

# UNC School of Medicine Office of Research Bi-Annual Report January—June 2022

## **Message from the Vice Dean for Research**

The first half of 2022 was extremely successful for the School of Medicine. The end of the 2021-2022 budget year revealed that the School of Medicine’s research portfolio surpassed \$600 million in research funding for the first time. This included over \$345 million from the National Institutes of Health. This outstanding achievement is further evidence that despite the difficult past few years, our research has significantly grown, which is a testament to the hard work and dedication of our faculty, staff, students and fellows.

We also celebrated the launch of the UNC School of Medicine Rising Star Program in collaboration with the Office for Diversity, Equity, and Inclusion, which aims to increase diversity among faculty by providing training to postdoctoral fellows from underrepresented groups. The 2022 cohort included 6 Rising Stars who came to UNC from across the country. They were all amazing scientists and many of them had previously graduated from UNC. We hope they will consider UNC for a faculty position in the future.

We have many opportunities to look forward to in the upcoming year, including implementation of the Academic Research Organization to bolster clinical research. In January of 2022, the Lineberger Comprehensive Cancer Center received a \$25 million gift from an anonymous donor to establish the UNC Lineberger Center for Triple Negative Breast Cancer, and we are excited about the advancements that will come from the Center. Dr. Joe Muenzer in the Department of Pediatrics also received a \$2.5 million dollar gift from The Bryson Family specifically for Mucopolysaccharidosis (MPS) disorder research and treatment. This outstanding gift will certainly help find a cure for this rare disease.

We are appreciative of all your efforts, and we look forward to continuing to support our departments and centers across the School of Medicine to advance the research mission.



*Blossom Damania, PhD  
Vice Dean for Research*

## **Table of Contents**

New Leadership in the School of Medicine.....	Page 2
Strategic Plan Spotlight.....	Page 2
Office of Research and School of Medicine Highlights.....	Page 3
Upcoming Award Deadlines.....	Page 4
Updates from the Office of Graduate Education.....	Page 4
SOM Dean’s Office Research Award Recipients.....	Page 5
2021-2022 SOM Office of Research Award Recipients.....	Page 6
School of Medicine Faculty Recipients of Prestigious Awards.....	Page 7
School of Medicine Research Rankings.....	Page 8
Innovation and Commercialization in the School of Medicine.....	Page 9

## ***New Leadership in the School of Medicine—UNC Health System and Dean’s Office***

### **Shakira Henderson—Assistant Vice Chancellor for Clinical Research**

**Shakira Henderson, PhD, DNP, MPH** was named the Assistant Vice Chancellor for Clinical Research effective on April 4, 2022. In this newly created role, Henderson will work to provide seamless integration of clinical research management across UNC Health, the UNC campus, and the School of Medicine.



## ***New Leadership in the School of Medicine—Department Chairs and Center Directors***

### **Paul Dayton—Chair of the UNC / NCSU Joint Department of Biomedical Engineering**



**Paul Dayton, PhD**, will continue his leadership of the UNC / NCSU Joint Department of Biomedical Engineering as he transitions to Chair. Dayton has been in the role of Interim Chair since 2019, and will continue his outstanding leadership of the unit. Dayton’s research interests are in the areas of biomedical ultrasound technology, and is the co-founder of three startup companies in the Research Triangle Park.

### **Jeanette Cook—Chair of the Department of Biochemistry and Biophysics**

**Jean Cook, PhD**, was selected to lead the Department of Biochemistry and Biophysics effective July 11, 2022. Throughout her tenure at UNC, Cook has had numerous leadership responsibilities including serving as Associate Dean for Graduate Education and Associate Chair of Strategic Planning for the Department of Biochemistry and Biophysics. Jean is both an outstanding leader and researcher, and will continue her research program centered on cell cycle control in mammalian cells.



### **Caprice C. Greenberg—Chair of the Department of Surgery**



**Caprice Greenberg, MD, MPH**, assumed her role as the Chair of the Department of Surgery on August 15, 2022. Greenberg joins UNC from the Medical College of Georgia at Augusta University, is a renowned health services researcher and surgical oncologist, and will bring with her research projects related to surgical coaching and methods to improve rural cancer care delivery. She received her MD from the University of Chicago and Master of Public Health from Harvard before completing a general surgery residency at Brigham and Women’s Hospital, and a surgical oncology fellowship at the Dana-Farber/Partners Cancer Center in Boston.

## ***Strategic Plan Spotlight—Clinical Research Support Office***

One of the greatest needs in the School of Medicine is better infrastructure and support to help investigators and research teams conduct clinical research studies. Using funds from the School of Medicine *Forward Together* Strategic Plan, the School of Medicine developed the Clinical Research Support Office (CRSO) to serve as a central administrative office supporting all human subjects research across the School of Medicine. The CRSO is led by **John Buse, MD, PhD**, **Andrea Carnegie, PhD**, and **Laura Viera, MA, CCRP**, and together they promote the mission of the CRSO by supporting the clinical research workforce, establishing standard operating procedures (SOPs), and developing tools and resources to make clinical research easier and more streamlined.

The CRSO was essential in supporting and enabling clinical research during the research shutdowns due to the COVID-19 pandemic. A major initiative now is establishing the SOM Clinical Research Accountability Units (CRAUs) across the

school – units that will be responsible for the human subjects research portfolio within primarily clinical departments and serve as an essential communication network for clinical research. The CRSO also works closely with administrative research offices across campus to promote a comprehensive understanding of the needs of investigators and teams and ensure essential information is disseminated appropriately. Vital information, guidance documents, resource summaries, educational content, and SOPs can be found on the [Clinical Research Support Office website](#). Although not comprehensive, some of the more recent accomplishments of the CRSO include launching a new SOM Profile and Training System (PaTS) to document standardized information about clinical research personnel and to disseminate SOPs, training materials, and development opportunities for staff based on their individual job requirements and interests. The CRSO team has also developed and launched a new REDCap project to support the Office of Clinical Trials Quality Assurance program to effectively track and evaluate trends in monitoring findings across the School, and is working on several other tools to improve our understanding of the SOM's entire clinical research portfolio. In 2022, the CRSO launched the first SOM-wide SOP, "Obtaining and Documenting Informed Consent from Adult Research Participants," to promote compliance and efficiency. They have accepted 5 physician scholars into the second annual Clinical Trialist Training Program – a joint initiative between the CRSO, NC TraCS, and LCCC that provides a combined 10% salary support for one year of training to develop site investigators for multicenter clinical trials, and have presented and coordinated multiple training sessions to empower clinical research staff and PIs. To date, 19 of the 22 planned Clinical Research Administration Units (CRAUs) have been established and are working collaboratively with the CRSO to enable enhanced communication, delivery of resources, and identification of key opportunities for initiatives to continue making it easier for investigators and study teams to initiate and execute clinical research studies.

The CRSO is proving to be an invaluable resource in the School of Medicine that will significantly improve our clinical research infrastructure. For any questions about the CRSO, the team can be reached here: [crso@med.unc.edu](mailto:crso@med.unc.edu).

## **Office of Research and School of Medicine Highlights**

### **Heather Skinner—Director of Research Integrity and Compliance**

**Heather Skinner, JD**, joined the School of Medicine in March of 2022 as the Director of Research Integrity and Compliance. In this position, Skinner oversees research integrity and compliance by formulating, interpreting, and implementing related policies, including those surrounding new federal regulations related to Science and Security. During her time with the school, Heather has already been working on numerous research integrity and oversight cases, and is also updating the vendor relations process, bolstering compliance around the existing FDA portfolio, and auditing IRB repository protocols. She is also playing an essential role in preparations for data management and sharing changes, and is planning the iThenticate and LabArchives trainings as well as working on foreign influence education. Heather brings a wealth of expertise from her previous positions at Drexel University and Boston University, and will be publishing regular updates in a research compliance blog in Vital Signs: *Compliance in Science: Updates for the School of Medicine*. To learn more about Heather and her role, you can visit the [Vital Signs article linked here](#).



### **Faculty Database**

We take great pride in the interdisciplinary and collaborative nature of the School of Medicine. To help foster new collaborations in all fields, including clinical research, the School of Medicine Office of Research has revamped its faculty database. This new iteration will make it easier for faculty to find collaborative partners, and includes clinical faculty who are interested in research collaborations regardless of if they have an established program or not. The faculty database [is active on the Office of Research website](#). Please submit your faculty profile and direct questions and suggestions to Trisha Dant ([dant@med.unc.edu](mailto:dant@med.unc.edu)).

## ***Upcoming Award Deadlines Offered by the School of Medicine / Office of Research***

### **Applications for Bridge and Boost Awards**

The Bridge and Boost funding mechanisms provide critical support for faculty research programs, and are traditionally offered three times a year for Bridge and two times a year for Boost. Bridge funding provides continued support for successful research projects that suffer a lapse in funding, while Boost funding is designed to increase the chances of funding for an NIH R01 (or similar) grant that has been reviewed favorably but needs additional revisions and preliminary data in order to be funded on resubmission. Applications for the second round of Bridge funding for FY23 are due by 5pm on Monday, **January 16, 2023**. More information about the mechanisms, eligibility, and application process [can be found on our website](#).

### ***Updates from the Office of Graduate Education***

The mission of the Office of Graduate Education (OGE) is to support the development of future biomedical science leaders. The OGE promotes innovative recruitment and training, stimulates purposeful career development, removes barriers to success, and fosters a collaborative, inclusive research community. To accomplish these broad goals, the OGE runs many programs to support the research training community in the School of Medicine. Highlights from the first half of 2022:

***Biological and Biomedical Sciences Program (BBSP)***. The BBSP graduate students who entered in Fall 2021 completed their first year and joined graduate programs and thesis labs. The BBSP curriculum was led by Director **Dave McDonald, PhD** and faculty **Lisa Tarantino, PhD**. In the spring, BBSP recruited [a new class of 104 students for the 2022-23 year](#). This incoming class is 64% female, 36% male, 24% from historically underrepresented groups in the biomedical sciences, and 13% non-US Residents.



Notably, 103 faculty – a record number! – participated in our 6 admissions committees. Recruitment was led by Director **Jeff Steinbach** and faculty **Rob Nicholas, PhD**.

***OGE training programs to promote diversity in the biomedical workforce.*** Our NIH-funded [IMSD \(Initiative for Maximizing Student Development\)](#) program is a community of over 130 PhD graduate students largely from ethnic and socioeconomic backgrounds traditionally under-represented in the sciences. This program was led by Director **Ashalla Freeman, PhD**, Assistant Director **Debra Ragland, PhD**, and grant principal investigators **Jean Cook, PhD**, **Rita Tamayo, PhD**, and **Tom Kash, PhD**. A former IMSD graduate student, **LaKeya Hardy, PhD**, was hired to run [UNC PREP](#), our NIH-funded post-baccalaureate research program to prepare students from groups traditionally under-represented in the sciences for competitive graduate programs. Dr. Hardy joined grant principal investigators **Donita Robinson, PhD** and **Jose Rodríguez-Romaguera, PhD**. UNC PREP sent 9 scholars to top biomedical PhD programs across the USA, and welcomed a new group of 9 scholars who started in June. The OGE summer research program [SOLAR](#) was led by Directors **LaKeya Hardy, PhD** and **Patrick Brandt, PhD**, with substantial help from postdoctoral fellow **Carol Dannenhoffer, PhD**, whose effort was supported by the [OGE ImPACT Internship program](#). The OGE organized a highly successful end-of-summer poster session for about twelve SOM summer research programs, hosting 76 undergraduate poster presenters and about 180 attendees.

**Career programming.** The [Training Initiatives in Biomedical & Biological Sciences \(TIBBS\)](#) program, led by Directors **Patrick Brandt, PhD** and **Beka Layton, PhD**, serves the career exploration and professional development needs of SOM trainees. TIBBS supports several Career Cohorts for graduate students and postdocs to explore and prepare for various career paths, as well as Affinity Groups to support holistic student development across a number of social identities. In June, TIBBS hosted SciPhD, a comprehensive 16-hour program that makes academic scientists “business-ready” for professional positions, whether in academia, government, or industry. The event was co-sponsored by the Office of Postdoctoral Affairs, the School of Pharmacy, and the Graduate School. Seventy-five students and postdocs from UNC, North Carolina Central University, Wake Forest University and East Carolina University earned certificates. The OGE has piloted a new workshop series for international trainees, developed by postdoctoral fellow **Ana Teixeira Nogueira, PhD**, that will roll out in the coming academic year.

**Mentor Training in Biomedical Research.** OGE Director **Dave McDonald, PhD** led a 6-hour mentor training for faculty and postdoctoral fellows who work with graduate students, increasing [the total number of faculty and postdocs trained by OGE to 216](#). He also held mentor trainings for graduate/postdoctoral peer mentors and bench mentors for summer students. To showcase the variety of quality mentorship at our institution, the OGE solicited nominations for mentoring awards for anyone at UNC. [We honored 11 faculty, 1 postdoc, 10 graduate students, and 2 staff members](#) with printed posters around campus and on social media.

**OGE staff and scholarship.** The OGE is led by a [team of outstanding directors, staff and faculty](#). We welcomed **Louisa Steffen**, OGE Business Officer, and **LaKeya Hardy, PhD**, Assistant Director, UNC PREP and Science Outreach. We said goodbye to **Jean Cook, PhD**, former Senior Advisor to the OGE, and **Debra Ragland, PhD**, former Assistant Director for Diversity Affairs. OGE Directors actively collect and analyze data on graduate education and career outcomes, then disseminate it through peer-reviewed and other publications. Check out our recent publications on the OGE [Innovations & Impact webpage](#).

## **SOM Dean's Office Research Award Recipients**

### **2021-22 Yang Family Biomedical Scholars**

The School of Medicine was extremely happy to name three outstanding researchers as the [sixth class of the 2021-22 Yang Family Biomedical Scholars](#): **Mauro Calabrese, PhD**, **Nilu Goonetilleke, PhD**, and **Adam Hantman, PhD**. Along with the prestige of being named Yang Family Biomedical Scholars, each faculty member will receive a grant to be used at their discretion for biomedical research projects in the School of Medicine. The awards are given to the most promising young tenured faculty, and recognizes those who have made significant scholar contributions to their field. The 2021-22 scholars truly exemplify and are most deserving of these awards and a seminar in honor of the recipients took place on October 31 in Kirkland Auditorium.



**Mauro Calabrese** is an associate professor in the Department of Pharmacology, and his research focuses on using computational methods to understand the roles of long noncoding RNAs in gene regulation in the context of health and disease. Calabrese and colleagues identified that long noncoding RNAs can be identified computationally, which suggests that recurring sequence patterns exist within these molecules and consequently their functions can be predicted. This work represents a major advance towards understanding complex biological processes involving long noncoding RNAs, and his computational methods are being widely adopted by the scientific community.

**Nilu Goonetilleke**, associate professor in the Department of Microbiology and Immunology, is a T cell immunologist who studies how T cell immunity contributes to the control of infectious disease, vaccine-mediated immunity, immunotherapies, and autoimmunity. Much of her work is focused on HIV, and her lab has shown that people on HIV therapy have a reduced response to the virus but still maintain a residual response, suggesting that there is enough of the virus in latent reservoirs to keep activating the immune response. She has also identified that HIV virus in latent reservoirs can be cleared by immune cells, and has analyzed immune cell function in the presence of latency reversing



agents – work that could lead to better treatments for people with HIV.

**Adam Hantman** is an associate professor in the Department of Cell Biology and Physiology who studies brain dynamics that underlie behavior. Specifically, his lab combines circuit mapping, perturbations, and physiological recordings to study how mammals grasp things - a complex behavior that involves many regions of the central nervous system. Hantman seeks to identify and understand the intricate mechanisms responsible for skillful motor control, which is pertinent for human health but is often lost in neurodegenerative diseases.



### UNC SOM's Rising Stars Program

The UNC SOM's Rising Star Program aims to increase diversity among faculty members in the basic sciences with a specific focus on groups historically minoritized in these fields. The program does this by providing training to postdoctoral fellows to help them excel during the faculty interview process. Admitted scholars will receive a two-day campus visit to UNC and opportunities to complete mock job talks, chalk talks, and one-on-one faculty interviews. Both internal and external postdocs are invited to apply.

2022 welcomed the first cohort of six scholars into the program. They are: **Alex Guseman, PhD**, from the University of Pittsburgh, **Gabrielle Harris, PhD, RN**, from the UNC School of Medicine, **Oleta Johnson, PhD**, from University of California San Francisco, **Jennifer Jones, PhD**, from the University of Pittsburgh, **Shahzad Khan, PhD**, from Stanford University, and **Vivien Maltez, PhD**, from the National Institute of Allergy and Infectious Diseases.

### New UNC SOM-Novant Health Research Pilots

A new pilot award mechanism was announced to further solidify the partnership between UNC Health, Novant Health, and New Hanover Regional Medical Center (NHRMC). The *Promoting Health Equity and Clinical Research in Southeastern NC Awards* have two focus areas —Clinical research and Health Equity research and must include teams of researchers from both UNC SOM and Novant/ NHRMC. Congratulations to the first teams that received awards.



#### RFA 1: Promoting Clinical Research in Southeastern NC

*Creation of a firearm event registry and evaluation of gun shows' impact on gun violence rates*

Contact PI: **Sarah Kowitz, PhD, MPH** (UNC Family Medicine)

#### RFA 2: Promoting Health Equity Research in Southeastern NC

*Understanding pediatric epilepsy surgery disparities within the state of North Carolina*

Contact PI: **Qian-Zhou (JoJo) Yang, MD** (UNC Neurology)

## 2021-2022 SOM Office of Research Award Recipients

### Bridge and Boost Awards

The Office of Research's Bridge and Boost funding mechanisms continue to be extremely successful. Bridge funding provides continued support for successful research projects that suffer a lapse in funding, while Boost funding is designed to increase the chances of funding for an NIH grant that has been reviewed favorably but needs additional revisions and preliminary data to be funded on resubmission. In Fiscal Year 2022, 4 Bridge and 7 Boost awards were provided, and we look forward to continuing this support in Fiscal Year 2023.

### SOM Physician Scientist Training Program

The SOM Physician Scientist Training Program (PSTP), led by **Alex Duncan, MD, PhD**, supports clinicians-scientists committed to translating research findings to advance the practice of medicine. The program supports admitted physician scientists at both the resident/fellowship level and the early-stage faculty level. In 2022, two awards were given at the resident/fellowship level to **Jeremy Meier, MD, PhD** and **Simon Gray, MD, PhD** – fellows

in the Department of Medicine. **Erin Steinbach, MD, PhD** (Department of Medicine), and **Erica Brenner, MD, MSCR** (Department of Pediatrics), received support at the faculty level. More information about the awardees can be found in the [press release linked here](#).

[The PSTP program now has a website](#) with information about the program and trainees.

### **Forward Together Initiative to Support Clinician Scientists**

This strategic initiative supported by the School of Medicine helps bolster the engagement of junior clinician scientists in research by providing funding to clinical departments for each mentored career development award from the NIH (K award) holder. This helps alleviate the clinical coverage time allow the K awardees to more easily have their protected research time. For Fiscal Year 2023, \$380,000 was provided to clinical departments. Since the inception of this program in 2019, over \$1.4 million dollars has been provided to support clinical departments and help them to continue to grow their cohorts of physician-scientists.

### **Forward Together Research Initiative for Basic and Clinical Joint Faculty Hires**

The School of Medicine is home to an outstanding array of scientists with varying expertise across 8 basic science and 19 clinical departments. In order to capitalize on the diversity of research in our School and also increase translational research that is needed to fuel discovery, innovation, and improve human health, the Office of Research holds the *Forward Together* Research Initiative for Basic and Clinical Joint Faculty Hires. As part of this program \$300,000 is provided towards the recruitment package awardees. After a two year pause due to COVID-19, in 2022 two joint hire awards were provided. The first was to the Department of Orthopedics and UNC/NCSU Joint Department of Biomedical Engineering to recruit a basic science faculty member to further translational research in the area of musculoskeletal health. The second award was to the Department of Pediatrics and the Department of Microbiology and Immunology to support the recruit of a physician-scientist to study the female genital tract microbiome.

### **School of Medicine Faculty Recipients of Prestigious Awards (January 2022—June 2022)**

*Below is a comprehensive list of awards received by SOM faculty and featured in Vital Signs from January 2022 through June 2022. For a complete list of grants received by our faculty, please look for our bi-weekly "Latest Awards from the SOM Faculty" in Vital Signs.*

2021-2022 Yang Family Biomedical Scholars – **Mauro Calabrese, PhD, Nilu Goonetilleke, PhD, and Adam Hantman, PhD**, were the three mid-career faculty members named the 2021-2022 Yang Family Biomedical Scholars. <https://bit.ly/3VEha6z>

2022 APA Teaching Award for Mid-Career Faculty – **Kenya McNeal-Trice, MD**, received this prestigious award that recognizes excellence in teaching among Academic Pediatric Association members. <https://bit.ly/3pDjSLw>

2022 C. Knox Massey Distinguished – **Amir Barzin, DO**, was one of six recipients of this award, which is one of the most prestigious distinctions for faculty and staff. Barzin has been at the forefront of UNC's response to the COVID-19 pandemic and is most deserving of this recognition. <https://bit.ly/3PPxEpi>

2022 IEEE Fellow – **Paul Dayton, PhD**, is among the newly elected Institute of Electrical and Electronics Engineers Fellows. Dayton was chosen for his contributions to contrast agents and contrast-enhanced ultrasound in medical diagnostics and therapeutics. This is the highest grade of membership in the IEEE. <https://bit.ly/3QMZrYz>

2022 Unsung Hero – **E. Nathan Thomas, PhD**, was named a 2022 Unsung Hero by the UNC-Chapel Hill Office of Diversity and Inclusion. These awards are given to university members who exemplify a steadfast commitment to inclusion. <https://bit.ly/3KrPmy5>

2022 Women in White Coats Heroes Award – **Beth Friedland, MD**, was nominated as one of 15 leading female physicians nationwide for this prestigious award from the WomenInWhiteCoats.com blog. Nominees are selected for their exceptional records in patient care, education, research/scholarship and innovation. <https://bit.ly/3T9mfTN>

American Academy of Arts and Sciences Election – **Jenny Ting, PhD**, and **Ralph Baric, PhD**, were both elected as members of the American Academy of Arts and Sciences. Elected members are from across disciplines, professions and professions and membership is an honor. <https://bit.ly/3PKZUJo>

Fellow to the American Association for the Advancement of Science – **David Margolis, MD**, was elected a fellow of the AAAS for his distinguished contributions to the field of virology, particularly in making key discoveries on the mechanisms of HIV latency and devising new strategies to find a cure for HIV infection. <https://bit.ly/3QZNfmR>

H. Fleming Fuller Award- **Matt Nielsen, MD, MS**, received UNC Health’s H. Fleming Fuller Award. This prestigious award was established in 1986, and is given to the physician who best embodies a commitment to patient care, teaching, and community. <https://bit.ly/3wm7weF>

Hyman L. Battle Distinguished Cancer Research Awards – **Blossom Damania, PhD**, and **Dirk Dittmer, PhD**, were both recipients of the 2021 Hyman L. Battle Distinguished Cancer Research Award. They were recognized with this award for their individual high-impact research accomplishments in tumor virology, their service to the School of Medicine and UNC, and their co-leadership of global oncology and virology programs. <https://bit.ly/3pxLRMR>

Illinois State University Distinguished Alumni Award – **Jenny Ting, PhD**, was the recipient of the Illinois State University Distinguished Alumni Award for her outstanding immunology research. The award recognizes Illinois State University alumni who have exceptional achievements, and selection is based on accomplishments in one’s field. <https://bit.ly/3pBxE1f>

National Academy of Sciences Election – **Jenny Ting, PhD**, was among 120 scientists who were elected to the prestigious National Academy of Sciences in 2022. Ting was elected in recognition of her distinguished and continuing achievements in original research. <https://bit.ly/3ADwjND>

Ned Brooks Award for Public Service - **Ron Strauss, DMD, PhD**, received this award that honors a distinguished and sustained record of service to UNC and the larger community. Strauss has been a role model for hundreds of faculty who consider him their lifetime mentor in community engagement and service. <https://bit.ly/3wqmhgr>

North Carolina Obstetrical and Gynecological Society Distinguished Service Award – **Daniel L. Clarke-Pearson, MD**, received this recognition in April of 2022. This award recognizes his outstanding career of service, clinical care, and research. <https://bit.ly/3AIIrY>

Robert E. Bryan Public Service Award – **Robyn Jordan, MD, PhD**, was recognized with this award for exemplary public service for her partnership in creating a network of addiction clinics in North Carolina that will accept patients suffering from addiction. <https://bit.ly/3dJEbV0>

University Teaching Awards – These awards acknowledge the University’s commitment to outstanding teaching and mentoring. Of the 25 faculty members, 4 were members of the School of Medicine: **Jason Franz, PhD** (Chapman Family Teaching Awards), **Devin Hubbard, PhD** (William C. Friday Award for Excellence in Teaching), **Brenda Temple, PhD**, (Tanner Award for Excellence in Undergraduate Teaching) and **Jenny Ting, PhD** (Mentor Award for Lifetime Achievement). <https://unc.live/3pzkmCz>

WCHL Hometown Hero – **Blossom Damania, PhD**, was honored with a WCHL Hometown Hero award in January of 2022. <https://bit.ly/3QUvHZG>

## ***School of Medicine Research Rankings***

### **NIH Rankings**

The FY2021 NIH research rankings from the Blue Ridge Institute for Medical Research were released in February 2022, with the UNC School of Medicine ranked 18<sup>th</sup> in the country in NIH funding, and 5<sup>th</sup> among peer public universities. The total dollar amount of FY21 funding from the NIH was \$348 Million and all six basic science departments ranked in the top six for NIH funding. Twelve clinical departments rank in the top 30. The

numbers in parentheses reflect the rank among public schools of medicine:

#### Basic Science Departments

Cell Biology & Physiology, 1<sup>st</sup>  
Genetics, 3<sup>rd</sup> (1<sup>st</sup>)  
Biomedical Engineering, 4<sup>th</sup> (1<sup>st</sup>)  
Pharmacology, 4<sup>th</sup> (4<sup>th</sup>)  
Biochemistry & Biophysics, 5<sup>th</sup> (3<sup>rd</sup>)  
Microbiology & Immunology, 6<sup>th</sup> (3<sup>rd</sup>)

#### Clinical Departments

Obstetrics & Gynecology, 4<sup>th</sup> (3<sup>rd</sup>)  
Family Medicine, 11<sup>th</sup> (10<sup>th</sup>)  
Emergency Medicine 13<sup>th</sup> (6<sup>th</sup>)  
Dermatology, 18<sup>th</sup> (7<sup>th</sup>)  
Physical Medicine & Rehabilitation, 18<sup>th</sup> (9<sup>th</sup>)  
Medicine, 19<sup>th</sup> (7<sup>th</sup>)  
Psychiatry, 19<sup>th</sup> (9<sup>th</sup>)  
Otolaryngology/Head & Neck Surgery, 20<sup>th</sup> (11<sup>th</sup>)  
Pathology & Laboratory Medicine, 21<sup>st</sup> (10<sup>th</sup>)  
Radiology (includes radiation oncology), 24<sup>th</sup> (10<sup>th</sup>)  
Pediatrics, 25<sup>th</sup> (12<sup>th</sup>)  
Urology, 30<sup>th</sup> (14<sup>th</sup>)



### ***Innovation and Commercialization in the School of Medicine***

Researchers in the School of Medicine have continued to pursue entrepreneurial efforts and technology commercialization. The School of Medicine is responsible for 80 startups which makes up 52% of the startups from UNC. In 2022 alone, 81 reports of inventions were made, 147 patents were filed, and 4 startups were conceived. Below are a few noteworthy stories relevant to the innovation and commercialization efforts in the School of Medicine.

The majority controlling stake of Meryx Inc, a clinical stage immune-oncology company focused on developing tyrosine kinase inhibitors that inhibit the growth of hematologic and solid malignancies founded by **Shelley Earp, MD** was acquired by Xcovery Holdings, Inc – a biopharmaceutical company focused on developing small molecules that target cancer growth mechanisms. This exciting new partnership will help enhance both Xcovery's and Meryx's aims to develop oncology drugs for patients.

PerkinElmer recently acquired SonoVol Inc., a spinout from the Joint Department of Biomedical Engineering founded by **Paul Dayton, PhD**, and in April 2022 PerkinElmer announced the launch of the Vega imaging system, a novel ultrasound platform designed by SonoVol that combines hands-free, automated technology with the capability to accelerate non-invasive research and drug development studies.

Two additional stories featured by Innovate Carolina are listed below.

Pulvinar Neuro, a startup founded by **Flavio Frohlich, PhD** that developed a closed-loop, non-invasive device that shift brain activity patterns for patients suffering from mental illness and substance abuse was recently acquired by Electromedical Products International. [Story linked here.](#)

GenVentiv Therapeutics, a pre-clinical gene therapy company focused on blood disease and disorders founded by **Chengwen Li, PhD** was one of the recent recipients of a KickStart grant. These grants are intended to help companies translate their research from the bench to bedside. [Story linked here.](#)



***Thank you for everything you do for our research enterprise!***

