both BCTs include the prevalence of OUD and that help is available in the local primary care office. Community-tailored messages are distributed through posters and flyer inserts, drink coasters, newspaper articles, letters to local judges, restaurant placemats, and websites. Examples of the materials and messages will be presented.

DISCUSSION/SIGNIFICANCE OF IMPACT: Local community members are eager to help address the OUD crisis. Built on community-based participatory research principles, BCT can be used to translate complex information and guidelines around OUD and MAT into messages and materials that reflect local culture and community needs.

Trust in Research Among Older Adults
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OBJECTIVES/SPECIFIC AIMS: Adults, 60 years of age and older, are in high demand for enrollment in many types of health research. Here we aimed to examine baseline, 60-day and 120-day follow-up trust in research and researchers of Floridians 60 years of age and older engaged in University of Florida’s HealthStreet community engagement initiative. METHODS/STUDY POPULATION: HealthStreet Community Health Workers (CHWs) assess health needs and trust in research of community members and screen for dementia, before providing medical and social services referrals and linkages to opportunities to participate in relevant health research at UF. In addition, participants are followed up at 60 and 120 days. RESULTS/ANTICIPATED RESULTS: Among the 2,193 older adults assessed by CHWs, 62.6% were female, 46.8% were African American, and 6.1% Hispanic/Latino. At baseline, 28.3% reported ever being in a research study; 7.7% reported not being interested in participating in research. Trust in research and researchers was high at baseline [scored from 1 to 10 where 10 was high; mean of 7.4 each for trust in research (SD=2.0) and trust in researchers (SD=2.1)] and high at both follow-ups [60 days 7.8 (SD=2.1) and 7.7 (SD=2) for trust in research and researchers respectively; 120 days 8.0 for both (SD=1.9 and 1.8 respectively)]. DISCUSSION/SIGNIFICANCE OF IMPACT: Individuals who are 60 and older have high trust in research and researchers when approached and high interest in research. Their trust continues through work with HealthStreet CHWs. Community engagement is an important part of the pipeline for recruitment of older adults for research.

Understanding Community-engaged Research at an Academic Medical Center and Learning Healthcare System in the US South
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OBJECTIVES/SPECIFIC AIMS: Wake Forest Baptist Health (WFBH) experiences strained community relationships attributable to a history of medical and research abuses against marginalized populations. This legacy accompanies longstanding community mistrust in the healthcare system and research. To overcome these challenges, community-engaged research (CEnR) approaches have potential to repair community-academic relationships, improve public health, and empower groups that traditionally have been neglected by or overlooked in research. To develop and revise our understanding of how CEnR is harnessed at WFBH, semi-structured interviews were conducted with investigators and study staff experienced in CEnR approaches. In-depth interview guides were designed iteratively to capture socio-contextual and detailed descriptions of perceptions, experiences, and strategies specific to the use of CEnR.

METHODS/STUDY POPULATION: A keyword search performed within WFBH study records identified 51 investigators whom had submitted research proposals related to CEnR within the past ten years. Sixteen were confirmed eligible based on a review of proposal abstracts, of which 14 responded to email invitations agreeing to participate. Four additional participants were referred by initial participants. Eighteen investigators (16 faculty and 2 research associates) provided consent and completed Interviews. RESULTS/ANTICIPATED RESULTS: The participant sample was 50% female with a mean age of 55 years, 11% Black and 89% White, with representation across various academic backgrounds (e.g., anthropology, medicine, psychology, and public health). A majority of participants (89%) hold doctoral degrees (i.e., PhD, DrPH, EdD, MD, and MD-PhD). On average, participants had been employed at WFBH for 13.9 years, and represented various departments including dermatology, epidemiology and prevention, family medicine, neuropsychology, social sciences and health policy, and psychiatry. Nearly all participants (89%) indicated they had never received formal education or training in CEnR, though 100% reported “on-the-job” training in CEnR. Interviews were audio-recorded, transcribed, coded, and analyzed following an inductive thematic approach, from which twenty-two themes emerged across six domains related to CEnR (Table 2), including: Conceptualization and Purpose, Value and Investment, Community-Academic Partnerships, Sustainability, Facilitators, and Challenges. Results also provided key characteristics that define CEnR (Table 3), and yielded 11 emerging needs necessary to enhance CEnR within aLHSs (Table 4). DISCUSSION/SIGNIFICANCE OF IMPACT: The results of this study provide information critical to understanding how CEnR frameworks and approaches can be harnessed not just in Schools of Public Health, but within aLHSs to build and repair community-academic partnerships, inform research and institutional priorities, and address community health concerns. Despite the small sample size, the number of participant interviews was sufficient to achieve saturation while also providing broad and unique perspectives across various fields and CEnR approaches. Overall, participants conceptualized the purpose and goals of CEnR quite similarly, though there was a great deal of variance in how CEnR was defined and operationalized across interviews, indicating a need to more clearly articulate important features that enhance understanding of what CEnR is and what it is not (Table 3). These discrepancies and inconsistencies indicate a potential need for additional formal training in the understanding and use of CEnR approaches, which is supported by the fact that nearly all participants reported receiving no formal training in CEnR. Across all interviews, participants expressed a need for health care providers and researchers to better understand community contexts, social determinants of health, and historical factors influencing...
community health and participation in research (Table 4). This work and the data presented here are important for informing CEEnR approaches and will be useful for guiding the development of a model incorporating the core tenets of CEEnR within the mission, vision, and priorities of aLHSs.

### 3550

#### Understanding Racial Disparities in Hepatocellular Carcinoma Treatments and Outcomes

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OBJECTIVES/SPECIFIC AIMS: Black patients with hepatocellular carcinoma (HCC) receive fewer curative therapies and have higher mortality than other groups. Reducing this disparity will require an in-depth understanding of patient comorbidities, tumor characteristics, and social determinants of health. Our objectives are to:

- a) perform a multi-center retrospective cohort study of black and white patients diagnosed with HCC in the Indianapolis area.
- b) prospectively enroll black and white patients with HCC to collect clinical characteristics as well as data on the social determinants of health.

METHODS/STUDY POPULATION: A retrospective chart review of patients with a diagnosis of HCC from 2010-2017 from five area Indianapolis hospitals will be performed. Demographics, comorbidities, liver disease severity, and tumor characteristics will be collected using the Indiana Network for Patient Care database and compared between black and white patients. Concomitantly, a prospective cohort of black and white patients will be enrolled and surveyed to collect data on socioeconomic status and income adequacy, literacy, functional status, substance abuse history, social support, activation, and adherence. The primary outcomes are the receipt of curative therapies for HCC including liver transplantation, resection or ablation. The secondary outcome is mortality. Multivariable logistic regression models will be used to explore disparities seen in the primary and secondary outcomes.

RESULTS/ANTICIPATED RESULTS: These preliminary results include Indiana University Hospital (IUH) findings; a multicenter analysis is underway. The IUH cohort included 1,032 (86%) white and 164 (14%) black patients. Black and white patients had similar Model for End-Stage Liver Disease and Child-Pugh scores. There was a trend toward larger tumor size (5.3 cm vs. 4.7 cm; P = 0.05) in black patients; however, Barcelona Clinic Liver Cancer staging and Milan criteria were similar. Black patients were less likely to undergo liver transplantation than white patients—a disparity that was not attenuated (odds ratio [OR], 0.43; 95% confidence interval [CI]: 0.21-0.90) on multivariable analysis. Substance abuse was more frequently cited as the reason black patients within Milan criteria failed to undergo transplantation than white patients. Survival was similar between the two groups.

DISCUSSION/SIGNIFICANCE OF IMPACT: Racial differences in patient and tumor characteristics were small in our single center analysis and did not explain the disparity in liver transplantation. This analysis however only reflects 25% of patients diagnosed with HCC in the Indianapolis metropolitan, highlighting the need for a multicenter study. Higher rates of substance abuse in black patients within Milan criteria who failed to undergo transplantation suggest social factors contribute to this disparity and highlight the need for a prospective study that can explore these and other social factors.

### 3406

#### Understanding the Barriers, Challenges, and Facilitators to Community-Engaged Research: A Review of a CTSA Community Engagement Pilot Program

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OBJECTIVES/SPECIFIC AIMS: Engaging patients and consumers in research is a complex process where innovative strategies are needed to effectively translate scientific discoveries into improvements in the public’s health (Wilkins et. al., 2013; Terry et. al., 2013). The Clinical Translational Science Awards (CTSA)—supported by the National Institute of Health (NIH) under the auspices of the National Center for Advancing Translational Sciences (NCATS)—aim to provide resources and support needed to strengthen our nation’s clinical and translational research (CTR) enterprise. In 2008, Stanford University was awarded a CTSA from the NIH, establishing Spectrum (Stanford Center for Clinical and Translational Research and Education) and its Community Engagement (CE) Program aimed at building long-standing community-academic research partnerships for translational research in the local area surrounding Stanford University. To date, the CE Pilot Program has funded 38 pilot projects from the 2009-2017 calendar year. The purpose of this study was to understand, through a unique pilot program, the barriers, challenges, and facilitators to community-engaged research targeting health disparities as well as community-academic partnerships.

METHODS/STUDY POPULATION: Investigators conducted a qualitative study of the community engagement pilot program. Previous pilot awardees were recruited via email and phone to participate in a one-hour focus group to discuss their pilot project experience—describing any barriers, challenges, and facilitators to implementing their pilot project.

RESULTS/ANTICIPATED RESULTS: The focus group revealed that community engagement research through the pilot program was not only appreciated by faculty, but projects were successful, and partnerships developed were sustained after funding. Specifically, the pilot program has seen success in both traditional and capacity building metrics: the initial investment of $652,250.00 to fund 38 projects has led to over $11 million dollars in additional grant funding. In addition, pilot funding has led to peer-reviewed publications, data resources for theses and dissertations, local and national presentations/news articles, programmatic innovation, and community-level impact. Challenges and barriers were mainly related to timing, grant constraints, and university administrative processes.

DISCUSSION/SIGNIFICANCE OF IMPACT: The Community Engagement Pilot Program demonstrates an innovative collaborative approach to support community-academic partnerships. This assessment highlights the value and importance of pilot program to increase community engaged research targeting health disparities. Challenges are mainly administrative in nature: pilot awardees mentioned difficulties working on university quarterly timelines, challenges of subcontracting or sharing money with community partners, onerous NIH prior