science and medicine, but also each other.



Matt Lipner-Pharmacology

The support system that is available to address any possible issue a student could have in any year of the program. Our MSTP teams, student council, and the Leadership Team are all always available and excited to make changes that benefit each of us and the program as a whole.

Halei Benefield- Epidemiology

My favorite part of the UNC MSTP is my classmates. They have supported, inspired, and amused me over the last 7 years and I will miss them dearly!



Casey Rimland-NIH Cambridge Scholars Program- Dept of Surgery

That this program is truly a family. It has been remarkable to spend 8+ yrs training with colleagues who you know will drop everything to help you at a moment's notice, whether in your personal life or professionally. This spirit exists because of the truly wonderful MD/PhD leadership team, who will do everything in their power to make sure you succeed and genuinely are about you not just as a student but also a whole person.



Anna Kahkoska-Nutrition

How it supports and encourages students to find creative opportunities to pursue their research interests and passion. It makes for a community of thoughtful, energized, and like-minded people, even though everyone's training can end up looking very different. The program has also given me some of my closest friends I am grateful for all of them.



Dean Nehama-Genetics and Molecular Biology

How much it takes pride in and is committed to its trainees and their individual journeys. It is a small, big family that empowers and supports you to pursue your life goals.

Sherry Chao-Bioinformatics and Computational Biology

How collegial our community is. Everyone, from the leadership to our students, cares about each other's wellbeing and success. I can go to anyone in the program and ask for advice or even opportunity to collaborate on a project, which I think is something unique to our UNC culture.



Christof Smith-Microbiology & Immunology

Sense of friendliness, collaboration, & mentorship, all while taking place at a top tier medical & research institute. This amazing combo of supportive & intimate education alongside world class research provides a special environment for trainees to become outstanding physician scientists while cultivating humanism in medicine for patients from all walks of life/ backgrounds.



Chris Giardina- Biomedical Engineering

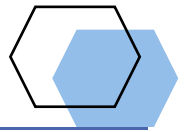
I loved that every single proposal we as students came up with, from taking time off to do an internship to directing plays, was wholly supported by the MD-PhD Team.



Randall Ung-Neuroscience

Favorite thing would definitely be all the great people I get to work with! We have many great attributes, but that one really stands out.

2020 THESIS DEFENSES

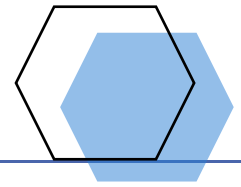


		DEPT/CURRICULUM	DISSERTATION TITLE	DEFENSE DATE
Dayne	Filer	Bioinformatics and Computational Biology	Tools and Statistical approaches for integrating DNA sequencing	11/16/2020
Rashmi	Kumar	Genetics & Molecular Biology	A Tale of Two Ends: Double Strand Break Repair from Pre-Neoplasia to Neoplasia	6/9/2020
Courtney	Vaughn	Genetics & Molecular Biology	Exploring the role of DNA damage, nucleotide excision repair, and circadian rhythm on cellular response to platinum-based drugs	5/6/2020
William	Weir	Bioinformatics and Computational Biology	Modularity-Based Approaches to Community Detection in Multilayer Networks with Applications Toward Precision Medicine	3/26/2020
Elizabeth	Brassfield	Philosophy	Conscience and Its Role in Moral Life	3/24/2020
Marcus	Basiri	Neuroscience	Transcriptional Representations in Discrete Neural Systems and Their Tuning by Chronic Physiological Pressures	3/24/2020
Prateek	Katti	NIH Ox-Cam Program	Drug-Device Development: Cancer Immunotherapy with Therapeutic, Ultrasound-Mediated Delivery	3/23/2020
Connor	Puett	Biomedical Engineering	Advancing the clinical potential of carbon nanotube-enabled stationary 3D mammography	3/20/2020
Nicholas	Brazeau	Epidemiology	The Molecular, Spatial, and Genetic Epidemiology of Malaria in the Democratic Republic of the Congo	2/24/2020
Sarah	Brnich	Genetics & Molecular Biology	Missense Managed: Examining the Role of Functional Assays in Clinical Variant Interpretation	1/24/2020

2020 STUDENT AWARDS

AWARD	DESCRIPTION	STUDENT
Alpha Omega Alpha Medical Honor Society	Recognition of high educational achievement, gifted teaching, promise of leadership in academia & community, supporting the ideals of humanism, and promoting service to others	Anna Kahkoska Casey Rimland Sherry Chao Matthew Lipner
Gates Cambridge Scholarship	Fully funded scholarship for pursuing doctoral degree in genomic sciences at the University of Cambridge through the NIH Oxford-Cambridge Scholars Program	Yasemin Cole
Gertrude Elion Mentored Medical Student Research Award	Support for women medical students who are pursuing health-related research projects	Courtney Vaughn Halei Benefield
Graduate Education Advancement Board HORIZON Award	Recognizes research that holds extremely high potential for making a significant contribution to the educational, economic, physical, social or cultural well-being of NC citizens and beyond at a future time.	Alison Mercer-Smith
Michael S. O'Malley Alumni Award for Publication Excellence in Cancer Population Sciences	Presented for the outstanding publication record by a graduate of the Gillings School of Public Health that advances knowledge in population-based cancer research (\$2.5k)	Halei Benefield
P.E.O. Scholar Award	Recognizes women in higher education who have the potential to make significant contributions in their field	Sherry Chao Anna Kahkoska
Royster Society of Fellows	5 year scholarship for promising students pursuing their graduate thesis in epidemiology	Camille Morgan
Scott Neil Schwirck Fellowship	Research award to honor a student who best represents the qualities of curiosity, intellectual vigor, enthusiasm for science and research, and a strong desire to help others	Courtney Vaughn
UNC 3 Minute These- 2 nd Place	National academic competition in which graduate students communicate the breadth and significance of their research project to a non-specialist audience.	Meryem Ok
35 th Annual MD/PhD National Student Conf- 1 st place Student Talk	Alison Tied for 1 st place in the student oral presentation at this year's virtual conference.	Alison Mercer-Smith

RECENT PUBLICATIONS

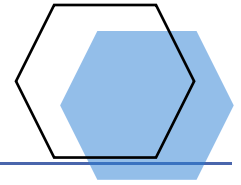


PUBLICATION

- Daag JV, Ylade M, **Adams C**, et al. (2020) Evaluation of a new point-of-care test to determine prior dengue infection for potential use in pre-vaccination screening. *Clin Microbiol Infect*. PMID: 32866651
- Benefield HC, et al. (2020) Borderline Estrogen Receptor-Positive Breast Cancers in Black and White Women. *J Natl Cancer Inst*. PMID: PMC7357313
- Benefield HC, et al. (2020) Epidemiology of Basal-like and Luminal Breast Cancers among Black Women in the AMBER Consortium. *Cancer Epidemiol Biomarkers Prev*. PMID: 33097496
- Brassfield ER, and Buchbinder M. (2020) Clinical discussion of Medical Aid-in-Dying: minimizing harms and ensuring informed choice. *Patient Education and Counseling*.
- Nakamura ZM, MacKay DP, Davis AM, **Brassfield ER**, et al. (2020) Reconsidering scarce drug rationing: implications for clinical research. *J Med Ethics*. PMID: 33246996
- Walker PGT, ... **Brazeau NF**, et al. (2020) The impact of COVID-19 and strategies for mitigation and suppression in low- and middle- income countries. *Science*. PMID: PMC7292504
- Hogan AB, ... **Brazeau NF**, et al. (2020) Potential Impact of the COVID-19 Pandemic on HIV, Tuberculosis, and Malaria in low-income and middle-income countries: a modelling study. *Lancet Glob Health*. PMID: PMC7357988
- Thompson HA, ... **Brazeau NF**, et al. (2020) SARS-CoV-2 infection prevalence on repatriation flights from Wuhan City, China. *J Travel Med*. PMID: PMC749965
- Fu H, ... **Brazeau NF**, et al. (2020) A database for the epidemic trends and control measures during the first wave of COVID-19 in mainland China. *Int J Infect Dis*. PMID: PMC7603985
- Fouladi F, Glennly EM, **Bulik-Sullivan EC**, et al. (2020) Sequence variant analysis reveals poor correlations in microbial taxonomic abundance between humans and mice after gnotobiotic transfer. *ISME J*. PMID: PMC7305193
- S.D. Falcinelli**, et al. (2020) Impact of biological sex on immune activation and frequency of the latent HIV reservoir during suppressive antiretroviral therapy. *J Infectious Diseases*. PMID: PMC7653086
- Gertner, AK**, et al. (2020) Primary Care Providers and Specialists Deliver Comparable Buprenorphine Treatment Quality. *Health Aff (Millwood)*. PMID: 32744950
- Wallis J, **Katti P**, et al. (2020) A liposome-based cancer vaccine for a rapid and high-titre anti-ErbB-2 antibody response. *Eur J Pharm Sci*. PMID: 32653563
- Lodge EK**, et al. (2020) The association between residential proximity to brownfield sites and high-traffic areas and measures of immunity. *J Expo Sci Environ Epidemiol*. PMID: PMC7483819
- Baharom F, ... **Mule M**, et al. (2020) Intravenous nanoparticle vaccination generates stem-like TCF1+ neoantigen-specific CD8+ T cells. *Nat Immunol*. PMID: 33139915
- Kim H, Berens NC, **Ochandarena NE**, Philpot BD. (2020) Region and Cell Type Distribution of TCF4 in the Postnatal Mouse Brain. *Front Neuroanat*. PMID: PMC7379912
- Puett C**, et al. (2020) Applying synthetic radiography to intraoral tomosynthesis: a step towards achieving 3D imaging in the dental clinic. *Dentomaxillofac Radiol*. PMID: 32666823
- Rimland CA**, et al. (2020) Outcome Measures in Large Vessel Vasculitis: Relationship Between Patient-, Physician-, Imaging-, and Laboratory- Based Assessments. *Arthritis Care Res*. PMID: 31785185
- Ferrada M, **Rimland CA**, et al. (2020) Defining Clinical Subgroups in Relapsing Polychondritis: A Prospective Observational Cohort Study. *Arthritis Rheumatol*. PMID: 32249511
- Beckermann KE, ..., **Smith CC**, et al. (2020). CD28 Co-stimulation Drives Tumor-Infiltrating T Cell Glycolysis to Promote Inflammation. *JCI Insight*. PMID: PMC7455120
- Smith CC** et al. (2020). Using RNA-sequencing to characterize the tumor microenvironment. *Methods in Molecular Biology*, vol 2055. PMID: 31502156
- Rodriguez-Romaguera J, **Ung RL**, et al. (2020) Prepronociceptin-Expressing Neurons in the Extended Amygdala Encode and Promote Rapid Arousal Responses to Motivationally Salient Stimuli. *Cell Rep*. PMID: 33176134

NIH F30 AWARDS

INDIVIDUAL MD-PHD PREDOCTORAL FELLOWSHIP



Last	First	TITLE
Benefield	Halei	The role of estrogen receptor in breast cancer outcomes and the effect of exposure history
Brathwaite	Danielle	Emergency Department-Based Psychiatric Services for Children and Adolescents: An In-depth Investigation of Care in North Carolina
Brazeau	Nick	Identifying the Distribution, Origin and Threat of Plasmodium vivax in the DRC
Chao	Sherry	Defining the quantitative relationship between DNA damage and cell cycle dynamics in CUL9-deficient cells
Diehl	Nate	Validation of WEE1 kinase as a clinical target in KRAS-mutant pancreatic cancer
Falcinelli	Shane	Reducing the HIV Reservoir: Next-Generation Latency Reversal Agents and T Cell Population Targets
Filer	Dayne	Expanding the utility of prenatal genetic testing
Gertner	Alex	Utilization and Access to Buprenorphine Treatment for Opioid Use Disorder in Medicaid
Grayeski	Phil	Structural Analysis of SERPINA1 RNA IN A1AT Deficiency
Kahkoska	Anna	Characterizing Impulsivity as a Determinant of Weight and Glycemic Control in Youth with Type 1 Diabetes
Keepers	Ben	Human CRISPRa Cardiac Reprogramming: Model Characterization and Epigenetic Mechanisms
Kovacs	Stephen	Inflammasomes and Gasdermins in the Pathogenesis of Bullous Pemphigoid
Lipner *	Matthew	FOLFOX-induced kinome reprogramming in pancreatic cancer tumor xenografts
Lopez	Cesar	The Role of Dengue Virus Antibodies in Vector-independent transmission of Zika Virus
McDonell	Shan	Evaluating the impact of obesity-associated inflammation on breast cancer heterogeneity and metastasis using single cell RNA-seq
Mercer-Smith	Alison	Therapeutic Engineered Stem Cells as a New Adjuvant Therapy for Non-Small Cell Lung Cancer Brain Metastases
Oh	Loren	Detection and treatment of breast and colorectal cancer in dual eligible beneficiaries in the Medicare Sharing Savings Program
Ok	Meryem	A Novel Planar Crypt Microarray for Real-Time Evaluation of Human Intestinal Stem Cell Fate
Puett	Connor	Improved cancer screening with synthetic and stationary 3D mammography
Sengottuvel	Nisitha	The Role of SPON1 Expressing Inflammatory Monocytes in Promoting Lung Cancer Metastasis.
Smith	Christof	Design and Delivery of Neoantigen-based Tumor Vaccines
Ung *	Randall	Encoding Precise Behavioral Features of Anxiety by Cortico-BNST Ensembles
Vaughn	Courtney	Genome-wide Patterns of DNA Damage and Repair in Resistance to Platinum-Based Chemotherapy

*Ended FY20

TEAM UPDATES

THREE OF OUR FIVE TEAMS HAVE NAMES HONORING OUR FOUNDING DIRECTOR, EUGENE (GENE) P. ORRINGER.



Cell Yeah

Co-Capt: Clark Cunningham

Co-Capt: Allie Bukowski

We won the retreat competition, making that 3/4 or 4/5? years in a row? The dominance continues...

This year was the first year that we ran a special "NC Connections" applicant interview weekend that was a tremendous success! Several of our new matriculating students came from that week, which we believe is in no small part due to our superb hospitality. We volunteered at the State Fair collecting canned goods for the food bank and had a team laser tag outing that was a blast. Current plans are under way to hold a socially-distanced team event in the near future.



EPO induced Progenitors

Co-Capt: Meryem Ok

Co-Capt: Julie Necarsulmer

Past EPO Activities: May 2019 - DNA Day 5K volunteering.

Helped organize, publicize, and fundraise for the Annual DNA Day 5K. Many team members also ran the race! August 2019 - Social Potluck. We got together at Evans' place to shoot the breeze, eat pizza, and hang out with a chicken coop. September 2019 - Mentor Lunch. In the fall of 2019, EPO-Induced Progenitors welcomed a new faculty mentor, Dr. Jonathan Parr. To celebrate and introduce ourselves, we had a team lunch with Dr. Parr and our other mentor Dr. Alex Duncan. January 2020 - Recruitment weekend! We are in charge of the first weekend in January, now second overall recruitment weekend. June 2020 - EPO Zoom Social – We hosted a social hour over Zoom. Dr. Duncan joined, as well as students from multiple years. We gained two additional mentors from the PSTP program: Jose Martinez and our very own MSTP alumna Klara Klein! July 2020 – Virtual Retreat. We welcomed three new MS1s to Team EPO: Cambray Smith, Alisa Suen Wallach, and Sean Connelly! October 2020 - Pumpkin Carving. Team EPO and Gene's Dream Team had a successful, socially-distanced pumpkin carving joint event with team captains and MS1s. 🎃



Future EPO activities: We look forward to January 2021 Virtual Recruitment weekend and getting together as a group in whatever way possible in the coming months!



Gene's Knockouts

Co-Capt: Sarah Glier

Co-Capt: Nisitha Sengottuvel

Genes Knockouts took a few months off after planning the fabulous retreat last year at Wrightsville beach. But we got

back together right as the MS2s entered the clinic to celebrate the end of their Step1 dedicated study period (and unknowingly, the start of COVID19) with a lovely dinner at Al's Burger Shack in Governor's Village. We had hopes and plans for other fun activities this summer like an outdoor paint and picnic event in a local park, but nature seems to have had other plans for how humans will socialize going forward (shrugs). Our team is currently busy figuring out how to incorporate some social-ness and how to welcome the incoming students at this year's retreat.





Gene's Dream Team

Co-Capt: Loren Oh

Co-Capt: Zachary Billman

Gene's Dream team is ready for the new year! This past year, our team joined with the Wild Types to take on the UNC Outdoor Education Center's Challenges Course. Who knew that UNC operated a Ninja Warrior-style obstacle course on campus? We decorated cookies together before departing for the winter holidays. Up next was the big show, Interview Weekend 3 (formerly known as Interview Weekend 2). We love all of our interviewing MD-PhD students, but, as Interview Weekend 3 candidates ourselves, we have to admit there's something special about us. Given our wonderful incoming MD-PhD class this year, we would consider it a success! And, of course, we couldn't have done it without the help of all of the UNC MD-PhD teams that contributed. The COVID pandemic tried to keep us down (and honestly, it made a halt in some of activities for a while). We're happy to say that we did not stay down for too long. This October, we enjoyed an appropriately socially distanced pumpkin carving event with EPO Induced Progenitors to welcome the first years, something that was long overdue! We look forward to finding creative solutions to connect in the future during this pandemic (maybe some team bonding over Among Us?)

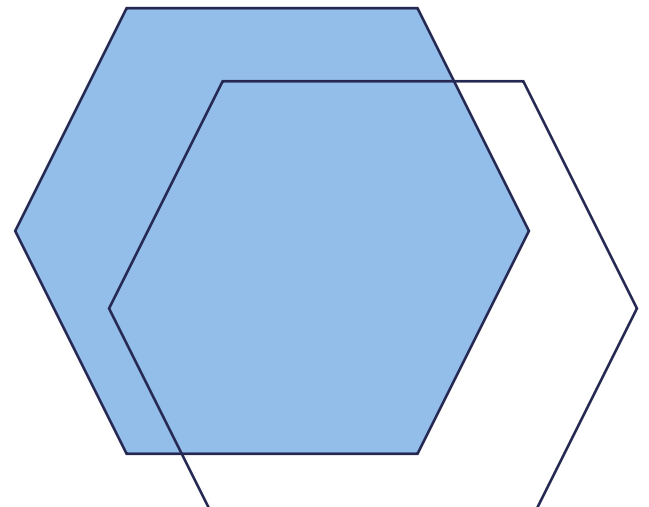


Team Wild Types

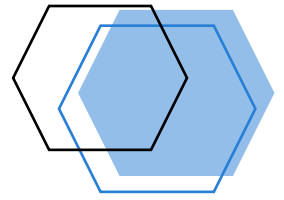
Co-Capt: Ben Keepers

Co-Capt: Kyle Riker

Just as Team Wildtypes started planning for second look, the University shut down. But in a wonderful twist, the virtual second look we helped put on was a big hit and helped recruit our biggest class ever! Kyle, Ben, and the rest of the team had a blast with V2L, and we think some version of it may have a permanent place in our program. This year we also tried implementing cross-class coffee chats in our team. We want to come up with fun, creative ways to engage our teammates across the years. This Fall, Team Wildtypes held two events to circle the virtual wagons. Before the weather turned, we headed out to Maple View Farms for an ice cream social(ly distant). Leading up to Election Day 2020, we got together to help phonebank for You Can Vote, a non-profit voter education organization. We're regularly brainstorming new ways to interact and socialize – stay tuned!



STUDENT GROUPS



AIMS



UNC Advocates for Inclusion in Medicine and Science (AIMS), formerly AMPWIS, was founded in 2012 and strives to promote the success, recognition, and excellence of women and minorities in academic medicine and medical research. Thank you to our Symposium chairs and volunteers for hosting a successful joint AIMS Symposium/APSA South-Atlantic Meeting virtually in October 2020! Our group is comprised of four committees as listed below, and each of these groups is excited to share a wide variety of upcoming events and initiatives:

- **Career Development:** AIMS Career Development is planning a virtual seminar on self-advocacy (e.g., in the context of mentor-mentee relationships and salary negotiation) on January 14th, 2021 at 6pm as well as a virtual F30 Panel/workshop with current UNC MD-PhD students in early 2021.
- **Undergraduate Diversity:** AIMS Undergraduate Outreach will hold a casual meet-and-greet for applicants on December 2nd at 6pm. We're looking forward to connecting with applicants then! For the Spring 2021 semester, Undergraduate Outreach is planning on hosting a virtual workshop on applying to medical school for undergraduates at North Carolina Central University, a historically black college. In addition, committee members will be working towards strengthening partnerships with UNC School of Medicine's Student National Medical Association (SNMA) as well as the Chancellor's Science Scholars Program.
- **Research Diversity:** AIMS Research Diversity will host a multi-institutional panel of current MD-PhD students who can speak to pursuing non-traditional (i.e., non-biomedical science) PhD degrees, focusing on how to identify institutions and mentors that support non-traditional research.
- **Service Outreach:** The Service Outreach committee has chosen to focus their outreach on high schools and middle schools around the state of North Carolina (and beyond). The first step to being able to reach a wide audience is to prepare a video of "What is MD/PhD" to distribute to high school students to help kick off outreach events. We plan to host virtual hands on activities for high school and middle school students to help inform them and prepare them for careers in medicine and science. Committee members are also planning on joining service organizations within the school of medicine (such as SNMA) to help assist in similar efforts.

BRIDGE BUILDERS SEMINAR



The MD/PhD Bridge Builders Seminar was created and initiated during the summer of 2020, as a student-driven response to ongoing racial tensions in the U.S. The purpose of this seminar is to create intentional time and space to discuss racial issues and their impact on our personal and professional lives. Readings covered through this seminar include: the 1619 Project by the New York Times, The New Jim Crow, White Fragility, So You Want To Talk About Race, Stamped From The Beginning, and How to Be an Anti-Racist. Topics covered include: The true history of slavery, mass incarceration, higher education, healthcare, implicit bias, and starting conversations about race. We have already made it through the first half of this year-long seminar and have seen students grow in their relationships with one another, their confidence in discussing difficult racial issues, and their foundational knowledge with regards to race in the U.S. We look forward to our Spring semester and continuing to improve upon this initiative in the future and beyond! The syllabus for this seminar has been shared widely both internally and externally to UNC, and you are more than welcome to contact one of the co-leaders at danielle_brathwaite@med.unc.edu if you would like a copy as well.



The second annual UNC MD-PhD Program-led Mini Med School will continue in spring 2021 in a Zoom webinar format. Mini Med School is a five-week lecture series, free and open to the public, led by MD-PhD student speakers and School of Medicine faculty. Next year, it will be held virtually on Tuesdays (6:30 – 8 pm EST) beginning on 2/2/2021 and ending on 3/2/2021. Each session will cover one of the five following topics, chosen based on current events and feedback from participants in the 2020 Mini Med School: viruses/pandemics, stroke, cervical cancer, thyroid disease, and health equity. Stay tuned for more details!

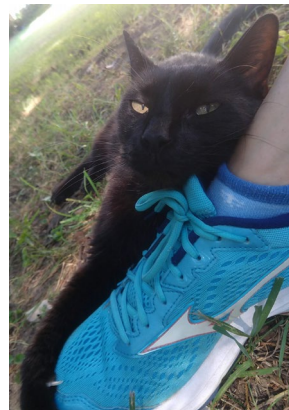
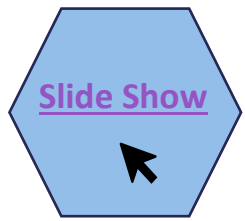
STUDENT COUNCIL 

The mission of the MSTP Student Council is to: (1) Create an additional avenue for vertical integration within the program; (2) Create an additional avenue for peer advising and resource sharing; (3) Ensure the success of students at every stage of the program; (4) Enhance communication between students and program leadership. One representative from each class in the program is nominated to serve on the Student Council for a one-year term. A senior member of the council serves as President and a second member serves as Vice President. The Vice President serves two consecutive terms first as VP and the following year as President. The Council meets once per semester and then follows up with program leadership to present feedback and create action plans. In the short time since our Student Council was created, it has already led to concrete changes within the program that improves access to resources available to students and clarifies transition processes between Med and Grad.

CLASS	Representative
MS1	Cambray Smith
MS2	Kelly Carey-Ewend
PhD1	Nicole Ochandarena
PhD2	Julie Necarsulmer
PhD3	Meryem Ok
PhD4	Alison Mercer-Smith
PhD5	Cesar Lopez
MS3	Tim Dinh
MS4	Matt Lipner

COVID HOBBIES

CHECK OUT WHAT OUR STUDENTS HAVE BEEN DOING IN THEIR FREE TIME!



2020 RETREAT 🌴

VIRTUAL



DR. JENNY TING

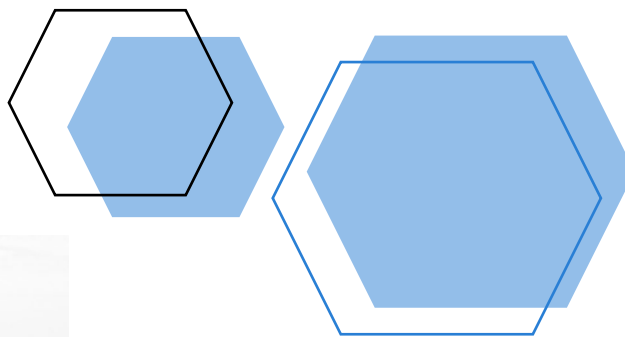
KEYNOTE TALK

IMMUNOLOGY: BASIC MECHANISMS & DISEASES

Dr. Ting is a William R Kenan Jr. Distinguish professor at UNC-CH. She earned her Ph.D. at Northwestern University in 1979 and carried out postdoctoral research at the University of Southern California and at Duke University. She joined the UNC faculty in 1984 as an Assistant Professor and rose rapidly through the ranks, becoming a full professor in 1993. She was the vice president of AAI ([The American Association of Immunologists](#)) from 2019-2020. In 2020, she was elected as president (2020-2021) of AAI. Dr. Ting has studied the transcriptional master regulator of class II Major Histocompatibility (MHC) genes called CIITA (class II transactivator) for over a decade. Based on the structure of CIITA, Dr. Ting found a large family of genes that encode similar structural motifs as CIITA. This family was named the NLR and they are important for immune defense against bacteria, viruses, fungi, parasites and damage-associated molecules. Her lab studies the biological effects that these NLR proteins have in disease. In addition, her lab also has projects involving the microbiome, neuro-inflammation, an immune activating microparticle delivery system, and mitigation of radiation induced toxicity. Dr. Ting has extensive training experience, having trained over 60 postdoctoral fellows, physician scientists and 35 pre-doctoral students, including 1 MD-PhD student.



[Jenny Ting Lab Website](#)



We are looking forward to getting back to the beach for our Annual Retreat!