

WHAT'S NEW AT THE YALE-GRIFFIN PREVENTION RESEARCH CENTER?

Updates on PRC Projects

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- Barriers & Facilitators of COVID-19 Vaccine Confidence & Access among Black and Latinx Communities in Connecticut
- Effect of Phototherapy on Type 2 Diabetes Risk

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- Welcome to New Staff/Students
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Our PRC is a member of the CDC's [Prevention Research Centers](https://yalegriffinprc.griffinhealth.org) Program. For more information about our PRC, please visit our website at <https://yalegriffinprc.griffinhealth.org>.

MESSAGE FROM OUR LEADERSHIP TEAM

PRC Principal Investigator:
Rafael Pérez-Escamilla, PhD

PRC Co-Directors:
Kathleen O'Connor Duffany, PhD, MEd
Beth Comerford, MS

Improving COVID-19 Vaccine Uptake in CT

Our PRC has received CDC supplemental funding to support COVID-19 vaccine uptake efforts in CT. We're listening to the needs and wants of diverse communities and key stakeholders from the CT Department of Public Health, local Departments of Health, health care systems, community organizations, and legislators.

The havoc created by the Delta variant highlights a need to recalibrate messaging and strategies to convey trusted information to diverse audiences, including people of color and residents of socioeconomically vulnerable communities.

While improving vaccine uptake should remain a key focus of our collective work, we also need to address rapidly-evolving changes in recommendations due to Delta, including information on booster shots and whether vaccinated persons should wear face masks. This requires immediate action to strengthen coordination of efforts. We also need to develop behavior change strategies addressing people's reasons for not getting vaccinated or not returning for a second dose.

Developing and disseminating trusted and effective evidence-based messaging can be challenging in the context of misinformation being disseminated. We want to learn how misinformation spreads so rapidly, and use that knowledge to improve vaccine uptake and other COVID-19 prevention efforts.

The pandemic has illustrated the complexity of behavior change in public health and how it is unlikely to occur without substantial and permanent investments in public health infrastructure, workforce development, and health literacy. We are proud to be part of the national CDC PRC network that is working to make this a reality sooner rather than later. See **Other PRC Projects** in this issue for more information on the vaccine confidence initiative.

CORE RESEARCH PROJECT:

Improving Health in Low Income Communities: Virtual Delivery of a Diabetes Prevention Program Facilitated with Community Care Coordination

This 5-year project is assessing the feasibility and health impacts of a virtually-delivered Diabetes Prevention Program (vDPP), facilitated by community health workers (CHWs), to adults in New Haven and the Lower Naugatuck Valley who have lower incomes and are at risk for type 2 diabetes.



In May, we offered a 4-week pilot study of the vDPP to 11 residents of our communities of focus (5 from New Haven and 6 from the Lower Naugatuck Valley) to identify and address recruitment, program and operational issues prior to offering the full year-long intervention to other residents.

Participants received a free fitness tracker, a small amount of financial compensation for their time, and the option of continued free access to the vDPP for an entire year, i.e., beyond the 4 weeks of the pilot.

Pilot study participants were provided the [vDPP platform developed by incentaHEALTH](#) with our customized title of “Healthy Me: A Lifestyle Program from the Yale-Griffin Prevention Research Center.”



The incentaHEALTH platform includes a health tracking app, a CDC-approved webinar series on healthy lifestyle practices, and direct support from a health coach. In addition, a Community Health Worker (CHW) helped to identify and address any social determinants or other barriers to engaging in healthy lifestyle behaviors.

As part of the pilot study, we collected the following data and feedback from participants: (1) screening for social determinants of health needs; (2) a survey to assess motivation and barriers to participating in the vDPP; (3) participant engagement with webinars, weekly weigh-ins, and physical activity tracking; (4) a survey with questions on food shopping, food preparation, food knowledge, dietary intake, physical activity levels, diabetes risk knowledge, self-efficacy, food security, stress, and program satisfaction; and (5) focus groups to share participants' experiences with the program.

The project team met weekly to review the pilot study implementation and address issues. The full study team discussed the progress of the project on an ongoing basis, and reviewed the findings together.

The pilot study findings prompted the following changes to the full-year vDPP implementation process:

- adding HbA1c levels to inclusion/exclusion criteria to determine participant eligibility;
- modifying the social determinants of health screening tool to include items related to access to primary care and places to be physically active;
- extending the enrollment timeline to give participants more time to complete orientation tasks, such as signing up for the platform and setting up the digital scale;
- developing a welcome packet to provide participants with more information on navigating the incentaHEALTH platform, using the digital scale, and understanding the roles of study team members;
- postponing the distribution of free fitness trackers until after the completion of the 1-year program and data collection;
- continuing the weekly check-ins between research staff, the health coaches, and the CHWs to address program barriers and facilitators throughout the year-long intervention.

We're now recruiting participants for the year-long vDPP program. Contact Rockiy Ayetey by phone at 203-732-1125, or by email at rockiy.ayetey@yalegriffinprc.org.

OTHER PRC PROJECTS

Understanding Barriers and Facilitators of COVID-19 Vaccine Confidence and Access among Black and Latinx Communities in Connecticut

The Yale-Griffin PRC is one of 26 PRCs across the U.S. receiving supplemental CDC funding for rapid-response efforts to inform effective solutions to increase confidence in and uptake of COVID-19 vaccines.



Our own PRC's efforts are intended to improve vaccine uptake in New Haven and the Lower Naugatuck Valley, especially among Black/African-American and Hispanic/Latinx residents. COVID-19 vaccination rates have been disproportionately low among Black and Latinx people in CT, despite the fact that their age-adjusted COVID-19 death rates have exceeded those of their White counterparts.

We're conducting this project in partnership with the Community Alliance for Research & Engagement (CARE). It builds upon work that CARE is conducting as part of its REACH grant's supplemental funding focusing on vaccine hesitancy and communication.

In collaboration with our community partners, the project activities include:

- (1) conducting listening sessions and surveys** with community residents and vaccine providers to better understand the beliefs, perceptions, and perceived risks/benefits that influence confidence in the vaccine and identify key barriers and facilitators to vaccine access;
- (2) developing culturally-appropriate strategies** with community partners to increase confidence in the vaccine and address barriers to its delivery;
- (3) using feedback loops to improve and refine our outreach and education efforts**, including vaccine promotion messages, message delivery, and other strategies to promote uptake.

As part of our formative research this summer and fall, we're conducting listening sessions with vaccine "providers", i.e., community-



based providers, clinicians, community health workers, and vaccine outreach workers, to learn about their roles and experiences with COVID-19 vaccine promotion, distribution, and/or delivery.

We'd like to know: (1) what they perceive as the most significant challenges with engaging community members in receiving the vaccine; (2) their reflections about barriers to vaccine access; (3) strategies they have found most helpful in encouraging people to receive the vaccine; and (4) what additional supports might help to expand vaccine access and distribution.



In September, we'll conduct listening sessions with some community residents to inquire about their point of view on the COVID-19 vaccine. They'll have

the chance to discuss concerns they or others have about the vaccine, and at what locations and from whom they might feel most comfortable receiving the vaccine.

We're also conducting an anonymous survey of community residents at vaccination sites to determine motivations for vaccination at this time, barriers faced, and participant experiences and satisfaction at the vaccination site.

For more information about this project, please contact PRC Co-Director Beth Comerford at beth.comerford@yalegriffinprc.org.

NOW RECRUITING!

Can a Phototherapy Product Improve Health and Reduce the Risk for Diabetes?



We've received IRB approval and are now recruiting for a study to test the effects of a phototherapy product on measures of health, including the risk for developing diabetes.

Recent research indicates that certain wavelengths of light appear to activate an enzyme called cytochrome c oxidase (CCO) in the mitochondria of cells, which in turn appears to activate signaling pathways in the body.

A recent animal study showed that elevated CCO activity led to reduced blood glucose levels and insulin resistance in mice with diabetes.

The product to be tested in this study uses 2 small patches worn on the skin that, when activated by body heat, reflect low levels of infrared and visible light to stimulate the skin's surface. They don't contain any drugs or herbal compounds, and don't put any chemicals in the body.

This randomized controlled study will compare the effects of 12 weeks each of using the patch product vs. placebo patches on markers of cardio-metabolic risk (hemoglobin A1C, insulin sensitivity, serum lipids, C-reactive protein, endothelial function, and body composition) and sleep quality in adults at risk for type 2 diabetes.

Study title: Effects of the FOS Biomedical Device on Diabetes Risk Factors and Sleep Quality in Adults at Risk for Type 2 Diabetes: A Randomized, Placebo-controlled, Crossover Trial. Griffin Hospital IRB #: 2021-10

Principal Investigator: Valentine Y. Njike, MD, MPH

Funding provided by: Fos Biomedical, Inc.

We are recruiting adults to take part in this 8-month study who:

- are older than 40 years of age (if women, they must be postmenopausal)
- are non-smokers
- are overweight
- have higher-than-normal blood glucose levels, but not diabetes
- are willing and able to:
 - visit the PRC at Griffin Hospital 5 times for clinical tests
 - wear 2 small patches on their abdomen each day for approximately 6 months
 - report their food and beverage intake on certain days during this study

Participants will receive \$500 for completing this study. All tests and study products will be provided free of charge.

For more information and to inquire about study eligibility, please contact Rockiy by phone at 203-732-1125, or send an email message to rockiy.ayetey@yalegriffinprc.org.

NEWS FROM THE COMMUNITY ALLIANCE FOR RESEARCH AND ENGAGEMENT (CARE)



In partnership with the New Haven community, CARE works in tandem with

the PRC to take action against chronic diseases and other challenges that threaten the health of community members. For more information, contact CARE Director Alycia Santilli at santillia1@southernct.edu.

Addressing COVID-19 Vaccine Confidence in New Haven



Since April, CARE has been working with residents and community partners to increase COVID-19 vaccinations among Black and Brown residents of New Haven through CDC funding to supplement our REACH grant. To learn more about vaccine access, acceptance, and perceived barriers to COVID-19 vaccination in New Haven among Brown and Black residents, CARE conducted community listening sessions in English and Spanish.

Black and Brown residents face many barriers to vaccine uptake, including historical and modern medical mistreatment and racism, logistical barriers, language barriers, etc. The spread of misinformation compounds these barriers, resulting in lower vaccine confidence and uptake.

CARE has tailored outreach materials based on these findings, equipping our outreach workers with information needed to increase vaccine confidence in New Haven.

Furthermore, a [community friendly website \(www.vaccinateNHV.org\)](http://www.vaccinateNHV.org) was developed to list COVID-19 mobile clinics, provide information on vaccines, and a place to report COVID-19 rumors.

We identified neighborhoods in New Haven that were lagging in COVID-19 vaccinations and worked with community partners to host mobile COVID-19 vaccination clinics.

Urban Agriculture Master Plan in New Haven



This summer, the City of New Haven Food System Policy Division (FSPD) received a USDA Urban Agriculture and Innovation Production grant to develop the first New Haven Urban Agriculture Master Plan. The ultimate goal of the Master Plan is to eliminate long-standing regulatory, resource, and information barriers. It will also provide a cohesive strategy to: create transparent, easy-to-navigate City processes; update zoning regulations and land-use policies; improve access to knowledge and financial resources for urban agricultural initiative; and better connect with Black, Indigenous, and people of color (BIPOC) and low-income communities.

The grant activities will be used to inform the development of the Master Plan. CARE will be the external evaluator on the grant to examine individual and community knowledge, attitudes, barriers, facilitators, and experiences and the roles that these play in either the uptake or hindrance of engaging with urban agriculture and the food system in New Haven by BIPOC. CARE will be assisting with survey design, data collection, and analysis.

Recruitment Opportunity for New Haven Health Leaders



CARE is accepting applications for the 2021-2022 New Haven Health Leaders cohort! The Health Leaders receive training about health disparities and solutions to create health equity at the neighborhood level. They co-learn from each other about New Haven's neighborhoods, community engagement, and leadership development – with a focus on improving health in New Haven. [Apply today!](https://www.carenhv.org/new-haven-health-leaders-application) (<https://www.carenhv.org/new-haven-health-leaders-application>)

CARE website: www.careNHV.org

Instagram: [instagram.com/carenhv](https://www.instagram.com/carenhv)

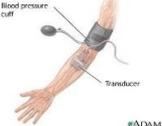
Facebook: [facebook.com/CARE4NewHaven](https://www.facebook.com/CARE4NewHaven)

Vaccinate New Haven: www.vaccinateNHV.org

PROJECT FINDINGS

After-Meal Effects on Extra Virgin Olive Oil on Cardiovascular Risk Measures in Adults at Risk for Type 2 Diabetes

Our study, recently published in [The International Journal of Cardiology](#), compared after-meal intake of two kinds of olive oil in a group of 20 adults with pre-diabetes.

<h3>What was the reason for this study?</h3>  <p>People with pre-diabetes have a higher risk for type 2 diabetes.</p>  <p>Diabetes in turn raises the risk for cardiovascular disease.</p>  <p>Olive oil is often recommended as part of a heart-healthy diet.</p>  <p>Since olive oils aren't all alike, we compared the health effects of 2 kinds of olive oil.</p>	<h3>What kinds of olive oil did we compare?</h3> <h4>Extra virgin olive oil</h4>  <p>Made from the juice of olives No additives Relatively high in polyphenols Higher in certain other nutrients</p> <p>vs.</p> <h4>Refined olive oil</h4>  <p>Heavily processed Relatively low in polyphenols, due to how they're processed</p>
<h3>What took place during this study?</h3> <p>20 adults at risk of type 2 diabetes took part.</p> <p>Each person drank a smoothie made with olive oil on an empty stomach (total of 2 smoothies, 1 week apart).</p>  <ul style="list-style-type: none">- One smoothie with 50 mL (2½ Tbsp.) extra virgin olive oil- One smoothie with 50 mL refined olive oil <p>We measured endothelial function and blood pressure before and 2 hours after each smoothie.</p>	<h3>What is endothelial function?</h3>  <p>A measure of how well blood vessel walls stretch and expand as blood flows through them</p> <p>Measured using ultrasound on a blood vessel in the arm</p>  <p>It can help predict the risk for cardiovascular disease</p> 
<h3>What were our study findings?</h3> <p>In these adults at risk of type 2 diabetes...</p> <ul style="list-style-type: none">- Extra virgin olive oil led to a 5% improvement in blood vessel function (statistically significant) 2 hours later, while refined olive oil didn't have this effect.- Neither olive oil affected blood pressure. 	<h3>What can we conclude from this study?</h3> <p>The type of olive oil seems to matter in reducing the risk of cardiovascular disease in adults at risk of type 2 diabetes.</p>  <p>A larger study with a longer time frame could help confirm our findings.</p>

Study title: Post-prandial Effects of High-polyphenolic Extra Virgin Olive Oil on Endothelial Function in Adults at Risk for Type 2 Diabetes: A Randomized Controlled Crossover Trial.

Funding provided by: [Cobram Estate](#) with support from the Centers for Disease Control and Prevention (CDC)

For more information: Contact Valentine Njike, MD, MPH, email Valentine.Njike@yalegriffinprc.org.

GRANT PROPOSALS

Recently Funded Projects

Our work with [Wholesome Wave](#) will continue with support from the following grants:

- Gus Schumacher Nutrition Incentive Program (GusNIP): Fidelity, Equity, and Dignity in Produce Prescriptions: Participatory Design for Social Justice and Healthy Food Systems. Funded by the National Institute of Food and Agriculture (NIFA).
- Contract to develop the FED model for fidelity, equity, and dignity with a focus on racial equity in the organization and in programming. Funded by the Walmart Foundation.
- Contract to assess Fruit and Vegetable Prescription Programs in Sacramento, CA, and to partner in redesigning the Wholesome Wave organizational and program model to focus on Fidelity, Equity and Dignity principles. Funded by WW Good.

Recent Grant Submission

- **Family Approach to Type 2 Diabetes Management with Intensive Lifestyle in Youth-Caregiver Dyads (FAMILY-D).** Kathleen O'Connor Duffany, PhD and the PRC will lead the evaluation if this project is funded. Submitted to the Department of Health and Human Services Office of the Assistant Secretary for Health / Office of Minority Health.

OTHER NEWS AND ANNOUNCEMENTS

Congratulations!



Congratulations to longtime PRC Community Committee member Ludwig Spinelli on his recent retirement as the CEO of Optimus Healthcare. We're thrilled that he plans to continue as a member of our Community Committee, and look forward to his continued presence and contributions.

Welcome!



Katia Astudillo, MBA is a Community Health Worker (CHW) with Project Access-New Haven for the REACH program. As a CHW for our vDPP project, her focus is to help study participants to reach their health goals by removing barriers

and facilitating access to local resources for their health and social needs.



Bailee Rue is an MPH candidate concentrating in Social and Behavioral Sciences at the Yale School of Public Health. In her position as a Research and Evaluation Intern at CARE, she is

supporting implementation and analysis of our virtual Diabetes Prevention Program project.

Journal Club

Wednesday, Sept. 15th from 2:00 to 3:00 pm



Article for discussion: Perri MG, Shankar MN, Daniels MJ, et al. Effect of Telehealth Extended Care for Maintenance of Weight Loss in Rural US Communities: A Randomized Clinical Trial. JAMA Network Open. 2020; 3(6): e206764.

A free full text version of the article is available [here](#). For questions, or to receive a Zoom meeting invitation, contact Rockiy Ayettey at rockiy.ayetey@yalegriffinprc.org.

Health Equity Fellowship Program

As part of a joint commitment to improve health equity and support community programs in Greater New Haven County, the Yale School of Public Health (YSPH) and Southern Connecticut State University (SCSU) continue to offer a robust Health Equity Fellowship program for students during the summer months. Through this program, graduate student fellows are placed with community organizations and programs to engage in community-based work. They also attend weekly reflection sessions that focus on learning more about health equity, harmful impacts of inequitable practices, community-based participatory approaches, and working with communities in a culturally responsive way.



Source: <https://ysph.yale.edu/news-article/health-equity-fellowships-expand-in-new-haven-county/>

The Fellowship program is overseen by YSPH's [Office of Public Health Practice \(OPHP\)](#) in partnership with the [Community Alliance for Research and Engagement \(CARE\)](#), which is jointly housed at YSPH and SCSU, and the Yale-Griffin Prevention Research Center (Y-G PRC).

"We are taking the lead of community agencies and co-developing projects that meet immediate needs in New Haven County," said Susan Nappi, MPH, the OPHP's executive director. "We ask and we listen. Supporting these projects through funding and mentoring is one way to foster equitable partnerships."

Working individually or in teams, this year's fellows are working on a vast array of important and impactful community-based projects, including coordinating the Y-G PRC's COVID-19 "strategies that work" assessments in New Haven and the Lower Naugatuck Valley, supporting the implementation of a virtual Diabetes Prevention Program as part of the Y-G PRC's core research study, developing an evaluation protocol for the Greater Waterbury Food Resource Committee in collaboration with the United Way of Greater Waterbury, and supporting the evaluation of CARE's New Haven Health Leaders and Community Research Fellows programs, among other projects.

The weekly reflection sessions, facilitated by Sofia Morales, MPH, Program Manager of Research and Evaluation (CARE/Y-G PRC) and Marquita Taylor, PhD, Assistant Director, Health Equity Leadership Programs (CARE), are an important part of the program, and serve as an opportunity for fellows to contextualize the work they are doing. "The Health Equity Fellowship program centers community work, while also creating space for students to engage in critical reflective practice," said Morales. "We are simultaneously developing a public health workforce that is skilled and experienced, as well as leaders who are thoughtful and authentic in the work they do. These students are attaining crucial tools and skills to continue championing equity throughout their careers and their lives."

For more information about this program, contact PRC Co-Director Kathleen O'Connor Duffany at Kathleen.oconnorduffany@yale.edu.

LET'S STAY IN TOUCH

To let us know what you are doing and how our research might assist you in your work, contact PRC Co-Director Beth Comerford, MS at beth.comerford@yalegriffinprc.org.

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