



# UNCMD-PhD

## Newsletter

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### A Fireside Chat with Toni Darville, M.D.

*On October 26, 2015, the UNC MSTP welcomed our new director of Clinical Medicine, Toni Darville. On January 6, 2016, she sat down with Michael Clark to discuss her goals, interests, and motivations, as well as field a few "would-you-rathers."*

I interviewed with Toni in her 8<sup>th</sup> floor corner office in MBRB. The shelf above her desk is covered with pictures of her family. Toni's Arkansan accent has the best qualities of both a twang and drawl; it is like honey on a biscuit or an iced sweet tea on a summer's day. I'm very fortunate her voice is soothing because Toni is by no means laconic. My first question was nine words long, her answer was just shy of nine minutes long. Her answers are given here as paraphrases and truncations for brevity and clarity.

Where are you from/where did you grow up?

*I'm from Little Rock, Arkansas. I went to school at University of Arkansas in Fayetteville, and then medical school at University of Arkansas Medical Sciences Campus and then did my residency at Arkansas Children's Hospital, which is a fairly large tertiary care center. Plenty of pathology to learn from – I did my Infectious Disease fellowship there.*

Why did you become a doctor?

*I love science and I like interacting with people. My mother kept telling me I needed to be a doctor. She told me that so many times that it finally was just imprinted in my brain... I started off in college with a part of me thinking I'd do chemical engineering, but... I needed more social interaction.*



It sounds difficult to me to balance medicine, science, and administrative responsibilities; what made you interested in joining the leadership of the MD-PhD program?

*As a more senior professor, you have the capacity and the obligation to give back to the University and the scientific community. I enjoy mentoring junior scientists and I enjoy teaching people how to meld science and medicine. And so it's a natural thing for me to be involved in mentoring the next world of clinician-scientists that are here at UNC. It's kind of my way of giving back.*



What do you think are the most important components of physician-scientist training?

*Integrate as much as we can. You have some time during the PhD training where you are just focused on research, but the integration is so important because as a physician-scientist, your day is broken up, and you do have to be able to flip gears quite frequently...*

*Something we did at Pittsburgh that I think we need to implement more here at UNC, is a lot of our students went back in their fourth year to do "mini-postdocs." I think that was a really nice way to come full circle and to get papers published.*

What book are you reading right now?

*I just finished the book about the Chilean miners. It's called Deep Down Dark. It was interesting from an infectious disease standpoint. They all got horrible mold infections on their skin... It was very good. I read a lot of fiction. When I was in Pittsburgh, I was in a book club with a lot of women. Something I really miss. I still skype in with them. When you're assigned a book, you read a lot of things you otherwise wouldn't have.*

What are your hobbies?

*I love to ski. Working out in the yard, flower gardening. I go to the gym quite a bit.*

Favorite color, food, book, movie, TV show, pastime?

*Color – Red*

*Food – Steak, medium rare.*

*Book – The Fountainhead*

*TV Show – Mike & Molly*

*Pastime – working in the yard or running.*

Would you rather go back in time to meet your ancestors (pre 1800s), or forward in time to meet your descendants (post 2200s)?

*Forward. My Ancestors probably aren't that interesting.*

Would you rather win the lottery, or live twice as long?

*Live twice as long.*

Would you rather have a rewind button in your life, or a pause button?

*A pause button. There's a lot of times when I'm thinking this is so wonderful, if we could just pause this and have this day last longer. We recently went to Australia and there were many times where I thought this day could just last forever.*

Would you rather be able to talk to animals, or speak all human languages?

*All human languages. If I could just speak Spanish fluently, that would be awesome.*

Would you rather talk like Yoda, or breathe like Darth Vader?

*Neither.* [Interviewer's note: in pre-interview chit-chat, Toni mentioned she just saw the new Star Wars... she is not a fan.]

Mac or PC?

*Mac*

Star Trek or Star Wars? Follow-up, Spock or Captain Kirk?

*Star Trek. Spock.* [No hesitation]

Pepsi or Coke?

*Coke.*

Batman or Superman?

*Batman.*

Hakunah Matata, or YOLO?

*Hakunah Matata.*

What does the Carolina Way mean to you?

*Having a positive attitude while also being diligent and not being lazy. It's Collaborative, interactive... There's just something about a bunch of guys in little blue plaid shirts. It's kind of feminine, but also sweet in a way. And Carolina's kind of like that. It's blue skies, people working hard.*

**Adriano Bellotti**

*NCSU, 2015*

*Major:* Biomedical Engineering with a concentration in biomaterials

*Research Interests:* Biomedical engineering, computational modeling, nanotechnology

*Favorite Star Wars:* I might be the only one who thinks this, but Episode I is #1!

*Interesting Fact:* I went diving with a 12 foot great white shark in South Africa.

**Alison Mercer-Smith**

*Pomona College, 2015*

*Major:* Chemistry

*Research Interests:* Drug development and delivery

*Favorite Star Wars:* Star Wars Episode VII

*Interesting Fact:* I hosted a country music radio show for one summer with zero knowledge of country music.

**Cameron Adams**

*Univ. of Washington, 2013*

*Major:* Biochemistry

*Research Interests:* Infectious diseases, Immunology

*Favorite Star Wars:* Episode IV because I'm original

*Interesting Fact:* I have visited forty of the fifty states.

**Clark Cunningham**

*UNC-Chapel Hill, 2015*

*Major:* Chemistry, Biology

*Research Interests:* Microbiology and Immunology, Infectious Diseases

*Favorite Star Wars:* Episode IV: A New Hope

*Interesting Fact:* I've spent over 250 nights camping. I do own a bed, though.





# The MS1 class

## Danielle Mohabir

*Univ. of Pennsylvania, 2015*

*Major:* Health and Societies; Biology

*Research Interests:* Child and adolescent mental health, outcomes research, service use, health policy.

*Favorite Star Wars:* Episode VII by far!

*Interesting Fact:* My music collection includes songs in over six different languages, including English, Spanish, Japanese, Chinese, Korean, and Hindi.



## Hannah Hudson

*Pomona College, 2013*

*Major:* Molecular Biology (and sort of Music)

*Research Interests:* Immunology, oncology, neuroscience, everything

*Favorite Star Wars:* Episode VI, obviously

*Interesting Fact:* I have all the instruments to form a bluegrass band except the double bass!



## Robert Hinson

*UNC-Chapel Hill, 2014*

*Major:* Biomedical Engineering and Math

*Research Interests:* Medical imaging, brain machine interface, signal processing

*Favorite Star Wars:* Episode VI: Return of the Jedi

*Interesting Fact:* I love to play a lot of board games, from well-known favorites to more complex ones.



## Wesley Stepp

*BS, Union University, 2008*

*PhD, Microbiology and Immunology; Georgetown University, 2015*

*Major:* Cellular Biology

*Research Interests:* Virology, trauma immunology

*Favorite Star Wars:* Episode V: The Empire Strikes Back





## The MS1 class

### Dayne Filer

*College of Idaho, 2012*

*Major: Mathematics*

*Research In-*

*terests: Bioinformatics, computational biology*

*Favorite Star Wars: Episode IV*

*Interesting Fact: I enjoy apprenticing in professional kitchens!*



### Phil

### Grayeski

*UGA, 2014*

*Major: Genetics, Chemistry*

*Research Interests: Gene and drug delivery*

*Favorite Star Wars: The Arizona Cardinals*

*Interesting Fact: I played basketball for the University of Cambridge.*



### Nate Diehl

*Clemson University, 2015*

*Major: Biochemistry*

*Research In-*

*terests: Cancer biology, cancer metastasis, cell signaling*

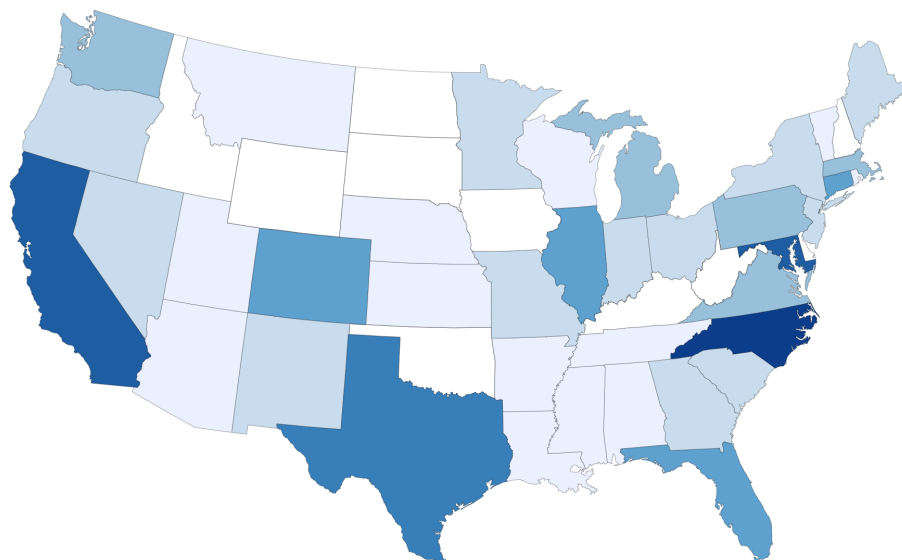
*Favorite Star Wars: Episode VI, of course.*

*Interesting Fact: I have backpacked the majority of the Appalachian Trail in MD and PA.*



## 2016 Applicant Pool

Where do the 2016 applicants come from?



### All Applicants

Number: 439

Average MCAT: 82nd %

Average GPA: 3.70

### Interviewees

Number: 51

Average MCAT: 96th %

Average GPA: 3.85



What a wonderful and busy year for the UNC Advocates for MD-PhD Women in Science! During 2015, we formally partnered with the Duke Advocates for MD-PhD Women in Science through a Kenan-Biddle Award, which allowed us to host joint events to continue achieving our goals of education, mentoring, networking, and providing students with the career development skills necessary to thrive in academic medicine. This partnership also provided students opportunities to network across the two MD-PhD programs and build individual relationships with MD-PhD students outside of the UNC program.

Through this partnership, Duke and UNC hosted a variety of exciting and innovative events, including an invited speaker, Dr. Matilda Nicholas, a graduate of the UNC MD-PhD program and a current faculty member at Duke. We also hosted two Health Policy and Patient Advocacy events. During the first event, students learned about the essentials of becoming more involved in health care policy and advocacy from experts in the field, Dr. Sue Tolleson-Rinehart and Dr. Beat Steiner, as well as our very own Tilden Hagan. During the follow-up event, NC Representative Verla Insko and former NC Senator Ellie Kinnaird provided advice on how physician scientists can best become involved in advocacy and policy. Other events included a book club on *Headstrong: 52 Women Who Changed Science- and the World*, an Equal Rights Amendment Discussion with Dr. Rachel Seidman, mentoring events as described below, and the second annual Southeast Symposium for MD-PhD Women in Science.

A main goal of the Kenan-Biddle partnership was to increase our outreach to physician-scientists at all stages of their careers, from undergraduates potentially interested in applying to MD-PhD programs to successful faculty members. As such, UNC and Duke AMPWIS developed their respective MD-PhD Mentoring Programs, which host information sessions for undergraduate students and pair interested undergraduates with current MD-PhD student mentors. Over the past year, this program was a huge success and hosted 4 information sessions with over 100 undergraduates in attendance. If you are interested in becoming a student mentor or helping with information sessions, contact Brooke Matson.

The other side of the mentoring initiative through AMPWIS is to build vertical professional networks between current MD-PhD students and faculty mentors through mentor socials. These events allow students and faculty to network in an informal setting and begin to build relationships based on common interests or goals. Our faculty mentors are selected to encompass a broad range of clinical and research disciplines and include faculty at different stages of their careers. This past year, in collaboration with Duke, we hosted two mentor socials which provided excellent opportunities to interact with MD-PhD students and physician-scientist faculty from both schools. Our next mentor social will be held in Spring 2016, so keep an eye out for this exciting and useful event!!

Additionally, the Kenan-Biddle Partnership funded the second annual Southeast Symposium for MD-PhD Women in Science on May 16, 2015. This year's symposium was held on the Duke campus and was attended by students from Duke, UNC, MUSC, JHU, UVA, and





## SE Symposium for MD-PhD Women in Science

VCU. The Keynote Speaker, Sallie Permar, MD, PhD, provided insight into the formula for a successful career as a physician-scientist and attendees learned how to build high-value relationships, deliver two minute elevator pitches, and network during a poster presentation.

We have many exciting events planned for 2016!! Keep your eyes out for: a panel of current residents with MD-PhDs, a workshop on developing your personal brand, an alumni panel, a social with our faculty mentors, the Third Annual Symposium for Advocates of Women Physician Scientists (to be hosted by MUSC in beautiful Charleston, SC!), as well as other fun and informative events. *Please let us know if you have any additional ideas for events or if there are any specific career development skills you would like to learn!*

**Everyone is welcome to attend our events and we look forward to seeing you all!**



*Audrey, Kate, and Dr. Orringer with Dr. Pisano at last year's symposium*



## Wisdom of the Elder Council

*During combined medical and scientific training at UNC, one learns a lot about medicine, science, medical and scientific training, UNC, and oneself.* Chris O'Connor, Audrey Verde, and James Byrne reflect on some of their hard-won lessons for the benefit of their younger colleagues:

- Build relationships with your medical school and MD/PhD classmates; someday they may be your interns, residents, and perhaps even attendings.
- If you ask a question at every talk you attend, make it a good one; people notice when someone consistently asks questions.
- Put in the time and effort to do well on Step 1. Even if you want to go into a field that doesn't require a high score, your score is still important for residency interviews. Plus, your clinical field of interest may change!
- Collaborate with fellow MSTP students on side projects; your colleagues are kick-butt researchers. James worked with Reid Roberts (MSTP class of 2015) on a project that resulted in a patent and paper.
- Be a team player and work to better not only yourself, but those around you and your environment.
- High impact publications are the currency on the academic market. If given the choice between 3-4 mid-tier publications and 1 top-tier publication, take the top-tier publication.
- It is a privilege to be in combined degree training — enjoy all of the opportunities you are afforded in the scientific community and learn from your patients and colleagues in your medical training.
- Clinical rotations are hard. Adapt.



## Team Wildtypes

You might know Team Wildtypes as the team with the coolest team shirt. You should also know that Bryna Harrington and Dean Nehama are our new team captains. Dr. Ned Sharpless and Dr. Maureen Su are our faculty advisors.

At the last retreat, we welcomed two first years, Robert Hinson and Cameron Adams, to our team. Since the retreat, we had the chance to have a luncheon with Maureen and win Back Bar trivia with Ned.

We participated in a park cleanup in Battle Branch Park in Chapel Hill.

We organized a bowling event which members of many other teams joined in on (the more the merrier!) and an joined team Cell Yeah at Defy Gravity for the hilarious opportunity to catapult elementary school children high into the air.



## Gene's Dream Team

This year, Gene's Dream Team welcomed Nate Diehl and Alison Mercer-Smith into our team.

In November, we participated in an escape room challenge at Cipher Escape in Morrisville - SOFUN! Although we didn't escape in time, we were VERY close. We still think they should've told us that the keypad locks out if you enter a lot of incorrect codes. They did eventually let us out to enjoy a delicious lunch at Dim Sum House.

Tru Deli tried to thwart our December holiday lunch plans by unexpectedly closing for the two weeks leading up to Christmas, but that didn't stop us from enjoying a delicious lunch from Neal's Deli and planning interview weekend #2.

This year, the Second Look dinner will be held at Gene's Dream Team's very own faculty advisor Dr. Kim Boggess's house! Our team captains are Brooke Matson and Kelly Orgel.





## Cell Yeah!

Team Cell Yeah gave back to our local community by manning the canned food drive at the NC State Fair. Unrelatedly, we had a great time checking out the NC State Fair and eating fried everything.

To continue our carb-maximizing ways, we had our team dinner at Breadstixx and loved every bite.

We teamed up with the Wildtypes for some crazy, bouncing fun at Defy Gravity.

Our faculty mentors are Richard Wardrop MDPH and William Kim MD and our captains are Tim Dinh and Lee Hong.

## EPO-Induced Progenitors

The EPO-Induced progenitors (cough, cough, back-to-back beach retreat pentathlon champions) were excited to welcome two new members in 2015 — Dani Mohabir and Adriano Bellotti.

We enjoyed volunteering at Durham's SEEDS (South Eastern Efforts to Develop Sustainability) community garden as well as lunch catered by Tru Deli with our advisors, Alex Duncan MDPH, Jim Evans MDPH, and Carey Anders, MD.

Our team is responsible for the first interview weekend. Our team captains are Robert Corty and Mike Clark.



## Gene's Knockouts

We were thrilled to welcome three new team members to our team: Dayne Filer, Hannah Hudson, and Wesley Stepp.

After seeing off our co-advisor Dr. Kristy Richards to Cornell last year, we waited anxiously for a few months to hear who our new co-advisor would be. We were excited when Dr. Jonathan Berg MD PhD joined our team this summer. Dr. Berg is an Associate Professor in the division of Medical Genetics. We welcomed him this November with a dinner at Perry's house.

Gene's Knockouts joined team Cell Yeah for a springy evening at a bounce house in Durham (thanks Tim for organizing!). We were by far the biggest ones there. The enterprising second graders we were jumping with capitalized on our large size to enhance their vertical leap.



## Congrats to recent PhD defenses!!!

<b>Klara Klein</b>	Decoy Receptors in Lymphangiogenesis	Cell Biology & Physiology
<b>James Byrne</b>	Local Iontophoretic Administration of Cytotoxic Agents for the Treatment of Solid Tumors	Pharmaceutical Sciences
<b>Rushina Cholera</b>	HIV and depression in a primary care clinic in Johannesburg, South Africa	Epidemiology
<b>Julia Geddings</b>	The role of tumor microparticles in cancer-associated thrombosis	Pathology & Laboratory Medicine
<b>Kate Hacker</b>	Investigating the role of SETD2 mutations and H3K36me3 loss in clear cell renal cell carcinoma	Genetics & Molecular Biology
<b>Katharine Liang</b>	Intravitreal AAV-mediated expression of Nrf2 promotes retinal recovery after light-induced retinal damage in mice	Neurobiology
<b>Chris O'Connor</b>	TRP4-mediated Mechanotransduction in Articular Cartilage Function and Disease	Biomedical Engineering
<b>Doug Orloff</b>	Development of a cellular analysis platform with microengineered permeable microwells	Pharmacology
<b>Elliott Robinson</b>	A better buzz? Bidirectional effects of the OPRM1 A118G polymorphism on opioid and alcohol reward	Neurobiology
<b>Sarah Rutstein</b>	Optimizing HIV Therapy: Outcomes, Challenges and Opportunities	Health Policy & Management
<b>Nick Taylor</b>	Balancing Pro- and Anti-Inflammatory Signals for Effective Immunotherapy in the Post-Hematopoietic Stem Cell Transplant and Solid Tumor Settings	Microbiology & Immunology
<b>Audrey Verde</b>	Structural Abnormalities within the episodic preception and decision making circuitry in cigarette smokers: a DTI and sMRI analysis	Neurobiology

## Match results 2015

<b>Dustin Bosch</b>	<i>Pathology</i>	<b>Univ. of Washington</b>
<b>Meagan Deming</b>	<i>Internal Med</i>	<b>Univ. of Maryland</b>
<b>Chris Dibble</b>	<i>Neurosurgery</i>	<b>Barnes Jewish Hospital</b>
<b>Michael Durando</b>	<i>Internal Med</i> <i>Research Track</i>	<b>Emory</b>
<b>Jeff Federspiel</b>	<i>OB-GYN</i>	<b>Johns Hopkins</b>
<b>Tom Jarrett</b>	<i>Emergency Medicine</i>	<b>Case Western</b>
<b>Will Jeck</b>	<i>Pathology</i>	<b>Mass General Hospital</b>
<b>Tricia Lenhart</b>	<i>Pediatrics</i>	<b>Univ. of Colorado Denver</b>
<b>Ryan Phillips</b>	<i>Radiation-Oncology</i>	<b>Johns Hopkins</b>
<b>Reid Roberts</b>	<i>Emergency Medicine</i>	<b>Maine Medical Center</b>
<b>Naman Shah</b>	<i>Family Medicine</i>	<b>Contra Costa Regional MC</b>
<b>Erin Steinbach</b>	<i>Internal Medicine</i>	<b>UNC Hospitals</b>

## Recent F30 Awards

(There are currently 21 funded F30s in the program, and 6 pending)

<b>CJ Smith</b>	Investigating Immunoregulation in Autoimmune Peripheral Neuropathy	NINDS
<b>Marni Siegel</b>	Establishing Genetic Drivers of Breast Cancer Metastases	NCI
<b>Michael Clark</b>	The Role of Repetitive Head Trauma in Cognitive Decline and Fronto-limbic Functional Connectivity	NINDS
<b>Christian Parobek</b>	Investigating the targets and strain specificity of antibodies against <i>P. vivax</i>	NIAID
<b>Patrick Taus</b>	Contribution of Fetal and Adult Testes Expressed to Tumor	NCI



## Recent Awards

- Audrey Verde was elected for a Travel Award to the National Institute of Neurologic Disorders and Stroke (NINDS) Research Career Day at the NIH on April 24th, 2015.
- Audrey Verde and Sarah Rutstein received the P.E.O. Scholar Award.
- Bryna Harrington was named an Infectious Disease Society of America (IDSA) Education and Research Foundation 2015 Medical Scholar.
- Alex Gertner received the Kerr L. White and Edward H. Wagner Scholarship in Health Care Research.
- Elliott Robinson was elected for a Travel Award to the National Institute of Neurologic Disorders and Stroke (NINDS) Research Career Day at the NIH on April 24th, 2015.
- James Byrne and Elliott Robinson were elected to AOA this year.
- Kevin Mangum was awarded Best Poster at the UNC Annual Pathology Symposium, received the 2015 Katherine Pryzwansky Young Investigator Award, and received a Travel Award to Arteriosclerosis, Thrombosis, and Vascular Biology Conference 2015 in San Francisco, CA
- Ayumi Nakamura has been selected to give one out of only two student oral presentations at the upcoming ASCI/APSA meeting in Chicago at the end of April. She also received a travel award to attend.
- Chris Giardina received a 2015 Graduate Education Advancement Board IMPACT Award for research benefitting the State of North Carolina.
- Patrick Lang received a 2015 Graduate Education Advancement Board IMPACT Award for research benefitting the State of North Carolina.
- Student Research Day 2015 awards: Chris Giardina (Scott Neil Schwirk Fellowship); Marybeth Anderson (Best Basic Science Poster); Ayumi Nakamura (Best Basic Science Oral Presentation); Chris Giardina (Best Clinical Science Oral Presentation); Nick Brazeau (Best Public Health Oral Presentation).
- Sabrina Heman-Ackah (PhD4, NIH Oxford-Cambridge Scholars Program) and her PI, Professor Matthew Wood, received the Freemasons' Grand Charity Research Grant for their work on understanding the mechanisms of neuronal loss in Parkinson's disease.
- Kate Hacker was inducted into the AOA Honor Society.
- Anna Kahkoska won the Scott Neil Schwirck Fellowship, MD/PhD category this year.
- CJ Smith received the Peripheral Nerve Society Travel Fellowship.
- Chris O'Connor was named the New Investigator Recognition Award Finalist at Orthopedic Research Society Annual Meeting.
- Sarah Brnich was named one of the University Cancer Research Fund Scholars for 2015-2016.
- Catherine Fahey and Ayumi Nakamura were featured in the Graduate Student Profile published online from the UNC Health Care and School of Medicine Newsroom.
- Ejiofor Ezekwe received the Robert Watkins fellowship from the American Society for Microbiology.
- Michael Clark received the NC TraCS \$50k Translational Research Matched Pilot Grant entitled "The Role of Repetitive Head Trauma in Cognitive Decline and Frontolimbic Dysfunction."



## Recent Awards continued

- Morgan Goheen and Ayumi Nakamura received the Gertrude B. Elion Mentored Medical Student Research Award from the Triangle Community Foundation.
- Morgan Goheen received the Royal Society of Tropical Medicine and Hygiene Travel Scholarship (£1000) for pursuit of 1 month infectious disease clinical elective in The Gambia.
- Morgan Goheen was recognized as one of top 10 “Women in Science” working at MRC Gambia.
- Morgan Goheen gave a research talk entitled “Iron Deficient RBCs Are Resistant to Growth and Invasion by *P. falciparum*: A Field Study” at the American Society of Tropical Medicine and Hygiene annual meeting, Philadelphia, PA, October 2015. She was also the invited speaker at the Gordon Research Conference: Red Cells, Holderness, New Hampshire in July 2015.
- Ayumi Nakamura received the 2015 Gordon H. DeFries Aging Research Award.
- Ayumi Nakamura was selected to give a talk at the 2015 RIKEN Center for Developmental Biology Symposium and received a travel award. She was also invited to give a research talk at the International Cell Senescence Association Conference in July 2015.
- Kurt Host was awarded a \$2,000 UNC Global Health International Fellowship through the Office of International Affairs, which will fund his longitudinal clerkship in Malawi this spring.
- Nate Diehl won the V. L. Tweedie National Scholarship from Alpha Epsilon Delta for the 2015-2016 year.
- Brooke Matson received the Larry Ewing Memorial Trainee Travel Fund Award to attend 48th Annual Meeting of the Society for the Study of Reproduction.
- Kevin Mangum was awarded a two-year graduate fellowship from the American Heart Association for his work on “Transcriptional Regulation of the SMC-specific hypertension-associated gene *GRAF3*”.
- AMPWIS received NIH recognition: There was a UNC highlight in the September issue of the Newsletter from The Office of Research on Women’s Health at the NIH. Audrey and Kate were interviewed and AMPWIS was described as part of the UNC “institutional spotlight”.
- Jamie Jarmul’s paper, “Interpreting Hemoglobin A1C in Combination with Conventional Risk Factors for Prediction of Cardiovascular Risk”, was highlighted in the School of Public Health e-newsletter.
- Jason Melehani and Chris Giardina were awarded 2nd place (\$2000 prize) for the Triangle Health Innovation Challenge. They led a team of 6 students (2 from NC State and 2 from Duke), where the team developed a lung function trainer to mimic pursed-lip breathing for patients with COPD. The device is Bluetooth and app-enabled and gives patients, caregivers and physicians the opportunity to monitor the health and training of the patient with COPD. Patients with COPD experience trouble breathing that ultimately can restrict their mobility and increase anxiety of exacerbations. This device is designed to help patients improve their lung function, improve their mobility, and reduce the number of exacerbations while providing positive feedback through self-monitoring.
- Sabrina Heman-Ackah (PhD4, NIH Oxford-Cambridge Scholars Program) and her PI, Professor Matthew Wood, received the Freemasons' Grand Charity Research Grant for their work on understanding the mechanisms of neuronal loss in Parkinson’s disease.



# 2016 Medical Student Research Day

By: Nate Diehl and Dean Nehama

The UNC Student Research Day was, once again, a big success. During this day-long event, over 100 UNC medical students showcased their research through poster and oral presentations. Moreover, for the first time, PhD students from Allied Health Science programs also participated. At the banquet at the end of the day, these students were inducted into the John B. Graham Research Society, which serves to support and promote UNC medical students' research pursuits.

Over 40 faculty members volunteered their time to help judge student poster and oral presentations. We are proud of Anna Kahkoska for receiving the Scott Neil Schwirck Fellowship in the MD-PhD category. Furthermore, it was our honor to have Dr. Nancy Brown, Hugh J. Morgan Professor of Medicine and Chair of the Department of Medicine at Vanderbilt University, as our Landes-Merrimon Lecture speaker. Dr. Brown discussed her work developing vasoactive peptides against targets in the renin-angiotensin-aldosterone system. Our MD-PhD program had the opportunity to host her for a luncheon on the day of the event, where students discussed ongoing research projects and Dr. Brown graciously offered insight from her wealth of experience as a physician-scientist. Congratulations and thank you to all who participated in Student Research Day!



## Iris

By: Lee Hong & Rashmi Kumar

**Lee :** Starting (or in my case, re-starting) an organization is certainly not an easy feat, given that we are all busy medical students. Despite this, the faculty and administration have been incredibly supportive of my vision to bring back IRIS, the literary and creative arts journal at UNC SOM. IRIS got started in the mid-90s by two medical students, who received submissions from students, faculty, and even patients reflecting on their experiences in medicine. We decided, for many reasons, to convert our journal to an online format and additionally accepted multimedia submissions. Our first edition had over 40 submissions from UNC SOM students, faculty, and staff ranging from poetry to photography, essays to paintings. This year, we've expanded our presence on campus by hosting two workshops, a painting class and a poetry/spoken word event at Linda's Bar and Grill on Franklin Street. As I've watched IRIS continue to grow, I couldn't be prouder of the hard work my fellow medical students and I have invested in bringing back a forum for celebrating medical humanities at UNC. Check out our website at [med.unc.edu/iris](http://med.unc.edu/iris) - you'll be glad you did!

**Rashmi:** Being a part of IRIS has been a way for me to use the English Lit degree that I was sure would collect dust once I got to med school. Thankfully, having an incredible arts and literary journal such as IRIS at UNC really enables me to not only use those skills but to tap into my humanities side in general. As an artist, it's been great to introduce events like Wine and Design night or Poetry Slam lunches to med students because it's a creative outlet for expression. As a medical student, it's wonderful and humbling to see the vast amount of talent our school brings whether its in the arts or the sciences. IRIS is not just a literary magazine, it's an ode to all the emotions, the great memories, evocative questions, and artistic aspects of medicine.



# Recent Publications

- Morgan AP\***, Fu CP\*, Kao CY et al (2015) The Mouse Universal Genotyping Array: from substrains to subspecies. *G3*, in press.
- Morgan AP**, Welsh CE (2015) Informatics resources for the Collaborative Cross and related mouse populations. *Mammalian Genome* 26(9-10): 521-539. doi:10.1007/s00335-015-9581-z. PMID: 26135136.
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By: *Alison Regan*

Beginning in the fall of 2014, the “*Transitional Education at Carolina (TEC)*” curriculum was implemented by the UNC School of Medicine. The TEC curriculum was designed to transform the way medical students learn the art and science of medicine through integrated basic science and clinical skills blocks, longitudinal patient care experiences, and flexible clinical experiences that give them opportunities in specialty fields well before they apply to residency programs. In the TEC curriculum, students will transition through three main phases: (1) The Foundation Phase which is a 16-month period of foundational blocks that will integrate the teaching of normal and abnormal human conditions through case studies, clinical experiences and small group learning activities; (2) The Application Phase which is a 13-month intensive period of hands-on longitudinal clinical experiences; and (3) The Individualization Phase which is a 14-month or more period of clinical electives and career advising which should help students make a more informed decision, at an earlier time point, in choosing their future specialty. Our current first year MD-PhD students are the second to enter the TEC curriculum at the Foundation Phase. We are excited about the opportunity this new curriculum offers our students to complete the first 16-week block of longitudinal clinical training prior to entering the PhD phase.

## Life Events

Jason Melehani got engaged to Stephanie Downey, a first year law student at UNC, just before Christmas.

James Green got married on October 24, 2015.

Morgan Goheen got married to Mikael Klingeborn June 2015 in Montana.

Nate Diehl got married to Molly Diehl on July 11, 2015.

Elliott Robinson and his wife welcomed their second son, Sawyer Christian Robinson, on 5/13/2015. He is happy and healthy, now almost 7 months old.