

Degree and Field of Study (2016):

SM Social and Behavioral Sciences

Organization	Project Abstract
Harvard innovation lab	The nutrition Algorithm I conducted survey, interview, and market research to inform the development of a web resource for healthy eating.
Harvard PRC	CORD Costing Project This summer, I assisted the Harvard Prevention Research Center's cost analysis team in generating an intervention implementation cost estimate for the Childhood Obesity Research Demonstration Project (CORD). This multi-sector childhood obesity intervention was funded by the CDC and implemented in Fitchburg and New Bedford, Massachusetts, by the Massachusetts Department of Public Health from 2011-2015. In this role, I researched and synthesized evidence on the resources required to implement the intervention and gathered cost data through consultation with experts, peer-reviewed literature and federal survey and report data. This invaluable experience introduced me to cost effectiveness analysis, connected me with prominent public health practitioners in Massachusetts, and provided me with experience gathering and analyzing quantitative and qualitative data.
Blue Cross and Blue Shield Association	Implementing Value-Based Care at BlueCross BlueShield Association The Value-Based Care team at Blue Cross Blue Shield Association is charged with enforcing the mandate, collecting data on its enforcement, and supporting the technology projects which enable the data exchange between Plans. When I came on board in June of 2015, these data exchanges were largely operational and the Value-Based Care team was moving into the measurement and reporting phase, evaluating Plan compliance with the 2015 mandate. My role was to assess each Plan's state of completion based on the number of clients participating, and then mapping this out to the total number of people eligible to participate in value-based programs.
Dana-Farber Cancer Institute	A Qualitative Study on Developing a Conceptual Model of Financial Well-Being for Public Health Research "Financial well-being" is a multi-dimensional construct currently under development in the Tucker-Seeley Research Lab at Dana-Farber Cancer Institute that aims to go above and beyond traditional indicators of socioeconomic status to capture not only material but behavioral and psychological components of the financial experience. To determine whether the construct appropriately measures the subjective and objective aspects of individual socioeconomic circumstances, four focus groups were conducted with community members, as well as resource specialists and social workers who work with cancer patients. This paper presents the results from the analyses of these focus groups.
Cambridge Health Alliance	Cambridge Health Alliance Patient Family Advisory Council I worked for the Cambridge Health Alliance Patient Family Advisory on a variety of projects geared towards revitalizing a stagnating program. This state-mandated program involves patients and family members to give feedback to the hospital system in order to improve patient experience of care. I helped the PFAC choose some action projects, prepare a recruitment strategy, launch a new webpage, and build out an orientation for new members.

Ariadne Labs	<p>Perinatal Quality Collaborates: Stakeholder Variation and Implications for Maternal and Child Health Mixed methods study on state-based PQCs</p>
Harvard T.H. Chan School of Public Health	<p>Product Reformulation After New Competitive Food Standards in Schools Introduction: In 2012, Massachusetts enacted school competitive food and beverage standards. These standards aim to improve the nutritional quality of competitive foods and beverages, which traditionally have been high in calories, saturated fats, and added sugars. We assessed the nutritional changes among competitive foods and beverages, and whether products were reformulated after the law took effect. / Methods: We documented all competitive foods and beverages sold before (2012) and after (2013 and 2014) the standards were implemented among a sample of 36 school districts with both a middle and high school. We analyzed: 1) changes in nutrient composition of competitive foods and beverages, 2) the extent of product reformulation, and 3) whether reformulated products were only available in schools or could be purchased at a local grocery store chain. / Results: The average nutrient profile of competitive snacks improved after the law was passed. In accordance with the new regulations, calories, total fat, saturated fat, sodium, and sugar decreased and fiber increased among foods after 2012. In 2013, nearly 5% of foods were reformulated, which increased to 8.6% in 2014. Calories and sodium in beverages decreased significantly after 2012, in part due to decreases in package size. / Discussion: Massachusetts’s competitive food law was effective in improving the nutritional content of competitive foods and beverages, and product reformulation helped schools adhere to the law. This suggests that new national Smart Snacks in School standards may similarly improve the foods available in schools.</p>
Harvard T.H. Chan School of Public Health	<p>The global health and economic burden of cancer As one of the leading causes of death worldwide, cancer is projected to cause 13 million deaths a year by 2030. While the magnitude of the projected increase in the burden of cancer varies by country and by income group, it is rising for all income groups. Policymakers the world over must prepare for the toll that cancer will progressively take on their people, economically, medically, and socially.</p>
STRIPED (Strategic Training Initiative for the Prevention of Eating Disorders)	<p>Leveraging Corporate Social Responsibility to Increase Consumer Safety of Dietary Supplements Sold for Weight Loss and Muscle Building The potential dangers associated with dietary supplements sold for weight loss and muscle building are well documented and increasingly garnering the attention of the media, public, and government leaders. Public health professionals have an opportunity to improve population health in the context of dietary supplement use by translating scientific evidence into action. In this commentary, we discuss the potential to motivate corporate social responsibility (CSR) among manufacturers and retailers of dietary supplements sold for weight loss and muscle building. We examine levers available to public health professionals for generating voluntary corporate self-regulation by reviewing examples from successful CSR initiatives in other domains of public health and offering recommendations highlighting effective advocacy strategies. We encourage public health professionals to use one or multiple advocacy strategies to improve consumer protections for dietary supplements sold for weight loss and muscle building.</p>

<p>San Francisco Department of Public Health</p>	<p>Capacity and Gap Assessment of the San Francisco Health Care Services Master Plan As an intern in the Policy and Planning Office of the San Francisco Department of Public Health (SFDPH), this practicum focused on updating and enhancing San Francisco's Health Care Services Master Plan (HCSMP). The HCSMP is one of the components of San Francisco's community health improvement plan and is used to guide land use planning and inform health policy decisions that improve population health and create equitable health care access for all. My work primarily involved identifying and reporting the current system's capacity and gaps as well as projected needs for certain health care services. This required examining the prevalence of the relevant health issues; disparities in care; quality of care; as well as the capacity; utilization; and geographic, cultural, and linguistic access to care.</p>
<p>Wellframe</p>	<p>Establishing Health Communication & Health Literacy Guidelines As a member of the clinical team at Wellframe, my role was to refine the health education component of a mobile app to help patients manage chronic disease. This content consisted of short articles on various health topics (i.e. diabetes, chronic heart failure, etc.). I conducted a thorough review of existing Wellframe disease programs, developed guidelines, and ensured health literacy standards were met for existing and future content. Given the amount of medical information in this content, it was important to make the text as simple as possible while also ensuring that formatting was appropriate for reading on a mobile device.</p>
<p>Massachusetts General Hospital</p>	<p>Developmental Timing of trauma and maltreatment exposure: Depression and PTSD symptoms in adulthood Utilizing data from the Grady Trauma Project and working under the guidance of Dr. Erin Dunn, I performed literature review and synthesis, data cleaning and analysis, results interpretation, and manuscript drafting and submission for the following abstract. In addition, I worked on a few other projects in a research capacity, including gene by environment analyses and social capital influence on adult mental health. Abstract: Background: Trauma exposure is a known risk factor for psychopathology. However, the impact of the developmental timing of exposure remains unclear. This study examined the effect of age at trauma exposure on levels of adult depressive and posttraumatic stress symptoms. Methods: Lifetime traumatic event exposure (including age at first exposure and frequency of exposure), current psychiatric symptoms, and demographic information were collected by interview among adults participating in a study at a public urban hospital in Atlanta, GA. Timing of first exposure was classified by early childhood (ages 0-5), middle childhood (ages 6-10), adolescence (ages 11-18), and adulthood (ages 19+), on depressive and PTSD symptoms. Results: Exposure to trauma (i.e., child maltreatment, other interpersonal trauma, non-interpersonal trauma, and other events) was high among the sample, with over half reporting exposure to some type of exposure. Participants exposed to trauma at any age had higher depressive and PTSD symptoms compared to their unexposed peers. Early childhood exposure to child maltreatment was associated with significantly higher PTSD symptoms compared to exposure starting in middle childhood or adolescence. Interpersonal violence exposure in early or middle childhood was associated with significantly higher depressive symptoms compared to those first exposed in adolescence or adulthood. Lastly, non-interpersonal violence exposure in middle childhood was associated with significantly higher PTSD symptoms than exposure during adulthood. Conclusions: Traumatic exposures at different ages may differentially impact depressive and PTSD symptoms in adulthood. More detailed examination of developmental timing and traumatic exposure is warranted.</p>
<p>Boston Children's Hospital</p>	<p>Does proximity drive visits? Using real-time GPS data to understand youth access and patronage of food establishments Background: Research suggests the built environment influences weight related outcomes through access to food and physical</p>

	<p>activity opportunities. “Food deserts” or geographic areas with limited healthy food outlets are believed to negatively impact health by limiting access to fresh, healthy, and affordable foods. However, teens spend more than half of their days away from home making proximity potentially less important in choosing where to patronage. Objective: Using real time smart phone GPS data, we set out to understand how often and at what distance from home individuals passed by (i.e., had access to) and stopped in (i.e., visited) full service grocery stores, convenience stores, and fast food outlets. Methods: We examined travel patterns using GPS data, including auto-detected visits to food service outlets, in a small sample (n=11) of Boston teenagers each carrying a GPS-enabled cell-phone for a period of a minimum of two-weeks. Both GPS and WiFi location data points were collected on a semi-continuous basis by a location analytics firm (Locately) and probabilistically compared to a proprietary dataset of food businesses to assess, for each day of participation and the overall study period: 1. the number of convenience stores, fast food restaurants, and grocery stores passed; 2. the distance each subject traveled from home; 3. the distance from home of each food outlet passed; 4. visits to food service establishments and the distance these establishments were from home.</p>
Self	<p>Experiences within inpatient psychiatric facilities from the consumer and staff perspective: A mixed methods approach The research I conducted over the summer was focused on better understanding experiences and quality of inpatient psychiatric facilities from both consumer and staff perspectives. This research will result in several papers, with varying focuses. I have already presented some findings on 3 different occasions and have built a support team of students and researchers.</p>
Harvard T.H. Chan School of Public Health	<p>Adolescent Health Literacy Most widely used measures of health literacy have been developed and/or validated for adults, but health literacy is also important for adolescents as they transition to adult care. With the health needs of adolescents in mind, I conducted a literature review to investigate the methods and tools used to assess health literacy among this population. As adolescents are increasingly expected to access and understand complex health information and to make their own health care decisions, the need for health literacy measures specifically for this age group is critical.</p>
MA Joint Committee on Public Health	<p>SBS SM2 Practicum – Massachusetts Joint Committee on Public Health For my practicum, I worked at the Massachusetts Joint Committee on Public Health under Senator Jason Lewis. As an intern, I was tasked with researching various topics and providing the Senator with evidence and background information for specific public health policies. While I worked on many issues, the majority of the research I did was on marijuana legalization. I worked with the Legislative Director and the Chief of Staff to compose a series of briefs on each aspect of legalization for the Senator’s reference.</p>
Boston Health Care for the Homeless Program	<p>Pilot Study of a Health Communication Text Messaging Intervention for Homeless Patients with Type-2 Diabetes and/or Depression For my practicum, I collaborated with Boston Health Care for the Homeless Program’s research team, as well as a team from the nonprofit mobile technology organization CareMessage, on a pilot study evaluating the feasibility and effectiveness of a health communication intervention delivered through text messaging. This intervention is intended to improve disease knowledge, adherence to disease self-management regimens, and health outcomes among homeless individuals with type-2 diabetes</p>

	and/or clinical depression.
FXB India Suraksha	Impact evaluation of FXBVillages in Villapuram, Tamil Nadu, India Evaluate impact of three-year poverty alleviation program in two rural villages in Villapuram, Tamil Nadu, India; focusing on immediate and sustainable impact among female program participants. Utilize findings from program evaluation to inform program design/plan of new poverty alleviation intervention in urban slums in New Delhi.