Message from the Vice Dean for Research

Reflecting on the successes of the past year engenders immense pride in our School’s research enterprise. Our total research funding in 2023 again exceeded the previous fiscal year. Our CTSA grant was renewed thanks to the efforts of the NC TraCS team. I am also excited to see how enthusiastic our faculty have been about applying for the new ARPA-H opportunities, with many teams submitting innovative applications and proposing solutions to some of the world’s biggest problems. All of the research successes of the past year, including the renewal of the CTSA grant, have primed us for our new upcoming strategic plan. I invite you to celebrate the successes of our current strategic plan summarized in the newsletter, and I would like to express my appreciation for all the efforts of those who have contributed their time and innovative ideas to shape the new strategic plans in the School of Medicine and UNC Health. We also have several chair searches underway and I am excited to see what this year holds for our research enterprise.

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

Brian Strahl—Interim Assistant Dean for Research (now Assistant Dean for Research)

Brian Strahl, PhD, professor in the Department of Biochemistry and Biophysics assumed the role of Interim Assistant Dean for Research in May of 2023. In this role Strahl oversees the infrastructure, communication and development necessary to bolster the growing research SOM enterprise. Strahl is a national and international recognized expert on chromatin structure and function, and is both a Pew Scholar and an Oliver Smithies Investigator. Strahl also brings administrative expertise to this role from his service as Interim Chair for the Department of Biochemistry and Biophysics, and is the Faculty Director of the UNC High-throughput Peptide Synthesis and Array Facility and the co-Director of the Chromatin and Epigenetics Program.

Larry Marks—Assistant Dean for Organizational Health and Quality

Larry Marks, MD, Sidney K. Simon Distinguished Professor of Oncology Research assumed the role of Assistant Dean for Organizational Health and Quality on July 1, 2023. Marks will promote team-building and other quality-related initiatives within the school. Marks is an expert in radiation therapy for breast and lung cancer patients, and catalyzed the growth of the Department of Radiation Oncology as previous Chair of the Department. Marks will continue his role as executive medical director of Care Redesign for UNC Health.

Nick Shaheen—Senior Associate Dean for Clinical Research

Nick Shaheen, MD, MPH, the Bozymski-Heizer Distinguished Professor and Chief of the Division of Gastroenterology and Hepatology in the Department of Medicine assumed this role in October of 2023 when John Buse, MD, PhD, stepped down. Shaheen will lead the expansion of clinical research throughout the SOM and facilitate growth of clinical trials research in the School. Shaheen is highly regarded for his research on Barrett’s esophagus and for developing and testing new treatment methods for patients.

Joan Taylor and Angela Smith—Associate Deans for Faculty Affairs and Leadership Development

Angela Smith, MD, MS, Professor in the Department of Urology and Joan Taylor, PhD, Professor in the Department of Pathology and Laboratory Medicine, both took on the role of Associate Dean of Faculty Affairs and Leadership Development, where they will form new programs, policies, and initiatives to promote career development for faculty and staff in the School of Medicine. Smith and Taylor are both exceptional researchers in their fields, and both bring prior leadership experience to this role. Smith currently serves as the Vice Chair for Academic Affairs of the Department of Urology and is the Director of Urologic Oncology for LCCC. Taylor served as the Vice Chair for Research for the Department of Pathology and Laboratory Medicine and was Associate Director of the McAllister Heart Institute.

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

Saame Raz Shaikh—Chair of the Department of Nutrition

Saame Raz Shaikh, PhD, is a renowned researcher who specializes in how dietary fatty acids and their metabolites affect immunological and metabolic response in disease. Shaikh has received numerous awards including an Early Career Award from the International Society for the Study of Fatty Acids and Lipids (ISSFAL), election to the ISSFAL Board of Directors, and election to the American Society for
Nutrition Board of Directors. Shaikh also brings significant leadership experience to this role, as he is co-director of UNC NORC.

Ben Chi—Interim Director of the Center for Women’s Health Research

Ben Chi, MD, the Annie Louise Wilkerson, MD ’36 Distinguished Professor and Vice Chair for Research in the Department of Obstetrics and Gynecology assumed interim leadership of CWHR after the tragic passing of Wendy Brewster, MD, PhD. Chi will oversee all the activities of CWHR, and his expertise in transforming women’s health care will serve him well in this role. Chi has been instrumental in initiating new HIV programs in Zambia, has led two public health initiatives funded by the US President’s Emergency Plan for AIDS Relief, and is currently working to prevent new HIV infections among pregnant and breastfeeding women, and is an internationally recognized expert in the prevention of mother-to-child transmission of HIV.

Margaret Helton—Interim Chair of the Department of Dermatology

Margaret Helton, MD, Professor and Chair of the Department of Family Medicine, began interim leadership of the Department of Dermatology in May of 2023. Helton is an outstanding physician, leader, and researcher, and her interests involve full spectrum family medicine, women’s health, and geriatrics. Helton’s leadership experience with the Department of Family Medicine will be instrumental in her interim leadership for the Department of Dermatology.

Ellen Jones—Interim Chair of the Department of Radiation Oncology

Ellen Jones, MD, PhD, Professor of radiation oncology assumed the role of interim Chair in 2023. Jones is an exceptional physician-scientist who is interested in gynecology and breast cancer, and the agents that enhance the effectiveness of radiation treatment. Ellen Jones has received many recognitions, including serving as President of the Society for Thermal Medicine, and selection as the Keynote speaker for the European Society for Hyperthermic Oncology. Jones brings significant leadership experience to this role from her time as Vice Chair in the Department and her external leadership positions.

Gregory Matera—Interim Director of iBGS

Gregory Matera, PhD, Professor in the Departments of Biology and Genetics, assumed leadership of the Integrative Program for Biological Genome Sciences (iBGS) on August 1, 2023. Matera oversees all activities of iBGS and will continue his research program working towards understanding cellular, molecular and developmental biological processes and epigenetic gene regulations as well as the role of small ribonucleoproteins. Matera is a core faculty member of iBGS and consequently brings a deep knowledge of the Center to this role.

Anthony Passannante—Interim Chair of the Department of Anesthesiology

Anthony Passannante, MD, assumed the role of Interim Chair of Anesthesiology in 2023. Passannante is a Professor in the Department of Anesthesiology and is an expert in anesthesia for vascular and liver surgery. Passannante is also the Associate Medical Director of the Operating Room, and the Vice Chair of the Committee of Operating Room Leaders within the SOM. He is also part of the ABA MOCA Minute Committee Chair, and consequently brings significant leadership experience to this role.

Forward Together Research Investment Highlights (2019-2024)

As we come to the conclusion of our current Strategic Plan and look forward to the new, we would like to briefly highlight some of the great things that we have been able to accomplish so far with the funding and support provided by Forward Together. Despite the major disruption caused by COVID-19 in 2020, research initiatives continued to develop and strengthen our overall infrastructure as our annual research funding has grown by more than $116M since FY19.
The SOM Physician Scientist Training Program has recruited four cohorts of physician scientists, providing support to 12 faculty and 7 fellows in 5 departments. $2.06M has been invested in cultivating physician scientists to grow our translational and clinical research pipeline. In addition to salary and research support, the program developed a curriculum to support mentorship and career development. PSTP successes include grant awards (R01, 3 K, 8 pilots, Doris Duke Award) and 58 publications authored by PSTP recipients. All five fellows in the program have been appointed to Assistant Professor.

The Clinical Joint Hires program was established to foster research collaborations between clinical and basic science departments through support for startups for joint hires. 6 awards were made resulting in 4 successful recruitments involving CBP/Neurology, Pediatrics/Microbiology, Orthopedics/BME, and CBP/Medicine.

Support from Forward Together established the Clinical Research Alliance, an administrative hub for coordinating large multi-site clinical research through the SOM. A framework was established and the CRA officially launched in 2022. The CRA continues to grow and has partnered with the Collaborative Studies Coordinating Center in the School of Public Health in the shared goal of bolstering large clinical research studies.

The Clinical Research Support Office was established as a central hub for supporting human subjects research. The CRSO has provided an array of new tools and resources for the community, including but not limited to: the establishment of 22 Clinical Research Accountability Units (CRAUs); developing the Clinical Trialist Training Program; creation of the RADaR human subjects research dashboard; spearheading the Career Development Initiative for research staff; deploying the web-based Personnel Profile and Training System (PaTS) for all clinical research personnel; and leading the creation of school-wide SOPs and best practices. The CRSO also played a critical role in the $70M renewal of the CTSA grant this past year. The success of the CRSO has bolstered campus efforts to support clinical research with the CRSO playing a critical role in the ONE UNC Clinical Research initiative that will provide similar support to all of campus.

Strategic investments were provided together with UNC Health and UNC Research to purchase and implement the OnCore enterprise clinical trial management system to reduce administrative burden, improve operational efficiencies and provide for a more robust clinical trial infrastructure to strategically pursue growth.

NeuroSpark is an annual event sponsored by the Neuroscience Center, providing an opportunity for Neuroscience research teams to pitch pilot projects with the top four teams receiving a $25k pilot award. 16 teams have received pilot funding supported by Forward Together.

Forward Together filled a strategic need in clinical departments to support the research efforts of successful faculty that have received K awards (Up to $15k/yr for 3 years). $1.74M has been allocated to support 58 K awardees in 13 departments.

Forward Together established a new funding source for core infrastructure dedicated to providing research vouches to new users of core facilities and services. $766,643 has been administered for the use of 43 cores by 77 investigators in three rounds of strategic funding. In 2020-21, $488,528 from this fund was also used to provide relief from COVID-19 related losses by the cores and provide financial stability after the campus closure and research slowdown during this difficult time.

Investments in departmental shared equipment continued with Forward Together and from FY20-24, $2M was allocated to 19 departments and 15 centers to upgrade equipment that is critical for our growing research enterprise.

The Rising Stars Program was established with Forward Together support as a mechanism for increasing the profile of UNC for postdoctoral fellows that will be entering the job market, providing support for further diversifying the SOM faculty. 11 participants were supported in the first two cohorts and one faculty member from the first cohort was recruited. This was a collaboration with Dr. Nate Thomas and the Office of Inclusiv Excellence and Community Engagement.

The Bioinformatics and Analytics Research Collaborative (BARC) was established in October 2020 as a multi-disciplinary collaborative core program that aims to provide bioinformatics expertise and analysis to researchers across the university and beyond for high throughput data. Since 2020, the BARC has provided support for more than 140 projects, provided more than 80 workshop sessions, written over 40 letters of support, and have been acknowledged in over 27 publications.
The Computational Medicine Program, launched in 2018 with support from Forward Together and Lineberger Cancer Center, the program now has 60+ faculty members including six new joint hires. The primary faculty labs are located in Mary Ellen Jones and the program supports a community of interdisciplinary faculty dedicated to integrating modern computational approaches with cutting-edge experimental techniques to advance the goal of predictive health care. Computational Medicine seminar series and annual symposia support the mission of the program and facilitate outreach. In addition, four rounds of Computational Medicine pilot awards have promoted the research of 22 faculty through 11 pilot awards.

Precision Medicine was a strategic focus of Forward Together, and with support from UNC Health, the Program on Precision Medicine in Healthcare was established to advance the implementation of evidence-based precision medicine and precision healthcare in NC and beyond through research, education and patient care. Efforts in support of the PPMH core initiatives have resulted in the successful launch of the Precision Health Genomic Screening project for UNC Health patients; integration of genomic data and into Epic and the use of genomic indicators in clinical decision making; launching of the GENSYS core facility to support variant analysis for genomic sequencing projects; funding for an R25 undergraduate summer program, an R21, renewal of the U24 ClinGen grant, as well as supporting more than $57M in external grant funding.

Our historical Bridge Funding program has been instrumental in supporting established labs as they renew R01s, sometimes through multiple cycles. 30 investigators have been funded since FY19 with a historical ROI of 1:46. Boost Funding was established in 2018 to provide funding to collect preliminary data to support new R01 or similar funding for early-stage faculty working to secure their first RO1 and established investigators working to secure an additional grant. Since FY19 the Boost program has funded 30 faculty with an ROI of 1:17.

Strategic supplemental funds were awarded in June 2021 through an ad hoc RFA issued to mitigate the negative impact of the COVID-19 pandemic on existing grants, with priority given to early career faculty. $309,452 was provided to 24 faculty in 15 departments.

The strategic plan continued to support the successful Translational Team Science (TTSA) and Emerging Challenges in Biomedical Research (ECBR) pilot awards. Nine TTSA teams have been funded and ECBR funding has supported 14 teams in the research areas of COVID-19, health equity, and basic mechanistic research. The ROIs for these pilots (15:1 TTSA; 14:1 ECBR) demonstrates the success of the program in seeding innovative research relevant to strategic funding agencies.

Additional Strategic infrastructure funds were utilized for supporting the creation of additional BSL3 space in Taylor Hall, supporting the ScreenNC COVID-19 surveillance study, renovations to the CTRC exam rooms, renovations to support our growing needs for animal models housing, and support for the creation of the Drug Discovery Initiative in collaboration with Pharmacy and Lineberger Cancer Center.

Office of Research and School of Medicine Highlights

Andrew Mara-Williams—New Office of Research Business Officer

The Office of Research was excited to welcome Andrew Mara-Williams to the team as the new Business Officer in 2023. Mara-Williams also supports the MD/PhD Program. He joins us from the School of Nursing where he held multiple roles, including an Office and Business Manager, Clinical Support Assistant, and Program Coordinator for the Hillman Scholars Program. Mara-Williams has done an exceptional job navigating the office finances and maintaining all of the business transactions and day-to-day needs of the Office of Research, and we are very lucky to have him on board!

SOM Representation at UNC Research Week

UNC Research Week, a celebration of the research done in all disciplines across campus, took place from October 23 – 27, 2023. 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 Allaura Cone, Meredith Chambers, and Dirk Dittmer (Endolysosomal Compartments in U-2 OS Cells), Taghreed Al-Turki and Jack Griffith (BRACO19 Disruption of Telomeres in U-2 OS Cells), and Emily Robinson and Joshua Strauss (Nucleosome). More about the winners can be found here.

- The 2023 Hettleman Talks- Two of the five recipients of the 2023 Hettleman Prize recipients were from the School of Medicine. Brian Conlon, PhD, and Pengda Liu, PhD presented 15-minute talks about their research programs at the reception on October 24, 2023.

- Research Week Core Tours 2023- The Office of Research Technologies, directed by Chris Gregory, PhD, and the Office of Sponsored Programs organized core facilities tours throughout research week. This allowed attendees to meet core directors and staff, learn about upcoming events, view the instrumentation and learn about how collaborating with the core could enhance their own work.

- School of Medicine Innovation Roundtable – The Office of Research invited resident entrepreneurs Rahima Benhabbour, PhD, Msc, Matthew Hirsch, PhD, Chad Pecot, MD, Brian Strahl, PhD, and Mireya McKee, PhD to discuss their experiences and knowledge about commercializing biomedical research. Attendees were able to network and gain valuable knowledge about taking their work to the market.

- 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 Nicholas Brown, PhD, and Jose Rodriguez-Romaguera, PhD, and James Woods recipient Miriam Sklerov, MD, MSc.

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

Expertscape Database

Expertscape identifies the top individuals with specialized biomedical expertise across diverse fields worldwide helping patients seeking the best doctors and knowledge experts. Expertscape determines who is an expert based solely on scientific publishing record, and authors of papers who rank in the top 1% are deemed Expertscape experts. To showcase the exceptional clinical and biomedical expertise in our School, the Office of Research will soon release a database that will feature faculty ranked in the Top 15 Expertscape rankings within their specialties. Keep an eye out for a launch announcement!
Upcoming Award Deadlines Offered by the School of Medicine / Office of Research

Computational Medicine Pilot Awards

The Computational Medicine program and Office of Research provides pilot awards in order to support new research projects that integrate computational approaches in biomedical research. These awards help 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 are due Thursday, October 31, 2024.

Space and Construction Updates

The Translational Research Building is Back on Track

COVID-19 put a halt to many long-term projects, including the construction of the Translational Research Building (TRB) – a building that will provide much needed expansion of space for animal housing, BSL3 containment labs, imaging, and wetlab. 2023 also brought great news about additional funding for the building from an $8M NIH C06 grant to Craig Fletcher, DVM, PhD, to support the BSL3 facility to be located in the building. We hope to be able to share many more updates about the building in 2024.

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 2023-2024 recipients of these awards were Nicholas Brown, PhD and Jose Rodriguez Romaguera, PhD. They both provided a seminar on October 23, 2023 during UNC Research Week.

Brown is currently an Associate Professor in the Department of Pharmacology, and is also a member of the Lineberger Comprehensive Cancer Center. Brown received his PhD in Biochemistry and Molecular Biology from Baylor College of Medicine and completed his postdoctoral fellowship at St. Jude Children’s Research Hospital. Brown joined the faculty in 2017 and has developed an outstanding research program focused on the molecular interactions that are essential to the timing of events in the cell cycle. Brown has published over 50 articles and has received numerous awards including the NIGMS Maximizing Investigators’ Research Award for Early-Stage Investigators, and the American Heart Association Innovative Project Award. Brown’s seminar was entitled “Dissecting Ubiquitination Mechanisms in Eukaryotic Signaling and Disease”

Rodriguez-Romaguera is an Assistant Professor of Cell Biology and Physiology and Psychiatry, Director of the Rising Star Program to Increase Faculty Diversity, Co-Director of the Carolina Stress Initiative, and member of the Carolina Institute of Developmental Disorders and the UNC Neuroscience Center. Rodriguez-Romaguera received his PhD from the University of Puerto Rico at Rio Piedras in Academic Psychology and completed his postdoctoral fellowship at UNC with Dr. Garret Stuber. Rodriguez-Romaguera was elected to the faculty in 2019, and his cutting-edge research is focused on understanding the neuronal circuits responsible for hyperarousal states. Rodriguez-Romaguera published over 20 articles and was the recipient of the NARSAD Young investigator Award from the Brain and Behavior Foundation, and a Junior Faculty Development Award from the UNC Provost’s Office among other awards. Rodriguez-Romaguera presented a talk entitled, “Tracking Arousal Responses with Biometric Ocular Photometry Eyewear”.

Jefferson-Pilot Fellowships in Academic Medicine

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.
Miriam Sklerov, MD, was the recipient of the 2023-2024 James Woods award. Sklerov is an Assistant Professor in the Movement Disorders Division in the Department of Neurology, Director of the Autonomic Laboratory, Director of the UNC Atypical Parkinsonism Multidisciplinary Clinic, and the Director of the CurePSP Center of Care. She is also a member of the SOM Physician Scientist Training Program. Sklerov received her MD from the New York Medical College, completed an Internal Medicine Internship at Yale University Greenwich Hospital, and her Residency and Postdoctoral Fellowships at Columbia University Medical School. She also received an M.Sc in Epidemiology from the Mailman School of Public Health at Columbia University. Sklerov joined the UNC faculty in 2017 and runs an outstanding research program looking at the genetics of movement disorders such as Huntington’s Disease and Atypical Parkinsonism Syndromes. Sklerov has amassed over 15 publications and book chapters, and has received many awards including the Henry Markley MD Humanitarian Award in Medicine from the Greenwich Medical Society, and the UNC Health Care and Faculty Physicians Carolina Care Excellence Leader Award. Sklerov’s talk was entitled “New Horizons in Treatment of Parkinsonism Disorders”.

UNC SOM’s Rising Stars Program

The UNC SOM’s Rising Star Program aims to help postdoctoral fellows 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. In 2023, five scholars were admitted to the program. Edward Evans, PhD, from the University of Colorado, Ian Williamson, PhD, from Duke University, Mariam Fofana, PhD, from Yale University, Shaneice Mitchell, PhD, from Stanford University, and Tigist Tamir, PhD, from the Massachusetts Institute of Technology.

We were pleased to welcome former Rising Star scholar, Dr. Shahzad Khan, as a new assistant professor in the UNC Departments of Neurology and Cell Biology and Physiology in 2023.

UNC SOM-Novant Health Research Pilots

The Research Advisory Council (RAC) is comprised of leaders from Novant Health, Novant Health New Hanover Regional Medical Center, the UNC Health care System, and the UNC School of Medicine, and is the backbone of the UNC-Novant partnership to increase research and provide better care to the Southeastern NC. The following teams received awards in 2023:

- Christina Orahovats (UNC Department of Pediatrics) and Khadijia Reid (Novant Department of Pediatrics) “BFAST: Measuring Initial Implementation Outcomes in Southeastern NC”
- Hung-Jui Tan (UNC Department of Urology) and Ibardo Zambrano (Novant Department of Surgery) “Reducing disparities in prostate cancer counseling and care through visual decision support”
- Rachel Urrutia (UNC Department of OBGYN) and Amber Woodard (Novant Institute for Safety and Quality) “CARE: Coordinating Risk Assessment to Reduce Hypertensive Disorders of Pregnancy Morbidity through Early Intervention”
- Jason Tasoulas (UNC Department of ENT) and Siddharth Sheth (Novant Department of Medicine, Oncology)

SOM Office of Research Award Recipients

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.
Faculty Collaboration Database Competition

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.

2023-2024 Translational Team Science Awards

The Translational Team Science Awards (TTSA) program funds new teams comprised of basic and clinical scientists with the aim of supporting future grant applications. The awards are meant to bolster translational research done in our School. Two teams received Phase 1 awards ($50,000 for 1 year), while one received a phase 2 award ($75,000).

Phase One Recipients

- Leon Coleman, MD, PhD (assistant professor, pharmacology) Zibo Li, PhD (professor, radiology) & Steven Rowe, MD, PhD (professor, radiology): “A New Translational Team for Early Diagnosis and Prevention of Alzheimer’s Disease”
- William Kim, MD, PhD (professor, medicine, genetics, pharmacology), Brian Kuhlman, PhD (professor, biochemistry and biophysics) & Shawn Yu, MD (fellow, medicine): “Multispecific T-cell engagers targeting intracellular cancer-testis antigens in urothelial carcinoma”

Phase Two Recipient

- Brandi Reeves, MD (assistant professor, medicine, genetics, pharmacology) & Rafal Pawlinski, PhD (professor, medicine): “Hypoxia Inducible Factors alpha in Myeloproliferative Neoplasm-Associated Thrombosis”

UNC NeuroSpark Research Awards

The NeuroSpark Research Awards, made possible by the Forward Together strategic plan and the UNC School of Medicine, are meant to increase collaborations in the neurosciences and incentivize faculty to generative pilot data for use in grants to the NIH and other external agencies. Four teams received awards in 2023.

- Dominique Higgins, MD, PhD (Assistant Professor, Department of Neurosurgery), Yueh Lee, MD, PhD (Vice Chair of Translational Research, Professor of Radiology, Neuroradiology Section Adjunct, Physics and Astronomy & Biomedical Engineering), Andrew Abumoussa, MD, MSc (PGY6 – UNC Department of Neurosurgery): “A pilot VR study for intro-operative neurologic monitoring in awake craniotomies”
- Jason Stein, PhD (Associate professor, Department of Genetics, UNC Neuroscience Center) & William Polacheck, PhD (Assistant professor, Biomedical Engineering, other affiliations are Cell Biology and Physiology + McAllister Heart Institute): “A void in the noid: vascularizing patient-derived organoids”
- Sarah Cohen, PhD (Assistant Professor, Cell Biology and Physiology) & Stephanie Gupton, PhD (Professor, Cell Biology and Physiology): “Illuminating the endolysosomal system in schizophrenia”
- Juan Song, PhD (Professor, Jeffrey Houpt Distinguished Investigator, Department of Pharmacology and Neuroscience Center, Wubin Bai, PhD (Assistant Professor, Department of Applied Physical Sciences): “Digital automation of synergistic, long-term drug delivery for treating Alzheimer’s disease”
Computational Medicine Pilot Awards

The UNC Computational Medicine Program Pilot Awards were designed to foster the development of new collaborative projects that involve integrating computational approaches and methodologies into biomedical research. The teams below received awards as part of the 2023 cycle:

- **Elizabeth Brunk, PhD** (Assistant Professor, Pharmacology) & **Ashok Krishnamurthy, PhD** (Professor, Computer Science, Director, RENCI): “Using Convolutional Neuronal Networks to Deter Extrachromosomal DNA and Track its Dynamics During Drug Treatment”

- **Guorong Wu, PhD & Todd Cohen, PhD**: “Elucidating Control Mechanisms of Tau Propagation for Alzheimer’s Disease”

School of Medicine Faculty Recipients of Prestigious Awards

Below is a comprehensive list of the awards received by the SOM faculty and featured in Vital Signs in 2023. For a complete list of grants received by our faculty, please look for our monthly “Latest Awards from SOM Faculty” notice in Vital Signs.

- **2023 Academy for Radiology & Biomedical Imaging Research Distinguished Investigator Award** – Eran Dayan, PhD, Yueh Lee, MD, PhD
- **2023 Association of Professor of Gynecology and Obstetrics Humanism in Teaching Award** – Leslie Clark, MD
- **2023 Distinguished Teaching Awards for Post-Baccalaureate Instruction** – Susan Coppola, PhD
- **2023 Innovation Pilot Awards** – Alexandria Kraus, MD, Elizabeth Stringer, MD, MSc, Stephen Tilley, MD, Stephen Schworer, MD, PhD
- **2023 North Carolina Pediatric Society Award for Outstanding Achievement** – Timothy Bukowski, MD
- **2023 Oliver Max Gardner Award** – Shelley Earp, MD
- **2023 Solovy Award for COPD Research** – M. Bradley Drummond, MD, MHS
- **2023 University Teaching Awards** – Susan Beck, PhD, Susan Coppola, MS, OT/L, OTD, FAOTA, and Seth Alexander, EdM.
- **2023-2024 American College of Emergency Physicians’ Board of Directors** – Abhi Mehrotra, MD, MBA
- **Alpha Omega Alpha Medical Honor Society at UNC Inductees** – David Lynch, BMBS, Lauren Raff, MD, Kyle Melvin, MD, Andrew Chen, MD, MPH, John Doughton, MD, Raquel Reyes, MD, MPA, Duncan Vincent, MD
- **American Board of Medical Specialties Research and Education Foundation 2023-2024 Visiting Scholar** – Fei Chen, PhD
- **American College of Radiology Case in Point Winners** – Carlos Zamora, MD, PhD, Daniel Nissman, MD, Fangbai Wu, MD.
- **American Pediatric Society Membership** – Ian Davis, MD, PhD, Kori Flower, MD, MPH
- **American Psychosocial Oncology Society Lifetime Achievement Award** – Donald Rosenstein, MD
- **American Society for Investigative Pathology Robbins Distinguished Educator Award** – Jonathan Homeister, MD, PhD
- **Application / Individualization Phase Clinical Preceptor Excellence in Teaching Award** – Sarabhi Kasera, MD, Jeyhan Wood, MD, Christine Khandelwal, DO
- **Association of Specialty Professors Council** – Lisa Rose-Jones, MD
- **Azerbaijan National Academy of Sciences Honorary Member** – Aziz Sancar, MD, PhD
- **Carolina Women's Leadership Council's Faculty to Junior Faculty Mentoring Award** – Janet Rubin, MD
- **Department of Health Sciences Distinguished Teaching Award** – Linn Wakeford, PhD
- **Diversity in Science and Excellence Award** – Nancie Archin, PhD
- **Education Mentor / Advisor Award** – Muneera Kapadia, MD, Adam Kimple, MD, PhD
Educational Research Mentor Award – Eugenia Quackenbush, MD
Faculty Teaching Resident / Fellow Award – Leslie Clark, MD
Foundation Phase Teaching Excellence Award – Raul Necochea, PhD, Danielle Samulski, MD
H. Fleming Fuller Award – Elisabeth Dellon, MD, MPH
High-Value Care Award – Daniel Park, MD, Meredith Newton, MD
Hyman L. Battle Distinguished Cancer Research Award – Albert Baldwin, PhD
Innovation in Teaching Award – Arielle Perez, MD, MPH
International Neuropalliative Care Society's Outstanding Scientific Contribution Award – Laura Hanson, MD, MPH
Junior Faculty Award – Erin Finn, MD
Lifetime Achievement Award in Medical Education – Jane Brice, MD, MPH, Mauricio Castillo, MD
Medical Image Computing and Computer-Assistant Intervention Outstanding Area Chair Award – Mingxia Liu, PhD
National Academy of Distinguished Educators in Pediatrics – Kenya McNeal-Trice, MD
National Commission on Correctional Health Care Board – Andrea Knittel, MD, PhD
National Foundation of Emergency Medicine Scholar and Mentor Program – Martin Casey, MD, MPH, Michelle Meyer, PhD, MPH
National Quality Forum Diagnostic Excellence Committee – Matt Nielsen, MD
NCI Division of Cancer Prevention Early Career Scientist – Chemtai Mungo, MD, MPH
Ned Brooks for Public Service Award – Giselle Gorbie, MD
North Carolina Institute of Medicine Membership – Kathryn Menard, MD, MPH
North Carolina Violent Death Reporting System’s Legacy Award from NCDHHS – Anna Waller, ScD
Robert A Winn Diversity in Clinical Trials Career Development Award – Dominique Higgins, MD, PhD
Robert E. Bryan Public Service Awards – Molly Berkoff, MD
RTI 2023-2024 Class of University Scholars – Jessica Lin, MD
Senior Faculty Award – Erin Malloy, MD
Spectrum Top 40 Under 40 Rising Star for Autism Research – Clare Harrop, PhD
UNC Medical Alumni Affairs Early Career Achievement Award – Angela Smith, MD
US Department of Health and Human Services Roundtable – Kavita Shah Arora, MD

School of Medicine Research Rankings

Highly Cited Researchers

17 members of the School of Medicine were listed on Clarivate’s 2023 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 (Microbiology and Immunology), John Buse MD, PhD, (Medicine) Ke Cheng, PhD (Biomedical Engineering), Gianpietro Dotti, MD, (Microbiology and Immunology), Katherine Hoadley, PhD (Genetics), Leaf Huang, PhD (Biomedical Engineering), Xi-Ping Huang, PhD (Pharmacology), Charles Perou, PhD (Genetics), Scott Randell, PhD (Medicine, Cell Biology and Physiology), Bryan Roth, MD, PhD (Pharmacology), Barbara Savoldo MD, PhD (Microbiology and Immunology), Timothy Sheahan, PhD (Microbiology and Immunology), Martin Styner, PhD (Psychiatry), Sidney Smith, MD (Medicine), Patrick
Innovation and Commercialization in the School of Medicine

Researchers in the School of Medicine have continued to pursue entrepreneurial efforts in technology commercialization. Although there are too many stories to highlight all of the outstanding innovation stories brought to life by School of Medicine investigators, here are three brief highlights from 2023:

Modern Ritual—Co-founder Beth Goldstein, MD (Dermatology). Modern Ritual provides local access to tele-dermatology which includes skin cancer screenings to help more people get screened earlier. The assessment will determine whether the spot suspicious and the degree of abnormality. Read more here.

G1 Therapeutics—Co-founder Ned Sharpless, MD (Medicine). New results published from a Phase 2 Clinical Trial of Trilaciclib show that Trilaciclib may enhance long term immune surveillance by increasing T cell function and have immunomodulatory effects in the tumor microenvironment. More here.

Target RWE – Target RWE, co-founded by Michael Fried, MD (Medicine) reached a hallmark milestone of enrolling 1000 patients in its eosinophilic gastrointestinal disorders state registry. The data will be used to better characterize natural disease history, the impact of co-morbidities, and the patient journey. Read more here.

In Memoriam

Remembering Adaora Adimora

With immense sadness, we pay our tributes to Adaora Adimora, MD, MPH, who passed away at the beginning of January 2024. She was a brilliant physician-scientist who dedicated her career to treating patients with HIV and researching the epidemiology of HIV and other STDs.

Ada earned her medical degree from Yale University and later moved to North Carolina to receive her MPH from UNC’s Gillings School of Global Public Health. Ada joined the faculty in 1997 and was the first African American woman to achieve tenure in the UNC Department of Medicine. Ada was elected to the National Academy of Medicine, received the Thomas Jefferson Award, and was recognized as the #17 expert in AIDS and HIV in the world. Ada was a renowned leader, and she held numerous positions across the state and nationally, such as within the NC Department of Health’s Communicable Disease Control Section and the US Department of Health and Human Services’ Antiretroviral Treatment Guidelines Panel. Ada also spent much of her time mentoring trainees and junior faculty, a reflection of her passion for education and helping others. Ada’s passing is felt across the nation, and she has left a legacy to inspire the next generation of physician-scientists.

Remembering Wendy Brewster

Wendy Brewster, MD, PhD, very sadly passed away on July 24, 2023 from cervical cancer. She was a deeply loved clinician-scientist who directed the Center for Women’s Health Research and spent her time caring for women with gynecologic cancers. She worked on understanding the determinants of poor outcomes in endometrial, ovarian, and cervical cancers.

Wendy was born in Newcastle upon Tyne, UK, and was raised in Guyana. She earned her bachelor’s degree in mathematics from Rutgers University, her MD from UCLA, and completed her residency training in OB/GYN at Harbor-UCLA Medical Center. She subsequently received her PhD in
epidemiology from UC-Irvine. She was recruited to UNC in 2008 to direct the Center for Women’s Health Research and become a faculty member in the OB/GYN department. She was revered for her outstanding and passionate efforts, ranging from caring for patients and educating the next generation of clinician-scientists to her research on populations at risk for disparate healthcare treatment, eliminating healthcare inequities, and furthering the field of gynecologic oncology. Wendy was a member of the Society of Gynecologic Oncology and was president-elect with a term to begin in 2024. To honor her deep commitment to the field and society, the Society of Gynecologic Oncology established the Wendy R. Brewster Young Investigator Award. The Lineberger Cancer Center has also established the Wendy R. Brewster Distinguished Lectureship in Cancer Health Equity to honor her legacy. She is deeply missed and remains a source of inspiration to all who knew her.

*Thank you for all you do for the School of Medicine!*