UNC Charlotte R1 Commission Call for Nominations:
Areas of Research and Scholarship Excellence

Title of the Area: Violence Prevention

Area Co-Leads (in alphabetical order):
1. Robert J. Cramer, PhD
Associate Professor of Public Health Sciences & Belk Distinguished Scholar in Health Research

2. Shanti Kulkarni, PhD, MSW
Professor of Social Work

3. Jennifer Langhinrichsen-Rohling, PhD
Professor of Psychological Sciences and Health Psychology

UNC Charlotte Participating Disciplines & Academic Units:
1. College of Health and Human Services: Department of Public Health Sciences; School of Social Work; Biostatistics Core; Academy for Population Health Innovation

2. College of Liberal Arts & Sciences: Department of Psychological Sciences, Department of Anthropology

3. College of Computing and Informatics: Department of Computer Science

Disciplines: Psychology; Public Health; Social Work; Informatics; Data Science; Computer Science; Anthropology

Target Category: Existing and Emerging Excellence

Key Words: Interpersonal Violence; Self-directed Violence; Marginalized Populations; Data Science; Prevention

Executive Summary. Our team addresses **the thematic area of violence prevention.** We adopt the World Health Organization's (2014) violence definition that includes acts of deprivation, as well as physical, sexual, and psychological harm, which can be self-directed (e.g., suicide), interpersonal (e.g., domestic violence), and/or collective (e.g., campus shootings). In alignment with the Centers for Disease Control and Prevention (no date), we connect the dots between these multiple forms of violence by adopting a "shared risk" model of prevention (Caine, 2013). That is, multiple forms of violence have common risk and protective factors, which can be targeted to develop state-of-the-art prevention strategies and cross-cutting interventions to improve the lives of those most vulnerable to violence perpetration and victimization. These strategies offer potential to redress multiple forms of violence across individual, interpersonal, community, and structural levels (Cramer & Kapusta, 2017). We centralize two themes in our violence prevention research: equity/cultural sensitivity and multidisciplinary innovation. Our equity focus includes partnership with a variety of community organizations and members of marginalized communities, including LGBTQ+ persons, military personnel/veterans, persons diagnosed with HIV, law enforcement, healthcare patients, and incarcerated persons. Our proposed Area of Excellence unites public health, data science, biostatistics, psychology, anthropology, and social work to enhance basic science, leverage novel analytic approaches, and advance measurement, training, intervention, and other aspects of violence prevention.

The following **evidence supports our nomination of violence prevention as an area of existing and emerging excellence**. First, our proposed team includes a record of over 150 journal publications in just the past 3 years, as well as positions on multiple journal review boards and funding proposal panels. Importantly, project co-leads Cramer, Kulkarni, and Langhinrichsen-Rohling (L-R), have independently **established signature programs of research addressing multiple forms of violence**. Individually, the Violence Prevention Leadership Team has had considerable success obtaining external funding ($16m). Cramer developed and validated the Core Competency Model (CCM) of Suicide Prevention, a training program for behavioral health and other providers addressing suicide prevention skills. This work has been funded by SAMHSA, the U.S. Navy, and private foundations. Kulkarni is a national leader in intersectional trauma-informed violence prevention services. She received NICHD funding to explore the development of media literacy violence prevention strategies for African American youth and is currently lead evaluator for the SAMHSA-funded Mecklenburg County Resiliency in Communities After Stress and Trauma (ReCAST) Evaluation. Langhinrichsen-Rohling's ground-breaking work in advancing examination of sexual assault kits has improved law enforcement responses to sexual violence cases. This work has been funded by DOJ and the Bureau of Justice Assistance.

Uniting these scholars through an Area of Excellence designation would enhance existing and emerging collaborations, and initiate synergy around preventing a core public health problem that has already impacted the UNC Charlotte campus (gun violence) and surrounding community (racial unrest). Integrating team expertise in data science (Diaz-Garelli, Gunn, Montanaro, Shaikh) and marginalized populations (Bowling, Fuentes, Mennicke, Montanaro, Zarwell) will enhance our violence prevention agenda. Importantly, the Violence Prevention leadership team (Cramer, L-R, and Kulkarni) are also well-positioned to mentor and promote both up-and-coming UNC Charlotte scholars (many of whom are named in this proposal) and PhD students in public health sciences, health psychology, health services research, and educational leadership. These activities, along with establishing a UNC Charlotte Violence Prevention Consortium, underlie UNC Charlotte's successful transition to an R1 institution.

Evidence of Strength and Excellence. Many members of our proposed Area of Excellence Team have already received national prominence in this area. In addition to signature programs summarized earlier, Drs. Langinrichsen-Rohling (L-R) and Cramer were both invited reviewers for CDC's first firearm research review panel in decades. Dr. Cramer is the co-editor of the *J Agg Conf Peace Res* and is on the editorial board at the *J Interpersonal Vio* and *Sui and Life-Threat Behav*. Dr. L-R has developed a nationally known measure to assess suicide proneness, The Life Attitudes Schedule and has developed, marketed, and empirically tested two violence-prevention programs for high-risk adolescents (*Building a Strong Relationship; Building a Lasting Love*). She also served as senior scientist and then Director of the Youth Violence Prevention Program at the University of South Alabama (> 4 million dollars in OJJDP funding). Dr. Kulkarni serves as National co-lead on the Social Work Grand Challenge: Build healthy relationships to End Violence. She regularly consults with leading national organizations such as the National Resource Center for Domestic Violence and the National Alliance for Safe Housing. Cramer and Gunn have attained international recognition with visiting scholar and honorary research appointments with several universities in the United Kingdom (e.g., Imperial College London) and Australia (e.g., Griffith University).

The team has already attained **considerable group and individual research successes**. A snapshot of these successes include the following.

1. Funding: Totaling over $22m, our team has been funded by the NIH, SAMHSA, CDC, DoD, DOJ, HRSA, and others sources. Examples include an NIAAA R15 focused on bystander intervention to prevent risky drinking (Montanaro, Mennicke, Bowling); U.S. Navy funded study of firearm attitudes and suicide risk (Cramer, Bowling); CDC K01 evaluating bystander intervention to reduce multiple forms of violence among high risk students (Mennicke); privately funded mental health and victimization COVID-19 needs assessment among low income adults in the Charlotte region (Cramer, Mennicke, L-R); NIH funded program to develop a community health worker training for transgender people of color (Zarwell).

2. Publications: We have published more than 150 journal articles in the last 3 years, including. 10 team-based publications addressing violence prevention. Examples include a policy piece on the preventing sexual harassment among social work students in field placements (Mennicke, Kulkarni; *J Fam Vio*); examination of violence victimization disclosure among sexual and racial minority college students (Mennicke, Bowling; *J Amer Coll Health*); assessment of marginalized identity and affective attitudes as predictors of suicide risk (Cramer, L-R, Mennicke, Montanaro, Bowling; *Int J Env Res Pub Health*); and gender variation in impacts of IPV (Kulkarni, Mennicke; *Vio Vic*). Among our many distinguished publications are a hate-motivated behavior perpetration instrument (Cramer; *Crim Just Behav*); nationwide study of bystander intervention opportunities among sexual and gender minority college students (Mennicke; *J Interpersonal Vio*); review of current science of suicide risk among transgender and gender diverse persons (Bowling; *Sui Life-Threat Behav*); and an ecological analysis of suicide risk among U.S. Air Force service members (L-R; *J Cons Clin Psych*). In total, our team's publications have **been cited over 15,000 times.**

3. Community Partner Engagement: Our partnerships with the following local, state and federal partners include: City of Charlotte Violence Prevention Data Collaborative; Atrium Health; Naval Medical Center Portsmouth; Mobile Police Department; Two Veterans Affairs Medical Centers; Mecklenburg County Health Department; and North Carolina Department of Public Safety. We have relationships with a range of non-profit agencies such as Brave Step (Charlotte, NC); Psychology For All (Charlotte, NC); Charlotte Transgender Healthcare Group

(Charlotte, NC); Matthew Shepard Foundation; National Coalition for Sexual Freedom; and Campus Advocacy and Prevention Professionals Association. Our international collaborators include scholars and practitioners from the University of Oxford, University of Strathclyde, UK National Health Services, University Medical Center Utrecht, Medical University of Vienna, Hospital Clinico San Carlos Madrid, and many others.

These successes, attained in the short time since area co-leads Cramer and L-R arrived at UNC Charlotte in 2019, are amplified by **a number of achievements on the horizon**. Among others, these include: a competitively scored NIMHD K award application focused on sexual and gender minority suicide (Bowling, Gunn, Cramer); HRSA funded grant on training clinical health psychology graduate students in prevention/early intervention (L-R); SAMHSA campus suicide prevention grant application under review (Cramer, Mennicke, Montanaro); DoD grant application for a military suicide intervention RCT (Cramer, Gunn); a foundation-funded grant under review to pilot an LGBTQ+ health course (Bowling, Cramer, Montanaro).

Our team's successes are driven by collaborative efforts to integrate the **unique strengths and expertise of team members**. Our team possesses high-level expertise in a number of subject matter areas: intimate partner violence; self-directed violence; sexual violence; prejudice/bias-based victimization; sexual and gender minority health; sexual health; military health; college student health; and risky behaviors (e.g., alcohol use). Likewise, we are characterized by an array of methodological and statistical capabilities such as intervention design; experimental and clinical trial design; psychometrics and latent variable modeling; electronic health record data analysis and informatics; machine learning; qualitative interviewing; thematic and phenomenological analyses; program evaluation; and community-engaged research. **Our group cohesion** is characterized by the following principles: (1) shared sense of vision for non-violent and equity-focused solutions; (2) clear understanding of team members roles and responsibilities; (3) open lines of communication, and; (4) a flexible sense of teamwork and group success. This cohesion is evidenced by several facts. First, our numerous initial grants and articles have all been grounded in an interdisciplinary team science approach. Second, our team continues its fervent pursuit of grants to redress violence-related concerns (see above). Third, most of the team is actively involved in the **mentoring and training of student research efforts**. Five of us organized a coordinated summer effort to mentor six Charlotte Research Scholars Program during the pandemic summer of 2020. Students benefited from multi-disciplinary team mentoring, as well as participation in mixed-method studies such as analysis of social media responses following the 2019 UNC Charlotte campus shooting. Our team is also heavily involved in PhD program student mentoring in UNC Charlotte Health Services Research, Public Health Sciences, and Health Psychology. For instance, both Dr. Kulkarni and L-R are investigators on a HRSA behavioral health workforce training grant for psychology PhD and social work MSW students.

Additional resources are needed to enhance team success and expansion. Our team would benefit from focused support to apply the innovative data science skills (Diaz-Garelli, Gunn, Montanaro, Shaikh) and integrate marginalized population/community-engaged research expertise (Bowling, Fuentes, Mennicke, Montanaro, Zarwell) with our lead investigator violence-focused content areas. Funding could also provide necessary stipends and honorariums to leverage our national and international partners for campus workshops aimed at strengthening current and generating new project proposal ideas. In particular, we would be interested in bringing in R1 scholars who currently lead violence prevention-focused centers of excellence (L-R and Cramer have such established relationships).

Alignment with Regional and National Priorities. Our proposed area of excellence, **violence prevention**, aligns with numerous local, university, regional, and national program and funding priorities. The UNC Charlotte mission statement prioritizes work promulgating a "*focused set of community engagement initiatives.*" Violence has been identified as a national priority by the Biden administration; they support ending violence against women (e.g., addressing the sexual assault kit backlog), improving healthcare access for high-risk groups (e.g., polytrauma and suicide prevention services for military veterans), and addressing violent extremism (e.g., firearm violence and radicalization). **Numerous federal agencies have violence prevention missions, including NIJ, CDC, DOJ, SAMHSA, and NSF, among others.**

This set of national violence priorities warrants solutions achieved through community-academic partnerships that foster community-engaged research, training, and practice. Our team is already community- and partnership-oriented (e.g., law enforcement, non-profit, healthcare, and military). In alignment with the 2019-2023 Trans-NIH Strategic Plan for Women's Health Research, team members are studying sexual health during the pandemic (Bowling, Montanaro), as well as multi-level violence prevention and policy strategies (e.g., bystander intervention; sexual assault kit processing; title IX processes; police culture, health literacy enhancement; batterer intervention programs; L-R, Kulkarni, Mennicke, Fuentes). In line with the Department of the joint Department of Veterans Affairs and Department of Defense (VA/DoD) 2019 suicide prevention priorities, Cramer is addressing military suicide stigma (w/ Montanaro), firearm access and suicide risk (w/ Bowling), and a LGBT health education program evaluation. These examples highlight our commitment to community-engaged research, programs, and policies to redress violence in ways aligned with campus, city, state, and national priorities. We are excited by the recent additions of data science-focused collaborators (Diaz-Garelli, Gunn, Shaikh) and anticipate expansion of innovative violence prevention efforts. For example, we are conducting natural language processing of our UNC Charlotte 2019 campus shooting social media/Twitter dataset (Bowling, Montanaro leads), and are applying electronic health record methodologies to our work with the NC Department of Public Safety (Cramer, Diaz-Garelli, Mennicke, L-R).

The UNC Charlotte mission statement further states that, "*UNC Charlotte maintains a particular commitment to addressing the cultural, economic, educational, environmental, health, and social needs of the greater Charlotte region.*" Violence was named as one of the top 4 health priorities in the 2019 Mecklenburg County Community Health Assessment. In October 2020, the City of Charlotte launched SAFE Charlotte efforts "*towards reimagining policing and violence prevention.*" COVID-19 has increased the risk for violence for many groups, while decreasing healthcare access. As a united core group of violence prevention scholars, we are poised to develop innovative and inter-connected efforts that speak to current community need and national priorities. For example, in partnership with a mental health-focused Charlotte non-profit (Psychology For All), members of our team (Cramer, Mennicke, L-R) conducted a funded Charlotte-region needs assessment of mental health, suicide, domestic violence, and other psychosocial outcomes. Further, Kulkarni is a program evaluator for the Mecklenburg County Resiliency in Communities After Stress and Trauma (ReCAST) funded by SAMSHA. Seeing the UNC Charlotte campus as a critical component of the Charlotte region, many of our ongoing violence prevention efforts involve academic-campus partner projects. These include an NIAAA funded project to develop a bystander intervention measure for college student problematic drinking (Montanaro, Mennicke, Bowling); a university-funded assessment of Title IX outcomes (L-R, Mennicke); and implementing a campus-wide trauma-informed suicide prevention program (SAMHSA funding under review; Cramer, Mennicke, Montanaro).

Supporting Documents

Table 1. Names, Titles, and Contributions of Violence Prevention Area Members

Names	Title(s)	Contributions & Expertise
Area Co-Leads		
Robert J. Cramer, PhD	Associate Professor of Public Health Sciences & Belk Distinguished Scholar in Health Research; Honorary Research Fellow, School of Psychological Sciences and Health, University of Strathclyde	Expertise: Suicide prevention; hate crimes; prejudice & discrimination; training intervention; military health; sexual and gender minority health; mental health; college students; psychometrics; community-engaged research; program evaluation; trial science (e.g., witness preparation), law & policy; incarcerated populations.
Shanti Kulkarni, PhD, MSA	Professor of Social Work	Expertise: Intimate partner violence, teen dating violence; services needs of marginalized survivors of violence; trauma-informed care; community-based participatory research; integrated behavioral health care.
Jennifer Langhinrichsen-Rohling, PhD	Professor of Psychological Sciences and Health Psychology	Expertise: Relationship and family violence, including stalking, sexual assault, physical abuse, and the intergenerational transmission of relationship behaviors; institutional betrayal; measure development; culturally-specific interventions with high-risk adolescents; risky and suicide-prone behaviors; suicide prevention; law enforcement; trauma; resilience-based interventions; mental health; health equity and access.
Area Contributing Members		
Jessamyn Bowling, PhD, MPH	Assistant Professor of Public Health Sciences	Expertise: Sexual health; sexual and gender minority health; qualitative methods and analysis; resilience; community-engaged research participatory research; prejudice & discrimination.
Franck Diaz-Garelli, PhD	Assistant Professor of Health Informatics and Analytics	Expertise: Clinical data management and analysis; advanced quantitative analytics; biomedical engineering; user-centered design; visual analytics; machine learning; electronic health record data quality.

Catherine Fuentes, PhD	Teaching Professor of Anthropology	Expertise: Intimate partner violence, qualitative and mixed research methods, cultural sensitivity
Annelise Mennicke, PhD, MSW	Assistant Professor of Social Work	Expertise: Bystander intervention; sexual violence prevention; alcohol use; college student health; intimate partner violence; trauma-informed practice; marginalized populations; incarcerated populations.
Erika Montanaro, PhD	Assistant Professor of Psychology	Expertise: Health behavior theory; risky behaviors (e.g., substance use, sexual activity); relationship health; program evaluation; psychometrics; latent variable modeling; social media data analysis; adolescent & college student health.
Samira Shaikh, PhD	Assistant Professor of Computer Science & Cognitive Science	Expertise: Natural language processing; data science; computational sociolinguistics; cognitive science; artificial intelligence; chatbot development.
Meagan Zarwell, PhD	Assistant Professor of Public Health Sciences; Member of Academy for Population Health Innovation; Member of the Getting to Zero Community Working group	Expertise: HIV prevention; pre-exposure prophylaxis (PrEP); sexual and gender minority health; social capital; health disparities; community-engaged research; qualitative methods & analysis; medical anthropology.