Why Context Matters: Towards a Place-Based Prevention Science

This year’s conference theme, *Why Context Matters: Towards a Place-Based Prevention Science*, challenges prevention scientists to explicitly recognize the central role that geographical concepts such as location, distance, distribution, connectivity, place, neighborhood, and activity space (routine locations of individuals) have on health outcomes. A place-based approach to prevention science recognizes that risk and protective factors are spatially differentiated, and that health disparities and cultural variations between neighborhoods, regions and countries, are magnified in particular places; disproportionately affecting some individuals but not others as a function of location. Put simply, a spatial perspective collects, analyzes, and interprets data within a geographic context to understand interactions between people, places, and health.

Place is studied among prevention scientists who investigate neighborhood effects and the distribution of risk and protective factors within communities, including public health scientists and particularly epidemiologists. However, in a recent word search within the journal *Prevention Science*, only 3% of the 1126 articles reviewed included the terms spatial, place-based, neighborhood, activity space, or geographic information systems in the title or abstract. This basic review highlights the potential for prevention science to more thoroughly integrate a spatial perspective into its research portfolio.

Place-based research is complex and must account for a wide array of methodological issues such as interactions between individuals and place, neighborhood choice, place-based social processes, and the larger interaction of composition and influence of contiguous neighborhoods. Nevertheless, this challenging and inherently interdisciplinary approach can provide new perspectives on social-spatial forces and health behaviors critical to the advancement of prevention science.

The importance of place on health is gaining traction in the popular press. For example, recent research has demonstrated how zip codes can determine our life spans, with variations of up to 30 years within some cities. Within the context of population health, prevention science can examine the geographically linked nature of substance use, obesity, crime, educational outcomes, and other health disparities, as well as protective features such as social capital. Increasing the scale of prevention research necessitates examining how geographically constituted policies can promote or suppress desirable health outcomes. Other examples of interest are: a) understanding how native populations experience place and how this could be leveraged to improve prevention programming, b) understanding the use of private, hidden, spaces for criminal activities, sexual violence, and substance use, and c), examining how rural spaces can be effectively studied given lack of density.

This call for papers seeks to stimulate creative spatial thinking to advance prevention science by integrating place into existing behavioral theories, testing new theories and research designs, using technologies such as Geographic Information Science, and examining new data collection and analytic methods.

2020 Special Conference Themes

Each year, SPR selects three special themes designed to highlight specific areas of research relevant to prevention science. These special themes guide the development of plenary sessions, symposia, and preconference workshops. The SPR Conference Committee encourages basic, applied, and developmental research submissions across the three special themes.

Consistent with this year’s conference theme, *Why Context Matters: Towards a Place-Based Prevention Science*, the SPR Conference Committee encourages special conference theme submissions related to: (1) place-based prevention, (2) technology and spatial epidemiology, and (3), increasing health equity and strengthening resilience. This year’s third special theme is highlighted in SPR’s strategic plan and in the work of SPR’s task force on reducing health disparities and improving equity through prevention. Submissions based on this years’ third special theme can intersect with the other two special themes or stand alone.
Special Theme #1: Place-based Prevention
Place-based prevention focuses on the locations of participants such as neighborhoods, the built environment, nature, and activity space, and tests differential outcomes according to spatial location. Towards this end, in 2013 the National Institute on Drug Abuse director Nora Volkow co-authored a paper in the journal Science with Douglas Richardson, executive director of the Association of American Geographers, and other NIH directors entitled “Spatial Turn in Health Research.” This brief paper summarized new geographically informed approaches to health research. It concluded with the assertion that there is extraordinary potential to make scientific discoveries in global health by incorporating spatial data and analyses into health research agendas. More recently, NIH launched the Environmental Influences on Child Health Outcomes (ECHO) program to address respiratory problems, obesity, postnatal, positive health, and neurodevelopment outcomes. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) has long supported research addressing social ecological correlates of problematic drinking and alcohol use disorders at the city, state, and national level. For example, NIAAA supports research on the interactive role of genetic, social, and place-based factors such as neighborhood exposure and mobility across the life span. In 2014, the Institute of Medicine recommended linking addresses from electronic health records with community health level data to tailor interventions to the contexts in which patients reside. Thus, this spatial turn is not merely studying space as an object of investigation, but rather, it is the turn towards studying health outcomes among people using geographic concepts.

The SPR Conference Committee invites submissions under this theme that address issues such as: 1) development and testing of place-based or spatially explicit theories in which outcomes depend upon locations and where differentiating health behavior is understood according to location; 2) processes and mechanisms by which places, such as neighborhoods, may be associated with an individual’s health across the lifespan; 3) interventions that integrate place as an active ingredient of the intervention, and/or how outcomes may vary with spatial analysis (spatializing outcome data); and 4), examining how neighborhoods and places are defined, perceived, and experienced, and how these may vary by age, gender, race/ethnicity, health behavior, income, and urbanicity. Submissions incorporating spatial analyses, multivariate modeling that includes geographic variables, simulation modeling, virtual reality approaches, and qualitative methods are well-positioned to address these issues.

Special Theme #2: Using Technology to do Spatial Epidemiology
Spatial epidemiology incorporates a spatial perspective into the design and analysis of the distribution, determinants, and outcomes of health and well-being. While epidemiology uses the tripartite model of person, place, and time to understand disease and wellness, the incorporation of place as it relates to disease prevention and health promotion, has not received adequate attention. New technological advances provide researchers opportunities to integrate place into their work with enhanced precision and scale. Some examples are using GPS enabled smart phones to assist community health workers collect field data; nutrition environmental surveys using real-time place-based data; built environment features mapped and analyzed for risk and protection; and rapid reporting of location specific outbreak information. The advancement of geographic information science (GIS) has provided software to capture, integrate, and analyze spatial data. For example, researchers can link existing child health and development data to spatial data sets such as street networks, alcohol, tobacco, and cannabis outlets, parks, wilderness, health related services, as well as linking to geographically informed community health surveys.

The SPR Conference Committee invites submissions under this theme that address issues such as: 1) longitudinal models of place effects (e.g., neighborhoods, cities, regions, transborder, and activity space) on disease distribution and health promotion, including residential mobility; 2) spatial data collection, and data integration challenges and opportunities; 3) the role of place on social norms, social capital, social policy, and population health outcomes; and 4), spatial analytic modelling, statistical spatial analysis, and data visualization at multiple geographic levels.

Special Theme #3: Increasing Health Equity and Strengthening Resilience
Health inequities adversely affect population subgroups who have systematically experienced greater obstacles in accessing health care and prevention interventions based on their racial or ethnic group, religion, education, economic status, gender identity, sexual orientation, geographic location, disability or other characteristics or
social contexts historically linked to stigma, discrimination, or exclusion. The goal of improving health and social well-being among these groups requires innovative strategies to improve understanding of determinants of inequities at all levels of the socioecological framework, as well as intervention strategies that build on existing protective factors within these populations. Furthermore, studies that address the development of measures appropriate for collecting data on the built and natural environments in addition to the aforementioned social determinants of health are encouraged. Examples of how increased public, government, and private investments in prevention efforts move populations towards health equity are also encouraged.

The SPR Conference Committee seeks proposals that advance understanding of (a) risk and protection across and within different populations and places, (b) the use of meaningful data to illuminate and help address health disparities, (c) prevention efforts that address health disparities through explicitly stated place-based theory, and (d) policies that promote equity, health, and well-being.

General Conference Themes: Advances in Prevention Research

Epidemiology and Etiology: Submissions under this theme are focused on describing the distribution and patterns of injury and disease (e.g., cancer, cardiovascular disease, substance use disorders, depression, and HIV/AIDS) as well as on identifying risk and protective targets of preventive interventions, especially those with a developmental and/or lifespan approach, or that include neurobiological, genetic, or contextual factors.

Development and Testing of Interventions: Prevention interventions can be tested for efficacy under conditions of high quality assurance and strong research designs ("proof of concept") and tested for effectiveness under real world conditions in settings and systems. Submissions reporting the findings from efficacy or effectiveness trials (including pilot studies with preliminary outcome data) are welcomed, and those that combine the findings of such trials with one of the special conference themes are particularly encouraged.

Dissemination and Implementation Science: Dissemination, implementation, and operations research bridge the gap between research and everyday practice through a dynamic, transactional process between the public health community and researchers. Submissions under this theme should advance the scientific understanding of dissemination and implementation, including cost-efficient sustainability of preventive interventions into systems. Presentations that focus on program dissemination and implementation outcomes, improve dissemination and implementation processes, or identify individual, provider, organizational, and/or system levels factors that contribute to dissemination, implementation, and effectiveness are encouraged.

Research, Policy, and Practice: Decision makers around the world emphasize evidence-based policy reform. New policy initiatives at the state and national levels require evidence to guide further policy change, such as changes in opioid prescribing practice guidelines and new approaches to improving the educational system. This theme encourages submissions that evaluate or estimate the outcomes of planned, new, or existing policies, that look at the impact of efficacious programs in emerging policy contexts, and that demonstrate how empirical research has been used to inform and guide new policies. In addition, research that describes and evaluates the processes by which policies have been formed, developed, and implemented are encouraged. A wide variety of content areas are welcomed, including global emergent areas such as marijuana legalization or immigration policy, along with recurring areas of concern such as cancer screening, HIV antiretroviral therapy compliance, education policy, gun safety, obesity prevention, and anti-bullying laws and policies. Proposals focused on international and transborder research or comparative research across policy contexts and proposals that combine the findings of such research with one of the special conference themes are particularly encouraged.

Innovative Methods and Statistics: “Cutting edge” studies and methodological analyses that address measurement, statistical, and design challenges to prevention science are invited. That includes studies of quantitative, qualitative, and mixed methods approaches. Studies that use advanced methods but do not directly study a novel statistical, methodological, or design question should be submitted to one of the other themes. Presentations should highlight the challenges related to prevention science that these innovative design and statistical methods can address and additional benefits gained by using these techniques.
**NIDA International SPR Poster Session**
The International Program and the Division of Epidemiology, Services and Prevention Research of the National Institute on Drug Abuse (NIDA) will host the 13th Annual NIDA International SPR Poster Session at the SPR 28th Annual Meeting in Washington, DC, May 26–May 29, 2020. Posters should highlight drug and/or alcohol use prevention research, including research on drug/alcohol-related HIV/AIDS prevention completed in an international setting by international researchers, domestic researchers, or binational research teams. See the separate Call for NIDA International SPR Poster Session for details. **Abstract submission format:** Individual Posters

**NIAAA, SPR International Committee Invited Symposium: Prevention efforts addressing the nexus of HIV-Alcohol**
SPR’s International Committee and the UCLA Global Center for Children and Families, with the support of the National Institute on Alcohol and Alcohol Abuse (NIAAA) will host an invited symposium on "Prevention efforts addressing the nexus of HIV-Alcohol." Prevention research that addresses the importance of the HIV-Alcohol connection as a public health concern across international boundaries is solicited. Papers that address how international collaborations support the progress in reducing HIV/AIDS and specifically how addressing alcohol is important to prevention efforts are welcomed. There are travel stipends available for a limited number of participants. Participants may present and/or attend without a stipend. See the separate Call for Papers, NIAAA, SPR International Committee Invited Symposium: Prevention efforts addressing the nexus of HIV-Alcohol. **Abstract submission format:** organized paper symposium and/or individual papers.

**Abstract submission formats for All SPECIAL and GENERAL themes:** Individual papers, Individual posters, Organized paper symposium, Organized poster forums, TED-Like talks, Organized “20 x 20” presentations, Roundtable Discussions, Technology demonstrations.

For more details see abstract submission guidelines at https://www.preventionresearch.org/2020-annual-meeting/abstract-submission-guidelines/

**Individual Paper Presentations** are research papers submitted for a 20 minute oral presentation. A maximum of 3 individual papers will be grouped together based on a single theme and similar content within a 90-minute concurrent session.

**Individual Poster Presentations** allow presenters to discuss their research with interested colleagues during a 75-minute block of time. The poster boards are 4 ft. high x 8 ft. wide. The poster sessions will be held in the early evening along with a reception, and will not compete with any other sessions.

**Organized Paper Symposia** provide for multiple oral research presentations to be made on a single theme involving a brief introduction by the chair, 3 (minimum/maximum) presenters, with one discussant (encouraged, though optional) and open discussion from the floor. The concurrent session is 90-minutes.

**Organized Poster Forums** provide for multiple, 4 minimum/8 maximum, poster research presentations to be made on a single theme. The concurrent session is 90-minutes. Poster boards are 4ft. high x 8 ft. wide. This format allows for time for discussion with the poster presenters and time for group discussion during the 90-minute concurrent session.

**TED-Like Talks** provide for multiple oral presentations to be made on a single theme involving a brief introduction by the chair and 4 minimum/6 maximum unique presenters. TED-Like Talks offer commentary, present new ideas, promote a new direction, or emphasize a take-home message from your work that transcends single empirical papers.

**Organized “20 x 20” Presentations** provides for multiple oral research presentations to be made on a single theme involving a brief introduction by the chair and 6 (minimum/maximum) unique presenters. 20 x 20 presentations are fast-paced slide presentations.

**Roundtable Discussions** do not present research findings, but rather address an area or issue of fundamental importance to the field. The 90-minute RD should include an introduction outlining the issues presented by the chair followed by each of the 5 (required) discussants elaborating on their different viewpoints and perspectives on the issue.

**Technology Demonstration** are presented during the evening poster sessions for “hands-on” presentations of technology, such as statistical analysis programs, data collection instruments and techniques, literature search techniques, or science-based prevention curricula.