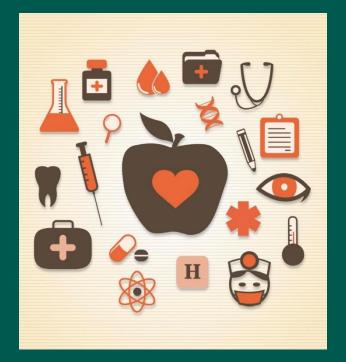


Department of Family Medicine and Public Health Sciences

# Department of Family Medicine and Public Health Sciences Research Day

Margherio Conference Room Mazurek Education Commons Detroit, MI April 17, 2019





Welcome to the Department of Family Medicine & Public Health Science's third annual Departmental Research Day. During today's event, you will hear from our keynote speaker on the topic of behavioral health across the criminal/legal continuum. In addition, we have oral and poster presentations from our faculty, BSPH and MPH students, residents (family medicine, transition year), and medical students whose research work was conducted or is ongoing in the department.

Thank you for attending and we hope you find the day informative.

Tsveti Markova, MD, FAAFP

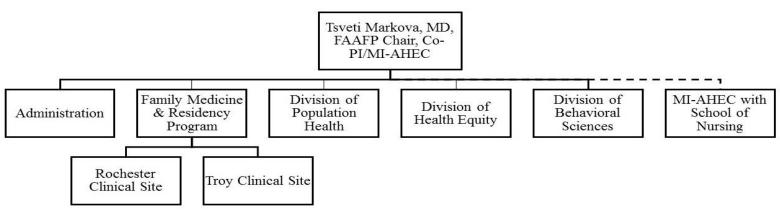
#### About Us

Organized in the 70's in response to legislative recognition of the need for more physicians to practice Family Medicine in Michigan, our department has grown significantly over time. It is now a home to more than 40 physician and PhD faculty members, and more than 250 voluntary faculty, engaged in research, education and clinical care. Family Medicine as a specialty is committed to providing personalized, front-line medical care to people of all socioeconomic strata, delivering the majority of care for America's underserved rural and urban populations.

The Department of Family Medicine and Public Health Sciences at the Wayne State University School of Medicine upholds and furthers its legacy through a commitment to excellent patient care, rigorous medical education and groundbreaking research. Many faculty and students are engaged in research on health equity and disparities, including studies on cancer, heart disease, asthma, obesity, HIV, and maternal and child health. This work is primarily focused on metropolitan but includes work nationally and internationally. Our faculty are active in medical education both in the undergraduate and residency levels at the School of Medicine. We also lead the WSU Master's in Public Health program. Our department prides itself on being respectful of diversity, embracing all aspects of health and well- being. We exhibit academic excellence and high-quality care, student success at every level, research innovations to further community health and philanthropic partnerships to secure the future.

#### Our Mission

The Department of Family Medicine and Public Health Sciences will promote health equity and well-being of individuals, families, and communities. We improve health and well-being by advancing the science and practice of Family Medicine and Public Health through innovation, interdisciplinary collaboration, and excellence in partnership with our communities.





#### DFMPHS Research Day Agenda April 17, 2019 8:00 AM – 12:00 PM Margherio Conference Room, Mazurek Education Commons

8:00-8:30 AM	Continental Breakfast, Networking, and Paper Poster Viewing	
8:30-8:40 AM	Call to Order	Michael McLeod, JD, MPH Assistant Professor, Department of Family Medicine & Public Health Sciences
8:40-8:45 AM	Welcome	Tsveti Markova, MD, FAAFP Chair and Professor, Department of Family Medicine & Public Health Sciences Associate Dean for Graduate Medical Education & Designated Institutional Official
8:45-9:15 AM	"Understanding Behavioral Health Across the Criminal/Legal Continuum: What Practitioners Need to Know"	Sheryl Kubiak, PhD Dean and Professor, School of Social Work Director of the Center for Behavioral Health and Justice
9:15-9:45 AM	<ul> <li>Student/Resident Awards and Oral Presentations</li> <li>"Improving health equity through fostering obesity management strategies in an urban Family Medicine residency clinic"</li> <li>"Improving Resident Wellness Through a Formal Wellness Curriculum: Preliminary Findings"</li> </ul>	Blake Sanford (MD/MPH Candidate) Michael Duarte, MD (Medical Resident)
9:45-10:30 AM	Break and Strolling Poster Presentations	
10:30-10:45 AM	Presentation of the John B. Waller Jr., DrPH and Menthele (Mikki) Waller Endowed Scholarship for Master of Public Health	Avis Randle, BA, MBS (MPH Candidate) Academic Advisor: Dionyssios Tsilimingras, MD, MPH
10:45-11:00 AM	Presentation of US Excellence in Public Health Award by Captain Gregory Scherle, MD	Daniel Kaisler (MD/MPH Candidate) Academic Advisor: Juliann Binienda, PhD



11:00-11:05 AM	Presentation of the 2019 North American Primary Care Research Group (NAPCRG) Student Research Award	Blake Sanford (MD/MPH Candidate) Academic Advisor: Juliann Binienda, PhD
11:05-11:20 AM	Presentation of the 2019 MPH Essay Contest Award "Policy Must Treat Addiction as a Disease, Not a Crime"	Blake Sanford (MD/MPH Candidate) Academic Advisor: Juliann Binienda, PhD
11:20-11:50 AM	"HIV Prevention and Care Continuum Research with Youth and Young Adults Using a Community Engagement Approach"	Angulique Outlaw, PhD Associate Professor, Department of Family Medicine & Public Health Sciences
11:50-12:00 PM	Announcement of Poster Awards & Closing Comments	Elizabeth Towner, PhD Assistant Professor, Department of Family Medicine & Public Health Sciences



## **Oral Presentations**

Of all abstracts submitted for the 2019 DFMPHS Research Day, two were selected by the Research Day Committee as excellent overall abstracts. These two student authors are awarded with the opportunity to deliver an oral presentation and a certificate of excellence for their outstanding work.

**Title**: Improving health equity through fostering obesity management strategies in an urban Family Medicine residency clinic

Authors: Blake Sanford, B.S., Ameen Masoodi, M.D., Rajni Parmar, M.D./M.P.H., Fatin Sahhar, M.D.

Research Mentor(s): Dr. Fatin Sahhar

**Hypothesis/Statement of Problem/Background**: The city of Detroit, MI has a disproportionately high obesity rate and Family Medicine practitioners play an important role in obesity prevention and management. The purpose of this study is to assess the impact of an interactive obesity management didactic series at a Family Medicine Residency Program in Detroit on resident knowledge and preparedness to counsel and manage patients experiencing obesity.

**Methods**: Residents at a Family Medicine Residency in Detroit, MI were asked to complete 16-item survey before and after an interactive obesity management didactic session that discussed nutrition counseling, the relationship between obesity and health equity, and medical management of obesity. Ten items were multiple choice and true/false questions designed to assess resident knowledge and five were based on a Likert scale in which participants would assess their level of comfort with performing obesity management strategies.

**Results**: Ten residents completed both the pre and post surveys. The average scores for the ten-question multiple-choice and true/false section of the survey were 49% on the pre survey and 68% on the post (p<0.05). For each of the six questions about how prepared residents feel to manage patients with obesity, no statistically significant difference was noted between the pre and post survey

**Conclusion/Discussion/Future Research**: Residents showed an overall increase in knowledge after the didactic session but did not feel more prepared to manage overweight and obese patients. A longitudinal obesity management curriculum that focuses on applying management techniques to patient management may be more effective in preparing residents.

**Public Health Implications**: Family medicine physicians play an important role in lifestyle counseling for obese patients and those at risk for obesity. The results of this study can inform obesity management curricula at family medicine training programs and promote health equity by reducing rates of obesity.

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Acknowledgement of Funders: N/A Email Address of Primary Author: bsanford@med.wayne.edu Email Address of Mentor: fsahhar@med.wayne.edu



Title: Improving Resident Wellness Through a Formal Wellness Curriculum: Preliminary Findings

Authors: Michael Duarte MD, Tess McCready DO, Elizabeth Towner PhD

Research Mentor(s): Dr. Elizabeth Towner

**Hypothesis/Statement of Problem/Background**: Physician suicide, depression, and burnout are at an all-time high. A Wellness Curriculum, co-developed by residents and clinical faculty, is currently being implemented within the Wayne State Family Medicine (FM) and Transitional Year(TY) Resident Programs. This evaluation explores implementation of this curriculum and its impact on resident wellness in the first 6 months.

**Methods**: The Wellness Curriculum includes: 1) monthly wellness events outside of work, 2) structured wellness breaks (30-45 minutes) during didactic blocks, and 3)a wellness library of books and games. Feasibility and acceptability of curriculum components are measured by 1) attendance and frequency of wellness events and didactic breaks and 2) a log of books and games checked out of the library. Residents anonymously completed The Wayne State University Resident Wellness Scale at baseline (T1) and 6-months (T2). The Wellness Scale includes 10 items with response choices of 1 (never) to 5 (very often) and produces a Total and two subscale (Self-Care and Meaningful Work) scores. Total Score < 3.5 suggests wellness deficiency. Changes of +0.4 were considered meaningful. Responses were examined for all residents and by sex, cohort (FM only), and program.

**Results**: Five wellness events (mean attendance=52%) and 4 wellness breaks (attended by 100% of residents expected) occurred. Five residents checked out items from the Wellness Library. Total Wellness score remained consistent and above the threshold for deficiency for residents and irrespective of sex or cohort. Female and TY residents reported decreases in Meaningful Work of 0.5. Self-Care increased 0.4 for TY and second year FM residents but decreased by 0.6 for third year FM residents.

**Conclusion/Discussion/Future Research**: While early in its implementation, our data suggest our curriculum is feasible to implement but improvements are needed to increase acceptability. Exploration of factors that decreased Meaningful Work and Self-Care reported by some subsets is also needed.

**Public Health Implications**: Physicians are more than twice as likely to commit suicide than non-physicians. Depression rate among first year residents increase 20% by the end of their first year. This project attempts to reduce the rate and improve the well-being of residents. Some aspects of this project may be utilized to evaluate wellness in other populations outside of medicine.

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Acknowledgement of Funders: N/A Email Address of Primary Author: gl2265@wayne.edu Email Address of Mentor: ekuhl@med.wayne.edu



## **Poster Presentations**

**Title**: The Effect of Food Assistance Program Participation on Dietary Quality and Obesity in Preschoolers from Detroit

Authors: Shraddha Jadhav, Riya Chhabra (presenting author), Kristine Durkin, Kobra Eghtedary, Mark Greenwald, & Elizabeth Towner

#### Research Mentor(s): Dr. Elizabeth Towner

**Hypothesis/Statement of Problem/Background**: Lack of access to healthy foods is a suggested risk-factor for childhood obesity. Emergent evidence suggests that food assistance programs may have a differential impact on dietary quality in young children. The purpose of this study was to examine how food assistance programs impact dietary quality and weight status in preschoolers from low-income backgrounds.

**Methods**: Caregiver-preschooler dyads (n=33, 88% African American) were recruited from WIC clinics in Detroit. Caregivers self-reported whether they received SNAP benefits and preschooler dietary intake over the past week.

**Results**: Seventy percent of preschoolers received WIC+SNAP benefits. Higher rates of obesity were observed for preschoolers who received WIC+SNAP benefits (52%) than for preschoolers who received WIC benefits only (40%; NS). Preschoolers consumed similar amounts of fruits, vegetables, whole grains, legumes, saturated fat, teaspoons added sugar, sugary drinks, dairy, sodium, and meat/poultry/fish regardless of whether they received WIC+SNAP benefits or WIC benefits only. For the sample overall, preschoolers were within recommended levels for all areas of diet assessed except for intake of dairy and whole grains, which were significantly lower than recommendations (both p<.001). In our sample of predominantly African American preschoolers living in Detroit, dietary quality and obesity prevalence were not related to whether they received WIC+SNAP benefits or only WIC.

**Conclusion/Discussion/Future Research**: Future research is needed to continue examining how food assistance and other social determinants of health may impact weight status in young children at a heightened risk of obesity.

**Public Health Implications**: Moving forward, it would be helpful to keep such differences in mind while creating or modifying government run food assistance programs in order improve family health by lowering childhood obesity.

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Acknowledgement of Funders: Targeted Research Award Grant Program, Society of Pediatric Psychology Email Address of Primary Author: gi0743@wayne.edu Email Address of Mentor: ekuhl@med.wayne.edu



**Title**: Healthcare Discrimination Experienced by LGBTQ Patients: Preliminary Results of the Corktown Health Center Community Health Assessment

Authors: Nicholas Cook, Shoshana Krohner, Chelsea Harmell, Leseliey Welch, Eric Kessell

#### Research Mentor(s): Dr. Leseliey Welch

**Hypothesis/Statement of Problem/Background**: Corktown Health Center is Michigan's first medical home dedicated to addressing the health needs of the lesbian, gay, bisexual, transgender, and queer (LGBTQ) community. Recent national reports have illuminated the health needs and wide spread discrimination faced by members of the LGBTQ community (1, 2). A community health needs assessment was completed by Corktown Health Center to better understand and serve the LGBTQ community in southeast Michigan.

**Methods**: The health needs assessment was developed by a multidisciplinary team and assessed domains including health-care utilization, access to LGBTQ affirming healthcare, discrimination, and general health. Community-based focus groups provided feedback and contributed to the survey development. The survey was administered primarily online and was also available in paper format at Corktown Health Center. The survey consisted of approximately 70 questions and completion time was estimated to be 15-20 minutes.

**Results**: 122 respondents completed the survey online. Approximately half of respondents reported experiencing health care discrimination due to their sexual orientation or gender identity. 48% of respondents reported delaying seeking medical care due to their LGBTQ identity. Of patients with a primary care provider, only 57% reported that their health care needs were adequately addressed. 66% of patients who reported engaging in mental health treatment also reported that the therapist was affirming of their identity.

**Conclusion/Discussion/Future Research**: Healthcare discrimination was a common among respondents, such as being denied medical therapy or being treated differently due to LGBTQ identity. Delays in seeking health care and difficulty finding LGBT affirming health care were also prevalent concerns.

**Public Health Implications**: Increased understanding of the LGBTQ community in southeast Michigan is essential to better serve the health needs of this population. Awareness of negative experiences with health care providers is a critical step in providing LGBTQ competent care. Efforts to better educate healthcare professionals on LGBTQ-affirmative care is necessary to properly address LGBTQ health needs and reduce substantial health disparities experiences by this population.

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Acknowledgement of Funders: Corktown Health Center Email Address of Primary Author: njcook@med.wayne.edu Email Address of Mentor: welchl@umich.edu



**Title**: A Multi-Site Study of Social Cognitive Factors Related to Adherence Among Youth Living With HIV in the New Era of Antiretroviral Medication

Authors: Veronica Dinaj-Koci, PhD Bo Wang, PhD Sylvie Naar-King, PhD Karen Kolmodin MacDonell, PhD, Adolescent Medicine Trials Network for HIV/AIDS Interventions

Research Mentor(s): Dr. Karen Kolmodin MacDonell

**Hypothesis/Statement of Problem/Background**: The goal of the current study was to determine how a set of social cognitive factors predict antiretroviral therapy (ART) medication adherence in youth living with HIV in an era of newer highly active ART medications using a conceptual model.

**Methods**: Behaviorally infected youth living with HIV ages 13-24 (N = 822) from 14 sites within the Adolescent Medicine Trials Unit (AMTU) were included in the study. Structural equation modeling was used to explore predictors of ART medication adherence.

**Results**: Results found that motivational readiness for ART was related to higher ART medication adherence, which was associated with lower viral load. Higher social support and higher self-efficacy had an indirect relationship with higher adherence through increased motivational readiness. Fewer psychological symptoms were associated with higher social support and higher self-efficacy. Lower substance use was directly associated with lower adherence.

**Conclusion/Discussion/Future Research**: The results provide insight into factors that may be related to adherence in youth living with HIV. Findings suggest focusing on motivational readiness to increase adherence. Improving the patients' ART self-efficacy and strengthening their social support networks during treatment can increase motivational readiness for ART treatment. Furthermore, programs maybe more effective with the inclusion of risk reduction components especially those related to substance use.

**Public Health Implications:** 

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Acknowledgement of Funders: Funding This work was supported by The Adolescent Trials Network for HIV/AIDS Interventions (ATN) from the National Institutes of Health [U01 HD 040533 and U01 HD 040474] through the National Institute of Child Health and Human Development (B. Kapogiannis)], with supplemental funding from the National Institutes on Drug Abuse (N. Borek) and Mental Health (P. Brouwers, S. Allison). Email Address of Primary Author: vkoci@med.wayne.edu Email Address of Mentor: kkolmodin@med.wayne.edu



Title: Living in the Shadow of Detroit Renewable Power

Authors: Doubrovski O, Holsey V, Noor MI, Wilson D, Jordan D, Campbell-Voytal, K

Research Mentor(s): Dr. Kimberly Campbell-Voytal

**Hypothesis/Statement of Problem/Background**: In the past five years, Detroit Renewable Power has violated the federal Clean Air Act over 700 times, including failure to monitor sulfur dioxide, carbon monoxide, and nitrous oxides. Toxic emissions from waste incinerators exacerbate the symptoms of acute respiratory episodes, asthma, and COPD. Detroit Renewable Power is in zip code 48211, where the crude prevalence rate of COPD is 15.5% and 14.7% for asthma. The crude prevalence of COPD within this specified area is higher compared to the crude prevalence rates of 11.3% for the entire city of Detroit, 8% for the state of Michigan, and 6.5% for the United States. The crude prevalence of asthma is 8.9% in the United States, whereas it is 14% in the city of Detroit. The differences in respiratory disease rates that are embodied by Detroit residents could be attributed to the industrialized city plan. More than 90% of the senior residents living less than a mile away from the incinerator in City View Apartments suffer from respiratory diseases, according to the Residential Coordinator. The purpose of this study was to describe the attitudes and beliefs of senior residents about the incinerator and perceived impacts on health and quality of life.

**Methods**: Using the Ecosocial theory, three Community Discussion forums were held with seniors, called "Tea, Cookies, and Conversation," in March and April 2019. Public comments at each forum were recorded and transcribed. Transcripts were content analyzed through an iterative process of reading, discussion, and interpretation.

**Results**: Twenty residents attended the first forum to discuss air quality and how the incinerator has impacted the health, lifestyle, and social interaction of the residents. During a second "next steps" forum, fifteen residents signed letters addressed to the mayor, calling for action to shut down the incinerator. Residents were provided with information to report incinerator related complaints and to attend environmental justice related events. Attitudes and opinions on the shutdown of the incinerator that occurred late March were expressed during the final forum. Policies pertaining to air quality in Detroit were examined. A Breathe Free Detroit representative spoke about zero waste practices and opportunities to get involved.

**Conclusions/Discussions/Future Research**: The results of the study reveal that the seniors are aware of the damage the incinerator has on their health and are motivated to voice their opposition against the incinerator. We intend to maintain a community-engaged research relationship with the seniors and continue to build upon community awareness and agency.

**Public Health Implications**: Residents of City View Senior Apartments have expressed interest in the WSU MPH program maintaining a relationship with the building. This established relationship will allow new students to continue working with the seniors living in 48201. Community health and wellbeing will continue to be prioritized and supported through this collaboration.

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Acknowledgement of Funders: N/A Email Address of Primary Author: oksana.doubrovski@wayne.edu Email Address of Mentor: kvoytal@med.wayne.edu



**Title**: Examining Barriers to the Implementation of Evidence Based Practices in HIV Treatment and Prevention Clinics

Authors: Habeba Elmadawy; April Idalski Carcone, PhD; Karin Coyle, PhD; Sylvie Naar, PhD

#### Research Mentor(s): Dr. April Idalski Carcone

**Hypothesis/Statement of Problem/Background**: Implementation of interventions for young men who have sex with men (YMSM) is critically important because youth ages 13-24 accounted for 26% of new HIV infections between 2003 and 2014 (Zanoni BC, Mayer KH). This project is using the Exploration-Preparation-Implementation-Sustainment (EPIS) Model to study the implementation of evidence-based practices (EBPs) into 13 HIV treatment and prevention sites across the US. The goal of this cross-sectional study is to examine key stakeholders' perceptions of consumer and community needs prior to EBP implementation.

**Methods**: The current study is using a multiple cross-sectional design with data collected at three critical periods – pre-implementation (or *Preparation*), post-*Implementation*, and *Sustainment*. This report focuses on the pre-implementation phase. Trained interviewers conducted semi-structured qualitative interviews by phone. Interviews were professionally transcribed and coded by three coders using a code scheme that operationalized EPIS constructs. Inter-rater reliability was assessed on a randomly selected 30% of interviews using Cohen's kappa (k=0.791). Data assigned to the Consumer/community needs node were analyzed for common barriers that could affect EBP implementation.

**Results**: The main barrier being consistently mentioned was that HIV care is not the patients' first priority due to competing psychosocial needs. Many patients that receive care at these HIV clinics come from low socioeconomic status, so many of them struggle with homelessness or lack of secure housing. The issue of stigma is another barrier addressed by multiple stakeholders. The population at risk and/or undergoing care often faces stigma and discrimination based on race, ethnicity, gender, or sexual identity. This stigma may make it more difficult to implement interventions into people's lives because of fear of other people finding out.

**Conclusion/Discussion/Future Research**: The barriers identified through these interviews suggest consistent HIV care may suffer due to competing demands. Understanding these barriers helps EBP implementers better understand the intervention delivery context to proactively address known barriers. The role these issues pose for the EBPS being implemented will be investigated in future interviews. This is the first study to use the EPIS model to study EBP implementation into HIV prevention and care services making it an example for further studies.

**Public Health Implications**: While the rate of HIV in the general population is decreasing, it is increasing in the youth of the US. Lack of proper interventions to decrease the number of cases and to help care for those with HIV poses an immense risk to this population and to the US as a whole.

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Acknowledgement of Funders: This research was funded by the National Institute of Child and Human Development (U19HD089875; Naar

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**Title**: Increasing the compliance of input and output documentation in patients with decompensated heart failure: a quality improvement initiative

Authors: Brian Benenati, MD Victor Chukwueke, MD Sakeena Fatima (presenting author), MD Kristi Wu, MD Amy Zavell, MD

#### Research Mentor(s): Dr. Pierre Morris

**Hypothesis/Statement of Problem/Background**: In the United States, heart failure (HF) exacerbation accounts for a significant portion of patients that are hospitalized with an annual cost of over \$21 billion. HF causes fluid buildup in patients, thus monitoring fluid intake and output (I&O) is critical to tracking clinical improvement. Previously we found that providing education to nursing staff increased I&O documentation from 23% to 72%. Documentation increased further to 79% when reminder signs were placed in patient rooms. This next phase of our quality improvement initiatives examines whether providing both interventions simultaneously, could further improve outcomes to our targeted goal of 85%.

**Methods**: Information pamphlets were made for nursing staff and patients, and documentation reminder signs were hung on wipe boards in patient rooms. Data was collected from HF patients during a one-month period and compared to a baseline of I&O measurements in the preceding month. Successful documentation was defined as record of both I&O during a 12-hour shift.

**Results**: Baseline measurement revealed a 25% decrease in I & O documentation since our last assessment 10 months prior. Following implementation of the current intervention, I&O documentation decreased further from 54% to 50%.

**Conclusion/Discussion/Future Research**: Documentation of I&O decreased from previous PDSA cycles, even though strategies applied were successful previously. Reasons for this inconsistency are not clear. Discussion with nursing staff regarding ways to improve intervention efficacy such as incorporation of EMR reminders will be pursued to inform future work.

**Public Health Implications**: Approximately 6 million adults in the United States have heart failure, resulting in 11% of all deaths nationally.<sup>1</sup> More than 20% of patients hospitalized with CHF are readmitted within 30 days, and up to 50% by 6 months.<sup>2</sup> With proper documentation of the I&O status of HF patients, readmission rates could be significantly reduced, resulting in decreased length of stay and better outcomes.

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Acknowledgement of Funders: N/A Email Address of Primary Author: bbenenat@med.wayne.edu Email Address of Mentor: pmorris@med.wayne.edu



**Title**: Assessing Facial, Thermal, and Eye Discomfort, Acceptability and Perceived Protective Efficiency of Powered Air-Purifying Respirators (PAPRs) In Simulated Healthcare Work Settings: Verbal User Feedback

**Authors**: A. Haidar, Y. Liu, Wayne State University, Detroit, MI S. Raynaud, B Southworth, L Jacobs, S. Batra, J Hood, E. Shulz X. Cook Children's Hospital, Fort Worth, TX He, S. Chen, S. Trivedi, D. Sterling, University of North Texas Health Science Center, Fort Worth, TX, X He, West Virginia University, Morgantown, WV

#### Research Mentor(s): Dr. Youcheng Liu

**Hypothesis/Statement of Problem/Background**: Little has been investigated subjectively on the acceptability, usability, comfort and perceived effectiveness of PAPRs. This study was to 1) determine comfort and user barriers between PAPRs and N95 respirator and among different PAPR models; 2) determine preference, acceptability and perceived difference of different respirators (PAPR vs N95 respirator or different PAPR models) based on user feedback.

**Methods**: Forty healthcare workers from Cook Children's Hospital at Fort Worth, TX were selected to wear four types of tight-fitting PAPRs and N95 respirator during the performance of a series of simulated healthcare work tasks. A questionnaire survey was conducted to seek subjects' verbal comments on PAPRs and N95 respirator. The results were summarized based on the advantages and disadvantages of each type of respirator after ranking the frequency of each type of comments.

**Results**: For advantages, MAX showed more comforts including easy to put on, comfortable, light weight with a small battery, less noisy with good airflow, and fits stethoscope well. 3M showed the best visual look, airflow, and considered most comfortable. EVA and SEN showed few advantages. For disadvantages, 3M showed fewer discomforts including being too loud and causing eye discomfort secondary to its high air flow, as well as belt discomfort. MAX, EVA, and SEN showed more discomforts. MAX showed the most frequent discomfort is the high airflow and belt restraints. For EVA, the most noted discomfort was high airflow. High frequency discomforts of MAX are that it's heavy, loose, and falls easily. For SEN, the most prominent discomforts were eye shield glare, high noise, and bulkiness. In contrast, N95 respirator has fewer discomforts except for being too tight

**Conclusion/Discussion/Future Research**: N95 respirator is more comfortable than PAPRs. Among PAPR types, 3M is more comfortable with fewer complaints.

**Public Health Implications**: The evaluation feedback from healthcare workers can be useful in future PAPR design and should be considered by PAPR users for routine healthcare or during public health disasters and pandemics.

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Acknowledgement of Funders: This study was funded by a contract from the U.S. Centers for Disease Control and Prevention (Contract#: 200-2015-M-63768). Email Address of Primary Author: fw1558@wayne.edu Email Address of Mentor: gn9147@wayne.edu



Title: Community Health Assessment of Corktown and Mexicantown

Authors: Daniel Kaisler

Research Mentor(s): Dr. Juliann Binienda

**Hypothesis/Statement of Problem/Background**: The Robert R. Frank Student Run Free Clinic opened in the summer of 2010 and has been providing free health care services to the people of Detroit since. While accomplishing this goal, the SRFC has provided educational experiences to medical students. Currently the SRFC shares space with the Mercy Primary Care Center on the east side of Detroit. This year, the SRFC will be moving across Detroit to a new location to share space with the St. Frances Cabrini Clinic.

**Methods**: Demographic information was collected from the 2017 American Community Survey. A windshield survey of the general area was conducted. An interview with the Executive Director of the Cabrini Clinic was held. A 2016 public health survey was reviewed for information as well. Recent literature was evaluated for deeper insight into issues that emerged. Finally, this data was critically evaluated and formed into several key points and recommendations for SRFC leadership to consider as they move the SRFC and begin seeing patients in the new location.

**Results**: Members of these communities are younger, more likely to be Hispanic, have lower income, educational attainment, and rates of insurance coverage than people in other parts of Detroit. These neighborhoods have new development, old well-maintained structures, and blight. Mexicantown is unique in its Hispanic culture. Restaurants and industry are plentiful. Challenges to these areas include undocumented status of immigrants, language barriers, mental health, and substance abuse. Strengths include community resources and family and community values.

**Conclusion/Discussion/Future Research**: The SRFC will face changes as it moves, and preparation for these changes will ensure successful adaptation. These communities face many health challenges but have many resources that enable health. With a basic understanding of these communities, the SRFC can begin to provide compassionate, effective, and culturally competent care to patients.

**Public Health Implications**: Delivering competent clinical care requires an understanding of each patient as a product of his or her environment and culture. Clinicians need a big picture view before they can understand the individual patient.

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Acknowledgement of Funders: N/A Email Address of Primary Author: dkaisler@med.wayne.edu Email Address of Mentor: aa7654@wayne.edu



**Title**: Quality Improvement Initiative to Increase Use of a Validated Developmental Disability Screening Tool During Well-Child Visits

Authors: Gypsa Katoch MD, Hassan Baiz MD, Benjamin Maynard MD, Bradford Woelke MD, Elizabeth Towner PhD, Tess McCready DO

Research Mentor(s): Dr. Elizabeth Towner

**Hypothesis/Statement of Problem/Background**: One in six children have a developmental disability and many go undiagnosed until school age. In 2018, we launched a quality improvement initiative to increase use of the Ages & Stages Questionnaire (ASQ), a validated developmental screening tool, during well-child visits with children ages 2 months-5 years seen by residents in our family medicine clinic. In our first PDSA cycle, educating residents and asking caregivers to complete the ASQ at check-in increased its use from 8% to 32%. Incomplete and unscored questionnaires were cited as barriers to higher utilization. Our second PDSA cycle examines whether a) mailing screeners prior to appointments and b) having medical assistants score screeners prior to the clinical encounter additionally increases ASQ utilization rates.

**Methods**: The ASQ didactic was repeated with residents. Front-desk staff were asked to mail ASQs to patients in the targeted age-range 3> days prior to appointments. Caregivers were asked to complete the questionnaire on-site if one was not returned. Medical assistants (MAs) were trained in ASQ scoring.

**Results**: 21 well-child visits occurred during the 2-month intervention period. ASQs were mailed to 57% (n=12) of families; 83% (n=10) were completed prior to arrival to office and returned at visits. An additional seven ASQs were completed in the waiting room. Barriers to mailing ASQs to the remaining nine families included: timing of when appointments were scheduled [day before/same day as appointment (n=5) and unknown reason (n=4)]. MAs scored 82% (n=14) of completed ASQs. Residents documented reviewing ASQ during 81% (n=17) of all well-child visits within the intervention period, representing a 49% increase from the previous PDSA cycle.

**Conclusion/Discussion/Future Research**: Advanced mailing and MA scoring may improve utilization of the ASQ to screen for developmental disabilities.

**Public Health Implications**: Consistent use of validated developmental screening tools like the ASQ may have a positive impact.

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Acknowledgement of Funders: N/A Email Address of Primary Author: gkatoch@med.wayne.edu Email Address of Mentor: ekuhl@med.wayne.edu



#### Title: Detroit HEARTBeat 2: Prospective Design for a Community-Based Randomized Controlled Trial

Authors: Cardell Louis, Gwyneth Finney, William Costello

Research Mentor(s): Dr. Julie Gleason-Comstock, Dr. Timothy Spannaus

**Hypothesis/Statement of Problem/Background**: Heart disease is considered largely preventable as many risk factors are determined by lifestyle. The American

College of Cardiology (ACC)/American Heart Association (AHA) recently updated recommendations for blood pressure (BP) target goals, lowering the adult threshold from 140/90 to 130/80, with increased focus on behavioral modifications. African-Americans have the highest prevalence of hypertension in the United States, as well as consistently lower rates of successful BP control than White and Hispanics. The aim of this study, DetroitHEARTBeat, is to provide a prospective design for a community-based randomized controlled trial (RCT) on BP control. We hypothesize the Intervention group will have lower BP readings, an increase of follow-up visits with "normal" BP readings, and an increase in lifestyle behaviors.

**Methods**: Using the Information-Motivation-Behavior framework and Consolidated Standards of Reporting (CONSORT) guidelines, DetroitHEARTBeat is proposed as a behavioral RCT that will screen 300 adults with uncontrolled BP to enroll 200 participants (randomized to 100 participants per group). The target sample size per study arm was calculated based on an 80% statistical power analysis to account for patients lost to 12-month follow-up. At-risk Detroit adults will be recruited by Community Health Awareness Group (CHAG). Both groups will receive BP lessons and a risk reduction plan. The intervention group will receive a nurse case manager with monthly BP readings and group sessions. Follow up will be conducted at three, six, and twelve months to assess objective physical changes and participant knowledge. Data collection using an electronic protocol has been presented to CHAG and pilot tested.

#### **Results**:

**Conclusion/Discussion/Future Research**: The proposed study is unique in that it is an RCT conducted by public health researchers in partnership with an African-American community-based organization to address heart health and BP control.

#### Public Health Implications:

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Acknowledgement of Funders: Wayne State University School of Medicine Cardiovascular Research Institute Partners Grant Email Address of Primary Author: calouis@med.wayne.edu Email Address of Mentor: jgleason@med.wayne.edu



**Title**: General Mindfulness Differentially Predicted by Male and Female Exercisers' Perceptions of Motivational Climate and Goal Orientations

Authors: Kristen Lucas, E. Whitney G. Moore

Research Mentor(s): Dr. Whitney Moore

**Hypothesis/Statement of Problem/Background**: Extending upon Iwasaki and Fry's (2016) study, where the connection between adolescent female athletes' mindfulness and their perceptions of goal orientations and motivational climates were examined, the connections between mindfulness, goal orientations, and motivational climate perceptions were examined among exercisers. We hypothesized a positive relationship between mindfulness and caring, task-involving climates, and task goal orientations, and a negative relationship between ego-involving climate and ego goal orientations.

**Methods**: Participants (N = 324, 62% women) were surveyed six weeks into their group exercise classes on their perceptions of the class climate (caring, task-involving, and ego-involving), goal orientations (task and ego), and general mindfulness. Participants were administered the Abbreviated Perceived Motivational Climate in Exercise Questionnaire, Caring climate Scale, Task and Ego Orientations in Sport Questionnaire, and Mindful Attention Awareness Scale.

**Results**: Separate linear regressions for men and women were run to determine if exercisers' perceptions of the motivational climate and their goal orientations predicted general mindfulness. Similar to previous research, ego goal orientation did not significantly predict mindfulness. In contrast to previous research, the regression model for women exercisers was not significant, and predicted only 2.3% of general mindfulness variance. However, 9.6% of general mindfulness variance was predicted for men by the significant regression model.

**Conclusion/Discussion/Future Research**: Men's perceptions of the caring climate and their task goal orientation were similarly important positive predictors of mindfulness. Women's perceptions of the task-involving climate was the only moderately positive predictor of mindfulness. Future directions should focus on understanding differences in perceptions of the climates and goal orientations between athletes and exercisers, and implementing teaching strategies that emphasize participants' mindfulness during exercise class, as well as transferring those mindfulness lessons from the exercise context to other life contexts.

**Public Health Implications**: By fostering a caring climate, exercise instructors have the potential to increase their participants' general mindfulness, an important avenue for positively affecting participants' quality of life and improving mental health.

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Acknowledgement of Funders: N/A Email Address of Primary Author: ft0793@wayne.edu Email Address of Mentor: whitneymoore@wayne.edu



**Title**: "Active Surveillance" vs. "Watchful Waiting" in prostate cancer in the Treatment Options for Prostate Cancer Study (TOPCS)

Authors: Margot Oliver, Cathryn Bock, PhD, James Janisse, PhD, Michael Goodman, MD, Elaine Brockman, MPH, Kendra Schwartz, MD, Jinping Xu, MD

#### Research Mentor(s): Dr. Jinping Xu

**Hypothesis/Statement of Problem/Background**: To describe factors influencing treatment choice in men with newly diagnosed, low-risk, localized prostate cancer (LPC), particularly in those who choose observation over immediate treatment. There are two types of observation: 'Watchful Waiting' (WW) uses palliative therapy when progressive prostate cancer symptoms appear; 'Active Surveillance' (AS) emerged in the 1990s as an initial strategy of close monitoring prior to curative treatment for those with signs of cancer progression.<sup>1</sup> Traditionally the terms were used interchangeably, but increased use of AS has led to a clear demarcation. Our aim is to determine the role of self-perceived life expectancy and socio-economic factors in the patient's treatment choice and in their urologist's recommendations for treatment.

**Methods**: The study identified and surveyed patients with low-risk LPC within 3-4 months of diagnosis through cancer registries in Detroit and Georgia, at baseline and 2 year follow-up.

**Results**: Among respondents preferring observation, the majority chose AS. Those who chose WW tended to be older, have lower education levels, lower income, were more likely to be on Medicare, be retired, on disability, or be black. Those who chose AS had increased self-perceived life expectancy with treatment, and were more likely to be employed full-time. Patients generally chose the treatment their urologist recommended. Eligibility criteria for WW and AS commonly suggest that men with shorter life expectancies (<10 years) should receive WW over AS.<sup>2</sup> Reported urologist recommendations were more likely to be WW for older patients, but there was no significant difference in recommendation of WW vs. AS based on the patient's self-perceived life expectancy of greater or less than 10 years.

**Conclusion/Discussion/Future Research/Public Health Implications**: Due to the lack of clear separation of these two methods in the past, it is possible that some patients were self-identifying incorrectly. Follow-up and medical records will clarify if patients who selected WW are actually on AS and whether efforts should be made by physicians to further clarify the two observational modalities when counseling patients.

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Acknowledgement of Funders: N/A Email Address of Primary Author: moliver@med.wayne.edu Email Address of Mentor: ak1624@wayne.edu



**Title**: Analysis of Influenza vaccination coverage in an urban pediatric asthma population: protocol development

Authors: Sarah Parker, BS; Amy DeLaroche, Alex Hill, Rajan Arora, Julie Gleason-Comstock

#### Research Mentor(s): Dr. Julie Gleason-Comstock

**Hypothesis/Statement of Problem/Background**: Asthma is a common medical condition in children accounting for many unscheduled visits to the emergency department (ED). This chronic disease disproportionately affects children living in poverty, including many African-American children. Children with asthma constitute a high-risk population for complications from influenza. These individuals require focused efforts for vaccine administration to reduce the burden of unexpected medically attended events. The aim of this study is to examine influenza vaccination coverage in pediatric asthma patients with attention to distribution of vaccinated and non-vaccinated cases.

**Methods**: This study will describe the proportion of children identified through an electronic query with a history of asthma or asthma-related symptoms who received an influenza vaccination prior to pediatric ED presentation November 1, 2017-April 30, 2018. State and Institutional Review Boards have approved data use. Immunization records will validate influenza vaccine administration. Aggregated zip code data will undergo geospatial analysis in regards to vaccination status. Further variables of interest include age, race/ethnicity, insurance type, and influenza testing. Analysis will consist of descriptive statistics including univariate and bivariate frequency distributions.

#### **Results**:

**Conclusion/Discussion/Future Research**: Increasing influenza vaccine administration is an attractive option to reduce healthcare-associated costs. Though recommendations support influenza vaccination in children with asthma, the administration rate remains unclear. Geospatial analysis presents a unique opportunity to represent areas of influenza vaccination coverage with impact on the health of the surrounding community

**Public Health Implications**: Opportunities to improve acceptance of vaccine administration in non-traditional settings is a compelling public health priority for pediatric populations. Data obtained may inform community outreach initiatives to improve influenza vaccination.

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Acknowledgement of Funders: N/A Email Address of Primary Author: sparker@med.wayne.edu Email Address of Mentor: jgleason@med.wayne.edu



Title: Assessing and Improving Follow Up In a Residency Based Family Medicine Center

Authors: Marco Peterson, MD, Tarek Chahine, MD, Rehana Siddiqui, MD, Cortney Cole, MD, Philip Riley, MD, Tess McCready, DO, & Elizabeth Towner, PhD.

Research Mentor(s): Dr. Elizabeth Towner & Dr. Tess McCready

**Hypothesis/Statement of Problem/Background**: Timely follow up endorses quality patient care. Within our resident clinic, we found higher rates of follow up if patients scheduled follow-up visits at the end of appointments versus calling to schedule at a later date. A new electronic medical record was implemented in July that includes a feature for physicians to electronically prompt scheduling of follow-up visits at patient check-out. This evaluation explores resident use of the new feature and relation to scheduling of follow-up visits for chronic care patients.

**Methods**: Over a 1-week period, residents completed a brief questionnaire after each patient indicating whether the patient was being seen for a chronic health condition and whether a follow-up appointment was recommended. Front desk staff tracked whether residents used the schedule follow-up visit feature, whether patients scheduled a follow-up visit and barriers if a follow-up was recommended but not scheduled.

**Results**: Follow-up care was recommended for 92% of chronic care patients seen (n=75). The "schedule follow-up visit" feature was utilized in 69% of cases and yielded higher rates of visits being scheduled (than when the feature was not used (17%). Patient refusal and inability to schedule visits 2 months out were the most common barriers to scheduling follow-up visits.

**Conclusion/Discussion/Future Research**: The "schedule follow-up visit" feature appears to be a promising strategy for promoting higher rates of follow up to allow for better continuity of care. Future work is needed to explore interventions to increase resident compliance with using this feature.

**Public Health Implications**: Physician ability to assist and monitor follow up of chronic conditions could lead to overall decreased hospital visits, length of stay, and ultimately financial burden on the public.

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Acknowledgement of Funders: N/A Email Address of Primary Author: mapeterson@med.wayne.edu Email Address of Mentor: tsolansk@med.wayne.edu



**Title**: Lipidomics Profiles are Related to Preterm Birth and Depressive Symptoms in Pregnant African American Women

Authors: Nadia Saadat, MBBS, MS, PhD, ReBUILDetroit-Wayne State University and University of Detroit Mercy; Todd Lydic, Dawn Misra, Carmen Giurgescu

#### Research Mentor(s): Dawn Misra

**Hypothesis/Statement of Problem/Background**: African American women have a higher preterm birth rate (PTB, birth before 37 weeks) compared to non-Hispanic white women. We hypothesized that variations in the Lipidomics profile will be associated with differences in Center for Epidemiologic Studies Depression Scale (CES-D) scores and gestational age at birth.

**Methods**: Thirty women were enrolled between 8 to 16 weeks of gestation, completed questionnaires and EDTA plasma samples were collected. Lipidomics profiles were determined by "shotgun" Orbitrap high resolution/accurate mass spectrometry. The data were analyzed by multivariate analysis using SIMCA P+ software.

**Results**: Orthogonal Projections to Latent Structures Discriminant Analysis (OPLS DA) score plot showed good separation of PTB and full-term birth and a clear separation was also observed in the model for higher and lower CES-D scores. Corresponding S-Plot, loading plot, VIP plot/list were used to identify the lipids responsible for the groupings. Higher levels of specific triglycerides species and lower levels of specific phosphatidylcholines PC(37:1), PC(41:6) and PC(39:3) were associated with PTB. Phosphatidylcholine PC(37:1) levels were also lower among women with CES-D scores  $\geq$  23 and points toward a possible connection between depressive symptoms and PTB. Although the overweight pregnant women group showed higher levels of triglycerides, PTB model showed specific triglycerides unique to PTB.

**Conclusion/Discussion/Future Research**: Our data suggest the role of specific triglycerides and phosphatidylcholines in PTB. Lipidomics profiles in pregnant African American women are also related to depressive symptoms.

**Public Health Implications**: Phosphatidylcholines play an important role during pregnancy and fetal development. Further investigation of triglyceride, choline and phospholipid metabolism will lead to the identification of non-invasive biomarkers of PTB and intervention strategies for pregnant African American women.

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Acknowledgement of Funders: R01MD01157502 & R15MD011465-01 Email Address of Primary Author: nads@wayne.edu Email Address of Mentor: dmisra@med.wayne.edu



Title: Increasing resident physician confidence in proper COPD use

Authors: Starr Whitaker, Lilia Peress, Ashley Aragona, Peter Ly, Zeeshan Sharif (presenting author)

Research Mentor(s): Dr. Pierre Morris

**Hypothesis/Statement of Problem/Background**: Chronic Obstructive Pulmonary Disease (COPD) is a progressive life threatening lung disease that is often under-diagnosed and a major cause of escalating healthcare cost worldwide. Poor inhaler technique and nonadherence impair the efficacy of medications for COPD. Studies have shown that verbal goal-oriented teach-back instructions for patients significantly decreased the likelihood of ED visits, readmissions, or deaths within 30 days after discharge. This highlights the need for physicians to become more comfortable with inhaler prescription in order to effectively teach their patients and reduce readmission rates.

**Methods**: Two educational videos on proper inhaler techniques were shown to Family Medicine and Transitional Year residents. Three brief, concise surveys were administered to all residents before and after viewing the videos, regardless of attendance, with a link to the videos was provided if absent. Baseline knowledge was assessed in the first survey, which was re-administered after watching the introductory video, and a final survey testing knowledge after viewing a video detailing steps of inhaler use.

**Results:** 95% responded to pre-educational survey, 55% rated themselves level 5 or greater for confidence. 50% responded to post-educational survey, 90% rated themselves as level 5 or greater for confidence. After MDI with spacer educational video, 90% of residents completed the post education test. 22.2% correctly listed the 6 steps, 38.8% listed 3/6 steps correctly. Frequent missed answers were within the initiation of inhaler usage. The most common intervention suggestions to improve resident confidence level were education during didactics, videos, brochures and pharmacist demonstration.

**Conclusion/Discussion/Future Research**: The 35% increase in resident confidence level in prescribing inhalers post intervention indicates that PCPs who work with patients who use inhaled medications have an essential role in minimizing patient errors and thereby hospital readmission.

#### **Public Health Implications:**

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Acknowledgement of Funders: N/A Email Address of Primary Author: gl2272@wayne.edu Email Address of Mentor: pmorris@med.wayne.edu



**Title**: Recruitment of African American Emerging Adults in an Urban Setting for a Technology-Based Asthma Medication Adherence Study

**Authors:** Rachael Vitale<sup>1</sup>, BA, Jessica Durkin<sup>1</sup>, M.Ed., Rhonda Dailey<sup>1</sup>, MD, Wanda Gibson-Scipio<sup>2</sup>, PhD, FNP-BC, FAANP, ATSF, Karen Kolmodin MacDonell<sup>1</sup>, PhD <sup>1</sup>Department of Family Medicine and Public Health Sciences, Wayne State University School of Medicine, Detroit, MI <sup>2</sup>College of Nursing, Wayne State University, Detroit, MI

Research Mentor(s): Dr. Karen Kolmodin MacDonell

**Hypothesis/Statement of Problem/Background**: The Detroit Young Adult Asthma Project is a technologybased intervention targeting adherence to controller medication in African American Emerging Adults (AAEA) with asthma. Emerging adulthood, ages 18-29, is a time of great change and transition, including living situations and medical care<sup>1, 2</sup>, making this population difficult to recruit and enroll in studies. Because of this, participants are being recruited through multiple sources, some of which were used during the pilot project<sup>3</sup> and others which are new for the current study.

**Methods**: Web-based recruitment, in-person referrals and data extractions from partnered hospitals and clinics, and community recruitment strategies are used to reach as many potentially eligible AAEAs as possible. Referrals are based on a brief assessment of eligibility, which helps extend the reach of our intervention. Those interested in learning more about the research study are encouraged to contact study staff for more information and are invited to complete an in-depth screening questionnaire. If eligible, individuals are scheduled for an orientation visit to complete the informed consent process.

**Results:** In 23 months of recruitment, 987 referrals have been received and 89 have enrolled. Web-based recruitment has the most enrollments (37%), followed by emergency department referrals (34%), clinic referrals (12%), data extraction (10%), and community referrals (7%).

**Conclusion/Discussion/Future Research**: While the largest number of enrollments have been from web-based recruitment, the clinic method has the highest rate of enrollment, with over half of the clinic referrals enrolling in the study. The current number of enrolled participants is reasonable and as expected for this type of recruitment.

**Public Health Implications:** The current information indicates that varied recruitment methods are important when working with AAEAs in an urban population and that linkage to care is an important component currently missing within this population.

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Acknowledgement of Funders: NHLBI/NIH Email Address of Primary Author: rvitale@wayne.edu Email Address of Mentor: kkolmodin@med.wayne.edu



**Title**: Cigarette smoking mediates the association between the experiences of racial discrimination and depressive symptoms among pregnant African American women

Authors: Carmen Giurgescu, PhD, RN; Liying Zhang (presenting author), PhD; Mercedes Price, BA; Rhonda Dailey, MD; Dawn Misra, PhD

#### Research Mentor(s): Dr. Dawn Misra

**Hypothesis/Statement of Problem/Background**: Research suggests that racial discrimination is related to depressive symptoms among pregnant women; however, the mechanisms through which racial discrimination increases risk for depressive symptoms during pregnancy are not well understood. This study aimed to examine the mediation effect of cigarette smoking on the association between racial discrimination and depressive symptoms in African American pregnant women.

**Methods**: We used baseline data from a longitudinal study with 203 pregnant African American women recruited from prenatal care clinics in metro Detroit, Michigan and Columbus, Ohio. Pregnant women were asked if they smoked cigarettes during their pregnancies. Lifetime experiences of racial discrimination were assessed using the Experiences of Discrimination (9 items; Cronbach's  $\alpha$ = 0.89). Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression (CES-D) (20 items; Cronbach's  $\alpha$ =0.89). Path analysis was performed using AMOS. Women's gestational age at data collection and maternal age were the control variables.

**Results:** The mean age of the sample was  $26.9\pm5.65$  years (range 18-42), and the mean gestational age at data collection was  $15.6\pm5.72$  weeks (range 8-29). Approximately 16.5% of pregnant women reported cigarette smoking; 58.6% reported experiencing discrimination in at least one domain (e.g., at work); and 27.0% reported CES-D scores  $\geq 23$ . Path analysis results indicated that the standard indirect effect of experiences of discrimination on depressive symptoms through cigarette smoking was statistically significant (standard indirect effect = 0.037; 95% CI = 0.006, 0.090; p = 0.016).

**Conclusion/Discussion/Future Research**: Cigarette smoking mediates the association between the experiences of racial discrimination and depressive symptoms among pregnant African American women.

**Public Health Implications:** The role of smoking with regard to a woman's response to the experiences of racism should be addressed when delivering smoking cessation programs to pregnant African America women.

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Acknowledgement of Funders: This study is funded by NIH. Grant number: NMIHD R01 MD011575; PI: Dr. Carmen Giurgescu Email Address of Primary Author: carmen.giurgescu@wayne.edu and giurgescu.1@osu.edu Email Address of Mentor: dmisra@med.wayne.edu



## 2019 MPH Student Essay Contest

**Blake Sanford** is the winner of the 2019 MPH Student Essay Contest for his essay titled **"Policy Must Treat Addiction as a Disease, Not a Crime."** Mr. Sanford is an MD/MPH Candidate with an MPH concentration in Public Health Practice who's advisor is Juliann Binienda, PhD. The theme for the 2019 Student Essay Contest was **"Creating the Healthiest Nation: For science. For action. For health."** Essay review, which focused on critical thinking and application of a framework to public health practice, was coordinated by Department of Family Medicine and Public Health Sciences Assistant Professor, Michael McLeod, JD, MPH. Reviewers were: Monique Green-Jones, MPH, Manager of Prevention Planning, Wayne State University Prevention, DFMPHS; Victoria Neale, PhD, Professor, DFMPHS; Eric Kessell, PhD, MPH, BSPH Lecturer, College of Liberal Arts and Sciences.

In his essay, Mr. Sanford speaks of the opioid crisis and it's relation to public health and the criminal justice system. Selections from his essay follow.

"For years, drug use and addiction have been seen as criminal activities. That paradigm is starting to change. Stemming from an evidence-based framework, there is now an understanding in the scientific community that addiction is a medical disease and that treating those suffering from addiction as criminals is not the cure.

The opioid crisis is a national public health emergency and in order to create the healthiest nation possible, it is imperative that we in the public health sciences advocate for policies that treat addiction as a disease, not a crime.

The origins of the crisis are multifactorial. Pharmaceutical companies marketing opioids as safe and pushing the healthcare system to prescribe them, increased availability of cheaper foreign synthetic opiates, and a cultural framing of pain as unnecessary and preventable are all contributing to this crisis.

Innovative strategies have been employed to reduce the fear and stigma of seeking help. In Gloucester, Massachusetts, the policy department established the "Angel Program," which provides anyone presenting to the policy department with an addiction assessment, connection to recovery resources, and immunity from prosecution.

The opioid crisis is far from solved. As a nation, we are taking steps in the right direction by changing prescribing habits, raising public awareness, and improving access to treatment. However, despite scientific support and growing public consciousness, we still treat addiction as a criminal offense. A large body of evidence suggests that policies need to be updated to address addiction as a disease.

As public health scientists, it is our duty to advocate for policies that treat addiction as a disease, not a crime. Doing so will help bring addiction out of the shadows and create a healthier nation for all."

## The Department of Family Medicine & Public Health Sciences wishes to acknowledge the generous gift from an anonymous donor for the award.



## **DFMPHS Faculty and Trainee Research Awards**

#### January 2018 – Present

The Department of Family Medicine & Public Health Sciences wishes to recognize and congratulate our faculty and trainees who have received research awards in the last year.

#### **Faculty Awards**

- Julie Gleason-Comstock, PhD, MCHES received a Cardiovascular Research Institute Partners' Award for expansion of Detroit HEARTBeat to a randomized controlled trial (RCT) model focusing on blood pressure control.
- April Idalski Carcone, PhD, received an Abstract Citation Award at the Society of Behavioral Medicine's 40th Annual Meeting and Scientific Sessions for her abstract entitled "Developing a Computer Algorithm to Automate Behavioral Coding and Analysis of Clinical Transcripts".
- Dawn Misra, PhD, DFMPHS Division of Health Equity Director and Professor, received the 2019 Excellence in Postdoctoral Mentorship Award by the Graduate School of Wayne State University.
- Jinping Xu, MD, DFMPHS Associate Professor, received a 2018 North American Primary Care Research Group Pearl Award for her presentation entitled "Uptake of Active Surveillance for Low-Risk Prostate Cancer in a Population-Based Cohort."

#### **Trainee Awards**

- Relicious Eboh, mentored by Dawn Misra, PhD, was invited to present their poster entitled "Relationship with the Father of the Baby and Perceived Stress Among Black Women" at the 23<sup>rd</sup> Annual Posters on the Hill. Over 350 competitive applications were submitted and just 60 posters were accepted to be presented on Capitol Hill.
- Fatima Eid, MPH Candidate, received a 2019-2020 Albert Schweitzer Fellowship. Her fellowship project will explore the use of creative writing and creative expression as a therapeutic intervention with at-risk youth and those currently in the juvenile justice system.
- Amy Pennar, PhD, former RoBUST postdoc, mentored by Karen MacDonell, PhD, received an award through the Small Grants Program for Early Scholars at the Society for Research in Child Development for her project, "Targeting Neurocognitive Functioning to Improve the Health Outcomes of Youth Living with HIV: Assessing Intervention Effects One-Year Later."
- Nadia Saadat, PhD, mentored by Dawn Misra, PhD, won a 3<sup>rd</sup> Place Poster Presentation Award at the Wayne State University Graduate and Postdoctoral Research Symposium in March 2019 for their poster entitled "Lipidomics Profiles are Related to Preterm Birth and Depressive Symptoms in Pregnant African American Women."
- Nadia Saadat, PhD, has also received the 2019 Postdoctoral Trainee Services Award from the Wayne State University Graduate School.



- Anjali Sundar, Undergraduate Medical Student, mentored by April Idalski Carcone, PhD, earned a second place prize in the Prospective & Retrospective Public Health Studies division of the 2019 WSU SOM Medical Student Research Symposium (MSRS) for her poster entitled "Enhancing Parental Motivation to Monitor African American Adolescents' Diabetes Care: Continuation of Beta Test of a Brief Computer-Delivered Intervention".
- Emily Yagihashi and Inara Ismailova, Undergraduate Medical Students, mentored by Dawn Misra, PhD, earned an honorable mention in the Prospective & Retrospective Public Health Studies division of the 2019 WSU SOM Medical Student Research Symposium (MSRS) for their poster entitled "Pregnant Women in the ED: Assessing Variables Predicting ED Use".



### Acknowledgements

Julie Gleason-Comstock, PhD, MCHES, Assistant Professor, DFMPHS, Research Day Co-Chair April Idalski Carcone, PhD, Associate Professor, DFMPHS, Research Day Co-Chair Victoria Neale, PhD, MPH, Professor, DFMPHS Angela Tiura, PhD, Assistant Professor, DFMPHS Elizabeth Towner, PhD, Assistant Professor, DFMPHS Amanda Compton, BS, Coordinator

#### Committee

The Department of Family Medicine and Public Health Sciences Research Day 2019 was made possible by the dedicated efforts of our department's faculty and staff. Committee members Drs. Gleason-Comstock, Carcone, Neale, Tiura, and Towner reviewed and made recommendations on all student presentations. Ms. Judy Magdalenic assisted with organization and communications. Ms. Amanda Compton assisted with organization, including the preparation of this book. Public heath image (cover) was designed by Vexels.

We also thank our department chairperson, Dr. Tsveti Markova, for her support of this event and our faculty and research partners for their willingness to share their research contributions.

## Save the Date...

# 4<sup>th</sup> Annual DFMPHS Research Day

Wednesday, April 15, 2020 Margherio Conference Room Mazurek Education Commons