# UNC School of Medicine Office of Research 2018-19 Academic Year Bi-Annual Report

May 2019

## Message from the Vice Dean for Research

The fiscal year (July 2018-June 2019) was a great year of growth and enhancement for research within the SOM. We continued to invest in our top research areas in both basic science and clinical research. Our new partnership with Deerfield Management, Pinnacle Hill, is a new and exciting way for us to better engage with industry, and is another step towards our mission to grow our research portfolio. We are immensely proud of what the UNC SOM faculty, students and staff have been able to accomplish this past year.



We launched the new SOM Strategic plan, *Forward Together*, this year. Looking ahead for the next 5 years, we continue to strive to provide research that is highly innovative, focused on important health issues and aimed towards improving lives; provide education that prepares healthcare leaders of the future; support service that impacts the state, nation and world; cultivate diversity that reflects our population and a culture of belonging; foster and retain faculty that thrive and lead in their chosen career paths; and build an administrative infrastructure empowered to fulfill our mission. We have received important feedback from SOM faculty, and we understand that we must focus on reducing administrative burdens to address growing faculty pressures and provide better mentorship for faculty so that they can thrive professionally in their careers.

We will be investing more than \$46.5 million in research in both basic science and clinical departments to bolster UNC's global leadership in the following thematic areas: Precision Medicine, Neuroscience, Immunology & Infectious Diseases, and Cancer. We will also facilitate translational research collaborations by incentivizing co-hires between basic science and clinical departments and providing multiple pilot funding opportunities year round. Furthermore, we are working on strengthening our clinical research enterprise and further increasing our engagement with industry. We also want to bolster UNC's research infrastructure, including governance and administration, to ensure UNC SOM research remains at the cutting-edge. In order to support our graduate students who fuel the research engine in the SOM, we, along with UCRF, have increased our commitment to them by providing an additional \$500K per year in funding for the Office of Graduate Education (OGE) to increase BBSP class size, graduate student stipends and support staff.

#### New Faces in the Office of Research

## Christopher Gregory, PhD – Director, Office of Research Technologies

to cutting-edge technology to advance research at UNC.

In July 2018, **Dr. Chris Gregory** was appointed Director of the Office of Research Technologies, an office established to provide core administration and operations support, budgeting assistance, core director training, financial reporting and general oversight for the research core facilities. Dr. Gregory also serves as the chair of the Core Facilities Advocacy Committee, which works with core facility directors to ensure high-quality services and user satisfaction. Chris received his PhD from Ohio State University in 1993, and completed a postdoc fellowship in the UNC Department of Pediatrics before accepting a research faculty position in the UNC Department of Pathology and Laboratory Medicine. After spending

some time in industry, Chris accepted this current position, where he builds upon the

existing core infrastructure by implementing long-term strategic planning to ensure access

OoR Team

**Dr. Blossom Damania**, Vice Dean for Research

**Dr. Robert Duronio**, Associate Dean, Research

**Dr. Jennifer Brennan**,
Director,
Office of Research

**Dr. Trisha Dant**, Associate Director, Office of Research

**Dr. David Peden**, Sr. Associate Dean, Translational Research

**Dr. Jean Cook**, Associate Dean, Graduate Education

Dr. Chris Gregory,
Director,
Office of Research
Technologies

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#### Trisha Dant, PhD—Associate Director, Office of Research

**Dr. Trisha Dant** joined the Office of Research at the end of August 2018 where she works under Dr. Jennifer Brennan. Dr. Dant was a graduate student in the laboratory of Dr. Jonathan Serody, and received her PhD from the UNC Department of Microbiology and Immunology in the Summer of 2017. After completing a one-year fellowship in the Office of Technology Commercialization, Trish joined OoR where she works to implement in the Initiatives and endeavors of OoR in a number of ways. She is also responsible for management of SOM faculty award nominations from the Dean's Office, is the SOM Representative of the Galapagos Initiative, and works occasionally with the Office of Faculty Affairs and Leadership Development.



### New Leadership in the School of Medicine

#### Wesley Burks, MD—The new Dean of the School of Medicine



In November of 2018, Dr. William Roper was named the Interim President of the UNC System, succeeding President Margaret Spellings who stepped down on March 1<sup>st</sup>, 2019. Dean Roper served as the Dean of the School of Medicine, the Vice Chancellor for Medical Affairs, and the CEO of UNC Health Care since 2004 and has received numerous awards including the North Carolina Award for Public Service, the highest civilian honor in the state of North Carolina. With this change taking place, we welcome **Dr. A. Wesley Burks** as the new Dean. Dr. Burks previously served as the Executive Dean for the School of Medicine as a member of UNC Health Care's senior leadership team, and has spent over 30 years taking care of patients, conducting research, helping to educate students and leading institutions. Dr. Burks is also a world-renowned expert in the field of pediatric food sensitivity.

#### Cristen Page, MD, MPH—Executive Dean of the School of Medicine

In February 2019, **Dr. Cristy Page** was named the Executive Dean of the School of Medicine, the position vacated by Dr. Burks. Dr. Page, the Chair and William B. Aycock Distinguished Professor of Family Medicine, received both her MD and MPH at UNC, and completed her residency at UNC hospitals before joining the Department of Family Medicine. Dr. Page has been instrumental in the development and evaluation of innovative training programs, creator and director of the FIRST Scholars program, the founder and CEO of Mission3, and has led federal, state and philanthropic grants to advance clinical, educational, and health workforce development. In her first few months, Dr. Page has been engaged with stakeholders and leadership in the SOM, and we look forward to working with her going forward.



#### Julie Byerley, MD, PhD—Executive Vice Dean of the School of Medicine



**Dr. Julie Byerley** began her appointment as the Executive Vice Dean of the UNC School of Medicine on November 1, 2018. Dr. Byerley will maintain her position as the Vice Dean for Education while also assuming the new leadership responsibilities as the Executive Vice Dean of the UNC School of Medicine. During her position as the Vice Dean for Education, Dr. Byerley oversaw the Translational Education at Carolina curriculum, played a role in designing the School of Medicine's Medical Education Building, and has worked to train the next generations of physicians so that they are best equipped to handle our state's health needs.

## Wendell Yarbrough, MD, MMHC—Chair of the Department of Otolaryngology/Head and Neck Surgery

**Dr. Wendell Yarbrough**, MD, MMHC began leadership of the Department of Otolaryngology / Head and Neck Surgery in September of 2018 and succeeds Dr. Harold C. Pillsbury. Prior to joining UNC, Dr. Yarbrough served as Section Chief of Otolaryngology, Department of Surgery in Yale University School of Medicine, the Director of the Head and Neck Disease center at Smilow Cancer Hospital, and Co-Director of the Virus and Other Infection-Associated Cancer Program in the Yale Cancer Center.



Dr. Yarbrough's translational research efforts are identifying novel targets for therapy in head, neck, and salivary cancers and hopes to improve patients of these ailments. Dr. Yarbrough has received numerous honors and accolades, including being named as one of "America's Top Doctors for Cancer" and one of "America's Top Doctors" for multiple years.

#### James Sanders, MD—Chair of the Department of Orthopaedics

**Dr. James Sanders** assumed leadership of the Department of Orthopaedics in April 2019, following the retirement of Dr. Ed Campion. Before coming to UNC, Dr. Sanders was Professor of Orthopaedics and Rehabilitation, Pediatrics, and Director of Pediatric Surgical Services and Chief of the Division of Pediatric Orthopaedics at the University of Rochester and Golisano Children's Hospital at Strong. Dr. Sanders' clinical specialty is pediatric orthopaedics, and he is a national leader in this field. He currently serves on the Board of Directors for the Scoliosis Research Society, has held leadership roles in the Pediatric Orthopaedic Society of North America, and serves as Associate Editor of the Spine Deformity Journal.



## Robert Duronio, PhD—Interim Chair and Craig Cameron, PhD—New Chair of the Department of Microbiology and Immunology



**Dr. Robert (Bob) Duronio**, Professor of Biology and Genetics, Director of the Integrative Program for Biological and Genome Sciences, and the UNC School of Medicine's Associate Dean for Research has been acting as the Interim Chair of the Department of Microbiology and Immunology since August of 2018 while a search for a permanent Chair was underway. Effective September 1, 2019, the new chair of the Microbiology and Immunology department will be **Dr. Craig E. Cameron**. Dr. Cameron joins us from Pennsylvania State University, where he held the title of Eberly Chair in Biochemistry and Molecular Biology. Dr.

Cameron's research program focuses on RNA viruses, specifically RNA polymerases and RNA-binding proteins required for viral replication or mitochondrial function. He brings a unique expertise in virology, biochemistry and mechanistic enzymology to the pursuit of novel strategies to treat viral infection and mitochondrial dysfunction. Craig will be an excellent addition to the School of Medicine leadership and we look f forward to working with him.



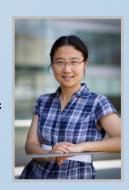


**Dr. Joe Eron** has been serving as the Vice Chief for the Division of Infectious Diseases and was appointed as the Chief of the Division of Infectious Diseases in January 2019 to succeed Dr. Mike Cohen, MD. Dr. Eron is a Professor of Medicine, Director of the UNC Center for AIDS Research Clinical Core, an Oliver Smithies Investigator, and an internationally recognized researcher, teacher and clinician in the field of HIV. Dr. Eron is also the PI for the UNC Global HIV Prevention and Treatment Clinical Trials Unit, Vice Chair and co-PI of the AIDS Clinical Trials Group, and has led or participated in many original studies of antiretroviral therapies. With his international reputation in the field of infectious diseases and extraordinary talent, we are very

excited to see the Division of Infectious Diseases proceed under Dr. Eron's leadership.

#### Li Qian, PhD—Associate Director of McAllister Heart Institute

In October 2018, **Dr. Li Qian**, Associate Professor of Pathology and Laboratory medicine was named Associate Director of the McAllister Heart Institute. In this role she will work closely with the Directors, Drs. Victoria Bautch and Rick Stouffer, to support the research efforts of the Institute. Dr. Qian was recruited to UNC in 2012, her contributions to the field of cardiovascular research and regenerative medicine have been recognized by numerous honors and awards, including the prestigious American Heart Association Katz Prize for Basic Research and the Boyalife Prize in Stem Cell and Regenerative Medicine from *Science/AAAS*.



#### Jonathan S. Berg, MD, PhD—Director of the Program in Precision Medicine in Health

**Dr. Jonathan Berg** was appointed as the Director of the new Program in Precision Medicine in Health Care. Dr. Berg is an Associate Professor of Genetics and has a clinical appointment in the Department of Medicine, Division of Hematology-Oncology and is affiliated with the Lineberger Comprehensive Cancer Center. Dr. Berg has a wealth of research experience relevant to Precision Medicine, including investigating the use of genome sequencing to generate diagnostic tests in patients. We are excited to see the Program in Precision Medicine in Health Care grow under Dr. Berg's direction.



## Office of Research and School of Medicine Highlights

#### **Deerfield Drug Development Partnership**

UNC has engaged with Deerfield Management, an employee owned hedge fund sponsor, to accelerate the discovery of new medicines based on technology developed by UNC investigators. Through this partnership, UNC and Deerfield Management have formed Pinnacle Hill, LLC, a company seeking to discover new medicines to address unmet medical needs of our times. In addition to committing \$65 million to support the development of these novel therapeutics, Deerfield Management will offer drug development expertise to products being developed at Pinnacle Hill. Pinnacle Hill released its first Request for Proposals in January 2019. Selected proposals will receive funding for studies that will hopefully lead to a successful IND application. More information can be found at <a href="https://www.pinnacle-hill.com">https://www.pinnacle-hill.com</a>.

#### Commitment to NIH HEAL Initiative

In response to the rise in Opioid Use Disorder, overdose, and death based on opioid prescription in the past decade, the NIH has allocated \$500 million dollars in new funding annually to address the increasing severity of issues associated with opioid use and prescription. The NIH will release a number of different funding opportunities and mechanisms in areas that range from Acute and Chronic Pain Signatures, preclinical screening platforms and optimization of non-addictive therapies to treat pain, to pain effectiveness research clinical trials. The SOM Office of Research along with TraCS and the Office of Research Development are disseminating important information and opportunities related to the HEAL Initiative through the UNC Opioid Research Network Group, that serves as a central information repository for investigators interested in Opioid research. This online group serves as a nexus for generating research ideas and projects to address the HEAL Initiative across the school of medicine and other health affairs schools. Please reach out to us if you would like to become part of this group.

#### **Precision Medicine Program**

In 2018, under the leadership of the Vice Dean for Research, UNC SOM and Hospitals launched a new Program for Precision Medicine in Health Care with a \$10M investment from the UNC Healthcare system. This initiative is led by **Jonathan Berg MD**, **PhD** and will advance the implementation of evidence-based precision medicine and precision healthcare in North Carolina and beyond, through an integrated program of research, education, and patient care. The program will make direct investments in infrastructure needed to conduct translational research and will focus on implementation of evidence-based interventions in patient care.

#### **SOM Involvement in the Galapagos Initiative**

The Galapagos Initiative is a strategic partnership between UNC and Universidad San Francisco de Quito which was created to transform research, education, and outreach at UNC by encouraging ideas that could foster international ties between UNC, USFQ, and the Galapagos Islands. The School of Medicine has partnered with the Galapagos Council and the Executive Team to cultivate new research projects that could utilize the unique environment and resources in the Galapagos Islands. With access to the Galapagos Science Center on the San



Cristobal Island and connections to key players in the hospital system in the Galapagos, this partnership presents a great opportunity for new research projects in the areas of health, microbiology, pathogenesis, and many other areas. If you have any questions or interest in conducting research in the Galapagos, please reach out to us.

#### Collaborations with SOM / SOP / SPH

The SOM Office of Research is committed to bolstering new and interdisciplinary research endeavors that with faculty members across UNC's campus. To further this mission between our three schools, **Dr. Blossom Damania** is working together with **Dr. Kim Brouwer** (Associate Dean for Research and Graduate Education in the Eshelman School of Pharmacy) and **Dr. Penny Gordon-Larsen** (Associate Dean for Research in the Gillings School of Global Public Health). To kickoff this effort, on **October 4, 2019**, with the help of NCTraCS, we will hold a joint Symposium with a goal of stimulating collaborative research among faculty in SOM, SOP and SPH focused on three themes: Data Science/Big Data, Opioids/Addiction, and the Microbiome. Registration for this event can be found here: <a href="http://tinyurl.com/y3rr98eh">http://tinyurl.com/y3rr98eh</a>.

#### NC Museum of Art Showcases the 'Art of Science and Innovation'

The North Carolina Museum of Art displayed incredible images from SOM faculty to showcase the beauty of Biomedical research. These images were on display from November 2018 until January 2019, and the opening of this exhibit was celebrated by a reception visited by SOM leadership, the researchers whose art was on display, and many other enthusiasts. **Eva Anton** (Cell Biology and Physiology), **Kathleen Caron** (Cell Biology and Physiology), **Dirk Dittmer** (Microbiology and Immunology), **Bob Duronio** (Genetics and Biology), **Jack Griffith** (Microbiology and Immunology, Biochemistry and Biophysics), **Mehmet Kesimer** (Pathology and Laboratory Medicine), **Wesley Legant** (Biomedical Engineering, Pharmacology), **Ed Miao** (Microbiology and Immunology), **Li Qian** (Pathology and Laboratory Medicine), and **Mark Zylka** (Cell Biology and Physiology) all had their images featured.

### 2018 Office of Research Award Recipients

#### **TTSA**

OoR sponsors the annual Translational Team Science Award (TTSA) in partnership with NC TraCS. This award is aimed at capitalizing on the culture of collaboration at UNC to foster new synergistic interdisciplinary team of basic science and clinical investigators. TTSA Phase I feasibility grants provide a 12-month period to fully engage team members in the development of a competitive TTSA Phase II. The expectation is that these awards will provide the planning time and initial funds to support early stage de novo research teams that would otherwise not be possible. In April 2018, three teams were provided TTSA Phase 1 awards:

- => **Melinda Beck** (Nutrition), **Raza Shaikh** (Nutrition), **Timothy Farrell** (Surgery) Mechanisms by which gastric-bypass surgery improves lymphocyte immunometabolism
- => Yuliya Pylayeva-Gupta (Genetics), Paul Dayton (BME), Autumn McRee (Medicine)

  Revitalization of anti-tumor immune responses using image-guided sonoporation in pancreatic cancer
- => Ben Calhoun (Medicine), Melissa Troester (Epidemiology), Sarah Nyante (Radiology)
  Integration of Molecular, Epidemiologic, and Histopathologic Markers for Risk Stratification of Benign
  Breast Disease

#### **Computational Medicine Program Pilot Awards**

Along with the University Cancer Research Fund, OoR contributed to the Computational Medicine Program Pilot Awards, which encourage the development of new collaborative research projects that integrate computational approaches into biomedical research. In January 2019, three teams were awarded one year pilot awards:

- => **Dr. Yuchao Jiang** and **Dr. Qing Zhang** (Pathology and Laboratory Medicine)
  Single-Cell Omics Analyses for Assessing Genomic, Transcriptomic, and Epigenomic Heterogeneity in Cancer
- => **Dr. Boyce Griffith** and **Dr. William Polacheck** (Biomedical Engineering)

  Computational-Enabled Design of Engineered Vascular Tissues for Ischemic Disease
- => **Dr. Yueh Lee** (Radiology)

  Breast Cancer Molecular Subtype Prediction from Stationary Digital Breast Tomosysnthesis Imaging

#### **ECBR**

The Emerging Challenges in Biomedical Research (ECBR) grants are a joint effort between UNC School of Medicine Office of Research, the UNC Medical Center, and NC TraCS, and the intent of these awards is to provide support for innovative, early stage research relevant to NIH priorities.

In the Summer of 2018, two teams received ECBR grants for projects that were focused on pressing issues in healthcare and precision medicine:

- => **Alison Stuebe**, Ana Whitney, Kim-Young-Wright, Kristin Tully, Sarah Verbiest, Katherine Bryant. Human centered-design to assess and address social determinant of health in maternity care
- => **Jill Bates**, William Kim, Tim Wiltshire, John Valgus, Scott Savage Implementation of a Preemptive Approach to Pharmacogenomics in Oncology

#### Faculty Collaborative Research Chat (FCRC) Awards

In November of 2018, the SOM Office of Research launched a project-based mechanism to create new research collaborations between faculty members housed In different units within the School of Medicine. Recipients of FCRC awards will be Given \$300 dollars which will cover expenses for approximately 2-3 meetings between collaborators to facilitate novel interdisciplinary research endeavors. The goal is to encourage interactions and collaborations between basic and clinical scientists, as well as conversations between new and established faculty at UNC. As a result of the inaugural RFA for the FCRC Awards, 5 PIs received FCRC awards:



- => Rebecca Maine, MD, MPH (Department of Surgery): Improving Surgical Palliative Care at UNC
- => Corbin Jones, PhD (iBGS): Population Genomics of Mosquitoes and Mosquito Borne Pathogens
- => Michelle Meyer, PhD, MPH (Department of Emergency Medicine): Cardiovascular Disease Markers during Post-Pregnancy in Women With and Without Type-2 Diabetes and their infants
- => **Nat Moorman**, **PhD** (Department of Microbiology and Immunology): *Codon Usage Bias in Translational Regulation*
- => Marcus Carden, MD (Department of Pediatrics): A Collaborative Effort to Determine Optimal Intravenous Fluid Use when Treating Adult Patients with Sickle Cell Disease and Vaso-Occlusive Pain.

## Office of Research Updates

#### **Support for Faculty Award Nominations**

We are deeply proud of the all of the work being done by SOM faculty, and feel that it is important to highlight the outstanding individuals through the nomination of prestigious internal and external awards. Since August of 2018, we have made nominations for 10 prestigious awards, and plan to continue this momentum, working with department chairs and utilizing the post tenure reviews to identify faculty for prestigious awards.

Furthermore, the Office of Research is in the process of recreating the awards database that is present on our website. Not only will awards be characterized by discipline and provide helpful information, we plan to include a more organized calendar of award deadlines, and will continue to solicit input from the Department Chairs and Center Directors for faculty nominations.

The OoR will continue to monitor the NIH funding opportunities and send key opportunities to relevant Departments and faculty to raise awareness of strategic opportunities.

#### **New SOM Website**

The Office of Research is working with the SOM Information Technology office to revamp the School of Medicine Website to be more outward focused and better emphasize the research areas of strength within SOM.

#### **Upcoming Funding Opportunities Offered by the Office of Research**

Below is a list of some upcoming funding opportunity deadlines in 2019 to keep on your radar.

"Forward Together" Research Initiative for Basic and Clinical Joint Faculty Hires – June 7, 2019. This new initiative will support joint faculty hires in research between clinical and basic science departments. This program is part of strategic efforts to capitalize the exceptional scientists in both the basic science and clinical departments in the SOM and increase translational research. The deadline for applications is June 7, 2019.

Faculty Collaborative Research Chat Awards – Summer 2019. The Faculty Collaborative Research Chat Awards (FCRC) fund meetings to help departments and centers initiative new interdisciplinary collaborations and To enable the exchange of ideas and expertise between faculty members that will lead to novel and innovative research endeavors.

Research Infrastructure Equipment Allocation – Fall 2019. The Dean's Office will continue to make allocations to Departments and Centers or the acquisition of shared research equipment. Each department or unit will be invited to submit one proposal for replacement equipment or new technology.

Translational Team Science Awards – Late Fall 2019. This award is administered in partnership with NC TraCS with the hopes of fostering new synergistic interdisciplinary teams of basic science and clinical investigators. More information about this award and past winners can be found on our website.

Bridge and Boost Awards – October 2019. The last round of applications for the Bridge and Boost awards for FY19 closed on April 24<sup>th</sup>. In FY20 Bridge applications will be accepted in October, January and April and Boost applications in October and April. See our website for details. Bridge Funding provides continued support for successful research projects that suffer a lapse in funding, while Boost awards are designed to increase the chances of funding for a grant that has been reviewed favorably but needs additional revisions and preliminary data in order to be funded on resubmission.

## Research Rankings

The UNC School of Medicine saw an increase of more than \$20 million dollars in total direct costs from NIH awards between 2017 and 2018, for a total dollar amount of approximately \$293M. Looking at the 2018 NIH Awards to each Medical School Rankings, SOM ranked 16<sup>th</sup> in Direct costs and 17<sup>th</sup> in total costs. Importantly, the UNC SOM is ranked 6<sup>th</sup> among public medical schools! Below are SOM departments that are ranked in the top 25 for NIH funding according to the Blue Ridge Rankings:



**Basic Science Departments** 

Biochemistry and Biophysics (4<sup>th</sup>)

Biomedical Engineering (6<sup>th</sup>)

Cell Biology and Physiology (9<sup>th</sup>)

Genetics (6<sup>th</sup>)

Microbiology and Immunology (5<sup>th</sup>)

Pharmacology (2<sup>nd</sup>)

Clinical Departments

Anesthesiology (5<sup>th</sup>)

Dermatology (24<sup>th</sup>)

Family Medicine (12th)

Medicine (14<sup>th</sup>)

Obstetrics and Gynecology (3<sup>rd</sup>)

Otolaryngology (23<sup>rd</sup>)

Physical Medicine and Rehabilitation (19<sup>th</sup>)

Psychiatry (16<sup>th</sup>)

UNC ranks 32<sup>nd</sup> overall (an increase in 2 spots from 2017) in the *U.S. News* & *World's* rankings of the "Best Global Universities", but ranks 5<sup>th</sup> among "Top Public Schools". Importantly, the UNC SOM was ranked 1<sup>st</sup> in the country for primary care education, and ranked 23<sup>rd</sup> for overall research for the second year. UNC also ranks highly in the subject matter areas below that fall within the School of Medicine:

Biology and Biochemistry – 38<sup>th</sup> (ranked 9<sup>th</sup> among US Public Schools)

Clinical Medicine – 23<sup>rd</sup> (ranked 7<sup>th</sup> among US Public Schools)

Immunology – 21<sup>st</sup> (ranked 5<sup>th</sup> among US Public Schools)

Microbiology – 10<sup>th</sup> (ranked 4<sup>th</sup> among US Public Schools)

Molecular Biology and Genetics – 26<sup>th</sup> (ranked 7<sup>th</sup> among US Public Schools)

Neuroscience and Behavior – 39<sup>th</sup> (ranked 8<sup>th</sup> among US Public Schools)

Pharmacology and Toxicology – 3<sup>rd</sup> (ranked 2<sup>nd</sup> among US Public Schools)

Psychiatry / Psychology – 21<sup>st</sup> (ranked 5<sup>th</sup> among US Public Schools)



The SOM is home to exceptional researchers that conduct high-impact and influential science. Consequently, many of our faculty appeared on the Highly Cited Researchers list of 2018, a list that recognizes world-class researchers for their research performance demonstrated by production of multiple highly-cited papers that rank in the top 1% by citations for field and year in Web of Science. Faculty with primary SOM appointments on this list include **Dr. Linda Adair** (Dept. of Nutrition), **Dr. Wesley Burks** (Dean of SOM, Dept. of Pediatrics), **Dr. John Buse** (Dept. of Medicine), **Dr. Mike Cohen** (Dept. of Medicine), **Dr. Joe Eron** (Dept. of Medicine), **Dr. Katherine Hoadley** (Dept. of Genetics), **Dr. Edward Miao** (Dept. of Microbiology and Immunology), **Dr. Karen Mohlke** (Dept.

of Genetics), **Dr. Diana Perkins** (Dept. of Psychiatry), **Dr. Chuck Perou** (Dept. of Genetics), **Dr. Barry Popkin** (Dept. of Nutrition), **Dr. Bryan Roth** (Dept. of Pharmacology), **Dr. Kenneth Schulz** (Dept. of OB/GYN), **Dr. Sidney Smith** (Dept. of Cardiology), **Dr. Jenny Ting** (Dept. of Genetics).

## **Brief Updates on SOM Construction Projects**

#### Mary Ellen Jones is Open

Since March 2019, several labs have moved into the newly renovated Mary Ellen Jones Building. MEJ now houses members of the Department of Comparative Medicine (1st floor), the Children's Research Institute (floors 3, 4, and 5), the Department of Neurosciences (floors 5, 6, and 7), the UNC Hemophilia and Thrombosis Center (8th floor) Department of Biomedical Engineering (floors 9 and 10), and the Computational Medicine Program (11th floor). Look for the completion of the final touches (including the faculty generated artwork that scales one of the walls on the main floor or MEJ), and the availability of the abundant conference rooms and group spaces.

#### The Design Phase for the Translational Research Building (TRB)

The design phase for the TRB began in January of 2019, and involved the establishment of advisory committees that will provide feedback to a Steering Committee and an Executive Committee about the design and functionality of the TRB. This process is underway and there has been indepth discussion of the utility of the building and ensuring that both the current and future needs of animal research are being met. Additionally, as part of the growing vision of the TRB, **Dr. Craig Fletcher** (Associate



Vice Chancellor For Research, Director, and Professor of Pathology and Lab Medicine) applied for an \$8M C06 NIH Grant. If awarded, this grant will fund a centralized cage wash and processing facility which would reduce maintenance costs, eliminate redundancies, and provide a more efficient cage processing operations that ultimately complements UNC's commitment to expand and support the use of animal research.

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

#### **Training**

The OoR works closely with the SOM Office of Graduate Education (OGE) and the UNC Office of Postdoctoral Affairs. UNC PhD students continue to graduate with a higher success rate (92.5%) and in less time (5.5 years) than the national average. <a href="https://bbsp.unc.edu/professional-development/career-outcomes/">https://bbsp.unc.edu/professional-development/career-outcomes/</a>

**Fellowship Awards**: OGE conducts multiple fellowship workshops for NIH, AHA, and NSF predoctoral fellowships. In the past two years more than 45% of UNC submitted F31s were funded. Students have also earned prestigious NSF, AHA, and HHMI fellowships. A bank of successful proposals and advice for sponsors and students is regularly updated at the newly-updated BBSP website under Resources for Students which links to the TIBBS website:

http://tibbs.unc.edu/resources/funding-opportunities/example-predoctoral-fellowship-proposals/.

In FY2018 UNC was #5 in the number of NIH institutional training grants (57 awards, \$19.3M). The OoR is always willing to consult on new and competitive renewal submissions, and we are familiar with the new tables and the new NIGMS RFA and its requirements. Text supporting recruiting and professional development resources are available for both training grant and individual fellowship applications. **Dr. Beka Layton** in OGE is an expert in evaluations and is available as a consultant.

#### **Recent OGE news**

- => OGE provides a popular training workshop for faculty in best practices for mentoring students and postdocs. In January, ten faculty were selected from student nominations for the first Excellence in Basic Science Mentoring Awards sponsored by OGE and FALD. A new round of nominations will be solicited each year. For more information contact Jessica Harrell.
- => A successful workshop on Rigor and Reproducibility developed in 2016 will be converted to a one-credit course for next year. This course complements resources for training in responsible conduct of research and the recently reinvigorated introductory biostatistics course. For more information, contact Rob Nicholas.
- => OGE welcomed excellent new staff over the past calendar year in the roles of wellness counselor, finance director, student services manager, program coordinator, program assistant, and administrative assistant.
- => The current round of BBSP admissions attracted a record number of applicants for the class that will matriculate in August of 2019. We'll welcome a diverse cohort of 95 curious and motivated individuals with high potential for success, and that the group will reflect the breadth of faculty research interests.

## SOM Dean's Office Research Award Recipients

#### 2018-19 SOM Oliver Smithies Investigators—Joseph Eron and Brian Kuhlman

The Oliver Smithies Investigators are annual awards provided to outstanding senior faculty members who have made significant research contributions and achieved international recognition of their work. The award was established in order of the research achievements of the late Dr. Oliver Smithies, UNC's own 2007 Nobel Prize Winner. Smithies Investigators receive \$75,000 over 5 years to support their research, become members of the Oliver Smithies Society, and present highlights of their research accomplishments at a special seminar. This year, The School of Medicine selected **Dr. Joseph Eron, MD** Professor of Medicine and Chief of the Division of Infectious Diseases, and **Dr. Brian Kuhlman, PhD**, professor of Biochemistry and Biophysics as Oliver Smithies Investigators.

Dr. Eron is the member of the UNC Institute for Global Health and Infectious Diseases, is the Director of the Clinical Core of the UNC Center for AIDS Research and Adjunct Professor of Epidemiology at the Gillings School of Global Public Health. He is internationally recognized for his contributions to the global care of patients with HIV infection and known locally for the personal level of care he gives patients in North Carolina.

Dr. Eron is known for the first clinical study demonstrating substantial activity of combination antiretroviral treatment of HIV, and is one of the four investigators leading the first clinical trial of the HIV cocktail that has dramatically changed HIV treatment and care. Dr. Eron has published more than 400 manuscripts, is a leader in translational medicine and in the field of HIV research, an exceptional clinician, and a valued teacher and mentor at UNC.

Dr. Kuhlman's has made vast contributions to the field of protein design, and is one of the main developers of the widely used molecular modeling software Rosetta. Aside from the development of Rosetta, Dr. Kuhlman has made game-changing discoveries in the field of de novo protein design, and was the first scientist to design and validate a protein fold not previously seen in nature. Recently, Dr. Kuhlman's lab developed a new method for protein design that allows pieces of naturally occurring proteins to be stitched together to create a large and diverse set of protein conformations. This technology has been used to create protein inhibitors, biosensors, and ligand binding proteins. Dr. Kuhlman's group has collaborated with Eli Lilly to create bispecific antibodies that can be used to induce immune cells to kill cancer cells, and has built an optogenetic switch that controls G-protein



signaling with sub-cellular resolution using computational design and high-throughput screening. The constructs for this switch are distributed commercially to laboratories around the world.

#### 2018 Yang Family Biomedical Scholars—Yen-Yu Ian Shih, Louise Henderson, and Jonathan Juliano

Made possible by a donation from Lenovo chairman and CEO Yuanqing Yang and Mr. To Hing Wu, the Yang Family Biomedical Awards recognize the research achievements of young tenured faculty. Through the Yang Scholars program, the UNC School of Medicine aims to establish a community of the most promising young tenured faculty, and the awards recognize faculty that have made significant scholarly contributions to their field while also receiving national recognition for their research. In 2018, the recipients of the award were **Yen-Yu Ian Shih**, **PhD**, **Louise Henderson**, **PhD**, **MSPH**, and **Jonathan Juliano**, **MD**, **MSPH**.



Dr. Shih has been part of UNC since 2012, and is the Director of the Center for Animal MRI and Director of the Small Animal MRI Core Facility at the Biomedical Research Imaging Center. Dr. Shih runs a diverse, cutting-edge research program in biomedical research which focuses on two major areas: understanding the link between brain activity and blood flow and understanding the role of stimulating a small population of neurons in the rodent brain. Dr. Shih's research as earned him a stellar international reputation and prestigious awards including the Young Investigator Awards from the Brain and Behavior Research Foundation and the Ellen Schapiro and Gerald Axelbaum Investigator Award.



Dr. Henderson joined the SOM in 2009, is a member of the Lineberger Comprehensive Cancer Center, Biomedical Research Imaging Center, and is an associate professor of radiology. Her work focuses on the epidemiologic study of image-based breast cancer and lung cancer screening, and she is interested in the disparities in cancer screening and treatment. Dr. Henderson is the leader of the UNC Carolina Mammography Registry (CMR) and is a key member of the national recognized Breast Cancer Surveillance Consortium. Dr. Henderson is known for her significant contributions to the field of breast cancer screening and the comparative effectiveness of emerging imaging modalities.



Dr. Juliano entered the School of Medicine as a resident in 2005 and became an assistant professor of medicine in 2011, and is currently a member of the UNC Institute for Global Health and Infectious Diseases, and Director of the antimicrobial stewardship team at UNC Hospitals. He is a pioneer in next-generation sequencing to study malaria and is internationally known for his work to explore epidemiological and evolutionary factors that shape parasite populations, drive genetic diversity, and allow the parasite to escape control measures. Dr. Juliano's group was the first to use targeted next-generation sequencing approaches to characterize the diversity of parasites within individual human

hosts and its potential impact on the development of drug resistance and vaccine escape.

## School of Medicine Faculty Recipients of Prestigious Awards

**2018 Faculty Award for Excellence in Doctoral Mentoring:** The UNC Graduate School recognizes one graduate faculty member on campus who provides outstanding support and guidance to their doctoral students. Senior and junior faculty are eligible for this award, and nominations come from graduate students throughout UNC-Chapel Hill. The Graduate School selected **Dr. Blossom Damania,** Vice Dean for Research and Boshamer Distinguished Professor of Microbiology and Immunology, as the 2018 winner of the Faculty Award for Excellence in Doctoral Mentoring.

**2018 Outstanding Mentor Awards:** The Office of Postdoctoral Affairs provides the Outstanding Mentor Award to faculty members who have engaged in exceptional mentoring of postdoctoral scholars. **Dr. Mark Heise,** Professor of Genetics, is a SOM recipient of the award this year.

**2019 Diversity Award:** Offered by the Office of Diversity and Inclusion, this award recognizes individuals and groups that have furthered diversity, equity, and inclusion at UNC and the surrounding community. This year, **Dr. Evan Ashkin, MD**, Professor of Family Medicine, was selected to receive this significant award in April of 2019. Dr. Ashkin founded the Formerly Incarcerated Transition Program to link individuals coming out of incarceration with primary care, mental health care, and substance use disorder treatment. Dr. Ashkin is also a physician at Prospect Hill and is a regional medical director of Community Care of NC.

2019 Excellence in Basic Science Mentoring Award: In January of 2019, a number of SOM faculty members received Excellence in Basic Science Mentoring Awards. To mark the 10-year anniversary of the BBSP program, 10 awards across the UNC campus were presented, 7 of which were to faculty within the SOM: Dr. Gary Pielak (Professor of Biochemistry and Biophysics, iBGS), Dr. Brian Strahl (Professor of Biochemistry and Biophysics, Smithies Investigator), Dr. Joan Taylor (Professor of Pathology and Laboratory Medicine), Dr. Chris Mack (Professor of Pathology and Laboratory Medicine), Dr. Henrik Dohlman (Sanford Steelman Distinguished Professor and Chair of Pharmacology), Dr. Kathleen Caron (Professor and Chair of Cell Biology and Physiology), Dr. Ben Major (Associate Professor of Cell Biology and Physiology), and Dr. Matt Redinbo (Professor of Biochemistry and Biophysics, iBGS), Dr. Jeff Sekelsky (Genetics, iBGS).

**Mentor Award for Lifetime Achievement: Dr. Channing Der**, the Sarah Graham Kenan Distinguished Professor of Pharmacology received this prestigious award in the April of 2019. This award is given to those who exemplify the dedication of Carolina faculty members, and whose work in the classroom and through their research demonstrates dedication and determination to uphold UNC's mission to inspire.

**Award for Regulatory Science Excellence**: **Dr. Michael Fried**, Professor of Medicine, received this award from the FDA for the Hepatitis C Therapeutic Registry and Research Network he co-founded in 2011. The award acknowledges this network as an outstanding public-private partnership that leverages real-world evidence to enhance the safety and effectiveness of direct-acting antivirals approved for chronic hepatitis C treatment.

American Physiological Society 2019 New Investigator Award: Dr. Natasha Snider, Assistant Professor of Cell Biology and Physiology received this award in Gastrointestinal and Liver Physiology. This national award recognizes Dr. Snider's prestigious publications and potential future impact to the field as a new PI.

National Academy of Medicine: Dr. Giselle Corbie-Smith, the Kenan Distinguished Professor in the Departments of Social Medicine and Medicine and the Director of the UNC Center for Health Equity Research was inducted into the National Academy of Medicine for her outstanding work on the practical and ethical issues of engaging communities in research to achieve health and equity.

American Academy of Arts and Sciences: Dr. Bryan Roth, the Michael Hooker Distinguished Professor of Protein Therapeutics and Translational Proteomics in the Department of Pharmacology was elected to the American Academy of Arts and Sciences in April of 2019. Dr. Roth was among six scientists selected who focus on neuroscience, cognitive science, and behavioral biology.

American Society for Clinical Investigation: Dr. Jonathan Juliano, Associate Professor in the Department of Medicine was inducted into the American Society for Clinical Investigation, one of the nation's oldest and most respected medical honor societies that seeks to support scientific efforts, educational needs and clinical aspirations of physician-scientists to improve health.

**Association of American Physicians**: **Dr. David Margolis**, Sarah Graham Kenan Distinguished Professor of Medicine, Microbiology and Immunology, Epidemiology, and Director of the HIV Cure Center was inducted into AAP which is composed of members who are leading senior physician scientists.

American Institute for Medical and Biological Engineering College of Fellows: In the spring of 2018, Dr. Paul Dayton, Professor in the Department of Biomedical Engineering, Dr. Melina Kibbe, Colin G. Thomas, Jr Distinguished Professor and Chair of the Department of Surgery, and Dr. Christopher Sims, Adjunct Professor of Medicine were all elected into AIMBE. Election to AIMBE College of Fellows is one of the highest professional distinctions given to a medical and/or biological engineer, and this academic year we are happy to say that three SOM faculty members were elected. Dr. Andrew Wang, Associate Professor in the Department of Radiation-Oncology was elected to AIMBE's College of Fellows for his "outstanding contributions in translating advances from nanomedicine and drug delivery research to improving cancer management and treatment". Dr. Koji Sode, the William R. Kenan Jr. Distinguished Professor of Biomedical Engineering was selected due to his work "engineering enzymes and devices that have improved the quality of life for millions of diabetics worldwide" while Dr. Ke Cheng, Professor in the Department of Biomedical Engineering was elected for "contributions in designing new biomaterials and targeted cell therapies for tissue engineering and regenerative medicine".

**Hettleman Prize**: In November of 2018, **Dr. Juan Song**, Assistant Professor of Pharmacology and Member of the UNC Neuroscience was awarded a Phillip and Ruth Hettleman Prize for Artistic and Scholarly Achievement by Young Faculty.

**Ruane Prize**: **Dr. Joseph Piven**, the director of the Carolina Institute for Developmental Disabilities received the Ruane Prize for Outstanding Achievement in Child and Adolescent Psychiatric Research from the Brian and Behavior Research Foundation.

**Pew Scholar**: In the Summer of 2018, the Pew Charitable Trusts named **Dr. Hiroyuki Kato**, Assistant Professor in the Department of Psychiatry and member of the UNC Neuroscience Center as a Pew Scholar in Biomedical Sciences. Dr. Kato received a 4-year grant to study how animals process sounds and the behavior elicited by different calls.

American Society for Clinical Investigation: Jonathan Juliano, MD, MSPH, Yang Family Biomedical Scholar has been invited to join the American Society for Clinical Investigation, one of the nation's oldest and most respected medical honor societies that supports the needs of physician-scientists to improve health.

**NCI Outstanding Investigator Award**: This award supports accomplished leaders in cancer research who are working on science with breakthrough potential, and in 2018 **Channing Der, PhD**, member of the Lineberger Comprehensive Cancer Center, was a recipient!

**Searle Scholar:** In April of 2019, Dr. Wesley Legant, Assistant Professor in the Departments of Pharmacology and Biomedical Engineering earned a \$300,000 Searle Scholars award for his work creating new fluorescence microscopes for rapid three-dimensional imaging. Dr. Legant was one of 15 young faculty members from across the United States to be named in 2019.

**2019 Outstanding Achievement in Clinical Diabetes Research Award**: **Dr. John Buse**, the Verne S. Caviness Distinguished Professor, Chief of Endocrinology in the Department of Medicine, and Director of the Diabetes Center and NC Translational and Clinical Sciences Institute received this award in recognition of his exceptional contributions in patient-oriented clinical outcomes in research that have impacted diabetes prevention and treatment.

**2019 Kelly West Award for Outstanding Achievement in Epidemiology**: **Dr. Elizabeth Mayer-Davis**, Cary C. Boshamer Distinguished Professor of Nutrition and Medicine and Chair of the Department of Nutrition receives this award that is given to recognize significant contributions to the field of diabetes epidemiology.

**ASCO Board of Directors**: **Dr. Ethan Basch**, Distinguished Professor in the Department of Medicine, was elected to the American Society of Clinical Oncology Board of Directors. ASCO is the world's leading professional organization for physicians and oncology professionals caring for people with cancer.

**NSF Early Career Award**: **Dr. Xiaogang Hu**, Assistant Professor in the Department of Biomedical Engineering, received a National Science Foundation Early Career Award for his project to decode the neurobiological commands sent from the brain that control our individual finger movements. This project could substantially enhance the quality of human-machine interactions for individuals with neurological injuries.

**Craver Medical Student Teaching Award: Dr. Amy Shaheen**, Professor of clinical medicine, received the Craver Medical Student Teaching Award that was established by UNC School of Medicine alum Dr. Joseph Craver to honor outstanding teachers in internal medicine, pediatrics, and surgery who inspire and change the lives of medical students through their teaching.

**Women Leaders in Medicine Award: Dr. Melina Kibbe,** Colin G. Thomas Jr. Distinguished Professor and Chair of the Department of Surgery was honored with the 12<sup>th</sup> Annual Women Leaders in Medicine Award from the American Medical Student Association. The award recognizes women physicians and educators inspiring the next generation of women in medicine.

**Junior Faculty Development Award**: **Dr. Damaris Lorenzo**, Assistant Professor in the Department of Cell Biology and Physiology, received a Junior Faculty Development Award from the American Diabetes Association. This award is given to new Pls working in the field of Diabetes and enables to continue their work research this disease.

**Crohn's Disease Health Care Hero**: **Dr. R. Balfour Sartor**, Midget Distinguished Professor of Medicine and Microbiology and Immunology, received the inaugural Healthcare Hero in the Field of Crohn's Disease offered by the National Liberty Museum. Dr. Sartor received this recognition for his commitment to finding cures for inflammatory bowel diseases and improving the quality of life for patients.

Cystic Fibrosis Foundation's 2018 Richard C. Talamo Distinguished Clinical Achievement Award: Dr. George Retsch-Bogart, Professor of Pediatrics and co-director of the UNC Cystic Fibrosis Therapeutics Development Center, received the prestigious 2018 Richard C. Talamo award which is given to recognize individuals who have dedicated their careers to researching and caring for people with CF, and whose contributions have altered the course of the disease.

**IPPF Lifetime Achievement Award**: A the 2018 International Pemphigus and Pemphigoid Foundation Patient Education Meeting, **Dr. Luis Diaz**, Clayton E. Wheeler Jr. Distinguished Professor of Dermatology received the IPPF Lifetime Achievement Award for his contributions to the field over the last 50 years.

**IPPF 2018 Doctor of the Year: Dr. Donna Culton,** Assistant Professor of Dermatology, was named the 2018 Doctor of the Year Award at the 2018 International Pemphigus and Pemphigoid Foundation Patient Education Meeting for her support of patients and the IPPF over the past year.

**Thomas Jefferson Award**: **Dr. Sue Estroff,** Professor in the Department of Social Medicine, received the 2018 Thomas Jefferson Award, which is presented to a UNC faculty member who, through personal influence and performance of duty in teaching, writing and scholarship, has best exemplified the ideals and objectives of Thomas Jefferson.

**Distinguished Alumni Award from UNC-Greensboro**: **Dr. Samuel Jones**, Associate Professor of Surgery, received a Distinguished Alumni Award by the College of Arts and Sciences at UNC-Greensboro.

**Dr. George Johnson Jr. Award**: **Dr. Jane Brice**, Professor and Chair of the Department of Emergency Medicine received this award from the North Carolina EMS Advisory Council. The George Johnson Award is given to those who have made significant long-term contributions to Emergency Medical Services in North Carolina.

Society for Healthcare Epidemiology of America Senior Scholar Award: Dr. David Weber, Professor of Medicine, Pediatrics, and Epidemiology received this award in October of 2018. This award recognizes the work of an investigator or practitioner in infection prevention/healthcare epidemiology in practice for 15 years or more, and selection is based on breadth and quality of the recipient's contributions.

**HIV Medicine Association's 2018 Research Award**: **Dr. Lisa Hightow-Weidman**, Associate Professor of Medicine, received this award for her innovative and critical work improving HIV prevention in men.

**Hyman L. Battle Distinguished Cancer Research Award**: **Dr. Gary Johnson**, the Kenan Distinguished Professor in the Department of Pharmacology was awarded the 2017-2018 Hyman L. Battle Distinguished Cancer Award. The UNC SOM presented Dr. Johnson with this award to recognize his outstanding achievements in cancer research, mentorship, leadership and innovation.

Hyman L. Battle Distinguished Excellence in Teaching Award in the Basic Sciences: Dr. Alice Ma, Professor of Medicine has bel awarded the 2018 Hyman L. Battle Distinguished Excellence in Teaching Award, which recognizes the professor who is the most outstanding educator overall in the pre-clinical curriculum.

**DeLano Award**: **Dr. Brian Kuhlman**, Professor of Biochemistry and Biophysics, received the DeLano Award from The American Society for Biochemistry and Molecular Biology received the DeLano Award for computer applications to enhance research. Winners of this award have made significant contribution to biochemistry and molecular biology and the training of emerging scientists.

### Innovation and Commercialization in the School of Medicine

The large number of technologies developed and commercialized by School of Medicine Investigators is an example of the translational impact of research done at the School of Medicine. With more than 150 portfolio companies, in FY18 UNC School of Medicine Startups have raised \$549.5 million in funding which leads to a total of \$4.1 billion in funding in all years. The license revenue that the Office of Commercialization received for licensed technologies arising from SOM faculty for FY18 was \$2,151,649. The amount of revenue disbursed to SOM departments for FY18 is \$605,993.

Below are a few notable events that took place in 2018 from commercial efforts of former and current SOM Faculty that were highlighted in Innovate Carolina's Newsletter:

- => KXTbio Awarded NIH Grant to Develop a New High-Throughput Platform for Screening Drug Candidates (**John Sondek**, Pharmacology, Biochemistry and Biophysics) <a href="https://www.businesswire.com/news/home/20180604005886/en/KXTbio-Awarded-NIH-Grant-Develop-New-High-Throughput">https://www.businesswire.com/news/home/20180604005886/en/KXTbio-Awarded-NIH-Grant-Develop-New-High-Throughput</a>
- => Liquidia Technologies plans to use \$50M from IPO to fund drug development (**Joseph DeSimone** and **Jude Samulski**, Pharmacology) <a href="https://www.wraltechwire.com/2018/07/27/liquidia-plans-to-use-50m-from-ipo-to-fund-drug-development/">https://www.wraltechwire.com/2018/07/27/liquidia-plans-to-use-50m-from-ipo-to-fund-drug-development/</a>
- => Cell Microsystems makes first sale of AIR system for imaging & sorting single cells (Nancy Allbritton, Biomedical Engineering) <a href="https://www.wraltechwire.com/2018/08/22/cell-microsystems-makes-first-sale-of-air-system-for-imaging-sorting-single-cells/?ssid=83753998">https://www.wraltechwire.com/2018/08/22/cell-microsystems-makes-first-sale-of-air-system-for-imaging-sorting-single-cells/?ssid=83753998</a>
- => UNC Cure Center and Cell Microsystems receive NIH contract for single cell HIV diagnostic assay (**David Margolis**, Medicine and **Nancy Allbritton**, Biomedical Engineering) <a href="https://www.newswise.com/articles/unc-cure-center-and-cell-microsystems-receive-nih-contract-for-single-cell-hiv-diagnostic-assay">https://www.newswise.com/articles/unc-cure-center-and-cell-microsystems-receive-nih-contract-for-single-cell-hiv-diagnostic-assay</a>
- => Scintillating Fibre Measures Radiotracer Concentration in Blood (Lucerno Dynamics **Charles Scarantino**) <a href="https://physicsworld.com/a/scintillating-fibre-measures-radiotracer-concentration-in-blood/">https://physicsworld.com/a/scintillating-fibre-measures-radiotracer-concentration-in-blood/</a>
- => GeneCentric licenses UNC pancreatic cancer subtyping tech (**Neil Hayes**, Medicine and **Chuck Perou**, Genetics) <a href="https://www.genomeweb.com/cancer/genecentric-licenses-unc-pancreatic-cancer-subtyping-tech#.XNc-k8pKg2x">https://www.genomeweb.com/cancer/genecentric-licenses-unc-pancreatic-cancer-subtyping-tech#.XNc-k8pKg2x</a>
- => UNC-Chapel Hill Researchers File Patent for Dengue Virus Vaccine (**Aravinda de Silva**, Microbiology and Immunology) <a href="https://www.wraltechwire.com/2018/10/10/unc-chapel-hill-researchers-file-patent-for-dengue-virus-vaccine/">https://www.wraltechwire.com/2018/10/10/unc-chapel-hill-researchers-file-patent-for-dengue-virus-vaccine/</a>
- => EpiCypher SNAP-ChIPâ Technology Posed to Transform Market for Histone PTM Antibodies (**Brian Strahl**, Biochemistry and Biophysics) <a href="https://www.selectscience.net/product-news/epicypher-snap-chip-technology-poised-to-transform-market-for-histone-ptm-antibodies/?artID=47410">https://www.selectscience.net/product-news/epicypher-snap-chip-technology-poised-to-transform-market-for-histone-ptm-antibodies/?artID=47410</a>
- => Boehringer Ingelheim Partners with Epizyme (**Yi Zhang**, Biochemistry and Biophysics) <a href="https://">https://</a>
  <a href="mailto:investing/biotech-investing/biotech-investing/boehringer-ingelheim-partners-epizyme/">https://</a>
  <a href="mailto:investing/biotech-investing/boehringer-ingelheim-partners-epizyme/">https://</a>
  <a href="mailto:investing/biotech-investing/boehringer-ingelheim-partners-epizyme/">https://</a>
  <a href="mailto:investing/biotech-investing/boehringer-ingelheim-partners-epizyme/">https://</a>
  <a href="mailto:investing/biotech-investing/boehringer-ingelheim-partners-epizyme/">https://</a>
  <a href="mailto:investing/biotech-inv
- => G1 Therapeutics Reports More Promising Results For Cancer Research (**Ned Sharpless**, Medicine and Genetics) <a href="https://www.wraltechwire.com/2018/12/05/g1-therapeutics-reports-more-promising-results-for-cancer-drug/">https://www.wraltechwire.com/2018/12/05/g1-therapeutics-reports-more-promising-results-for-cancer-drug/</a>

#### In Memoriam

#### **Remembering Paul Godley**

On Sunday, March 31, 2019, we lost Dr. Paul Godley, the UNC School of Medicine Vice Dean for Diversity and Inclusion. Dr. Godley was appointed in 2017 as the first Vice Dean for Diversity and Inclusion, and oversaw the SOM's efforts to build a diverse and inclusive work and learning environment. Dr. Godley co-founded The Academic Career Leadership Academy in Medicine (ACCLAIM) program, which provides leadership and career development opportunities to faculty members underrepresented in medicine.

Dr. Godley was the Rush S. Dickson Distinguished Professor of Hematology/ Oncology in the Department of Medicine, and was a member of LCCC. Dr. Godley dedicated his career to researching and treating prostate cancer, and worked to identify and eliminate racial health disparities as director of the Program on Ethnicity, Culture and Health Outcomes.

Dr. Godley received his MD from Harvard Medical School, and received a Master of Public Policy degree from Harvard's John F. Kennedy School of Government. He completed his internship and residency at Case Western Reserve University, University Hospitals of Cleveland, and the Cleveland VA Medical Center, and came to UNC in 1987 for a research fellowship in cancer epidemiology, and earned a PhD from the UNC Gillings School of Global Public Health in 1993.

Dr. Godley was a major force in medicine, and his work in prostate cancer has improved screening procedures and greatly affected how patients are treated. He was an internationally recognized leader in cancer, epidemiology, and health disparities, and was a valued advisor to NIH and NCI. He inspired many across the entire UNC campus, and he will be greatly missed.





Dr. Stuart Bondurant, the Dean Emeritus of the UNC School of Medicine, passed away in March of 2018. In remembrance of his excellent and legacy at UNC, we wanted to provide a brief look into Dr. Bondurant's life.

Dr. Bondurant was born in Winston-Salem and received his Bachelor of Science degree from UNC. After receiving his M.D. and completing an internship and residency in the department of medicine at Duke University, Dr. Bondurant accepted a cardiology fellowship in Boston, MA and then joined the School of Medicine at the University of Indiana, joined UNC as the Dean of School of Medicine in 1979.

Dr. Bondurant is known for his work in infant mortality, and improving North Carolina's infant mortality rates was a particular focus of his outreach during his time as Dean. He served as Chair of the Governor's Commission on the reduction of Infant Mortality from 1989 until 1996, and also served as Vice Chair of the North Carolina Healthy Start Foundation from 1989-2005.

During his long tenure as dean, Dr. Bondurant transformed medical education in the School of Medicine. He was a champion for students and undertook many curriculum improvements to enhance the excellence of medical education. 5 new departments were added under Dr. Bondurant (Biomedical Engineering, Emergency Medicine, Nutrition, Physical Medicine and Rehabilitation, and Radiation Oncology) along with a number of programs and centers (Cystic Fibrosis / Pulmonary Research and Treatment Center, the Program on Molecular Biology and Biotechnology, the Gene Therapy Center, and the Ambulatory Care Center). Dr. Bondurant also nurtured a number of important relations with business leaders, the state government, and was a founding member of the North Carolina Institute of Medicine and was essential to the formation of the North Carolina Biotechnology Center.

After resigning from his deanship in 1994, Dr. Bondurant remained on the SOM faculty until 2004, and served as interim dean of the SOM from 1996-1997. In 2004 he moved to Georgetown University where he served as interim dean and executive vice president of the Georgetown University. Dr. Bondurant also served as director of Furiex and as CFO of Directo, Inc.

Dr. Bondurant was an outstanding scientist, mentor, and administrator who set the UNC School of Medicine in a positive trajectory which continues to embody and guide our unit.

## Thank You Everyone for a Wonderful Academic Year!



SOM OoR Research Retreat August 2018

