

Connecting you with valuable resources and innovative research from the Division of Population Medicine





#### **MESSAGE FROM** THE DIRECTOR

We are excited to bring you a new edition of the Population Medicine & Research Newsletter to highlight several updates from over the past summer.

You will hear more about a presentation of KAN's lung cancer screening research in Northeastern Kentucky at an international conference on practice facilitation put on by the North American Primary Research Group (NAPCRG). In addition, we highlight one of DFCM's own researchers, Dr. James Keck and his team, on their research (recently published in the Journal of the American Board of Family Medicine), featured in AAFP News.

We are thrilled to have two new research faculty, Dr. Brittany Smalls and Dr. Mikhail Koffarnus, join UK DFCM. They bring greater breadth to our research team in Family Medicine in the areas of diabetes among aging populations and substance use research. Next month, we will have one of Dr. Koffarnus' team members joining the UK DFCM as a new research faculty member.

You will also learn about one of our KAN members, Dr. William Thornbury, in this issue's KAN Member Spotlight.

We are excited about our growing team and work to bring high quality research to Kentucky. We are working closely with our KAN members and, for that, we are greatly appreciative!



Roberto Cardarelli, DO, MHA, MPH Director, KAN Professor and Chief of Population Medicine



#### **OUR TEAM**



Roberto Cardarelli, DO, MHA, MPH



Mary Sheppard, MD



Carol Hustedde, PhD



James Keck, MD, MPH



Karen Roper, PhD



Lars Peterson, MD, PhD



Kim Haney, MLS



Kacie Bledsoe



Madeline Slimack



Jackie King

#### IN THIS ISSUE

- DFCM Connect Now Live
- KAN research presented at Annual NAPCRG ICPF Conference
- UK DFCM Research Examines Knowledge, Practices Surrounding Prediabetes in Primary Care
- UK DFCM welcomes new research faculty: Dr. Brittany Smalls and Dr. Mikhail Koffarnus
- KAN Convocation of Practices: Your feedback requested
- Faculty opportunities now available at UK DFCM
- KAN Member Spotlight: William Thornbury, MD



On July 1, 2019, The University of Kentucky Department of Family & Community Medicine (DFCM) launched a new resource the Department, KAN members, Family Medicine-appointed Volunteer Faculty members, and other valued DFCM partners: **DFCM Connect.** 

Our goal with DFCM Connect is to enhance resource dissemination and develop a bi-directional learning community for members of DFCM Connect, creating a "one-stop-shop" of information and connecting groups with their most valuable resource—each other.

Collaborate with your peers in members-only discussion groups and access a rich library of resources and best practices. Keep up to date with the latest projects and events, and learn how you can be part of KAN's quality improvement-driven research or become a Volunteer Faculty member. We hope for this to be an open, inviting space for uesrs to interact with each other and share ideas and resources. The Community Resource Libraries will serve as document repositories that users can access any time, from any device (DFCM Connect is responsive and fully functional even on mobile devices).

The benefits are endless and only grow richer as more individuals become engaged and join in discussions and share resources. We look forward to making DFCM Connect a valuable resource for its members.

#### Join the discussion today.

Just as with KAN, membership to DFCM Connect is available to you at *no cost*.

Visit <u>ukydfcm.connectedcommunity.org</u> to create your profile and begin accessing all the resources UK and your peers have to offer, and share some of your own!

DFCM connect

Contact Kim Haney, KAN Coordinator, at KAN@uky.edu with questions and feedback.

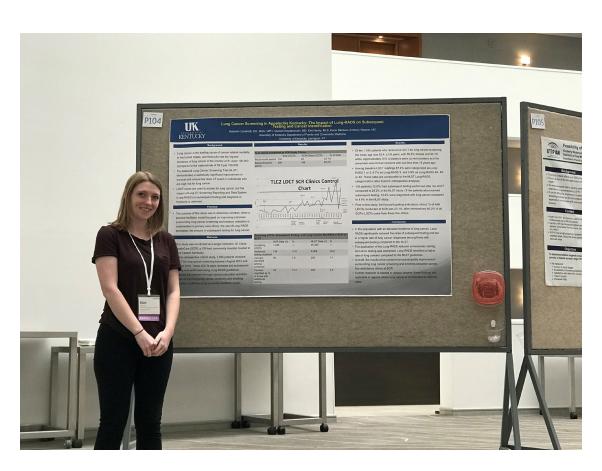
## KAN research presented at NAPCRG's ICPF Conference

In June 2019, Kim Haney, KAN Coordinator, attended the meetings of the North American Primary Care Research Group's Practice-based Research Network and Practice Facilitation groups. While there, she presented research from one of KAN's recently completed studies surrounding lung cancer screening and tobacco cessation.

The Terminate Lung Cancer study (completed early 2019) set out to determine whether, when a practice facilitator model focused on improving outcomes surrounding lung cancer screening and tobacco cessation is implemented in primary care clinics, the use of Lung-RADS decreases the amount of subsequent testing for lung cancer.

The Research team found that, of 1,045 patients who received low dose CT scans for lung cancer screening, 136 (13.0%) had subsequent testing performed (compared to 24.2% in a national study) after the application of Lung-RADS. Of the patients who received subsequent testing, 13.2% were diagnosed with lung cancer compared to 4.6% in the national study.

Overall, the results were sustained process/quality improvement surrounding lung cancer screening and smoking cessation. The application of Lung-RADS reduced unnecessary testing; and when testing was warranted, Lung-RADS identified a higher rate of lung cancers compared to national guidelines. Further research is necessary to assess whether these findings are applicable in regions where lung cancer is comparable to national rates.



Kim presented a poster, "Lung Cancer Screening in Appalachian Kentucky: The Impact of Lung-RADS on Subsequent Testing and Cancer Identification" at the NAPCRG International Conference on Practice Facilitation.

## UK DFCM research examines FP's prediabetes knowledge, practices

Article from AAFP News at https://www.aafp.org/news/health-of-the-public/20190816prediabetesstudy.html

Family physicians are routinely involved in the care of patients with prediabetes and diabetes. By some estimates, more than 90% of all patients in the United States who have diabetes see family physicians and other primary care clinicians for their condition.

To address the public health burden of prediabetes and diabetes, the CDC in 2010 created the National Diabetes Prevention Program, the key feature of which is a research-based, structured lifestyle change program that has been shown to significantly reduce the incidence of diabetes in at-risk people. The research team, consisting of faculty from UK DFCM and UK's Barnstable Brown Diabetes Center, found that although family physicians and other clinicians are highly skilled in screening for and managing diabetes, opportunities exist to raise awareness of the National DPP and similar resources.

The research was designed as an implementation study with two components. First, the authors surveyed 31 clinicians at an academic family medicine clinic using a questionnaire on prediabetes and



diabetes prevention. The researchers also analyzed the EHR data of all patients 18 and older seen in the clinic between 2015 and 2017. Following the U.S. Preventive Services Task Force's recommendation to screen adults ages 40-70 who have a BMI of 25 or higher for diabetes, the researchers obtained relevant patient data, such as hemoglobin A1c levels and metformin prescriptions. Of more than 15,000 patients seen at the clinic, 5,360 without a diabetes diagnosis met the USPSTF diabetes screening criteria.

Clinicians generally showed a high degree of knowledge of prediabetes and its health effects. For example,

- almost 97% knew the correct A1c range that indicated prediabetes,
- every clinician surveyed agreed that lifestyle modification was effective in preventing or delaying the onset of diabetes,
- almost 94% of clinicians thought prediabetes was a significant public health issue and
- nearly 65% considered screening for prediabetes a high priority.

On the other hand, only 45% of clinicians were aware of the National DPP and just over 48% knew how to refer a patient to a local DPP organization. Regarding the DPP, only about 68% offered referrals to a national program to at least some prediabetic patients.

The authors also compared the effects of point-of-care A1c testing versus lab-based testing. Of nearly 2,300 nondiabetic patients with an A1c test result in the prediabetes range, patients who received testing at the point of care were almost 15 times more likely to have prediabetes documentation in the EHR and 4.7 times more likely to receive a metformin prescription than patients who underwent lab-based A1c testing.

Corresponding author **James Keck, M.D., M.P.H.**, assistant professor in UK DFCM, emphasized how crucial it is to catch prediabetes before it becomes more serious. "Identifying someone at high risk of developing diabetes is very important," Keck told AAFP News. "With effective prevention programs we can improve patient health, prevent new cases of diabetes, spare clinicians from more 'sick care,' and reduce the burden of diabetes on the health care system."

Keck, who sees several patients who have prediabetes or diabetes, suggested that FPs could play an important role in disease management and prevention. "Many of the patients that we care for on a daily basis have prediabetes," Keck said. "We can reduce their risk of developing type 2 diabetes substantially by engaging with them on lifestyle modification, particularly by referring them to DPPs." DPPs could return the favor by engaging directly with primary care physicians. "Much like pharmaceutical companies used to detail clinicians, organizations offering the National DPP should be proactively reaching out to local primary care clinics to discuss the benefits of the DPP and develop referral processes," Keck said.

#### UK DFCM Welcomes new research faculty

The University of Kentucky, Department of Family & Community Medicine, Division of Population Medicine is thrilled to announce the addition of two new faculty to the research team. Dr. Brittany Smalls brings her NIH-funded research that focuses on rural families and diabetes among older populations. Dr. Mikhail Koffarnus (also NIH-funded) focuses his research on interventions related to substance abuse.

UK DFCM plans to hire two more research faculty to start in the coming fiscal year.

#### Dr. Mikhail Koffarnus



Mikhail Koffarnus, PhD is an Associate Professor in the Department of Family & Community Medicine with training in experimental psychology, behavioral economics, behavioral pharmacology, and neuroscience. Dr. Koffarnus' research focuses on addiction mechanisms and treatment with a focus on using mobile technology to facilitate remotely delivered treatment. He is funded by NIH with grants from the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse. Ongoing projects include the evaluation of the abuse liability of reduced-nicotine cigarettes and the development and implementation of a remote alcohol monitoring and incentive-based treatment platform. He is evaluating this treatment platform both in an underserved community population and in a relapse prevention model following inpatient alcohol detoxification. He serves on the editorial board of two academic journals, has served on multiple NIH review panels, and is an active committee member for scientific organizations such as the American Psychology Association Division 28, College on Problems of Drug Dependence, and Society for Research on Nicotine and Tobacco.

#### Dr. Brittany L. Smalls



Brittany L. Smalls, PhD, MHSA is an Assistant Professor in the Division of Population Medicine within the Department of Family & Community Medicine (DFCM) at the University of Kentucky. Before her faculty appointment to DFCM, she was an Assistant Professor in the Center for Health Services Research and Internal Medicine and the University of Kentucky. Prior to her work at the University of Kentucky, she served as Senior Project Manager at Bringham Womens' Hospital's Center for Surgery and Public Health and a member of faculty at Massachusetts College of Pharmacy and Health Sciences.

Dr. Smalls' research interests include health disparities, global health, and social determinants of health within the confines of complex chronic illnesses. Her work has included the assessment of social determinants of health on type 2 diabetes health outcomes, specifically community and neighborhood characteristics.

Currently, Dr. Smalls is focusing her research on the burden of complex chronic illness in older adults living in rural areas, the impacts of social determinants, and the development of patient-centered and community-based interventions to mitigate identified social environmental burdens to chronic disease self-management. At present, she serves as co-investigator on NIH grants and has been awarded an NIDDK K01 Career Development Award.



Each year, KAN offers members the chance to come together and network with their peers at a one-dat in-person event: the Convocation of Practices.

We provide members with updates on some of KAN's recent and upcoming research initiatives, and open up the conversation to hear your feedback! We want to know what's important to you, and how KAN can help you in your daily professional lives.

We are starting work to plan 2019's event, and we wanted first to hear from you—is an event like this something you value? Would you participate in the Convocation, if held?

<u>Click here to take the 1-question survey</u>, or paste the link below into your browser window.

https://www.surveymonkey.com/r/KRB9VYQ

Your feedback is appreciated!

#### JOIN OUR TEAM

Join our patient-centered team in the **Department of Family & Community Medicine** at the state's flagship institution, **the University of Kentucky**. Our faculty enjoy a culture where work-life balance results in job satisfaction. It is surrounded by picturesque landscapes, tranquil horse farms, and is close to several of Kentucky's 49 state parks. These features, plus Kentucky's incredible natural beauty and low cost of living provide a lifestyle to meet anyone's interests.

All of our open positions involve teaching medical students and/or residents. Faculty physicians have the opportunity to practice medicine that fullfils their personal interests. Flexible positions are available that include opportunities for research, inpatient medicine, and obstetrics. We are committed to developing each of our faculty members so they can achieve their personal career goals and move up the ranks through promotion. Faculty are supported through mentorship, enterprise resources, and being part of one of the largest healthcare systems in the state, UK HealthCare. We offer competitive salaries and outstanding benefits, including a very generous retirement contribution plan, college tuition reimbursement for dependents, excellent healthcare and dental coverage, disability and life insurance, plus paid CME and vacation.

Please call us at (859) 323-5988 or email <u>DFCMjobs@uky.edu</u> for more information.

Roberto Cardarelli, DO, MHA, MPH Professor and Chairman



## UPCOMING EVENTS

UK Barnstable Brown Diabetes Center Symposium: Diabetes and Beyond September 14, 2019 Lexington, KY

5th Annual Appalachian Research Day September 18, 2019 Hazard, KY

AMA ChangeMedEd 2019 September 18-21, 2019 Chicago, IL

KMA 2019 Annual Meeting September 20-22, 2019 Louisville, KY

Patient-Centered Diabetes Care September 27, 2019 Lexington, KY

Kentucky Healthcare Ethics Consoritum (KYHEC) Conference October 4, 2019 Lexington, KY

Appalachian Translational Research Network Health Summit October 14-15, 2019 Bethesda, MD

Kentucky Primary Care Association
Annual Meeting
October 17-18, 2019
LOCATION

51st Family Medicine Review November 3-8, 2019 Lexington, KY

NAPCRG Annual Meeting
November 16-20, 2019
Toronto, Canada

### KAN Member Spotlight: William Thornbury, MD



Location: Glasgow, KY

**Specialty areas**: Family

Medicine

Research interests: the affect of life purpose in the aged; and, how this can be employed to improve the literacy of preschool children in rural Kentucky

Dr. Thornbury is one of the leading family physicians in the United States. A summa cum laude graduate of the University of Louisville School of Medicine, he studied with Harvard Medical School at The Cambridge Hospital. He has practiced as a pharmacist, and has residency training in both general surgery and family medicine.

Dr. Thornbury's academic interest lies in the application of Lean systems to health delivery, training under the direct supervision of Toyota. Dr. Thornbury developed the first technology of mobile-to-mobile Telemedicine and has studied its influence in private practice in the care of chronic disease for nearly a decade. He is considered an international thought leader in the clinical application of mHealth authoring multiple publications and invited lectures throughout the United States and Europe.

Dr. Thornbury has been acknowledged by his peers as the Citizen Doctor of the Year in Kentucky, served as the 65th president of the Kentucky Academy of Family Physicians, and serves on the board of the KMA.

In addition, Dr. Thornbury serves as one of the members of the KAN Advisory Board.

Dr. Thornbury's small, private practice clinic is located in Glasgow, Kentucky. He devotes his service to the care of adults and the aged in management of acute and complex chronic disease care.

# Do you have a clinical or practice related question?

Do you have a question regarding clinical or health/disease related issues?

Do you have a question based on experiences in your medical practice?

We want to hear from you! Tell us about the issues you see and experience in your primary care practice. We may be able to answer your question, connect you with colleagues who share your concerns, or perhaps even turn your question into a research project.

Post your questions in the **KAN Member Community on DFCM Connect**, or, reach out any time at **KAN@uky.edu**.



#### **KAN Member Visits**

Kim Haney, our KAN Coordinator, is visiting member clinics across the state to touch base with members, assess potential needs and interest, and share the latest updates and free resources. If you have not yet received a visit from Kim, expect to be contacted about scheduling one soon. Feel free to reach out to Kim at **KAN@uky.edu** to get your clinic on the schedule and share your thoughts about KAN.

If you know of a colleague who may interested in becoming a KAN member, please invite them to join, and forward them this newsletter!

## Get engaged with KAN and the Division of Population Medicine

We often hear the question "We are primary care, why should we be involved in research?" Our responses are always the same, "Because if we don't do it, no one will create the knowledge and evidence we need to practice medicine that our patients and communities expect and deserve from us."

Primary care providers have a vital role in advancing the knowledge of our professions. Practice-based research groups grew from the realization that much of the research that is done in tertiary medical centers has little applicability to the practice of outpatient and ambulatory medicine. KAN invites all its members to participate in research that will have little hindrance to daily practice.

We welcome your ideas and engagement with the numerous resources and opportunities we offer!

