The Yale-Griffin Prevention Research Center Newsflash

Winter 2020 Issue

The PRC has prepared this electronic **Newsflash** to keep you informed about our work and invite you to take part in our research, education and outreach activities. If you have ideas for working together on shared projects, please let us know.

For more information about the Yale-Griffin PRC:

Please visit our website at https://yalegriffinprc.griffinhealth.org

PRC Updates

Goodbye and best wishes to:

- *Kim Doughty, MPH, PhD,* Research Scientist. Our sincere thanks to Kim for her work the past few years coordinating our VITAHLS initiative, managing the ACCESS project, and for her work in planning the first phase of our new core research project. Congratulations to Kim as she moves on to Fairfield University as faculty member and Director of the undergraduate Public Health program.
- **Sue Acheychek**, who worked here part-time for several years as an ultrasound technician for our endothelial function studies, and as a research assistant on our multiple sclerosis studies.
- Helen Day, who served as administrative assistant to Dr. David Katz for more than 15 years.

Welcome to our new interns and medical residents:

- Adaobi Okoro and Ketia Similien, both undergraduate students in Public Health at Southern Connecticut State University.
- Alex Anders, MD, MPH and Jacob Van Houton, MD, PhD, MS.

Current Projects

<u>CORE RESEARCH PROJECT: Improving Health in Low Income Communities: Virtual Delivery of a</u> <u>Diabetes Prevention Program Facilitated with Community Care Coordination</u>

This project, funded through September 2024 by the Centers for Disease Control and Prevention (CDC), will assess the feasibility and health impacts of offering a virtually-delivered Diabetes Prevention Program (vDPP), facilitated by community health workers and hospital-based community nurses, to low-income adults at risk for type 2 diabetes who reside in New Haven, Ansonia, and Derby. It will address barriers that prevent people with low incomes from successfully participating in lifestyle interventions. We have been busy planning Year 1 formative research activities, which will include focus groups with local residents, interviews with key stakeholders , vDPP pilot testing, and development of Program Impact Pathways and RE-AIM (Reach, Effectiveness, Adoption, Implementation, and Maintenance) frameworks to assess implementation processes, including program delivery bottlenecks, and outcomes. For more information, contact PRC Co-Director Beth Comerford at beth-comerford@yalegriffinprc.org or Co-Director Kathleen Duffany at beth-comerford@yalegriffinprc.org or Co-Director Kathleen.oconnorduffany@yale.edu.

<u>UPDATE - Valley Initiative to Advance Health & Learning in Schools (VITAHLS)</u>

We're pleased to report that the VITAHLS initiative will continue beyond the PRC's 2014-2019 funding cycle as leadership of this program has transitioned the our school in the Ansonia, Derby, Seymour, and Shelton school districts. The PRC has played an active role in leading this initiative for the past 8 years and is now helping to support the school districts in sustaining it. The VITAHLS working group meetings will be held quarterly, with each participating district hosting one meeting each school year. The meetings will include a brief educational component (e.g., a presentation or guest speaker), updates on current programs and activities, and time for networking.

UPDATE – Addressing Chronic Conditions in Elementary and Secondary Schools (ACCESS)

The PRC received \$30,000 in funding (\$15,000 per year) from the Valley Community Foundation to improve ways to identify and manage K-12 students with chronic health conditions (CHCs) in Ansonia, Derby, and Shelton public schools. The project began in November 2018 and will continue through October 2020. During Year 1, we: (1) established a working group of stakeholders including school nurses, teachers, and administrators from Ansonia, Derby, and Shelton; staff from the Naugatuck Valley Health District; and staff from Griffin Health Services; and (2) assessed current practices, needs, and resources related to managing CHCs among school-aged students. Based on the results of the completed needs assessment, the working group identified mental health conditions as a priority. In year 2, we will: identify strategies to screen, refer to care, and track outcomes in students with mental health conditions, implement the selected strategies, and evaluate their impact.

UPDATE - PRC Involvement in Local Community Partnerships

<u>Valley Council Food Security Task Force (FSTF)</u> - PRC Co-Director Beth Comerford continues to serve
on the FSTF, most recently spearheading efforts to develop a nutrition policy to guide task force and
member organization's practices, and a collaboration with the CT Food Bank to implement "nudge"
interventions with our food pantry partners.

Community Health Improvement Projects (CHIP)

The Heart Disease Working Group, co-chaired by PRC Co-Director Beth Comerford and Jamie Luckhardt, Health Educator for the Naugatuck Valley Health Department, met several times over the past few months to develop goals and objectives. The overall goal of reducing premature death rates in the Valley due to heart disease by implementing sustainable community-wide initiatives addressing modifiable lifestyle risk factors will be accomplished through the following activities: (1) developing a community-wide plan with strategies to address lifestyle risk factors associated with heart disease – focusing on physical activity, nutrition, and smoking; (2) conducting a tailored social marketing campaign to influence health behaviors; (3) identifying and implementing specific programmatic elements over time to support the social marketing campaign; and (4) implementing the strategic plan using established community infrastructure, primarily the Valley Chamber of Commerce and the Valley Council for Health and Human Service Organizations, and engaging key stakeholders in the community.

The Maternal-Infant Health Working Group, co-chaired by PRC Research Scientist Kim Doughty, and Joan Lane, Public Health Specialist for the Naugatuck Valley Health District, has also been meeting to develop its own goals and objectives. The overarching goals are to decrease low birth weight and fetal/infant mortality by improving health behaviors, to increase adequacy of prenatal care received by pregnant women; and to reduce disparities in adequacy of prenatal care, low birth weight, and fetal/infant mortality. The objectives that will be met to achieve these goals are: (1) establishing baseline objective data on maternal and infant health outcomes; (2) increasing the accessibility of an enhanced and updated version of the Maternal & Reproductive Health Directory; (3) developing and implementing a social marketing campaign targeting behaviors that influence maternal and infant health; (4) increasing the number of pregnant and postpartum women with HUSKY insurance who

are enrolled in the HUSKY Healthy Beginnings program; and (5) increasing the number of primary care and Ob/Gyn providers who incorporate screening for pregnancy intention into routine visits with women of childbearing age.

NOW RECRUITING - A Pilot Study of Oral FMT (Fecal Microbial Transplant) in Subjects with MS

The FDA has granted permission to use FMT capsules for this pilot study at Griffin Hospital to investigate whether a fecal microbial transplant (FMT) is tolerated, safe, and leads to favorable changes in the intestinal bacteria of people with multiple sclerosis (MS). The PRC is partnering with neurologist Joseph B. Guarnaccia, MD of the MS Treatment Center at Griffin Hospital, the principal investigator on this study, funded by the State of CT Department of Public Health.



Some studies have found that an imbalance of bacteria in the intestines could lead to inflammation in the immune system, which could make some people more likely to develop MS, or exacerbate symptoms in those with established disease. It is thought that restoring the balance of intestinal bacteria can improve some health conditions or diseases.

Our study team will offer patients with MS a single FMT procedure in the form of 30 oral capsules that contain fecal material. We will monitor them carefully before and after the FMT procedure.

- <u>Who we're recruiting</u>: Adults with MS who are 18 to 50 years old, can walk with or without assistance, are <u>not</u> on immunotherapy (except for interferon beta or glatiramer acetate), and are willing to visit Griffin Hospital 8 times over a 4-month period.
- What will happen: The 8 visits will include: a clinical screening, a single procedure of 30 FMT capsules taken by mouth; and 5 visits for blood and stool samples, medical exams, and surveys.
- <u>Outcome measures</u>: (1) ability to tolerate FMT capsules without vomiting or adverse side effects; (2) immune markers found in blood samples; (3) changes in the microbiome of stool samples; (4) self-reported quality of life, mental health status, and levels of fatigue; and (5) MS disease status.
- <u>Compensation</u>: \$800 total, payable in installments over the course of the study. The FMT capsules and all study procedures and tests will be provided free of charge.
- How to apply: Call Rockiy Ayettey at 203-732-1265, extension 300.

UPDATE – Community Alliance for Research and Engagement

The Community Alliance for Research and Engagement (CARE) extends the PRC's work with a mission to improve health in New Haven, CT. CARE, in partnership with the New Haven community, is working in tandem with the PRC to take action against chronic diseases and other challenges that threaten the health of community members. For more information on CARE initiatives, contact CARE Director Alycia Santilli at santillia1@southernct.edu.

Racial and Ethnic Approaches to Community Health (REACH) Initiatives

This national program is administered by the CDC to reduce racial and ethnic health disparities. CARE's local REACH initiatives address issues among New Haven residents.

#GiveHealthy - CARE successfully piloted 2 Healthy Food Drives with Northeast Medical Group and Southern CT State University's Public Health Society using #Give Healthy. #GiveHealthy uses a webbased "food drive" model to donate fresh fruits and vegetables and other healthy foods identified by local food pantries or soup kitchens. People can buy and donate foods to a specific hunger-relief organization. The food is ordered online and delivered to the hunger-relief organization at no cost.

<u>"Safe Routes for All" Active Transit Master Plan</u> - Last summer, CARE launched "Safe Routes for All" in partnership with the City of New Haven's Department of Traffic, Transportation, & Parking and a tactical urbanism engineering firm. The goal is to make walking, biking, and bus riding easier and

safer for residents. It began with demonstration projects in 6 neighborhoods that are serving as a model as the City develops an Active Transit Master Plan.

<u>Addressing Transportation Barriers</u> - CARE partnered with Project Access New Haven to station community health workers in 2 food pantries to screen and navigate clients for needs related to 5 social determinants of health: food, transportation, housing, utilities, and medical primary care.

<u>Coordinated Food Assistance Network</u> - CARE and several partners met this fall to discuss strengths and limitations of food assistance programs, share information and resources, and discuss goals for a coordinated food assistance network. Partners included the City of New Haven Food System Policy Division, New Haven Food Policy Council, New Haven Food Access Working Group, Witnesses to Hunger, Downtown Evening Soup Kitchen, CT Food Bank, and United Way of Greater New Haven. They plan to meet again in early 2020.

• Community Engagement Update

<u>REACH New Haven Health Leaders</u> - The first cohort of 10 participants and 2 Southern CT State University graduate students graduated in December. They received training in community organizing to address neighborhood-level health disparities in New Haven. CARE's evaluation team will use feedback to make improvements for the next cohort due to start in the spring of 2020.

<u>Patient-Centered Outcomes Research Institute Community Research Fellowship</u> – CARE's second and final cohort of 11 fellows is receiving training from November through June on community-engaged research, and will be paired with Yale research teams to inform their study designs.

Grant Proposals and Awards

RECENTLY-SUBMITTED PROPOSALS

• Building Research Capacity in Kenya to Address Rising Rates of Non-Communicable Diseases Valentine Njike MD, MPH, Assistant Director of Evaluation/Research for the PRC and Griffin's Medical Education Department, collaborated with Mary Murimi, Professor of Nutrition at Texas Tech University, to submit a grant proposal to the National Institutes of Health (NIH) for a Fogerty International Research Training Award intended for programs in low- and middle-income countries. The aim is to train a cadre of Kenyan scientific researchers with expertise and skills to conduct independent research focusing on cardiovascular diseases, diabetes, and hypertension as some of the major causes of morbidity and mortality in Kenya. This proposed project is a collaboration between Daystar University in Kenya and Texas Tech University. If funded, Dr. Njike will serve as a member of the faculty representing several U.S. institutions who will provide research training and mentoring.

RECENTLY-AWARDED GRANT

• Our proposal, <u>The Impact of Consumption of Eggs in the Context of Plant-Based Diets on Diet Quality and Cardio-Metabolic Risk Factors in Adults at Risk for Type 2 Diabetes</u>, has been approved for funding from the Egg Nutrition Center. This randomized controlled crossover study with 35 adults at risk for type 2 diabetes will compare the impact of including 2 eggs daily for 6 weeks in a plant-based (vegan) diet, vs. a plant-based (vegan) diet, on endothelial function, diet quality, nutrient intake, and cardio-metabolic risk. Plant-based diets are recommended to reduce type 2 diabetes risk, as long as intake of protein and other nutrients such as Vitamin B12, iron, zinc, copper and selenium is adequate. Eggs are rich in high-quality protein, vitamins, and minerals, and are satiating, with the potential to regulate calorie intake, reduce body weight, and lead to improved diet quality. We are awaiting approval from the Griffin Hospital Institutional Review Board (IRB) to conduct this study, and will soon begin recruiting participants. More details will follow in our spring Newsflash.

Presentations

Valentine Njike, MD, MPH, Assistant Director of Evaluation/Research for the PRC and Griffin's Medical Education Department, presented lectures as part of the Griffin Hospital medical residency program: (1) descriptive statistics, sampling, point and interval estimates on September 6; (2) Inference statistics on September 13; and (3) critical appraisal of scientific manuscripts on September 27 and October 4.

Publications

- Khatlani K, **Njike V**, Costales VC. <u>Effect of Lifestyle Intervention on Cardiometabolic Risk Factors in Overweight and Obese Women with Polycystic Ovary Syndrome: A Systematic Review and Meta-analysis. Metab Syndr Relat Disord. 2019 Dec;17(10):473-485.</u>
- Katz DL, Doughty KN, Geagan K, Jenkins DA, Gardner CD. <u>Perspective: The Public Health Case for Modernizing the Definition of Protein Quality.</u> Adv Nutr. 2019 Sep 1;10(5):755-764.
- Guthrie NL, Berman MA, Edwards KL, Appelbaum KJ, Dey S, Carpenter J, Eisenberg DM, Katz DL.
 <u>Achieving Rapid Blood Pressure Control with Digital Therapeutics: Retrospective Cohort and Machine Learning Study.</u> JMIR Cardio. 2019 Mar 12;3(1):e13030.

In-Service / Training Opportunities

You're invited to join us at our **Journal Club meetings or other professional development sessions**, usually held every other month. **Our next meeting will be held at the PRC on the second floor of Griffin Hospital.** If you have questions, please contact Dr. Valentine Njike by email at <u>valentine.njike@yalegriffinprc.org</u>.

Tuesday February 11 from 2:30 to 3:30 pm
 Finkelstein A, Zhou A, Taubman S, Doyle J. <u>Health Care Hotspotting – A Randomized, Controlled Trial.</u>
 N Engl J Med. 2020 Jan 9;382(2):152-162.

Let's Stay in Touch

Let us know what you are doing and how our research might assist you in your work. Please contact Beth Comerford, MS, PRC Co-Director (beth.comerford@yalegriffinprc.org) or the staff listed in this **Newsflash**.

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The Yale-Griffin PRC is a member of the Prevention Research Centers Program.



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