December 2020

Message from the Director Mark Holmes, PhD



As we approach the close of 2020, it is hard not to focus on the many challenges the year has brought -- the COIVD-19 pandemic,

continued evidence of systemic racial injustice and economic uncertainty. At the same time, I am immensely proud of the work that my colleagues at the Sheps Center have accomplished during 2020. Our researchers have been at the forefront studying the trajectory of and impact from COVID-19. They have brought new approaches to the study of health equity, ensuring that Black and rural communities share in access to health care.

This issue highlights some of our most important accomplishments -- our students and research fellows. The foundation they receive at Sheps will prepare them to solve the challenges of the future. Working with these young researchers is not only rewarding but inspiring. I hope you enjoy learning more about them.

Training Health Researchers for the Future

The Sheps Center is home to two training programs – the Predoctoral and Postdoctoral Fellowship in Health Services Research and the Primary Care Research Fellowship. Both of these programs have been funded for more than 30 years and are supported by a National Research Service Award (NRSA) Institutional Training Grant.

Fellows participate in a weekly core seminar and receive invaluable mentoring from program faculty representing many schools and departments across campus. Alumni from these programs have gone on to perform key research that has made an impact on our state as well as the nation.

Both programs are currently accepting new applications for the coming year (starting in July 2021) so please go to Sheps Center website for details and how to apply.

Predoctoral and Postdoctoral Fellowship in Health Services Research

This fellowship is funded by the Agency for Healthcare Research and Quality (AHRQ) and provides an advanced, specialized training opportunity in the methods of health services research for pre- and postdoctoral trainees. The emphases of the training program are the organization, financing, utilization, quality, and evaluation of personal health care services and public policies for ensuring access to such services.

Fellow Profiles

Joshua Herb, MD is a general surgery resident at UNC and a postdoctoral fellow in health services research at the Sheps Center. At the completion of

his residency, he plans to pursue further training in surgical oncology. At the Sheps Center, he investigates rural-urban disparities in the treatment for early-stage non-small cell lung cancer in North Carolina, identifying recent trends and the underlying causes for this disparity.

Dr. Herb's work was recently presented at the 2020 American Society for Clinical Oncology Quality Care Symposium. He found that nearly 1 in 5 patients with potentially curable lung cancer do not receive any treatment in North Carolina, with declining rates of surgical resection for patients in rural areas. Dr. Herb hopes this work will be used to improve access to surgical care for North Carolinians with early-stage lung cancer.



In addition to this research, he has several other ongoing projects investigating surgical workforce migration over time, cancer care delivery in patients with melanoma, and health policy. He believes his research training through the Sheps Center will be critical to his career as an academic surgeon and health services researcher.

Molly De Marco, PhD MPH was a postdoctoral fellow in Health Services Research at the Sheps Center from 2007 to 2009. She worked with the Health Disparities team and was mentored by the late Dr. Paul Godley and Dr. Giselle Corbie-Smith. Dr. De Marco is now a Research Fellow at the UNC Center for Health Promotion & Disease Prevention and a Research Assistant Professor in the Nutrition Department at the Gillings School of Global Public Health.



Dr. De Marco developed and leads the Food, Fitness and Opportunity Research Collaborative (FFORC). FFORC aims to build economic security, improve health outcomes and contribute to community-based research literature to address those affected by inequity in North Carolina and beyond. Dr. De Marco and her team are implementing community garden interventions with community partners in nine counties and developed two county-level food policy councils. FFORC is partnering with Habitat for Humanity of Orange County to develop active living coalitions and examining the health outcomes of a minimum wage ordinance in Minneapolis.

During the pandemic, the team adjusted research to conduct data collection and community engagement activities virtually, while also providing technical assistance to programs doing similar research to also go virtual.

Lexie Grove, MSPH, is a NRSA predoctoral fellow at the Sheps Centers and 5th-year PhD student in Health Policy and Management who studies service delivery for people with disabilities. Her dissertation evaluates a North Carolina housing program that serves low-income adults with disabilities, including mental illness, physical disabilities, intellectual/development disabilities, and other severe health conditions.



Building on prior work showing that housing stability can promote improved access to health care, Lexie's research examines how participation in the program affects the use of health services, including primary care, medication adherence, emergency department visits, and hospitalizations. The study uses a novel data source consisting of Medicaid claims data linked to administrative data on the housing program. Her work also identifies factors associated with housing program tenure, in order to identify groups of participants who may need additional help staying housed. Results from the project will be available in spring 2021.

Jessica Young joined the Sheps Center in the summer of 2020 as a postdoctoral research fellow after receiving a Doctoral degree in Epidemiology with a minor in Biostatistics from the UNC Gillings School of Global Public Health. Her research focuses on using

large population-level data to better understand opioid prescribing behaviors, identify opportunities to reduce unnecessary opioid exposure, and evaluate strategies to reduce prolonged opioid use in patients undergoing surgery.

Dr. Young is interested in leveraging the large amounts of data collected during clinical care into actionable research improving healthcare delivery to patients. Her most recent work examines how legislative limits on opioid prescriptions for acute pain may impact the risk of prolonged opioid use and finds that common



limits (e.g. a 7-day supply limit) may impact many patients undergoing surgery while having minimal effectiveness in reducing prolonged opioid use.

She is leading research evaluating the consistency between insurance claims data and electronic health records, with preliminary results finding that less than half of surgical patients had agreement between the data sources on whether opioids were prescribed in varying time periods surrounding surgery. Expanding on this, her research aims to develop practical methods to address potential biases in studies using secondary health data, thus facilitating the use of these data to conduct meaningful and robust research informing public health.

As a postdoctoral research fellow at the Sheps Center, she looks forward to collaborating with researchers and clinicians and is especially interested in expanding her training in translational research incorporating patient perspectives.

Leslie Adams, PhD, MPH is a tenure track Assistant Professor in the Department of Mental Health at Johns Hopkins Bloomberg School of Mental Health, where she broadly studies social contexts that shape black men's mental health and healthcare utilization—both in the US and globally. She recently completed a David E. Bell post-doctoral fellowship at the Harvard Center for Population and Development Studies and received her PhD in Health Behavior from UNC Chapel Hill's Gillings School of Global Public Health, an MPH in Health Policy and a BA in Neuroscience from Dartmouth College. During her time at UNC, Dr. Adams was a NRSA T-32 pre-doctoral fellow in health services research.



Her current research interests are at the intersection of gender, race, and mental health care utilization, with attention to measurement challenges and applications of latent variable approaches. This work has been recently published in Journal of Affective Disorders, Qualitative Health Research, and Health Education & Behavior. Her long-term goals focus on developing tools to better detect and mitigate depressive symptoms, prevent clinical depression, and curtail suicidal behavior among boys and men of color.

Primary Care Research Fellowship

This fellowship is funded by the Health Resources and Services Administration (HRSA) and trains primary care physicians for academic careers that emphasize research. Fellows are based in Family Medicine, Internal Medicine, or Pediatrics and have the unique experience of continuing their clinical duties while receiving important research training.

Fellow Profiles

Dr. Ebiere Okah began her NRSA fellowship in the Department of Family Medicine in July 2020, after completing her family medicine residency at the University of Minnesota's North Memorial Family Medicine Residency Program. As part of the NRSA fellowship, she is completing a Master of Science in Clinical Research at the University of North Carolina's Gillings School of Global Public Health and sees patients at the Family Medicine Center at Chapel Hill.

Her research interests are two-fold. She is interested in the relationship between racism and hypertension in the African American population, and she is also interested the use of race as a disease risk-factor in clinical decision-making. She works primarily under the mentorship of Drs. Gaurav Dave and Giselle Corbie-Smith of the Center for Health Equity Research.

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Dr. Okah is currently working on studies evaluating hypertension in immigrant Blacks and assessing the relationship between physicians' adherence to a colorblind racial ideology and their use of race in medical decision-making. She is also in early stages of a systematic review evaluating the use of race in clinical decision-making. Lastly, she is working on a book chapter on community-engaged research.

Colin Orr, MD, MPH is a former NRSA Primary Care Research fellow. He completed the program in 2019 and is now an Assistant Professor with the Department of Pediatrics at UNC School of Medicine. During his fellowship Dr. Orr's work focused on the impact of food insecurity on the growth and development of children as well as diversity of the pediatric workforce. He was primarily mentored by Drs. Kori B. Flower and Eliana M. Perrin.



Dr. Orr is currently a <u>Simmons Scholar</u> and a co-investigator on a PCORI funded RCT of different approaches to preventing childhood obesity between 0-2 years of age. Dr. Orr is also working on an American Board of Pediatrics Foundation grant with Dr. Erin Fraher that will estimate the future supply of pediatric subspecialists in the United States.

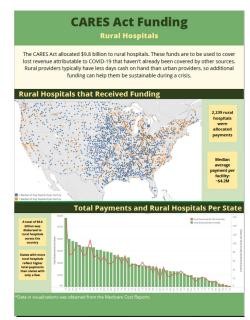
Prior to coming to UNC, Dr. Orr received his medical degree from Columbia University and completed his residency with Cincinnati Children's Hospital Medical Center. Dr. Orr credits the NRSA Primary Care Research Fellowship for providing him with outstanding mentorship and training in research methods.

Developing Rural Health Researchers

NC Rural Health Research Program Supports Summer Internships

During a spring where much was uncertain, especially the status of needed summer internships, the NC Rural Health Research Program (NC RHRP) created seven part-time research internships for students from the Gillings School of Global Public Health—five for Bachelor of Science in Public Health (BSPH) and two for Master of Healthcare Administration (MHA) students—providing research experience and building on interest in rural health issues.

Although students have always been an integral part of the NC RHP research team, adding seven in such a short period of time was a new endeavor. Each intern was paired with a mentor to study health services research with a rural focus. Erin Kent, PhD; Kathleen Knocke, MSPH; George Pink, PhD; Kristin Reiter, PhD; Kathle Ricks, PhD; and Sharita Thomas, MPP served as mentors.



One of the challenges this year was not being able to work together in person, so the internships, like many other jobs, were virtual. Students met with mentors and other staff through video conference calls in addition to communicating over email. Students gained a

range of new research and policy skills from exposure to rural issues and terminology, to how CARES Act funding was distributed to rural hospitals.

Andy Castro-Arroyo, Randall John, Jiona Mills, Morgan Parks, and Dimitry Shitarev served as BSPH interns, and Andrew Osgood and Pranathi Sana served as MHA interns. Together, the interns:

- conducted systematic literature reviews
- participated in grant writing
- · supported programs via social media
- · reviewed and edited transcripts from interviews
- built a dashboard of metrics
- · conducted interviews
- · coded qualitative data
- co-authored briefs, infographics, and manuscripts
- co-presented at the National Organization of State Offices of Rural Health (NOSORH)
 Region B Annual Meeting
- explored characteristics of urban hospitals that serve a high number of rural patients
- studied aims to identify hospital-level factors and interventions that may present opportunities for improving the financial performance of rural hospitals
- studied financial performance data directly related to work with the Federal Office of Rural Health Policy (FORHP) directing CARES Act funding to rural hospitals

Here are a few of the briefs they produced.

- Urban Hospitals with a High Percentage of Inpatient Days for Rural Patients
- A Comparison of Rural and Urban Specialty Hospitals
- Medicare Covers a Lower Percentage of Outpatient Costs in Hospitals Located in Rural Areas
- Rural Hospitals that Closed between 2017-20: Financial Condition in the Year Before Closure

The internship program was a success thanks to the mentors and the interns. The students have unique skills, curiosity, and drive that made them productive team members. Several are continuing their research as part of their senior honors theses. NC RHRP looks forward to the long-term return on the investment in their training -- an increased number of health care leaders with an understanding of and an interest in rural health care.

Sheps Students Making Their Mark

Alison Miller is a project director for the North Carolina Institute of Medicine and a part-time MPH student at Johns Hopkins University, where she is also a Bloomberg Fellow focused on addressing issues related to addiction and overdose.

Through the Bloomberg Fellows Program, which provides training to individuals engaged with organizations tackling critical challenges facing the United States, Alison's practicum and capstone work will focus on access to evidence-based treatment for substance use disorders during the pandemic. Alison's work as a Bloomberg Fellow



will also support the North Carolina Institute of Medicine in identifying and engaging with stakeholders to ensure diversity and adequate representation across multiple sectors as the Institute prepares to launch new task forces in 2021.

Julia Long is a Chapel Hill native and senior undergraduate in the BSPH program in Health Policy and Management. In her current role as a Research Assistant for the Program for Health Workforce Research and Policy, she contributes data analysis, background research, and a geographic perspective to the work of the Rural Residency Planning and Development Technical Assistance Center (TAC). Through the TAC, she has helped connect rural practices with resources to train medical residents in immersive rural settings and learned from rural residency

program directors across the country.

Julia's honors thesis research uses location-allocation models, a geospatial technique, to find the next best places to locate rural residency programs based on provider supply and community health needs. Under the HRSA-funded Carolina Health Workforce Research Center, she analyzed and mapped multiple federal rural definitions as "levels of rurality" across the United States, in collaboration with Mark Holmes and Paul Delamater. Upon her graduation in May 2021, she hopes to build on her research interests through federal policy work.



Upcoming Events

UNC Rural Health Research Seminar Series

December 9, 2020 11 a.m.

Alice Ammerman, DrPH and Eleanor Wertman, MPH will discuss the Chatham Food Hub: Food Access and Economic Opportunity in a Pandemic.

Register: https://www.shepscenter.unc.edu/programs-projects/rural-health/unc-rural-health-research-seminar-series/

Interdisciplinary Seminar in Health Disparities: Healthcare Delivery in the Age of COVID-19

December 15, 2020 2 p.m.-3 p.m.

This seminar will serve as a working group for researchers interested in Home Health Workers and the COVID-19 pandemic. It will begin the first work group discussion session around developing a grant proposal in this topic area.

Register: https://go.unc.edu/prihdcovid

The COVID-19 Pandemic and Serious Mental illness: a Public Health Perspective

December 17, 2020 4 p.m.

This is the first seminar in a new series, Advances in Behavioral Health Policy, which will cover both global and U.S. topics of interest in behavioral health. The first seminar will be given by <u>Dr. Ben Druss</u> of Emory from 4 p.m. to 5 p.m., followed by a 5 p.m. to 5:45 p.m. "Happy Hour" mixer / planning session for the spring semester.

Register: https://docs.google.com/forms/d/e/1FAlpQLSfra5yxxbgeC97hjbmGDG-dZdQ7ZAghr8ntCcawU1brwtwgBA/viewform

Wireless in the Woods

Thanks to a generous gift from Dr. Tom Ricketts, there are two new picnic tables near the Sheps Building. These aren't just any old picnic tables but handcrafted by local carpenter and builder, Lee Gildersleeve. Some may know Lee as the blues guitarist fronting the local band "The Bad Dogs" who perform regularly in Chapel Hill and beyond. Lee is also known as the man who played lead guitar for Chuck Berry at a memorable concert at UNC way back when. Look for the Bad Dogs playing outside at the Brewery in Pittsboro or the Dead Mule in Chapel Hill. When things go back to "normal" they can often be found at the Second Wind in Carrboro.

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