

UNC School of Medicine Office of Research Bi-Annual Report July 2022—December 2022

Message from the Vice Dean for Research

Reflecting on the last six months of 2022 brings to mind the exceptional research accomplishments in the School of Medicine. The research done in our School and the caliber of our researchers continues to attract national and international attention. In September of 2022, it was announced that alumni William and Dana Starling [made a \\$25 million commitment to the Department of Psychiatry to create the UNC Suicide Prevention Institute](#) – a place that will allow UNC to offer innovative and compassionate care to patients in the state while supporting research to better understand suicide. Tom and Nancy Chewning were impressed with Dr. Jonathan Serody’s work at the UNC Health Foundation GameChangers event [and established a fund to support his CAR-T immunotherapy work, an act aligned with their vision to improve cancer treatment](#). Another exciting gift is the \$10 million donation from Vaughn and Nancy Bryson to fund [a new pediatric Center to support basic, translational and clinical for mucopolysaccharidoses \(MPS\)](#). The Dr. Joseph Muenzer MPS Research and Treatment Center will be named in honor of Dr. Joseph Muenzer, professor of Pediatrics and one of the world’s top experts in congenital disorders.

These gifts highlight the breadth of expertise in our unit, how the faculty is highly regarded for their expertise, and the deep trust that the public has in our faculty and school to do cutting-edge, life-changing research. We are extremely excited to see what comes from these philanthropic gifts, and all of the other research projects pursued by our faculty, students, and staff. We are truly grateful for the people that make up our School, and are deeply proud of the research we accomplish as a unit.



Blossom Damania, PhD
Vice Dean for Research

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New Leadership in the School of Medicine—UNC, UNC Health System, and Dean's Office

Associate Dean for Student Affairs—Alice Chuang

Alice Chuang, MD, Med, assumed this role October 1 and reports to Kim Nichols, Senior Associate Dean for Medical Student Education. Chuang has been part of the Department of Obstetrics and Gynecology since 2003 and has held a number of education-related roles such as Director of Undergraduate Medical Education in the department and acting as a course director in all phases of the curriculum. Chuang succeeds Georgette Dent, MD, who stepped down from this role in January of 2022.



Vice Provost for Faculty Affairs—Giselle Corbie

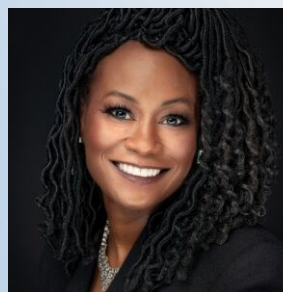
Giselle Corbie, MD, MSc, was selected to serve as the Vice Provost for Faculty Affairs in addition to her roles as the Director of the Center for Health Equity Research and Associate Provost for Rural Initiatives. Corbie will work with UNC leadership to advocate and advance UNC's faculty and strengthen the tarheel academic community. Corbie will continue her exceptional research focused on addressing health inequities in underserved populations through community-engaged and patient-oriented research.

Associate Dean for Information Technology and Chief Information Officer—Jill Jemison

Jill Jemison, MBA joins UNC from University of Vermont where she served as Assistant Dean for Technology and CIO for Health Services. Jemison has had leadership roles in the AAMC, including being the first female director of the AAMC GIR Leadership Institute. Jill brings a wealth of leadership and implementation experience to the role, and assumed her responsibilities on August 29, 2022. She succeeds Uduak Ndoh, MBA.



Senior Associate Dean for Medical Student Education—Kimberly Nichols



Kimberly Nichols, MD, assumed this role on October 1 and reports to Jennifer Wu, MD, MPH, Vice Dean for Academic Affairs. Nichols has held many leadership roles at UNC since she joined the faculty in 2011, such as Associate Dean for DEI Faculty Access and Success, and Medical Director of the procedural care suites and the post-anesthesia care unit. Nichols brings a wealth of knowledge in medical education, organizational culture, and equity and inclusion to this role.

Assistant Dean for Graduate Education—Scott Williams

Scott Williams, PhD, was appointed Assistant Dean for Graduate Education effective December 1, 2022. Williams reports to Donita Robinson, PhD, Associate Dean for Graduate Education, and in this role helps oversee the missions of the Office of Graduate Education. In addition to leading a successful research program in the Department of Pathology and Laboratory Medicine focused on how asymmetric cell division in skin cells is controlled at the molecular level, Williams has held leadership positions such as Director of Graduate Studies of Pathobiology and Translational Science.

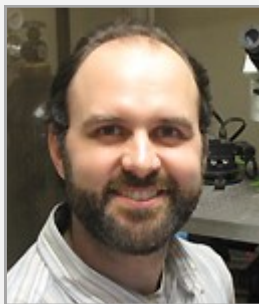


New Leadership in the School of Medicine—Department Chairs and Center Directors

Director of the Bowles Center for Alcohol Studies—Thomas Kash

Effective on January 1, 2023, **Thomas Kash, PhD**, John Andrews Distinguished Professor and Vice Chair of the Department of Pharmacology, assumed leadership of the Bowles Center for Alcohol Studies. Kash has been

part of UNC since 2009 and is a renowned expert in the field of brain circuitry and underlying alcohol use disorders. Kash succeeds Fulton Crews, PhD, who was the center's director for 28 years.



Strategic Plan Spotlight—Computational Medicine Program

Biomedical research increasingly relies on experimental methods and diagnostic tools that generate large high content data sets. Therefore, there is an increasing demand for computational approaches to analyze and interpret these data sets. In 2018, the UNC School of Medicine launched the Computational Medicine Program (CMP) to meet this need. The goals of CMP are to build strength in biomedical computing, foster collaborations between UNC faculty, and develop computational tools to aide in the diagnosis and treatment of human diseases. CMP is led by Co-Directors **Charles Perou, PhD**, and **Timothy Elston, PhD**. Perou is the May Goldman Shaw Professor of Molecular Oncology and a professor in the Department of Genetics. Elston is a Jeffrey Houpt Distinguished Investigator and professor in the Department of Pharmacology. Under their leadership, CMP has grown to include over 40 faculty from across the university. CMP is housed on the eleventh floor of the Mary Ellen Jones Building. This newly renovated space was designed to promote interactions between computational scientists and biomedical researchers. The floor can accommodate both computational and experimental research and has ample room for students, postdocs and faculty to gather and exchange ideas. Partnering with departments within the School of Medicine and College of Arts and Sciences, CMP has recruited 6 new faculty over the past 4 years. The research interests of these new faculty span cancer biology, cardiovascular disease and immunology. These new recruits join 4 existing faculty, who relocated their labs to CMP. Moving forward, CMP plans to recruit 2 additional faculty, develop a training program for graduate students interested computational medicine and pursue funding opportunities for team science.

CMP also offers pilot awards that are intended to foster the development of new research that integrate computational approaches into the biomedical research. Each award provides up to \$50K per year, and the next cycle of awards will open on October 1, 2023.

Office of Research and School of Medicine Highlights



Karmyn Eyles, JD – Training Grant Program Manager

We are fortunate that the School of Medicine is home to over 50 NIH training grants that provide an exceptional learning environment for our trainees. However, we are well aware of the administrative burden that comes with applying for these grants and collecting the extensive data needed. To make this process easier for our faculty, we have hired **Karmyn Eyles, JD**, our new Training Grant Program Manager. Eyles assumed her position in November of 2022 and joined us from NC State where she was an Advanced University Program Specialist. She has already supported multiple training grant applications by collecting data critical for the NIH-required tables, and will also work towards creating a streamlined platform for centralized application data. applications. Eyles is also the go-to person for the

institutional letter of support and designated liaison between the Office of the Vice Chancellor for Research and the faculty to get this letter signed. Please encourage your faculty to reach out to Karmyn for training grant application support.

SOM Representation at UNC Research Week

UNC Research Week, a celebration of the research done in all disciplines across campus, took place from October 10 – 14, 2022. Many of these events featured School of Medicine faculty, staff, and trainees, and below are a few noteworthy examples:

- *SOM Art in Science Competition Winners* – the winning images of the School of Medicine Art in Science Competition were on display in Bondurant Hall throughout the entire week. Congratulations again to **Deborah Cholon, Michael Chua,** and **Martina Gentsch** (*CFTR in Primary Human Airway Epithelial Cultures*), **Steve Hur, Matthew Flick, Wolfgang Bergmeier,** and **David Paul** (*Fga270/270 Mice Have Preserved Hemostasis Following Laser-Induced Saphenous Vein Injury*), and **Kendall Hutson** (*Ganglion*). [More about the winners can be found here.](#)
- *The 2022 Hettleman Talks*- Two of the four recipients of the 2022 Hettleman Prize recipients were from the School of Medicine. **Seth Berkowitz, MD, MPH** and **Yuliya Pylayeva-Gupta, PhD** presented 15 minute talks about their research programs at the reception on October 10, 2022.
- *2022 Core Facilities Showcase*- The Office of Research Technologies, directed by **Chris Gregory, PhD**, organized a UNC Core Facilities Showcase Fair that featured over 35 cores. Researchers had the opportunity to meet with key personnel in the cores, discuss research questions, and view brief presentations from core directors about new technologies and innovation research.
- *Jefferson-Pilot Fellowships in Academic Medicine and James Woods Junior Faculty Award Seminar*- the recipients of these prestigious junior faculty awards provided brief talks about their research programs to attendees. Congratulations to Jefferson-Pilot awardees **Ross Boyce, MD, MSc,** and **Hyejung Won, PhD,** and James Woods recipient **Colin Orr, MD, MPH.** [A link to the Research Week announcement of the seminar is linked here.](#)

Thank you to all who participated in UNC Research Week! A full list of the events that [took place can be found here.](#)

Expansion of Faculty Database

The School of Medicine Office of Research recently revamped our [Faculty Collaboration Database](#) to include both research-oriented and clinical faculty to foster new collaborations. There are currently 870 entries in the database and we would like to congratulate the Departments of Physical Medicine and Rehabilitation and Cell Biology and Physiology for having the most faculty participation for clinical and basic departments, respectively.

In order to continue to support the partnership between UNC and Novant Health, the database will soon include faculty from Novant as well. This will be a fantastic tool for faculty who are interested in submitting proposals for the Novant partnership mechanisms. An official announcement will be released when the Novant faculty have been incorporated into the database.

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

Computational Medicine Pilot Awards

The Computational Medicine Program and Office of Research provide pilot awards in order to support new research projects that integrate computational approaches in biomedical research. The hope is that these awards will help the investigators obtain critical preliminary data to help secure external funding. Each award can provide up to \$50,000 for one year, and all UNC-Chapel Hill faculty are eligible to apply. Applications for the next round of awards will open **Saturday, October 1, 2023.**

Updates from the Office of Graduate Education

The mission of the 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 last six months of 2022:

OGE staff. The OGE is led by a [team of outstanding directors, staff and faculty.](#) We welcomed faculty **Scott Williams, PhD** as Assistant Dean for Graduate Education and **Christiann Gaines, PhD** as Assistant Director for Doctoral Diversity and Success in Graduate Education.

Biological and Biomedical Sciences Program (BBSP). The BBSP welcomed [a new class of 101 students for the 2022-2023 academic year.](#) This incoming class is 63% female, 24% from groups historically underrepresented in the biomedical sciences, and 12% non-US Residents. The BBSP first year curriculum is led by director **Dave McDonald, PhD** and faculty **Lisa Tarantino, PhD.** In the fall they completed their fall lab rotations

and presented their research projects at the joint BBSP/PREP poster session, before embarking on their winter rotations. Current BBSP students are in their spring lab rotations.

Recruitment for the next academic year began in the fall with committee selection of candidates for interviews. Notably, 113 faculty – a record number! – participated in our 6 admissions committees. BBSP recruitment is led by Director **Jeff Steinbach** and faculty **Rob Nicholas, PhD** with help from faculty **Scott Williams, PhD**. Virtual interviews were held in January and February, and in-person campus visits for admitted candidates occurred in March.

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 110 PhD graduate students largely from ethnic and socioeconomic backgrounds traditionally under-represented in the sciences. In 2022, 28 IMSD students defended their dissertations, and at least 14 received fellowships or were appointed to T32 training grants. This successful program is led by Director **Ashalla Freeman, PhD**, Assistant Director **Christiann Gaines, PhD**, and grant Principal Investigators **Jean Cook, PhD**, **Rita Tamayo, PhD**, and **Tom Kash, PhD**. The leadership team successfully submitted an NIH T32 grant to continue funding for this successful program.

The [UNC PREP \(Postbaccalaureate Research Education Program\)](#) is in its 13th year. Under the leadership of **LaKeya Hardy, PhD** (program Director), **Jose Rodriguez-Romaguera, PhD**, and **Donita Robinson, PhD** (grant principal investigators), nine PREP scholars presented their research projects at the joint BBSP/PREP poster session and at the Annual Biomedical Research Conference for Minoritized Scholars (ABRCMS) national meeting in Anaheim, CA. The PREP scholars applied and are currently interviewing at top biomedical graduate programs in their respective fields. In January, UNC PREP leadership successfully submitted a R25 grant renewal application with the NIH to continue support of this program at UNC.

Career programming. The [Training Initiatives in Biomedical & Biological Sciences \(TIBBS\)](#) program, led by OGE directors **Patrick Brandt, PhD**, and **Beka Layton, PhD**, serves the career exploration and professional development needs of SOM trainees. TIBBS supports 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. Together these groups plan dozens of career development events throughout the year. For example, TIBBS and the Graduate Business and Consulting Club recently hosted the Accelerate to Industry (A2i) Consulting Bootcamp, a skill building series co-sponsored by local life science consulting firm, Triangle Insights Group. More than two dozen students and postdocs from UNC, Duke, and other local institutions gained valuable career skills and advice on this popular career path for PhDs. The popular ImPACT internship program will place its 200th intern during the 2023 cycle; this innovative program is a national model for an innovative academic-industry partnership returns significant benefits for trainees, UNC PhD programs, and local life science employers.

OGE scholarship. OGE Directors actively collect and analyze data on graduate education and career outcomes, then disseminate it through peer-reviewed and other publications. Directors **Beka Layton, PhD**, **Patrick Brandt, PhD**, and faculty **Pat Brenwald, PhD**, are principle investigators on an NIH R01 to examine the role of three critical components of graduate training in determining successful outcomes: a) professional development, b) mental health and wellness of trainees, and c) mentor-mentee match. Check out our recent publications on the OGE [Innovations & Impact webpage](#).

Mentor Training in Biomedical Research. As part of the OGE mission to support graduate students, the OGE invests resources to support a positive and productive training environment. Director **Dave McDonald, PhD**, led a 10-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 224](#). He also held mentor trainings for graduate/postdoctoral peer mentors and bench mentors for summer students. **Dave McDonald, PhD**, **Ashalla Freeman, PhD**, and collaborators completed development of new mentor training video-based modules (funded by an NIH supplement to the IMSD R25 grant) and trained the first cohort of faculty/staff facilitators to deliver the workshop.

Space and Construction Updates

New SOM Space Guidelines

The School of Medicine continues to grow as our faculty, staff, and trainees engage in new scholarly activities, but unfortunately the space in the School has not grown at the same rate. To support this growth and address new working conditions brought upon by the pandemic, the School convened a Working Forward Space Optimization Committee to evaluate space issues and develop guidelines, tools, and resources to be transparent

and efficient with space allocations. These guidelines were published and disseminated at the end of 2022 and can be found [on the intranet here](#). Importantly, these guidelines have emphasized that the School of Medicine Deans, Department Chairs and Center Directors are responsible for the efficient use of the space on campus. Any questions about the guidelines can be sent to Jennifer Brennan or Cam Enarson.

SOM Dean's Office Research Award Recipients

Jefferson-Pilot Fellowships in Academic Medicine

The Jefferson-Pilot Fellowships in Academic Medicine are given to talented junior faculty across all disciplines in the School of Medicine. The 2022-2023 recipients of these awards were **Ross Boyce, MD, MSc** and **Hyejung Won, PhD**. They, along with the James W. Woods Junior Faculty Award Recipient **Colin Orr, MD, MPH**, provided a virtual seminar on October 11, 2022 during UNC Research Week.

Boyce received his Bachelor of Science degree from Davidson College, his Masters of Science in Public Health in Developing Countries from the London School of Hygiene and Tropical Medicine and his MD here at UNC. After completing his internal medicine residency at Massachusetts General Hospital he completed a fellowship in Infectious Diseases at UNC before joining the faculty as a Clinical Instructor in the Department of Medicine in 2017. Boyce quickly became an Assistant Professor in 2019 in the Division of Infectious Diseases, and in 2021 he received an appointment in the Department of Epidemiology and became affiliated with the Carolina Population Center and the Department of Biology at Western Carolina University. Boyce runs an incredibly successful research program that addresses the epidemiology of malaria and other vector-borne diseases, and his work has an international impact as much of his



research is focused in resource-limited settings such as Uganda. The title of Boyce's talk presented at the Jefferson-Pilot and James Woods Seminar was "Bugoye to Brevard: A Tale of Two Mosquitos". [A press release about Boyce's receipt of the award is linked here](#).



Won earned both her Bachelor of Science degree and PhD in Biological Sciences from Korea Advanced Institute of Science and Technology. After completing her postdoctoral training in neurogenetics from UCLA she was recruited to the Department of Genetics in 2018. Won is an expert in genetics, brain development and psychiatric disorders, and leads an innovative research program looking at genetic risk factors for psychiatric illnesses by studying the regulatory relationships of the non-coding genome. Won spoke about her work in her talk entitled "Brain Disorders in 3D Genome". [An announcement of](#)

[Won's receipt of the Jefferson-Pilot Fellowship is linked here](#).

James W. Woods Junior Faculty Award

The James W. Woods Junior Faculty Award is given to very talented members of the School of Medicine's clinical faculty. The recipient of the award presents at the same seminar as the Jefferson-Pilot Award recipients in a joint celebration of the outstanding junior faculty in our School.

Colin Orr, MD, MPH, was the recipient of the 2022-2023 James Woods award. Orr received his BS from Washington University in St. Louis and his MD from Columbia University. Following his internship/residence at Cincinnati Children's Hospital, Orr pursued an MPH from UNC's Gillings School of Global Public Health. He also completed a National Research Service Award Primary Care Research Fellowship at UNC. After completing his fellowship, Orr joined the faculty in 2019 where he is also the Associate Medical Director for UNC Children's Primary Care Clinic, Resident Continuity Clinic Preceptor, and Newborn Nursery Attending. In addition to providing stellar pediatric care, Orr conducts critically important research on how food insecurity during childhood is related to poor health. Orr presented his research to the attendees of the Jefferson-Pilot / James Woods seminar in his talk entitled "Food Insecurity and Pediatric Health: Implications for Health Equity". [The Department of Pediatrics wrote a press release about Colin Orr that can be read here](#).



SOM Office of Research Award Recipients

Emerging Challenges in Biomedical Research

The Emerging Challenges in Biomedical Research (ECBR) awards provide support for innovative, early-stage research relevant to external strategic priorities. The Fall 2022 round sought to fund fundamental interdisciplinary, technology-focused, basic science research that could lead to new technologies or discoveries. Three outstanding teams were funded in the fall:

- *Biological Template for Sinoatrial (SA) Node Tissue Engineering* – **Michael Bressan, PhD**, (Cell Biology and Physiology), **Donald Freytes, PhD** (UNC/ NCSU Joint Department of Biomedical Engineering), and **Frank Conlon, PhD**, (Biology and Genetics).
- *Identifying the Role of Local Cell-Type Neighborhoods on Catecholamine-Induced Focal Necrosis* – **Christoph Rau, PhD** (Computational Medicine, Genetics), **Jeremy Purvis, PhD** (Genetics).
- *The New Metabolic Mouse Model for Immunometabolic Study of Regulatory T cells in Atherosclerosis* - **Xianwen Yi, PhD** (Surgery), **Yisong Wan, PhD** (Microbiology and Immunology).

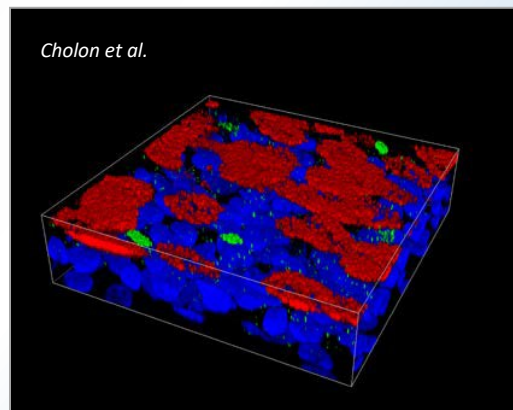
Forward Together Initiative to Support Clinician Scientists

The School of Medicine's Initiative to Support Clinician Scientists is meant to bolster the engagement of junior clinician scientists in research. This is done by funds allocated by the Office of Research to clinical departments with externally funded K awardees to alleviate the clinical coverage burden and allow clinical departments to expand their support for early career clinician scientists. In fiscal year 2023, OoR provided \$380,000 to nine departments that had K awardees. The following departments received awards: Anesthesiology, Family Medicine, Health Sciences, Medicine, Obstetrics and Gynecology, Otolaryngology, Pathology and Laboratory Medicine, Pediatrics, and Surgery.

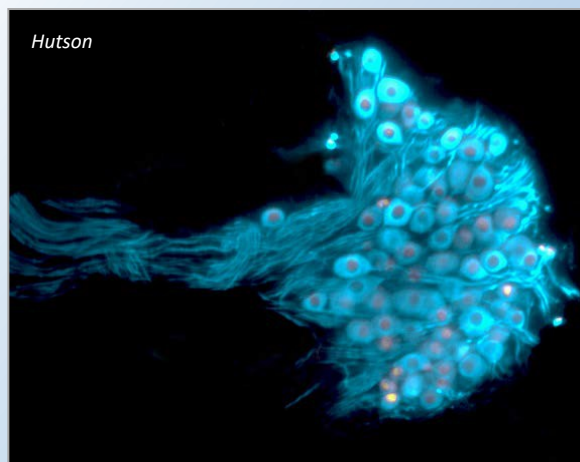
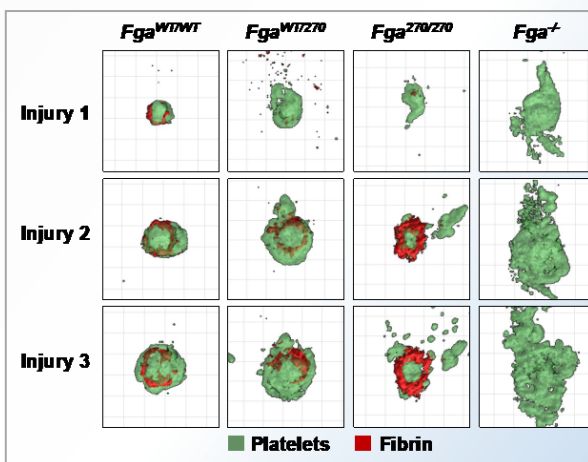
Art in Science Competition

The Office of Research holds an Art in Science Competition in conjunction with UNC Research Week. The purpose of this competition is to showcase the impressive biomedical research in the School and the beauty that is reflected in the science, and involves soliciting nominations for innovative scientific images from School of Medicine laboratories. Each year, up to three winners are selected and their images are showcased in Bondurant Hall during UNC Research Week. Congratulations to the winners of 2022! [Read more about the winners here.](#)

- **Deborah Cholon, Michael Chua, and Martina Gentsch**: “*CFTR in Primary Human Airway Epithelial Cultures*”
- **Steve Hur, Matthew Flick, Wolfgang Bergmeier, and David Paul**: “*Fga^{270/270} Mice Have Preserved Hemostasis Following Laser-Induced Saphenous Vein Injury*”
- **Kendall Hutson**: “*Ganglion*”



Hur et al.



UNC NeuroSpark Research Awards

- The School of Medicine has committed to support neuroscience research in part through the NeuroSpark Research Awards – pilot funding awards that intend to increase collaborations in the neurosciences and help faculty generate new pilot data to support subsequent external funding proposals. 2022 marked the third round of NeuroSpark Research Awards, and awards were given to four teams:
- **Brian Sindelar, MD, and Dawn Kernagis, PhD**, (Neurosurgery): *“Serum Biomarker Testing to Guide Clinical Management in Service Traumatic Brain Injury”*
- **Katie Baldwin, PhD, and Graham Diering, PhD** (Cell Biology and Physiology): *“Starry Night: The Role of Astrocyte-Synapse Interactions in Sleep”*
- **Todd Cohen, PhD**, (Neurology) and **Natalie Stanley, PhD**, (Computer Science): *“Spatial Signatures of Brain Health and Vulnerability in Aging and Alzheimer’s Disease”*
- **Helen Lazear, PhD**, (Microbiology and Immunology) and **Greg Scherrer, PhD**, (Cell Biology and Physiology, Pharmacology): *“Defining how Somatosensory Neuro Stimulation Triggers Herpes Virus Reactivation”*

Promoting Health Equity and Clinical Research in Southeastern NC Awards

In 2020, a partnership between Novant Health, UNC Health, and the UNC School of Medicine was announced. This partnership between the institutions is an agreement to support medical education, research, and clinical services to Novant Health facilities with an additional focus to bring better health solutions and care in rural areas. To support this partnership, the Research Advisory Council sponsors a research pilot award program, *Promoting Health Equity and Clinical Research in Southeastern NC Awards*, in two areas: clinical research and health equity research. As of December 2022, the following teams have received awards:

- **Sanjay Batish, MD** (Batish Family Medicine), **Adam Goldstein, MD, MPH** (UNC), **Sarah Kowitt, PhD, MPH** (UNC), **Joseph Pino, MD, MHA** (Novant Health), **Tara Queen, PhD** (UNC): *“Creation of a Firearm Event Registry and Evaluation of Gun Shows’ Impact on Gun Violence Rates”*
- **Qian-Zhou (Jojo) Yang, MD** (UNC), **Kiran McCloskey, PhD** (Novant Health), **Christine Tangredi, MD** (UNC): *“Understanding Pediatric Epilepsy Surgery Disparities within the State of North Carolina”*
- **Patrick Maguire, MD, MSF** (Novant Health), **Collette Shen, MD, PhD** (UNC), **Obiageli Ogbata, MD** (Novant Health), **Michael Repka, MD** (UNC), **Kevin Roof, MD** (Southeastern Radiation Oncology Group / Novant Health), **Lucasz Mazur, PhD** (UNC), **Lawrence Marks, MD** (UNC): *“Pilot Study Incorporating Biometric Data Evaluation for Patients with Head and Neck Cancer”*
- **Dana Casey, MD** (UNC), **Ryan Morse, MD** (UNC), **Patrick Maguire, MD, MSF** (Novant Health): *“Comparison of Adjuvant Monotherapy with Endocrine Therapy or Accelerated Partial Breast Irradiation Following Lumpectomy for Low Risk Breast Cancer Patients Over 65”*
- **Wesley Jackson, MD, MPH** (UNC), **Fernando Moya, MD** (Novant Health): *“Pharmacokinetics and Safety of Caffeine in Neonates with Hypoxic-Ischemic Encephalopathy”*
- **Shivani Sud, MD** (UNC), **Patrick Maguire, MD, MSF** (Novant Health): *“Pharmacologic Therapies to Mitigate Radiation-Associated Heart Disease”*
- **Karen Isaacs, MD, MPH** (Novant Health), **Kathleen Young, PhD, MPH** (Novant Health), **Victoria Boggiano, MD, MPH** (UNC), **Rupal Yu, MD, MPH** (UNC): *“Family Physicians and TGD Care in NC”*



School of Medicine Faculty Recipients of Prestigious Awards (July—December 2022)

Below is a comprehensive list of awards received by SOM faculty featured in Vital Signs through December 2022. For a complete list of grants received by our faculty, please look for our bi-weekly “Latest Awards from SOM Faculty” in Vital Signs.

2022 Donald W. Light Award for Applied or Public Practice of Medical Sociology – **Jill Fisher, PhD**, received this award for her book entitled *Adverse Events: Race, Inequality, and the Testing of New Pharmaceuticals*. The Donald W. Light award is given out by the American Sociological Association to a book or publication that expertly applies the concepts and methods of medical sociology to a contemporary issue of significance. <https://unc.live/3hNrY4a>

2022 Hall Award for Clinically Innovative Research Paper: **Matthew Vogt, MD, PhD**, received this award from the Pediatric Infectious Disease Society for his article published in *The New England Journal of Medicine* that outlined key aspects of how enterovirus D68 causes acute flaccid myelitis. <https://bit.ly/3mnwuYJ>

2022 Health Professions Higher Education Excellence in Diversity: **The UNC School of Medicine** received the 2022 Health Professions Higher Education Excellence in Diversity (HEED) Award from INSIGHT Into Diversity magazine for its DEI infrastructure and efforts. <https://bit.ly/3mlHbLF>

2022 Norma Berryhill Distinguished Lecture: **Nancy Raab-Traub, PhD**, delivered the 2022 Norma Berryhill Distinguished Lecture. Raab-Traub is an internationally recognized virologist, microbiologist, and professor, and has led the Virology Program in the Lineberger Comprehensive Cancer Center. <https://unc.live/3l0QSb7>

2022 Philip and Ruth Hettleman Prizes for Scholarly Achievement: **Seth Berkowitz, MD, MPH**, and **Yuliya Pylayeva-Gupta, PhD**, were amongst the recipients of the 2022 Hettleman Prizes – annual awards recognize the achievements of outstanding junior faculty. <https://unc.live/3WxW5vq>

2022 Young Investigator Award: **Jose Rodríguez-Romaguera, PhD**, received the Brain and Behavior Research Foundation’s 2022 Young Investigator Award. These awards are given to promising investigators to either extend their research fellowship training or begin careers as independent research faculty, and support mental illness research. <https://bit.ly/3Q00WTQ>

Academy Council of Distinguished Investigators Class of 2022: **Louise Henderson, PhD, Zibo Li, PhD, Gang Li, PhD**, and **Pew-Thian Yap, PhD**, were selected by the Academy of Radiology and Biomedical Imaging Research as Academy Council of Distinguished Investigators. This honor recognizes individuals for their outstanding contributions to the field of medical imaging. <https://unc.live/3l2faRV>

ACGME Anesthesiology Residency Review Committee: **Susie Martinelli, MD**, was selected to serve on the Accreditation Council for Graduate Medical Education’s Anesthesiology Residency Review Committee. Selection to serve on this committee is reserved for the most exceptional leaders in Anesthesiology education and training. <https://unc.live/3Wt9XqU>

American Heart Association Heart Failure Data Challenge Prize – **Melissa Caughey, PhD**, and Vishal Rao, MD from Duke University won third place in the AHA Heart Failure Data Challenge, which was focused on testing relationships between heart failure and health disparities, social determinants of health and structural determinants of health. <https://bit.ly/3FTopBo>

American Society for Microbiology Distinguished Lecturer – **Miriam Braunstein, PhD**, has been selected to serve as the ASM Distinguished Lecturer for a two-year term. Lecturers are chosen through a competitive nomination process, and only the most distinguished lecturers and researchers are chosen to participate in the program. <https://bit.ly/3Gs3nLP>

Approved NPF Center of Excellence: **The Autologous Islet Cell Transplant Program** led by **Chirag Desai, MD**, has been nationally recognized as an approved NPF Center the National Pancreas Foundation. These designations are given to those that focus on multidisciplinary treatment of pancreatitis. <https://bit.ly/3y43bgA>

Clinical Scientist Development Awards: **Andrea Knittel, MD, PhD**, and **Peyton Thompson, MD**, received Clinical Scientist Development Awards from the Doris Duke Charitable Foundation. These awards are given to support the transition of promising physician scientists to independent research careers whose projects may advance the prevention, diagnosis, and treatment of human disease. <https://bit.ly/3l3KFes>

Denny, Simon, Tigelstad Academic Service Award: **Meg Kihlstrom, MD**, and **Kenya McNeal-Trice, MD**, received this prestigious award from the North Carolina Pediatric Society and the American Academy of Pediatrics in recognition of their work with the Pediatric Residency Program at UNC. <https://unc.live/3VsKA75>

Election to American College of Rheumatology Board of Directors: **Saira Sheikh, MD**, joined the American College of Rheumatology's governing body and has been appointed to serve as the Board of Directors liaison to the Collaborative Initiatives Department. <https://unc.live/3JaJfz7>

Election to American Pediatric Society: **Benny Joyner, MD, MPH**, and **Kenya McNeal-Trice, MD**, were both elected to the American Pediatric Society. Members are those who have distinguished themselves as child health leaders, teachers, scholars, policymakers, and/or clinicians and whose important contributions are recognized nationally and internationally. <https://unc.live/3y6RW77>

Fellow of American Society of Tropical Medicine and Hygiene: **Jonathan Juliano, MD, MSPH, DTM&H**, was inducted as a fellow of the American Society of Tropical Medicine and Hygiene in recognition of his sustained excellence in tropical medicine, hygiene, global health, and related disciplines. <https://unc.live/3KRnZ2D>

Honors of the American Speech-Language-Hearing Association: **Elizabeth Crais, PhD**, received this award from the American Speech-Language-Hearing Association that recognizes individuals whose contributions have enhanced or altered the course of the discipline and is the highest honor that the Association provides. <https://bit.ly/3vIJKi4>

Hortense K. McClinton Outstanding Faculty / Staff Award: **Khalil Johnson, PhD**, received the 2022 McClinton Faculty / Staff Award in recognition of her exemplary leadership within UNC and her profession. <https://unc.live/3VsGqfD>

Johns Hopkins University Society of Scholars: **Anne Lyerly, MD**, was inducted to the Johns Hopkins Society of Scholars. This society recognizes former Hopkins affiliates who have made outstanding contributions to their fields. <https://bit.ly/41Islik>

Leonard Tow Humanism in Medicine Award: **Lindsey Wilson, MD, MPH**, received this award from the UNC School of Medicine Student Government in recognition of her compassion, empathy, respect, cultural sensitivity, communications skills and professional ethical standards in the delivery of care. <https://unc.live/3y6MyRC>

Life Achievement Honor Award: **Donald Budenz, MD, MPH**, received this prestigious recognition from the American Academy of Ophthalmology. This award is given annually to a select number of AAO members for their contributions to its scientific and education programs and to the field of ophthalmology. <https://unc.live/3Zybddb>

NeuroImage "Paper of the Year" – **Ian Shih, PhD**, and his laboratory were awarded the NeuroImage "Paper of the Year" award, which is the top prize from the journal NeuroImage, for the paper titled *Simultaneous fMRI and fast-scan cyclic voltammetry bridges evoked oxygen and neurotransmitter dynamics across spatiotemporal scales*. <https://bit.ly/3jo1QwZ>

President of North Carolina Pediatric Society: **Kenya McNeal-Trice, MD**, has been elected President of the North Carolina chapter of the American Academy of Pediatrics. The North Carolina Pediatric Society includes more than 2,500 pediatric care professionals and aims to empower pediatricians to optimize the wellbeing of North Carolina's infants, children, and adolescents. <https://unc.live/3PXqsZV>

President of RSNA Board: **Matthew Mauro, MD**, was named president of the Radiological Society of North America Board of Directors. In this role, Mauro will support RSNA's mission by helping the Society move through an evolving healthcare landscape and help disseminate high-quality research and education. <https://bit.ly/3kEOpK4>

President of the Society for Healthcare Epidemiology of America: **David Weber, MD, MPH**, was selected as president of the Society for Healthcare Epidemiology of America for 2024 (president-elect) and 2025. In this role he will oversee the national organization's board and executive committee meetings, act as a spokesperson for the organization, and make sure board resolutions are completed. <https://bit.ly/3kIkBc>

SisterLove's Pandora Singleton Ally Award: **Tonia Poteat, PhD**, received this award for her commitment to addressing HIV among cis and trans women from SisterLove, Inc, - the oldest women's HIV advocacy, sexual health, and reproductive justice organization in the Southeastern United States. <https://unc.live/3Ye5j02>

The European Society of Gene and Cell Therapy Founders Award: **Jude Samulski, PhD**, received this inaugural award for his contribution to the development of engineered recombinant adeno-associated virus vectors. <https://bit.ly/41xIHu6>

Vice-President of International Union of Toxicology: **Ilona Jaspers, PhD**, has been elected to serve a 3-year term as Vice-President of the International Union of Toxicology (IUTOX). IUTOX aim to increase the knowledge base of toxicological issues facing humankind and to extend this knowledge to developing nations. <https://unc.live/3GohXDK>

School of Medicine Rankings

Highly Cited Researchers

Many members of the School of Medicine were listed on Clarivate's 2022 list of Highly Cited Researchers. Those recognized had papers that ranked in the top 1% of citations for field and publication year. The faculty from the School of Medicine listed were:

Ralph Baric, PhD (Microbiology and Immunology), **Wesley Burks, MD** (Pediatrics), **John Buse, MD, PhD** (Medicine), **Gianpietro Dotti, MD**, (Microbiology & Immunology), **Lisa Gralinski, PhD** (Microbiology & Immunology), **Katherine Hoadley, PhD** (Genetics), **Xi-Ping Huang, PhD** (Pharmacology), **Helen Lazear, PhD** (Microbiology and Immunology), **John McCorvy, PhD** (formerly of Pharmacology), **Charles Perou, PhD** (Genetics), **Barry Popkin, PhD** (Nutrition), **Bryan Roth, PhD** (Pharmacology), **Barbara Savoldo, MD, PhD** (Microbiology & Immunology), **Dinggang Shen** (formerly of Radiology), **Sidney Smith, MD, FAHA, FESC, FACP, MACC** (Medicine), **Garret Stuber** (formerly of Psychiatry), and **Jenny Ting, PhD** (Genetics).



Innovation and Commercialization in the School of Medicine

With all of the cutting-edge research done by our laboratories, innovation and commercialization has always been a big part of the School of Medicine. Fiscal Year 2022 brought in over \$4,000,000 in licensing income to SOM Departments and Centers, and about 80 reports of invention were made in FY2022 by SOM inventors.

There have been so many monumental advancements in a variety of fields during the second half of 2022, so it is difficult to highlight all of them. Therefore for this issue, we decided two major CAR-T developments.

Tessa Therapeutics, a clinical-stage biotechnology company committed to developing next-generation cell therapies for solid tumors and hematological cancers, announced new Phase 2 clinical data for a CD30-CAR-T Therapy for Relapsed or Refractory Classical Hodgkin Lymphoma (TT11). The intellectual property behind TT11 is joint IP between Tessa and UNC, and the UNC inventors are **Barbara Savoldo, MD, PhD**, **Gianpietro Dotti, MD**, and **Jonathan Serody, MD**. The exciting data from an ongoing Phase 2 clinical trial entitled CHARIOT showed a favorable safety profile and efficacy in Hodgkin Lymphoma patients with a complete response rate of 57.1% and an overall response rate of 71.4%. This data shows that TT11 could be a viable treatment options for patients who currently have limited treatment alternatives. [The announcement from Tessa Therapeutics can be found here.](#)

Another CAR-T treatment that has been making news is a Phase I clinical trial for glioblastoma that is led by **Yasmeen Rauf, MD**. This Phase 1 trial has begun at UNC Medical Center and will evaluate the safety and tolerability of CAR-T immunotherapy in patients with recurrent or progressive glioblastoma. Glioblastoma is extremely aggressive and incurable, so if successful, this therapy could provide hope and a new treatment option to numerous patients. [More on this development can be found here.](#)

Thank you for everything you do for our research enterprise!