



UMass  
Worcester  
Prevention  
Research  
Center

# UMass Worcester Prevention Research Center Annual Report

2019 - 2020

***LEADING THE WAY IN HEALTH PROMOTION RESEARCH***

# UMass Worcester Prevention Research Center Annual Report

10/2019 – 9/2020

We are pleased to share the 2019-2020 Annual Report from the UMass Worcester Prevention Research Center with you. We are grateful for the opportunity to build upon the partnerships initiated when our PRC journey began in 2009, proud of our shared accomplishments during Year 1 of this new 5-year PRC funding cycle (10/2019-9/2024) and look forward to our future work together.

In this 2019-2020 UMass Worcester PRC Annual Report, we highlight our new Core Research Project called BP Control and our leadership role in the national Physical Activity Policy and Evaluation Network (PAPREN). We showcase our work with the Massachusetts Department of Transportation (MassDOT), where we have been able to put health considerations into decisions about transportation improvements throughout the state. We also feature an introduction to our newest students, Melissa Goulding, MS and Oluwabunmi Emidio, MD, MPH. We are particularly proud of the accomplishments of our students. Andrea López-Cepero and Meera Sreedhara both earned doctoral degrees from the UMass Medical School Clinical and Population Health Research Program. Dr. López-Cepero graduated in 2019 and is now a Postdoctoral Research Fellow at the Harvard T.H. Chan School of Public Health, and Dr. Sreedhara graduated in 2020 and is a fellow at the US Centers for Disease Control and Prevention.

This year has certainly brought challenges with the COVID-19 pandemic. We are applying our statistical, epidemiology and public health skills to meet emerging needs head-on in collaboration with long-standing and new partners. In our hometown of Worcester, we are supporting the essential work of the Worcester Division of Public Health (WDPH) by providing technical assistance in tracking COVID-19 cases and in the use of a COVID-19 PPE burn rate calculator. In partnership with the City of Worcester, Central Massachusetts Regional Public Health Alliance, and colleagues at UMass Medical School, we are disseminating and analyzing the Greater Worcester COVID-19 Survey and offering the data to local organizations to guide their response and planning. Statewide, we are working with the Massachusetts Department of Public Health (MDPH) to survey the training and technical needs of the 351 local public health departments and health boards related to COVID-19.

UMass Worcester PRC research, evaluation, technical assistance, and education have an impact – on individuals, communities, and our nation. We look forward to continuing this work with valuable partnerships and extending into new directions.

Stephenie C. Lemon, PhD & Milagros C. Rosal, PhD  
Co-Directors





**Stephanie C. Lemon, PhD**



**Milagros C. Rosal, PhD**  
*Image by Chris Christo*

## **Our Vision:**

Optimal health of communities, families and individuals.

## **Our Mission:**

To promote health and prevent disease and disability through: real-world community engaged research, evidence-based practice, and education.

## **We accomplish our Vision and Mission by being:**

1. a leader in community health research at UMass Medical School,
2. an integral part of Greater Worcester's collaborative public health system,
3. a research partner that addresses real-world challenges across Massachusetts,
4. a national model for research that connects academia, public health, community and health care systems.

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# Introducing the National PRC Network

The UMass Worcester PRC is part of a national network of 26 PRCs, funded by the US Centers for Disease Control and Prevention. Each PRC is located in an academic research center and uses a community partnered approach to research ways to prevent or manage chronic illness. Each PRC conducts one main research study in partnership with community stakeholders.

The UMass Worcester PRC is located at the University of Massachusetts Medical School. Our main research project is called BP Control, which is focused on hypertension in partnership with the Edward M. Kennedy Community Health Center and Family Health Center of Worcester.

Some PRCs are selected to implement a Special Interest Project (SIP). SIPs are competitively awarded to focus on a specific issue identified as a critical need. In partnership with the University of Illinois at Chicago, we have been selected to implement a SIP called PAPREN, which is the Physical Activity Policy, Research and Evaluation Network.



Photo: Courtesy of the CDC: <https://www.cdc.gov/prc/center-descriptions/index.htm>

# Presenting Our Community Advisory Board

Our Community Advisory Board (CAB) provides vital community-level guidance to ground our work in the real world. We thank each member of our CAB for support during the past five years and input into this new grant for funding for our important shared work. In addition to providing high-level guidance, we thank the many CAB members for partnering for individual research and evaluation projects.

Our board is composed of the following members. We are pleased to welcome 6 new members and 4 organizations to the CAB for the 2019-2024 PRC Cycle.

## Community Advisory Board Members

**Eric Batista, MBA** (new member & organization)  
Director, Office of Urban Innovation  
City of Worcester

**Louis Brady, MBA** (new member & organization)  
President/CEO  
Family Healthy Center of Worcester

**Casey Burns, MA** (new member & organization)  
Director, Coalition for a Healthy Greater  
Worcester

**Joanne Calista, MSW**  
Director, Center for Health Impact

**Suzanne Cashman, ScD**  
Professor  
Family Medicine and Community Health  
UMMS Worcester

**Stephen J. Kerrigan, BS** (new member)  
President & CEO  
Edward M. Kennedy Community Health Center

**Kelsey Hopkins, MA**  
Academic Health Collaborative of Worcester  
Worcester Division of Public Health

**Judi Kirk, MSPE**  
Director of Community Impact  
Boys & Girls Club of Worcester

**Mónica Escobar Lowell, BA**  
Vice President Community Relations  
UMass Memorial Health Care

**Paul Matthews, BA** (new member &  
organization) Executive Director  
The Worcester Regional Research Bureau

**Jean G. McMurray, BA** (new member)  
Executive Director  
Worcester County Food Bank

**Nikki Nixon, MS**  
Chief of Epidemiology  
Worcester Division of Public Health

**Shelly Yarnie, MPH**  
Director of Local Public Health Initiatives,  
Office of Local and Regional Health  
Massachusetts Department of Public Health,  
Central Regional Health Office

We would like to thank the following individuals who have shared their ideas and talents with us during the past cycle but who have moved on to new roles.

- Martha Assefa, MPA, former Manager, Worcester Food Policy Council
- Liz Sheehan Castro, MA, formerly of the Worcester County Food Bank
- Zach Dyer, MPH, formerly of the Worcester Division of Public Health
- Jacqueline Ewuoso, MPH, formerly of the Worcester Division of Public Health
- Toni McGuire, RN, MPH, formerly of the Edward M. Kennedy Community Health Center
- Mullen Sawyer, BA, formerly of Oak Hill Community Development Corporation
- Alexis Travis, PhD, formerly of the Worcester Division of Public Health

## The UMass Worcester PRC has strong leadership of faculty and staff.

### UMass Medical School Faculty and Staff

#### Directors

**Stephenie C. Lemon, PhD**  
Co-Director  
Co-I, Core Research Project  
Professor and Chief, Division of  
Preventive and Behavioral  
Medicine

**Milagros C. Rosal, MS, PhD**  
Co-Director  
PI, Core Research Project  
Professor  
Division of Preventive and  
Behavioral Medicine  
Vice Provost for Health Equity

#### Faculty

**Karen Clements, MPH, ScD**  
Co-I, Core Research Project  
Assistant Professor  
Center for Health Policy and  
Research  
Population and Quantitative  
Health Sciences

**Judy Ockene, PhD, MEd, MA**  
Professor  
Division of Preventive and  
Behavioral Medicine

**Lori Pbert, PhD**  
Professor and Associate Chief  
Division of Preventive and  
Behavioral Medicine

**Sharina Person, PhD**  
Co-I, Core Research Project  
Professor and Vice-Chair  
Population and Quantitative  
Health Sciences

**Rajani Sadasivam, PhD**  
Associate Professor  
Population and Quantitative  
Health Sciences

**Michelle Trivedi, MD**  
Assistant Professor  
Pediatrics

#### Staff

**Amy Borg, MPH, MEd**  
Deputy Director  
Project Director, Core Research  
Project  
Division of Preventive and  
Behavioral Medicine

**Christine Frisard, MS**  
Statistician  
Division of Preventive and  
Behavioral Medicine

**Karin Valentine Goins, MPH**  
Physical Activity Lead  
Research Project Director,  
PAPREN (Physical Activity Policy  
Research and Evaluation Network)  
Division of Preventive and  
Behavioral Medicine

**Karen Ronayne**  
Research Coordinator  
Division of Preventive and  
Behavioral Medicine

# Tackling Uncontrolled Hypertension with BP Control, our Core Research Project for the 2019-2024 PRC Cycle

Controlling high blood pressure is vitally important to individual and public health, as almost 50% of adults in the United States have high blood pressure, and about half of these adults have blood pressure that is considered to be uncontrolled. As high blood pressure can lead to stroke or cardiovascular disease, lack of control can result in huge health and financial burdens. In fact, by 2030, health care costs related to high blood pressure are projected to be \$200.3 billion per year. Research shows that we can help people control their blood pressure (BP) by helping them take their anti-hypertensive medications as prescribed.



As part of the UMass Worcester PRC award from the CDC for the 2019-2024 funding cycle, we are conducting a Core Research Project called BP Control. Through BP Control, we are partnering with the Edward M. Kennedy Community Health Center and Family Health Center of Worcester to implement an intervention that has evidence of effectiveness in controlling high blood pressure. The intervention is a system-based approach embedded into the electronic medical record to identify and refer patients with uncontrolled hypertension who are not adherent to anti-hypertensive medications, deliver coaching for medication adherence, facilitate communication among the provider team, and track patients over time.

The intervention will be implemented as standard of care for all eligible patients at these two community health centers. Clinical and economic outcomes at these two health centers will be compared to outcomes of standard care at comparable health centers who are also members of the C3 Accountable Care Organization. It will study the costs, return on investment, and blood pressure control groups among groups of people that have higher rates of uncontrolled blood pressure.

BP Control is led by UMass Worcester PRC Director Milagros C. Rosal, PhD in partnership with these organizations:

- Edward M. Kennedy Community Health Center
- Family Health Center of Worcester, Inc.
- Massachusetts League of Community Health Centers
- Massachusetts Center for Health Information and Analysis
- Community Care Cooperative (MassHealth Accountable Care Organization)
- Massachusetts Department of Public Health Division of Prevention and Wellness

## UMass Worcester PRC Study Staff

**Milagros C. Rosal, PhD**  
Principal Investigator

**Sharina Person, PhD**  
Lead statistician

**Amy Borg, MPH, MEd**  
Research Project Director

**Karen Ronayne**  
Research Coordinator

**Stephenie C. Lemon, PhD**  
Investigator

**Karen Clements, MPH, ScD**  
Cost analyst

**Christine Frisard, MS**  
Statistician

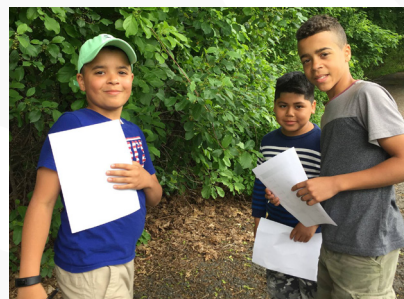


# Healthy Kids & Families was Completed



We are proud to say that Healthy Kids & Families, the UMass Worcester Prevention Research Center's prior Core Research Project (2014-2019) was completed and its results are promising.

The Healthy Kids & Families program was designed to improve children's weight, healthy eating and physical activity in effort to prevent childhood obesity in Worcester, Massachusetts, an issue of great concern to the community and the nation. The intervention focused on assisting parents in managing their elementary school-age children's obesogenic behaviors through changes in five specific areas based on national recommendations. The five areas are summarized by an acronym "SUPER": Snack Smart, Unplug and Play, Prepare and Plan, Energize with Exercise, and Rethink your Drink. As families face multiple demands, the intervention was designed to require minimal time. A community health worker was trained to coach parents to set behavioral goals related to healthy eating and physical activity based on their family values and priorities. The community health worker contacted parents at home visits and by phone. She sent letters after each contact summarizing the discussion and providing additional information on community resources in support of their goals. Parents also received newsletters and invitations to community events with a theme of healthy eating and physical activity. This intervention was compared to a comparison intervention that was identical in format but focused on positive parenting.



The study results showed that children in the Healthy Kids & Families intervention had greater reduction in their Body Mass Index Z score (a measure of weight based on growth), and a greater number of positive behavioral changes, than children in the comparison intervention. The study found that there were no changes in weight or behavior among the parents.

Our next step is to find a home for this program/ This involves identifying one or more community agencies that would like to adopt and deliver this intervention to the families that they serve.

We thank all of the families who participated in this study and wish them well into the future.

## UMass Worcester PRC Study Staff

**Milagros C. Rosal, PhD**  
Principal Investigator

**Stephanie C. Lemon, PhD**  
Co-Investigator

**Kevin Kane, MS**  
Statistician

**Wenjun Li, PhD**  
Multi-Principal Investigator (Years 1-3)

**Lori Pbert, PhD**  
Co-Investigator

**Karen Ronayne** Research  
Coordinator

**Thomas Land, PhD**  
Multi-Principal Investigator (Years 4-5)

**Amy Borg, MPH, MEd**  
Research Project Director



# Presenting PAPREN, the Physical Activity Policy Research and Evaluation Network



**PAPREN**  
PHYSICAL ACTIVITY POLICY RESEARCH  
AND EVALUATION NETWORK

Is it easy and pleasant for you to take a walk in your neighborhood? Is it safe and convenient for you to bike to work or school? Are there trails near you to hike, or places for your children to play outside? If the answer is yes, you benefit from local, state and

national policies and plans that create built environments that support walking and bicycling, including roads, sidewalks and parks .

What policies are effective in creating and supporting built environments that encourage people to be physically active where they work, live and play? Stephenie C. Lemon, PhD and Karin Valentine Goins, MPH of the UMass Worcester PRC have joined forces with Jamie F. Chiqui, PhD, MHS of the Policy, Practice, and Prevention Research Center at the University of Illinois at Chicago to lead a network dedicated to this question. The Division of Nutrition, Physical Activity, and Obesity of the US Centers for Disease Control and Prevention awarded the UMass Worcester PRC a grant as



Coordinating Center for the Physical Activity Policy Research and Evaluation Network (PAPREN). PAPREN's Vision is: *Active people in active communities, supported by equitable, sustainable policies and practices.*



Image by Dan Burden / [www.pedbikeimages.org](http://www.pedbikeimages.org)

PAPREN is a community of people interested in how the environment shapes people's opportunity to be physically active. Members include researchers, practitioners, trainees, and others from different disciplines. People get to know each other, learn about the work of different sectors, and collaborate for real-world research and evaluation to expand and improve physical activity opportunities.

PAPREN offers multiple routes for member engagement.

- The bi-monthly Grand Rounds speaker series brings high-profile speakers on current topics in the field. Initial speakers addressed the new Physical Activity Alliance, a physical activity research agenda during the COVID-19 era, and the impact of systematic racism on physical activity opportunity for Black Americans.
- Six Work Groups (Equity & Resilience, Transportation Policy & Planning, Rural Active Living, Worksite Wellness, School Wellness, Parks & Green Space) offer opportunities for networking, guest speakers, and collaboration on projects that result in academic and practice products.
- Bi-monthly Network meetings include updates from CDC, the Coordinating Center, and partner organizations about their policy-related initiatives.
- A continually updated website describes PAPREN structure, upcoming events, relevant resources, and Work Group activities.

Join our collaborative network of planners, engineers, policy makers, green space managers, advocates, health professionals and others as we transform the best research and policies into meaningful practice. To learn more, visit the website: <https://papren.org>

## UMass Worcester PRC Study Staff

Stephenie C. Lemon, PhD  
Investigator

Karin Valentine Goins  
Program Director

# Inserting Health into State Transportation Decisions



Each year, the Massachusetts Department of Transportation (MassDOT) decides which transportation facilities to build or improve. Impact on health, including opportunity for physical activity, has not traditionally been part of transportation decision making. MassDOT wants to change that. Stephenie C. Lemon, PhD and Karin Valentine Goins, MPH of the Physical Activity Policy Research Network Plus (PAPRN+) Collaborating Center at the UMass Worcester PRC worked with researchers from UMass Amherst College of Engineering and Yale University as part of a cross-disciplinary team that developed recommendations

for incorporating health into scoring of proposed road construction projects. The team reviewed the literature and interviewed representatives of state health departments and state and regional transportation agencies. They proposed metrics, identified data sources, and integrated new data into MassDOT's decision-making system.

Dr. Lemon and Ms. Goins had primary responsibility for developing the physical activity and equity recommendations. Other areas include safety, accessibility and air pollution. MassDOT is currently incorporating the metrics into scoresheets used to evaluate potential transportation improvements around the state. This project will have lasting impact, as incorporating health considerations into construction decisions represents sustainable change that can encourage more active transportation and higher physical activity levels.



## UMass Worcester PRC Study Staff

Stephenie C. Lemon, PhD , Co-Investigator  
Karin Valentine Goins, MPH, Co-Investigator

## Collaboration

MassDOT, UMass Amherst,  
Yale University

## Funder

MassDOT

# REACH Evaluation

## Evaluation of the Worcester Division of Public Health REACH Project



How can we make Worcester a healthier place to live, work and play? How can we design changes that will be particularly useful for groups of people who have higher rates of chronic disease? Members of the Latino community in Worcester face many challenges to health. According to the US Census American Community Survey, approximately 21% of Worcester residents identify as Hispanic/Latino, 36% of whom live below poverty. As a group, the Latino community faces higher rates of chronic diseases such as high blood pressure and type 2 diabetes.

The Worcester Division of Public Health **REACH** (Racial and Ethnic Approaches to Community Health) project is seeking to support current efforts in Worcester and work in collaboration with others to improve the health of the Latino community in Worcester. **Worcester REACH** is one of 31 projects that are funded by the US Centers for Disease Control and Prevention. The goal of the national REACH program is to promote health among groups of people who disproportionately suffer from increased barriers to living healthy lives. The Worcester REACH project is promoting improvements to local systems to make it easier for Latino persons to be healthier.



**Worcester REACH** project is focused on promoting improvements to food systems, the built environment, breastfeeding and early childcare and education for better nutrition and physical activity and the prevention of obesity and chronic disease. The project is also focused on promoting clinical-community referrals to address the social determinants of health and for chronic disease prevention.

The UMass Worcester Prevention Research Center is the independent evaluation partner for Worcester REACH. Our team brings together expertise in qualitative and quantitative research evaluation methods.

### UMass Worcester PRC Study Staff

**Stephenie C. Lemon, PhD**  
Principal Investigator and  
Quantitative Lead

**Milagros C. Rosal, PhD**  
Co-Investigator and  
Qualitative Lead

**Christine Frisard, MS**  
Statistician

**Karin Valentine Goins, MPH**  
Physical Activity Evaluation Lead

**Amy Borg, MPH, MEd**  
Evaluation Project Director



# Where are They Now? Spotlight on Former UMass Worcester PRC Trainee

## Monica Wang, ScD, Former UMass Worcester PRC Trainee

- Associate Professor of Community Health Sciences at the Boston University School of Public Health
- Adjunct Associate Professor of Health Policy and Management at the Harvard T.H. Chan School of Public Health
- Associate Director of Narrative at the BU Center for Antiracist Research

Monica Wang, ScD is on a mission to test a tool to potentially contribute to the complex problem of tackling obesity. She successfully piloted the H2Go! intervention with preteen youth at the Boys & Girls Club in Worcester, Massachusetts to replace sugar-sweetened beverages with water. The idea for this study began when Dr. Wang was a post-doctoral fellow at the UMass Worcester PRC (U48 DP001933), with Drs. Stephenie C. Lemon and Milagros C. Rosal as mentors. Dr. Wang applied for and was awarded a grant by the National Institute of Diabetes and Digestive and Kidney Diseases (K01DK102447). Now as Associate Professor at the Community Health Department at the Boston University School of Public Health, she has taken this pilot project to a full-fledge trial funded by the National Institute of Health. With new funding from the National Institutes of Health, Dr. Wang and colleagues will now test this important H2GO! Program with 10 Boys & Girls Clubs throughout Massachusetts.





# UMass Worcester PRC Recent Graduates

We would like to congratulate Andrea López-Cepero, PhD and Meera Sreedhara, PhD for earning doctorate degrees and thank them for their many contributions to the work of the UMass Worcester PRC!

## 2020 Graduate:



Congratulations to Meera Shreedhara, PhD for graduating in May, 2020. Dr. Sreedhara successfully defended her dissertation, *A Mixed Methods Study of Local Policy, Systems, and Environmental Approaches Supportive of Healthy Eating and Physical Activity*, in April, 2020 via Zoom. This work was funded by the National Heart, Lung and Blood Institute (NHLBI Grant 1 F31 HL142139). An abstract from her dissertation research was accepted as an oral presentation for the upcoming American Public Health Association annual conference. A first-author paper from my dissertation is also currently under review. After graduation, she was accepted into the CDC's Evaluation Fellowship Program. Her fellowship is with the Applied Research and Evaluation Branch of the Division for Heart Disease and Stroke Prevention (DHDSP) within the National Center for Chronic Disease Prevention and Health Promotion. As a fellow on the Evaluation and Program Effectiveness Team, she will assist with evaluation studies and provide evaluation support for DHDSP-funded programs.

During 2019, Meera co-authored two papers that were published in 2019. She led two more published papers related to my dissertation, which reported findings from a PAPER survey of US local health departments. She presented posters featuring PAPER research at the UMass Center for Clinical and Translational Science 8th Annual Community Engagement and Research Symposium and the 12th Annual Conference on the Science of Dissemination and Implementation in Arlington, Virginia.

## Selected Publications

Sreedhara M, Goins KV, Frisard C, Rosal MC, Lemon SC. Healthy Eating Policy Strategies in Community Health Improvement Plans: A Cross-Sectional Survey of US Local Health Departments. *J Public Health Manag Pract.* 2019 Dec 12;10.1097/PHH.0000000000001104. doi: 10.1097/PHH.0000000000001104. PMID: 31834204; PMCID: PMC7289666.

Sreedhara M, Valentine Goins K, Frisard C, Rosal MC, Lemon SC. Stepping Up Active Transportation in Community Health Improvement Plans: Findings From a National Probability Survey of Local Health Departments. *J Phys Act Health.* 2019 Sep 1;16(9):772-779. doi: 10.1123/jpah.2018-0623. Epub 2019 Jul 30. PMID: 31365900.

## 2019 Graduate:

Andrea López-Cepero, PhD graduated from UMass Medical School in 2019. With Milagros C. Rosal, PhD as her mentor, Dr. López-Cepero focused her doctoral work on understanding the relationship between psychosocial stress and specific stress-eating behaviors among Latinos who live in the U.S., and the relationship between stress and physiological dysregulation among Puerto Ricans. She was recognized as one of *El Mundo Boston Latino* 30 under 30 for her important work on this field.

Dr. López-Cepero is now a postdoctoral fellow in the Nutrition Department at Harvard T.H. Chan School of Public Health. Building upon the expertise and skills developed at UMass, she is studying how stress may impact what Latino women in the US and in Puerto Rico eat, their eating behaviors and how these associations may increase risk of cardiometabolic conditions.



## Selected Publications

López-Cepero A, Frisard C, Lemon SC, Rosal MC. Emotional Eating Mediates the Relationship Between Food Insecurity and Obesity in Latina Women. *J Nutr Educ Behav.* 2020 Nov;52(11):995-1000. doi: 10.1016/j.jneb.2020.08.007. PMID: 33168208; PMCID: PMC7656045.

López-Cepero A, Frisard C, Lemon SC, Rosal MC. Emotional Eating Mediates the Relationship Between Food Insecurity and Obesity in Latina Women. *J Nutr Educ Behav.* 2020 Nov;52(11):995-1000. doi: 10.1016/j.jneb.2020.08.007. PMID: 33168208; PMCID: PMC7656045.

López-Cepero A, O'Neill J, Tamez M, Falcón LM, Tucker KL, Rodríguez-Orengo JF, Mattei J. Associations Between Perceived Stress and Dietary Intake in Adults in Puerto Rico. *J Acad Nutr Diet.* 2020 Oct 24:S2212-2672(20)31346-0. doi: 10.1016/j.jand.2020.09.035. PMID: 33109502.

# Current UMass Worcester PRC Trainees



The UMass Worcester PRC was pleased to welcome Oluwabunmi Emidio, MD MPH to the team. Dr. Emidio is a PRACCTIS post-doctoral fellow in the Department of Population and Quantitative Science at UMass Medical School. Through this training program funded by the National Cancer Institute, Dr. Emidio is learning about implementation research with a focus on cancer prevention and control. She is concurrently a PhD Candidate in the Clinical and Population Health Research Program at UMass Medical School, with Stephenie C. Lemon, PhD as her mentor.

Dr. Emidio earned her Medical Degree from the Olabisi Onabanjo University, Nigeria and an MPH from the Johns Hopkins Bloomberg School of Public Health. In the past, she was a practicing physician at the Lagos State Teaching Hospital, Nigeria. She has coordinated public health activities for the Global Fund in West Africa and coordinating research at the Mckusick-Nathans Institute of Genetic Medicine, Johns Hopkins University School of Medicine. Her research interest is in the implementation of evidence-based interventions into clinical practice to improve quality of care and health equity.



The UMass Worcester PRC welcomes Melissa Goulding to our team! Melissa is a doctoral student in the Clinical and Population Health Research Program (CPHR) at the University of Massachusetts Medical School. Prior to doctoral work, Melissa earned a BS in Biology from Emmanuel College and then a MS in Medical Sciences from Boston University School of Medicine. As part of her master's thesis, she was introduced to clinical research at the University of Massachusetts Medical School, where she worked as a Clinical Research Coordinator for the Department of Emergency Medicine. During this time, she was able to see the far-reaching impact of research and was inspired build a career in this field to improve health at the community and population levels, which lead her to the CPHR program.

Currently mentored by Dr. Stephenie Lemon, Melissa's research interests include chronic disease prevention in children. She is excited for the opportunity to learn from Dr. Lemon and to be a part of the important work conducted by the UMass Worcester Prevention Research Center. As a first-year student, Melissa is currently focused on expanding her knowledge and skill set through the rigorous training in epidemiology, biostatistics, behavioral and health research with a further target of translation of that research into disease prevention, policy and clinical practice through her doctoral work. In the future, Melissa hopes to build a career in academia and community-based research focusing on chronic disease prevention in children.

# Associated Research Projects with UMass Faculty

09/30/2019 – 09/29/2020

## Policy, Systems and Environment

### Physical Activity Policy and Evaluation Research Network (PAPREN)

This network has three overarching aims: 1) establishing and building capacity among a network of researchers and practitioners who conduct physical activity policy research, 2) providing technical assistance in built environment-related policy activities among recipients of CDC SPAN, REACH and HOP grants, and 3) conducting an applied evaluation research project to understand the long-term influence of master plans on physical activity and associated outcomes and to identify model policies.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** US Centers for Disease Control and Prevention (PIs: Lemon, Chriqui)

**Dates:** 2019-2024

### Public Health Assessment for Transportation Projects

This project will assemble tools and metrics including ITHIM for use in evaluating the impact of transportation investments on health and equity and incorporating relevant outcomes into decision making at MassDOT and at the community level. Project goals are to identify available frameworks, tools, data and performance measures; utilize existing datasets to develop additional performance measures; develop a framework that could be incorporated into planning and decision-making processes for transportation projects; and provide recommendations for further investigation. UMMS has responsibility for the physical activity elements.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** Massachusetts Department of Transportation

**Dates:** 2018-2020

### Evaluation of the Worcester Division of Public Health REACH (Racial and Ethnic Approaches to Community Health) project

This sub-contract to the Worcester Division of Public Health's REACH project will allow in-depth evaluation of the REACH program. Evaluation focuses on the implementation of evidence-based policy, systems and environmental strategies to promote health among Latino residents.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD, Milagros C. Rosal, PhD

**Funder:** City of Worcester Division of Public Health, US Centers for Disease Control and Prevention (PI: Anderson)

**Dates:** 2019-2021

## Community-based

### **Greater Worcester COVID-19 Survey**

In collaboration with the Worcester Division of Public Health and the Central Massachusetts Public Health Alliance, this community wide survey assesses the experiences of Greater Worcester residents with the SARS CoV-2 pandemic, including physical, emotional and social impacts.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Partners:** Worcester Division of Public Health and Massachusetts Public Health Alliance

**Funder:** Massachusetts COVID-19 Relief Fund (PI: MPI)Sharina Person, PhD

**Dates:** 2020

### **BP Control: Economic Analysis of the Implementation of a Community Health Worker – Delivered Intervention to Enhance Antihypertensive Medication Adherence in Accountable Care Organizations.**

BP Control is studying costs, return-on-investment, and blood pressure among sub-groups of people associated with implementing an effective intervention for promoting adherence to anti-hypertensive medications among patients with uncontrolled hypertension. The intervention will be implemented as standard of care for all patients with uncontrolled hypertension.

**UMass Worcester PRC Investigators:** Milagros C. Rosal, PhD, Stephenie C. Lemon PhD

**Partners:** Edward M. Kennedy Community Health Center, Family Health Center of Worcester, Inc.

**Funder:** UMass Worcester PRC's Core research project, funded by the US Centers for Disease Control and Prevention (PI: Rosal)

**Dates:** 2019-2024

### **Greater Worcester Regional Youth Health Survey**

The survey is administered to middle and high school students in the Greater Worcester Area. It asks about health risk behaviors such as bullying, smoking, alcohol and drug use, food security and others.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** Worcester Division of Public Health (PI: Lemon)

**Dates:** 2016-2020

### **Preventing Childhood Obesity Through Youth Empowerment: A Cluster RCT of the H2GO! Program**

This study is a partnership with Boys and Girls Clubs in Massachusetts and involves testing the effectiveness of a narrative-based youth empowerment intervention for reducing sugar sweetened beverage consumption and obesity.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD, Milagros C. Rosal, PhD

**Funder:** National Institutes of Health, Boston University (PI: Wang)

**Dates:** 2020-2025



### **PR-OUTLOOK: PR Young Adults Stress, Contextual, Behavioral & Cardiometabolic Risk**

This study will fill knowledge gaps regarding the prevalence of cardiovascular disease (CVD) behavioral and cardiometabolic risk factors and overall cardiovascular health (CVH) among young adults in Puerto Rico and ascertain their psychosocial (individual and neighborhood-level) and sociodemographic determinants. We will establish an island-wide cohort of 3,000 young adults (18-29 years old) using a multi-stage sampling of probabilistic plus community approaches; conduct comprehensive assessments (survey, anthropometric, physiological), and establish a biorepository (blood, hair, saliva, urine) for future longitudinal studies of CVD risk, DVH, and mechanism.

**UMass Worcester PRC Investigator:** Milagros C. Rosal, PhD

**Funder:** National Institutes of Health (PIs: Rosal, Perez)

**Dates:** 2019-2024

### **Continuation of the Nicotine Dependence in Teens (NDIT) Study to Age 30**

The study follows the use of tobacco products, quit attempts, and genetic and environmental factors among study participants. It extends the ability to follow-participants until they are 30 years old.

**UMass Worcester PRC Investigator:** Lori Pbert, PhD

**Partners:** University of Montreal

**Funder:** Canadian Cancer Society Research Institute (PI: O'Loughlin)

**Dates:** 2015-2020

## **Clinical-Community Linkages**

### **FITLINE: Pediatric Practice-based Obesity Intervention to Support Families**

The goal of this randomized clinical trial is to test a program consisting of a telephone coaching and family workbook of informational materials to see if it reduces obesity among children. The trial is enrolling 512 children ages 8 to 12 with overweight and obesity and their family from 16 pediatric practices.

**UMass Worcester PRC Investigator:** Lori Pbert, PhD

**Funder:** National Institutes of Health, National Heart, Lung, and Blood Institute

**Dates:** 2016-2021

### **A Model for Community Health Worker Integration into Epilepsy Clinical Care Settings Informed by Clinical Provider and Patient Readiness**

The project will assess provider and patient readiness for integrating a Community Health Worker into epilepsy care teams throughout the region. This work will provide insight for the subsequent development of a transferable model of clinical-community linked epilepsy care. The project is a Special Interest Project (SIP) associated with the UMass Worcester PRC.

**UMass Worcester PRC Investigator:** Felicia Chu, MD; (Contact: Stephenie C. Lemon, PhD)

**Funder:** US Centers for Disease Control and Prevention

**Dates:** 2021-2024

## Clinical Capacity Building

### **MSWeight: Weight Management Counseling in Medical Schools: A Randomized Controlled Trial**

The goal of this study is to test the effectiveness of a curriculum to teach medical students how to screen and assess all adult patients for obesity and offer counseling to promote weight loss.

**UMass Worcester PRC Investigator:** Judith Ockene, PhD, Med, MS

**Funder:** National Institutes of Health, National Cancer Institute

**Dates:** 2014-2019

### **Bridging the evidence-to-practice gap: Evaluating practice facilitation as a strategy to accelerate translation of a systems-level adherence intervention into safety net practices**

This study will test whether a refined practice facilitation strategy improves fidelity to the implementation of ALMA, an evidence-based intervention targeting adherence to antihypertensive medication among Latino patients with uncontrolled hypertension; and whether the practice facilitation strategy results in improved blood pressure control.

**UMass Worcester PRC Investigator:** Milagros C. Rosal, PhD

**Funder:** National Institutes of Health, New York University School of Medicine (PI: Schoenthaler)

**Dates:** 2019-2024

## Training

### **Prevention and Control of Cancer: Training for Change in Individuals and Systems**

This project continues funding for the PRACCTIS (Prevention and Control of Cancer: Training for Change in Individuals and Systems), a pre- and post-doctoral training program located at the UMass Medical School in partnership with its affiliates: UMass Boston, Baystate Health, Worcester Polytechnic Institute and the Center for Healthcare Outcomes and Implementation Research at the Veteran's Health Administration. The project trains the next generation of scientists to conduct pragmatic research that seeks to promote evidence-based practice along the cancer continuum.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** National Institutes of Health, National Cancer Institute (PIs: Lemon, Ockene)

**Dates:** 2019-2024

### **K12 Cardiopulmonary Implementation Science Scholars Program**

This interdisciplinary K12 training program for junior faculty that promotes the development of independent implementation researchers committed to addressing cardiopulmonary disease prevention, treatment and management. The program is led by the UMass Medical School in collaboration with Baystate Health and the Center for Healthcare Organization and Implementation Research of the Veteran's Health Administration.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** National Institutes of Health (PIs: Lemon, Lindenaur, Wiener)

**Dates:** 2017-2022

## UMass Centers that are partnering with the UMass Worcester PRC

### **STRIDE: Strengthening Translational Research in Diverse Enrollment**

This collaborative study between UMass Medical School, Vanderbilt and the University of Alabama at Birmingham is developing innovative approaches to enhancing informed consent procedures with a goal of improving research literacy among under-served populations. This project is developing a multi-level informed consent platform that integrates e-consent with patient storytelling and simulations-based research assistant training. The intervention will be tested in the context of six ongoing clinical trials in a multiple time series design randomized trial.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** National Institutes of Health, National Center for the Advancement of Translational Science (PIs: Lemon, Allison, Saag, Harris)

**Dates:** 2016-2021

### **Community Engagement Core, UMass Center for Clinical and Translational Science**

The Community Engagement Core aims to enhance academic and community capacity to address urgent health priorities among communities in Massachusetts using community engaged research approaches through the establishment of collaborative research networks, training programs and consultation services.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD

**Funder:** National Institutes of Health (PI: Luzuriaga)

**Dates:** 2020-2025

### **Special Populations Resource Center, UMass Center for Clinical and Translational Science**

The Special Population Resource Center seeks to engage special populations in clinical and translational research with strategies that reach out to investigators and community members using tailored, culturally responsive methods.

**UMass Worcester PRC Investigator:** Milagros C. Rosal, PhD, Stephenie C. Lemon, PhD

**Funder:** National Institutes of Health (PI: Luzuriaga)

**Dates:** 2015-2020

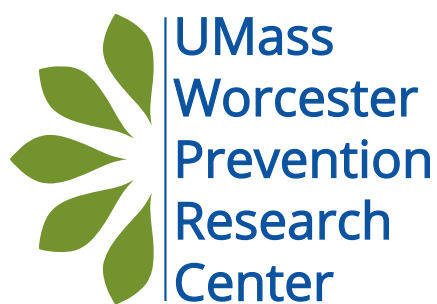
### **Center of Excellence for Public Mental Health Services & Implementation Research**

The Research Center of Excellence conducts research on topics aligned with the priorities of the Department of Mental Health, including the use of mental health services by individuals with serious mental illness, racial and ethnic disparities in services, rehabilitation and recovery, at-risk behaviors, strategies for promotion of healthy lifestyles, integration of behavioral health and medical treatment, stakeholder satisfaction, and forensic services.

**UMass Worcester PRC Investigator:** Stephenie C. Lemon, PhD, Co-director, iSPARC Workforce Development Program

**Funder:** Massachusetts Department of Mental Health (PI: M. Davis)

**Dates:** 2018-2021



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### For More Information

Please contact us at:  
[umwprc@umassmed.edu](mailto:umwprc@umassmed.edu)  
[www.umassmed.edu/prc](http://www.umassmed.edu/prc)  
508-856-4685

 @umwprc

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