My research program focuses on the examination and prevention of adolescent health risk behaviors, primarily underage drinking, and reducing health disparities among youth populations globally. Adolescence is a unique phase in human development. Biologically, it is the healthiest period of the lifespan; however youth death rates spike as youngsters reach adolescence, largely due to behavioral causes. Risk behaviors such as alcohol use, initiated at adolescence tend to compromise health for the duration of the lifespan. Globally, the lion’s share of premature disease-related mortality from preventable causes is traceable to risk behaviors adopted at adolescence, including alcohol use. Alcohol-related injuries are the primary cause of adolescent mortality in the U.S. Half of the U.S. eighth-graders report having consumed alcohol, and 23% report having been drunk. Costs associated with underage drinking in the U.S. exceed $62 billion annually. The public health burden of underage drinking and other adolescent risk behaviors is distributed unevenly across populations creating health disparities, domestically and globally. My long-term research agenda seeks to better understand determinants of underage drinking and other adolescent risk behaviors that operate on various levels of social ecologies, and develop innovative interventions to disrupt trajectories to risk behaviors in youth populations around the world.

Current gap in the empirical literature:
The extant research on underage drinking and other youth risk behaviors tends to focus either on individual-level determinants of risk behavior, or on broader contextual predictors of such behaviors. Little research integrates these two approaches to document preventable risk production mechanisms that operate in specific social contexts in which adolescents are embedded, such as family, peer networks, schools and broader social ecologies. Additionally, the bulk of research on adolescent risk behaviors relies on crude, often static segmentation of adolescent populations such as by race and culture, without seeking more nuanced criteria for identifying most at-risk subgroups of youth which may transcend traditional taxonomies. Addressing these gaps in adolescent science is crucial to address persistent health disparities among youth subpopulations. My program of research seeks to address the above gaps in scholarly knowledge.
My scholarly research encompasses four main areas:

1. Identify most at-risk subgroups within youth populations disproportionately vulnerable to alcohol use, and other risk behaviors, by using state-of-the-art data analytic methodologies such as latent class analysis and mixture modeling.

2. Apply powerful behavioral / decision-making science frameworks to examine behavioral mechanisms by which alcohol use and other risk behaviors escalate among more at risk subpopulations, and identify protective mechanisms among more resilient subgroups.

3. Map the above behavioral mechanisms onto modifiable social processes and practices operating in a variety of social contexts such as family, school, and peer networks.

4. Use the above knowledge to develop innovative, effective interventions disrupting risk behavior trajectories, tailored to specific, meaningfully segmented youth subpopulations across a variety of cultures and geopolitical realms.

My dissertation examines family level determinants of underage drinking among Latino adolescents living in the Bronx. An innovative longitudinal model for the first time examines adolescent alcohol use as a function of the accuracy with which adolescents perceive parental alcohol-related expectations, which, in turn, depends on parental communicative self-efficacy. Additionally, the study discriminates effects of parental expectations regarding major-risk vs. minor-risk adolescent alcohol use. As part of my dissertation work, I developed a novel measurement instrument of behavior-specific parental self-efficacy, which was incorporated in the large NIH-funded study of underage drinking among Latino adolescents. This new scale, as well as other findings from my dissertation are likely to find broad application in social work research and practice.

Independent research: Currently, I serve as a co-principal investigator on two innovative studies aimed to better understand development of risk behaviors among vulnerable youth populations. One study focuses on identifying socio-behavioral mechanisms that explain health and educational disparities among inner city youth in Bedford-Stuyvesant, Brooklyn. Another project applies Unified Theory of Behavior to better understand and ultimately disrupt developmental paths towards disproportionate underage drinking among vocational students in Russia.
Overall, my research agenda moves beyond static descriptions of underage drinking and other adolescent risk behaviors, and their established impacts. I aim to identify the specific mechanisms through which common social exposures impact important determinants of behavior among adolescents and identify novel approaches to modify these mechanisms in order to disrupt risky behavioral tendencies, and promote protective ones. The overall goal is to reduce health disparities related to underage drinking and other health risk behaviors among adolescent populations in the United States and internationally.