**Maternal & Child Health**

**Research Fellowships**

**2018-2019 Project Descriptions**

**Opportunities:**

1. Analysis and Translation of Birth Data for Practice and Policy, including the website Birth by the Numbers (Prof. DeClercq)
2. Cape Cod Family Health Study (Prof. Ann Ascengrau)
3. Leading the Narrative: Scientific Writing and Communication in Public Health Obesity (Prof. M. Wang)
4. Leveraging Community Expertise to Reduce Racial and Ethnic Disparities in Accessing Post-Overdose Addiction Treatment and Harm Reduction Services (Prof. Bazzi)
5. Medicaid Coverage of Pregnancy and Postpartum Benefits (Prof. Gordon, Prof. McCloskey)
6. Project Early: Engagement, Assessment, Referral and Linkage for Young Children with Social Communication Concerns (Prof. Feinberg)
7. Promoting Adherence to Antiretroviral Therapy (ART) Among Adolescents and Pregnant Women in Low-Income Settings (Prof. Sabin)
8. Substance Use and Engagement in Pre-Exposure Prophylaxis (PrEP) for HIV Prevention (Prof. Bazzi)
9. The Young Men & Media Project (Prof. Nelson)

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

**Professor:** Eugene Declercq, PhD

**Department:** Community Health Sciences

**Email:** declercq@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

The project needs a student with some data skills and a great deal of enthusiasm about working with birth data to work on two different projects, specifically: (1) the analysis of U.S. national birth certificate data as part of a cross-national study of the timing of births in the United States with a particular emphasis comparing the timing of hospital and out-of-hospital births. The project will be developed by the student into an abstract for a presentation at the 2019 APHA meeting, which the student is expected to present with Dr. Declercq’s support.  The second part of the fellowship will involve working with the team who develops materials for the website “Birth by the Numbers.” The Business of Being Born was a 2008 documentary on childbirth in the U.S. It has been re-edited into a shorter 30 minute version for college classroom use and it will be supplemented by a study guide and educational materials (developed by a 2010 MCH Fellow) to support in-class and internet use. An extra on the DVD was “Birth by the Numbers,” a short presentation on trends in childbirth in the US. As part of this project, a companion website examining data on childbirth in the US was developed and made available to educators, the public and the press to provide up-to-date statistics on childbirth in the U.S. and cross-nationally. The fellowship will involve working with Prof. Declercq and former fellows who are collaborating on these efforts and directly overseeing the *Birth by the Numbers* website. The fellow will work on website development and support, with a particular emphasis on developing up-to-date resources and presentations on childbirth data that can be downloaded for use in college classrooms and made available to students and the press.

**Cape Cod Family Health Study**

**Professor:** Ann Aschengrau, ScD

**Department:** Epidemiology

**Email:** aaschen@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

Motivated by a life course perspective that considers both chemical and social factors, this retrospective cohort study is investigating the long-term impact of early life exposure to environmental pollution, social stressors and resilience promotion factors on the risk of illicit drug use and unhealthy alcoholic beverage consumption during adulthood. In this fellowship, the student will assist the study investigator with analyses of questionnaire data and preparation of manuscripts for publication. The student will also gain experience with literature reviews. Applicants must be willing to complete human subjects and CITI trainings and attend weekly meetings with Dr. Aschengrau. This fellowship provides an opportunity for a student to be involved in an epidemiologic study that is entering the data analysis phase.

Note: Experience with SAS and data analysis is required.

**Leading the Narrative: Scientific Writing and Communication in Public Health Obesity**

**Professor:** Monica Wang, ScD

**Department:** Community Health Sciences

**Email:** mlwang@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

This fellowship provides training and experience in scientific writing and communication in obesity and health equity research. Writing projects will focus on analyzing and presenting data from a childhood obesity prevention study targeting sugary drink consumption through Boys and Girls Clubs. As a key member of the research team, one fellow will work directly with Professor Wang. Fellowship activities will build upon content and skills acquired in the classroom and include:

* Development of literature synthesis and critical analysis skills
* Writing for scientific and non-scientific audiences
* Preparing a manuscript for submission
* Disseminating science through various channels, including social media and submitting scietnifc papers and abstracts

The fellow will be invited to serve as lead author and/or co-author on at least 1 scientific paper and 1 public engagement piece (e.g. editorial, blog post).

**Leveraging Community Expertise to Reduce Racial and Ethnic Disparities in Accessing Post-Overdose Addiction Treatment and Harm Reduction Services** **Professor:** Angela Bazzi, PhD, MPH

**Department:** Community Health Sciences

**Email:** abazzi@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

Recent data suggest that opioid-related overdose rates in Boston have increased faster among Black and Latinx residents than their White counterparts. However, Black and Latinx people who use drugs (PWUD) may be less likely to receive addiction treatment or harm reduction services following non-fatal overdose. Little research to date has investigated the reasons for racial/ethnic disparities in accessing these life-saving services post-overdose. To better understand these disparities and identify strategies to overcome them, our interdisciplinary team is undertaking a large qualitative study with Black and Latinx PWUD and professional key informants in the Greater Boston Area. AN explicit goal od this research project is to engage Black and Latinx PWUD and other stakeholders in the research process through the formation of a committee that will help guide instrument design, research conduct, and analysis and dissemination activities. By joining our research team, the fellow will be able to participate in numerous aspects of this project and learn about community-based qualitative research collaborations. Depending on interests and skills, the fellow may help:

* develop study protocols
* contribute to recruitment and qualitative data collection
* assist with meetings of the committee of Black and Latinx PWUD
* assist with literature reviews
* contribute to data management, coding, and analysis
* participate in manuscript development and community-based dissemination activities

**Medicaid Coverage of Pregnancy and Postpartum Benefits**

**Professor:** Sarah Gordon, PhD, MS; Lois McCloskey, DrPH, MPH

**Department:** Health Law, Policy, and Management (Gordon); Community Health Sciences (McCloskey)

**Email:** gordonsh@bu.edu; loism@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

In this fellowship, a student will participate in creating a first-of-its-kind comprehensive database on perinatal health benefits covered by state Medicaid programs. Medicaid is a national health insurance program for low-income Americans that finances 45% of all U.S. births. States have considerable discretion in deciding which prenatal, delivery-focused, and postnatal maternal health benefits they cover, such as home health visits, postpartum breastfeeding consultations, home births, and doula services. While some states make this information publicly available, other states do not because services are covered through a global payment that covers a suite of maternity care services. As part of a multi-state project, a student will work with Drs. Gordon and McCloskey to gather evidence from publicly available sources and targeted outreach to state Medicaid officials to ascertain which maternal benefits states cover. The fellow will participate in the creation of a state database and a descriptive report of their findings with the possibility of turning the report into a peer-reviewed publication. Future work will build on the fellow’s findings to understand how state variation in perinatal benefits impacts quality of care in maternity care and maternal health outcomes.

**Project Early: Engagement, Assessment, Referral and Linkage for Young Children with Social** **Communication Concerns**

**Professor:** Emily Feinberg, ScD, CPNP

**Department:** Community Health Sciences

**Email:** emfeinbe@bu.edu

**Number of Fellows:** One

**Timeframe:** Nov 2019 – Dec 2020

Autism is a chronic condition that occurs in almost 1 in every 59 children and conveys lifelong disability in the areas of communication, social interaction, and behavior. Feasible, culturally appropriate interventions are necessary to reduce disparities in diagnosis and treatment of young children with autism. Our research team has several ongoing projects related to autism and mental health that aim to reduce these disparities through service systems interventions.

This fellowship provides an opportunity to learn about community-based research trials through participation in a multi-disciplinary research team. The fellow will have an opportunity to conduct outreach to families to administer developmental screening questionnaires in-person at BMC’s Pediatric Primary Care clinic and by phone. They will also abstract data from medical records to compare results of various developmental screening tools usually administered in primary care. The fellow will be responsible for consenting and enrolling families into the study and managing clinical research data in a standardized format.

Additionally, the fellow will have access to children’s specialty service documents from the Department of Public Health and will be able to create a data abstraction tool and database. Working on this project, the fellow will gain experience working with diverse communities, conducting patient outreach, administering research assessments, and managing complex datasets.

This is a great opportunity for a student who is interested in community based research and clinical care, and who wants to gain experience working with data. The student is expected to develop an abstract for submission to a national conference and will have the opportunity to attend and present her/his work.

**Promoting Adherence to Antiretroviral Therapy (ART) among Adolescents and Pregnant Women in Low-Income Settings**

**Professor:** Lora Sabin, PhD

**Department:** Global Health

**Email:** lsabin@bu.edu

**Number of Fellows:** One

**Timeframe:** Nov 2019 – Dec 2020

This project will equip a student with the skills and expertise to conduct analysis of qualitative and quantitative data (specifically cost data), draw conclusions from the data, and build on those data to draft a manuscript for publication and, possibly, to draft a proposal for further research to address the issue of poor adherence among adolescents and pregnant women. Dr. Sabin has several studies that focus on youth and pregnant women living with HIV, with some exciting work that needs to be done in 2020! One study (currently awaiting a funding decision, but likely to be funded) builds on our work in Vietnam and will implement an intervention to reduce stigma among HIV-positive adolescents. For this work, the fellow would help with a cost-effectiveness study component. A second study will focus on vulnerable populations in South Africa, and build on data collected in summer 2019 to analyze data and draft a manuscript for publication. The fellow would help with the manuscript-writing and further data analysis. The fellow will work closely with Lora on one or more of these projects, depending on what emerges as most urgent and timely, and engage in:

* Analysis of data
* Interpretation of data
* Drafting of a manuscript (or two!)
* Discussion of follow-on research
* Work on a research proposal

**Substance Use and Engagement in Pre-Exposure Prophylaxis (PrEP) for HIV Prevention**

**Professor:** Angela Bazzi, PhD, MPH

**Department:** Community Health Sciences

**Email:** abazzi@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

Recent clusters of new HIV infections have been identified among people who use and inject drugs and individuals experiencing homelessness in several communities in the U.S. northeast. Antiretroviral pre-exposure prophylaxis (PrEP) is clinically efficacious and recommended for HIV prevention among people who inject drugs (PWID) and others who use substances, but uptake in these populations has lagged far behind that of other groups (e.g., men who have sex with men). Our team’s formative research has identified multilevel barriers to PrEP use among PWID and other people who use substances, including culturally-appropriate PrEP navigation services, short-term prescribing, and assistance with medication storage. By thoroughly evaluating these ongoing efforts and studying patient and provider experiences, we aim to identify and disseminate promising strategies that can help inform HIV prevention programming for vulnerable substance-using populations throughout the U.S. Northeast and beyond. The fellow be engaged as a member of our evaluation research team and may be involved in a variety of activities, depending on their interests and skills. These activities may include:

* Helping to develop study protocols
* Learning about study coordination
* Contributing to program record review
* Conducting qualitative interviews with patients and professional key informants
* Assisting with literature reviews
* Contributing to data management, coding, and analysis
* Participating in manuscript development

**The Young Men & Media Project**

**Professor:** Kimberly Nelson, PhD, MPH

**Department:** Community Health Sciences

**Email:** knel@bu.edu

**Number of Fellows:** One

**Timeframe:** Dec 2019 - Dec 2020

Adolescent sexual minority males (ASMM), ages 14-17, are disproportionately affected by HIV and other sexually transmitted infections (STIs) in the U.S. Despite increased HIV/STI risk, there is a lack of formal sexual health education resources to prepare ASMM for engaging in healthy sexual activity. Lacking such guidance, ASMM often turn to the Internet, including pornography, to get information about male-male sexual relationships. Although the Internet can be a convenient and affirming source of sexual health information, it can also be unreliable, often providing misinformation or misleading characterizations of male-male sexual relations. The primary goal of the Young Men & Media project is to develop and pilot test a community-informed, online sexual health program that promotes the critical examination of online media by ASMM in order to promote healthy sexual development and to decrease their sexual risk-taking. The fellowship will provide training and experience in evaluating the usability and acceptability of the Young Men & Media intervention. As key members of the research team, fellows will work directly with Professor Nelson. Fellowship activities will include:

* Online survey testing
* Participant recruitment
* Social media management
* Data management
* Scientific writing
* Overall project monitoring