

MCH RESEARCH FELLOWSHIP

2024-2025 PROJECT DESCRIPTIONS

Page	Organization/Topic
1	Prof. Jasmine Abrams: Enhancing Recruitment and Retention of BIPOC Participants in the “Pregnancy Study Online” (PRESTO)
2	Prof. Gene Declercq: Analysis and Translation of Birth Data for Practice and Policy, including the website Birth by the Numbers
3	Prof. Cristina Gago: Closing the Gap: Stakeholder Perspectives on Post-WIC Household Nutrition
4	Prof. Allegra Gordon and Prof. Kimberly Nelson: Improving understanding of sexual and gender fluidity among youth: Disseminating findings from the Sexual Orientation Fluidity in Youth (SO*FLY) Study
5 - 6	Prof. Jacey Greece: Addressing Adverse Childhood Experiences in Winthrop Massachusetts
7	Prof. Patrece Joseph: The CHANCE Study: Considering the Health of Adolescents Navigating Community violence Exposure
8	Prof. PhuongThao Le: Pilot of the Self-Help Plus (SH+) Stress Management Intervention Among Breast and Gynecologic Cancer Patients in Viet Nam
9	Prof. Kimberly Nelson: Adolescent Sexual Health Research
10	Prof. Lora Sabin: Assessing Interventions to Support Adherence to Antiretroviral Therapy (ART) for Women and other Vulnerable Individuals Living with HIV in South Africa
11 - 12	Prof. Kathryn Thompson: Association Between Perceived Racial Discrimination and Adverse Maternal Outcomes by Insurance Coverage
13	Prof. Monica Wang: Preventing Childhood Obesity Through Youth Empowerment

Enhancing Recruitment and Retention of BIPOC Participants in the “Pregnancy Study Online” (PRESTO)

Professor: Jasmine Abrams, PhD

Department: Social and Behavioral Sciences, Yale School of Public Health

Email: jasmine.abrams@yale.edu

Number of Fellows: One

Timeframe: December 2024 – December 2025

Infertility and spontaneous abortion (SAB) each affect 15-20% of reproductive-aged couples in the United States (U.S.), and there are large racial/ethnic disparities in both outcomes. As infertility and SAB exact an emotional and financial toll on affected couples, identifying modifiable risk factors for these outcomes in both partners is an important public health goal. The Pregnancy Study Online (PRESTO), a web-based North American preconception cohort study, addresses this goal.

PRESTO has enrolled more than 17,000 females and nearly 4,000 male partners during the preconception period, with 20% of participants identifying as Black, Indigenous, or People of Color (BIPOC). To increase enrollment among BIPOC participants, we will use qualitative methods to identify facilitators and barriers to participation and identify strategies to improve BIPOC enrollment and retention.

By joining our research team, the fellow(s) will be able to participate in numerous aspects of this project. Depending on interests and skills, the fellow may help:

- Assist with participant recruitment
- Assist with qualitative data collection via focus groups
- Contribute to data management, coding, and analysis
- Assist with organizing meetings of the scientific and community advisory board

Participate in manuscript development and presentation of findings at scholarly conferences

[Back to the top](#)

Analysis and Translation of Maternal Mortality and Birth Data for Practice and Policy, including the website Birth by the Numbers

Professor: Eugene Declercq

Email: declercq@bu.edu

Number of Fellows: One

Timeframe: November 2024 - December 2025

The project needs a student with some data skills and a great deal of enthusiasm about working with birth data to work on three different projects, specifically:

- (1) the *analysis of U.S. national birth certificate data* or data from Listening to Mothers related to multiple questions concerning current birth practices. The project will be developed by the student into an abstract for a presentation at the 2024 APHA meeting which the student is expected to present with Dr. Declercq's support.
- (2) The second part of the fellowship will involve *working with the team of students who develop materials for and oversee and help with the design of the website "Birth by the Numbers."* (www.birthingbythenumbers.org). The fellow will work on website development and support, with a particular emphasis on developing up-to-date resources and presentations, including mapping, on childbirth data that can be downloaded for use in college classrooms and made available to students, faculty and the press.
- (3) *Exploring data on maternal mortality in the U.S.* Fellow will work with Dr. Declercq on the examination of reports from state maternal mortality review committees and publicly available data to examine patterns and trends in maternal mortality.

[Back to the top](#)

Closing the Gap: Stakeholder Perspectives on Post-WIC Household Nutrition

(PI/Mentor: Cristina Gago, PhD)

Food insecurity disproportionately affects households with low-income and those of color. Federal nutrition programs are designed to address these nutritional inequities across the lifespan, through stage-based programming. For example, from pregnancy to age five, the Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC) supports access for over six million low-income participants to evidence-based grocery benefits, nutrition education, breastfeeding support, and care referrals. Although federal nutrition programs are intended to offer uninterrupted coverage, ~600,000 five-year-olds every year experience a break in stage-based nutrition assistance between aging out of WIC and enrolling in kindergarten (offering the National School Breakfast and Lunch Programs). This represents a critical gap in nutrition assistance, due to an arbitrary age cutoff. Our research aims to document WIC staff, WIC parent, and Head Start parent perspectives on current aging out procedures, parent needs in this transition, and community- and education-centered initiatives to address such needs. The MCH fellow would be involved in analyzing qualitative data, coordinating an advisory council meeting to confirm interpretations, and supporting in summarizing and disseminating findings via policy brief and manuscript.

[Back to the top](#)

Improving understanding of sexual and gender fluidity among youth: Disseminating findings from the Sexual Orientation Fluidity in Youth (SO*FLY) Study

Co-Preceptor: Professor Allegra Gordon, ScD, MPH

Co-Preceptor: Professor Kimberly Nelson, PhD, MPH

Department: Community Health Sciences

Email: allegrag@bu.edu

Number of Fellows: One

Timeframe: Dec 2024 – Dec 2025

*The SO*FLY Study* is a mixed-methods, longitudinal research project with the goal of improving how public health researchers and practitioners understand and measure fluidity in sexual orientation identity and attractions among adolescents and young adults. In 2021-2023 we collected surveys from an online panel of over 15,000 adolescents and young adults ages 14-24) living across the United States. We collected 7 waves of surveys, reaching out to youth every 2-3 months over 18 months. Data we collected include both quantitative and qualitative measures about to how youth describe and conceptualize their own changes (or absence of changes) in sexual identity and attractions.

This has resulted in unprecedented data from youth perspectives about sexual fluidity over time—information that can be vital to inform researchers, clinicians, and policymakers interested in the sexual health, mental health, and overall wellbeing of youth.

We are now in the analysis and dissemination phase of the project. We are seeking a student with strong writing and communication skills and an interest in health equity and sexuality research to join our team for the year. The Fellow will work directly under the co-supervision of Dr. Gordon and Dr. Nelson on data analysis, interpretation, manuscript-writing, and the development of other dissemination materials (e.g., infographics). The Fellow will receive training in qualitative coding and analysis. Depending on the project timeline, the Fellow may also work on an abstract for a relevant conference or professional meeting (e.g., Society for Behavioral Medicine, Society for the Scientific Study of Sexuality, Society for Research on Adolescence).

[Back to the top](#)

Addressing Adverse Childhood Experiences in Winthrop Massachusetts

Professor: Jacey A. Greece, DSc, MPH

Department: Community Health Sciences

Email: jabloom@bu.edu

Number of Fellows: 1-2

Timeframe: November 2024 – December 2025

The Winthrop Department of Public Health & Clinical Services (WDPH&CS) in collaboration with Mi Amore, is conducting *Project UPLIFT (Understanding and Providing Lasting Impacts for Families to Thrive)*, which aims to fuse educational outreach and support service delivery for families experiencing food insecurity to mitigate chronic stressors and adverse childhood experiences (ACES) for the most vulnerable in the community. This project advances health equity through improved access to healthcare, safe housing, economic resources, and education. The project staff also collaborates closely with the Winthrop Fire Department that serves as a leader in the community for addressing ACES. BUSPH collaborates on all aspects of the project leading the strategic communication development and the mixed-methods evaluation.

It is estimated that nearly 13% of U.S. households experienced food insecurity in 2022.¹ Of those households that are food insecure, there is a higher prevalence and burden among marginalized communities.² The town of Winthrop is a coastal community located north of Boston in Suffolk County, Massachusetts. Winthrop has a population of 18,600 people with multiple generations living within the town. Winthrop has similar rates of food insecurity (12.2%) to the U.S.³ To help families with food insecurity in the community, Mi Amore was founded in 2014 as a food recovery and redistribution project. Currently, 42 families receive food support through Mi Amore, with 75 children being served by this project. Of the families who are involved with this project, 76% identify with the BIPOC community.

There are three main goals for implementation of this project:

- **Goal #1** is to increase awareness among Mi Amore recipients about the importance of *specific* factors that contribute to one's overall health and wellbeing, including nutrition, physical activity, social/emotional health, safe housing, and resiliency. Fellows will support project staff in measuring the reach of this goal; creating and pre-testing educational materials included in food distribution packages on various health factors topics; and, devising dissemination plans to ensure the materials reach those most in need.
- **Goal #2** is to identify key social needs beyond food insecurity for families receiving support through Mi Amore using an established Social Needs Assessment tool. Fellows will assist the project team in developing protocols and conducting the Social Needs Assessment with WDPH&CS resource navigators and will summarize the findings to identify additional areas for comprehensive supports to decrease impacts of inequity.
- **Goal #3** is to create a compendium of community-based resources that families can access based on the findings of the Social Needs Assessment including transportation, education, food, housing, utilities, and personal safety.
- **Goal #4** is to conduct a mixed methods evaluation of the process and outcomes of *Project UPLIFT* using both qualitative and quantitative data collection to assess program delivery and achievement of outcomes and issuing recommendations for expansion and sustainability.

Fellows on this project will be integral to the success of all three goals, as specified above. This project needs students with strong literature review, writing, and communication skills and an interest in community-based interventions and communications to help the study team address the following aims: 1) determine the current landscape related to ACES and the current supports of Mi Amore; 2) identify gaps in supports and communication in the factors that contribute to one's overall health and wellbeing; 3) develop protocols related to the Social Needs Assessment, in consultation with resource navigators; 4) draft and submit an Institutional Review Board (IRB) application to Boston University in order to conduct the evaluation of the project; 5) conduct an environmental scan and literature review to inform the compendium of resources available to families; 6) develop and conduct surveys to assess effectiveness (outcome evaluation) of the project; 7) develop and conduct interviews with stakeholders within and around Winthrop to assess perspectives and implementation (process evaluation); 8) conduct qualitative and quantitative analysis on the surveys and interviews, along with the study team, to issue recommendations for intervention enhancements; and, 9) draft a manuscript of the study, methods, results, and recommendations for submission to a journal. In collaboration with the study team and Winthrop, we plan to disseminate 2 manuscripts next year on these aims and the student will have the opportunity to co-author these manuscripts and prepare national conference presentations.

[Back to the top](#)

The CHANCE Study: Considering the Health of Adolescents Navigating Community violence Exposure

Supervisor & Mentor: Patrece Joseph, PhD

Email: pjoseph@bu.edu

Timeframe: December 2024 – December 2025

Project Description: The *CHANCE study* (Considering the Health of Adolescents Navigating Community violence Exposure) is motivated by increasing evidence that exposure to community violence, including gun violence, has negative impacts on adolescents' health and wellbeing.

This project aims to (1) improve understanding of how exposure to community violence is associated with adolescents' mental health and substance use, and (2) use participatory methods to involve youth in developing an agenda for research in this area.

In this fellowship, a student will gain experience in data management, quantitative data analysis, conducting a scoping review, participatory methods, as well as the presentation of data for scientific and general audiences. The fellow will assist Dr. Joseph with the following tasks:

1. Secondary data analyses of Adolescent Health Data: The Youth Risk Behavior Surveillance System (YRBSS) and the Adolescent Behaviors and Experiences Survey (ABES) are nationally representative datasets of that examine health behaviors and experiences among United States high school students. We will use these data to examine associations between community violence exposure, substance use, and mental health among adolescents. The fellow will assist Dr. Joseph by reviewing relevant literature and creating tables.
2. Scoping Review of Youth Participatory Studies: The fellow will assist with conducting a scoping review of studies that use participatory methods to examine adolescent exposure to community violence and/or substance use. Specifically, the fellow will work with Dr. Joseph to review the literature and extract and synthesize study findings.
3. Participatory Agenda Setting with Youth: The fellow will assist with developing an agenda for research on the impact of community violence on adolescents' health and wellbeing. Tasks include conducting agenda setting sessions with youth and revising the agenda based on feedback from youth.

The fellow will work directly with Dr. Joseph as well as her collaborators and community partners. Deliverables from this fellowship include: (1) presentations and infographics of findings from the secondary data analyses, (2) abstracts and posters for conference presentation, and (3) a report of the participatory research agenda. For interest students, there is an additional opportunity to co-author manuscripts related to each of the tasks above.

[Back to the top](#)

Pilot of the Self-Help Plus (SH+) Stress Management Intervention Among Breast and Gynecologic Cancer Patients in Viet Nam

Professor: PhuongThao Le, PhD, MPH

Department: CHS

Email: ptle@bu.edu

Number of Fellows: 1

Timeframe: December 2024 – December 2025

Project Description:

The purpose of the research study is to pilot a culturally adapted, group-based stress management program to reduce the psychological distress among cancer patients. We are conducting a randomized controlled trial of the adapted intervention, Vietnamese Self-Help Plus (vSH+), and evaluate the feasibility of the intervention model among breast and gynecologic cancer patients in various oncology settings in Viet Nam.

Fellowship Activities:

All data collection activities are being conducted by a research team in Viet Nam. The research fellow will be involved in documenting data collection activities, drafting data analysis plans, conducting descriptive analyses, and preparing for reports and publications, including submitting scientific abstracts and presentations and manuscripts. The fellow should have strong communication skills, respect for different cultures, basic knowledge of statistical methods, and appreciation of community-engaged research principles in global settings.

[Back to the top](#)

Adolescent Sexual Health Research

Professor: Kimberly Nelson, PhD, MPH

Department: Community Health Sciences

Email: knel@bu.edu

Number of Fellows: One

Timeframe: Dec 2024 – Dec 2025

In this fellowship, a student will gain experience with data management, quantitative and qualitative data analysis, and presentation of quantitative and qualitative data for both scientific and general audiences. Data for this fellowship will come from an online pilot survey called the Scales and Measures of Adolescent Sexual Health (SMASH) Pilot Survey. The SMASH Pilot Survey collected data from 92 US adolescents and young adults during the summer of 2024 and mainly focused on assessing the validity of existing measures of sexual function that have been validated with adults, with additional survey questions about sexual health and sexual behaviors. As a key member of the research team, the fellow will work directly with Professor Nelson and her team. Deliverables from this experience will be determined based on the interests of the fellow and can include:

- 1) the results of quantitative data analysis
- 2) presentations of quantitative analysis results
- 3) qualitative data analysis, including the development of qualitative codebooks and coding output
- 4) presentations of qualitative coding results following analysis
- 5) mixed-methods analysis, and/or
- 6) the presentation of the results of mixed-methods analysis

[Back to the top](#)

Assessing Interventions to Support Adherence to Antiretroviral Therapy (ART) among Women and other Vulnerable Individuals in South Africa

Professor: Lora Sabin, PhD
Department: Global Health
Email: lsabin@bu.edu
Number of Fellows: One
Timeframe: Dec 2024 – Dec 2025

This project will equip a student with the skills and expertise to assess implementation of a clinical intervention trial in a resource-constrained setting and conduct analysis of qualitative and quantitative data related to assessing intervention impact in Cape Town, South Africa. Dr. Sabin is the co-PI (with Dr. Orrell, an infectious diseases expert and physician based in Cape Town) on a large study entering year 4 that will assess outcomes and implementation of multiple interventions to improve adherence to and retention in HIV treatment for individuals beginning treatment in community clinics in Cape Town. Participants will include pregnant women and adolescents. The fellow would help with assessment of implementation outcomes among trial participants as well as clinic and research staff: analyzing quantitative and qualitative data, drafting one or more abstracts, and possibly helping with a manuscript to describe implementation. The fellow will work closely with Lora and other BUSPH team members, depending on what emerges as most urgent and timely, and engage in:

- Monitoring study progress and patient flow through the trial:
- Analyzing data
- Interpreting data
- Drafting an abstract
- Drafting a manuscript

[Back to the top](#)

Association Between Perceived Racial Discrimination and Adverse Maternal Outcomes by Insurance Coverage

Professor: Kathryn Thompson, PhD, MHA

Department: Community Health Sciences; Health Law, Policy, and Management

Email: kdthomps@bu.edu

Number of Fellows: 1

Timeframe: December 2024 – December 2025

In the United States, significant disparities exist in maternal health outcomes across racial and ethnic groups, with Black, Indigenous, and other women of color experiencing higher rates of adverse maternal outcomes compared to their White counterparts. These disparities are deeply rooted in social determinants of health, including structural racism, access to quality healthcare, and economic inequalities.

Perceived racial discrimination, a chronic stressor that impacts mental and physical health, has been increasingly recognized as a significant contributor to these poor maternal health outcomes. Research has shown that women who experience racial discrimination during pregnancy are more likely to face complications such as preterm birth, low birth weight, and even severe maternal morbidity (SMM). At the same time, insurance type—whether public, private, or none—plays a critical role in determining access to timely and adequate prenatal care, further compounding these disparities. Women insured by Medicaid or without insurance are at higher risk for adverse outcomes due to systemic barriers within healthcare, including limited provider options and delayed care.

The complex interplay between perceived racial discrimination, insurance type, and maternal health outcomes has not been thoroughly explored. This project seeks to address this gap by examining these factors using Phase 8 of the Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based surveillance dataset that captures self-reported experiences of discrimination and health outcomes across diverse groups.

Project Objectives:

This project aims to investigate how perceived racial discrimination and insurance type intersect to influence maternal health outcomes. The specific objectives are:

1. Quantify the relationship between perceived racial discrimination and adverse maternal outcomes, such as severe maternal morbidity, preterm birth, and low birth weight, across different racial and ethnic groups.
2. Explore the moderating role of insurance type (Medicaid, private, or uninsured) on the association between perceived racial discrimination and adverse maternal outcomes.
3. Assess yearly trends in these maternal outcomes using PRAMS Phase 8 data to identify shifts in disparities based on racial/ethnic group and insurance type over time.

Student Fellow Responsibilities:

Dr. Thompson is seeking on dedicated research fellow who are interested in maternal health disparities, social determinants of health, and health equity. The fellow will work under the supervision of Dr. Thompson, contributing to all stages of the research process.

Responsibilities include:

- Analyzing PRAMS Phase 8 data to examine the associations between perceived racial discrimination, insurance type, and adverse maternal outcomes.
- Developing high-quality tables, figures, and visualizations for inclusion in a peer-reviewed publication.
- Conducting literature reviews on racial discrimination in healthcare, insurance-related disparities, and maternal health outcomes.
- Assisting in the development of an abstract for submission to the AcademyHealth Annual Research Meeting (ARM) and contributing to the preparation of a manuscript for publication.
- Collaborating to interpret findings and prepare presentations for conferences.

Skills Required:

Ideal candidates will have a background in statistical data analysis, particularly in the use of Stata (preferred) or SAS. Experience with regression analysis and familiarity with health disparities, maternal health outcomes, or social determinants of health are highly beneficial. Strong writing skills are important, as the fellow will have the opportunity to contribute as co-authors on the manuscript.

Dr. Thompson is committed to fostering the professional development of our the fellow. The research team plans to submit a manuscript by the end of 2025, and fellows will have the opportunity to present findings at national conferences, gaining valuable experience in both academic and applied public health research.

[Back to the top](#)

Preventing Childhood Obesity Through Youth Empowerment

Professor: Monica Wang

Department: Community Health Sciences

Timeframe: November 2024-October 2025

Project Description

Are you passionate about public health and eager to make a difference in the lives of children and families? Join us as a Maternal and Child Health Fellow on the H2GO study, where you'll gain hands-on experience in a cutting-edge community-based intervention aimed at empowering youth and preventing childhood obesity. This fellowship offers a unique opportunity to blend research with direct community engagement, focusing on youth-centered empowerment and reducing sugar-sweetened beverage consumption among children and families through Boys & Girls Clubs across Massachusetts.

What You'll Do:

- **Community Engagement:** Act as a key liaison between our project and the Boys & Girls Club sites, fostering strong relationships and facilitating data collection.
- **Field Work:** Periodic travel across Massachusetts to collect important data, including anthropometric measurements from child participants. (Don't worry if you don't have your own transportation – rental cars are provided!)
- **Data Management:** Assist with survey administration, data entry, and overall project monitoring.
- **Professional Development:** Connect with community and academic experts, enhance your skills in writing, networking, and receive personalized mentorship to support your career growth.

Fellowship Activities Include:

- Conducting follow-up assessments with study participants at 2, 6, and 12 months.
- Attending weekly team meetings via Zoom.
- Communicating with study site partners to ensure smooth operations.

Additional Details:

- **Blend of in-person and remote activities:** Complete administrative tasks from the comfort of your own space. Engage in travel to study sites as needed and attend periodic team bonding events.

This fellowship is a fantastic chance to apply classroom knowledge in a real-world community setting, contribute to research that directly impacts the lives of children and families, and develop valuable skills for your public health career. If you're enthusiastic about making a tangible impact and eager to dive into a dynamic research environment, we encourage you to apply!

[Back to the top](#)