Pre-Conference Workshop #1
Wednesday, March 11, 2020
8:30 a.m.-11:30 a.m.
Location: Grand Ballroom C (First Floor)

**mHealth Interventions for Tobacco Cessation: Engaging Diverse Users and Innovative Technologies**

Sponsoring Organization: SRNT Treatment Network

**Intended Audience:** Anyone interested in mHealth interventions, from beginners to seasoned mHealth researchers

**Presenters:** Michael Businelle, PhD, University of Oklahoma Health Sciences Center; Jennifer Cantrell, PhD, NYU College of Global Public Health; Ana Paula Cupertino, PhD, John Theurer Cancer Center, Hackensack University Medical Center; Gillian Gould, PhD, The University of Newcastle; Emily Hébert, DrPH, University of Oklahoma Health Sciences Center; Jaimee Heffner, PhD, Fred Hutchinson Cancer Research Center; Darla Kendzor, PhD, University of Oklahoma Health Sciences Center; Roger Vilardaga, PhD, Duke University; Monica Webb Hooper, PhD, Case Comprehensive Cancer Center, Case Western Reserve University

**Moderators:** Francisco Cartujano-Barrera, MD, John Theurer Cancer Center, Hackensack University Medical Center; Lisa Sanderson Cox, PhD, University of Kansas School of Medicine

**Abstract:** Mobile health (mHealth) increases the availability of tobacco treatment to anyone with a mobile device, including specific populations facing tobacco-related disparities. This promising modality for treatment delivery also presents new challenges for researchers, and many of the practical lessons learned by individuals engaged in mHealth treatment development are not disseminated broadly. This workshop will review methodological approaches and lessons learned from researchers who have developed and evaluated mHealth interventions with diverse populations in different settings. The workshop will begin with a review of the current landscape of mHealth for tobacco cessation, including text messaging, apps, wearables, just-in-time adaptive interventions, and conversational agents. This overview will highlight both the promise and the challenges (e.g., engagement, privacy, accuracy of contextual sensing) of mHealth intervention development. The first half of the workshop will focus on practical aspects of conducting mHealth research, including ideas for how to build and test mHealth interventions and how to develop engaging programs using principles of user-centered design. Attendees will participate in breakout groups focused on applying user-centered design practices to their own research. The second part of the workshop will showcase novel methods being used in mHealth intervention work targeting disparities groups, including smartphone apps, wearables, contingency management interventions involving remote monitoring of smoking abstinence, and text messaging. Speakers will discuss how they incorporated the unique needs of the targeted populations into intervention design and how they addressed practical challenges that arose. Attendees will then have an opportunity to pose questions to a panel of mHealth researchers with experience in designing and implementing interventions for disparities populations.

Pre-Conference Workshop #2
Wednesday, March 11, 2020
8:30 a.m.-11:30 a.m.
Location: Salon 9-12 (First Floor)

**Advancing the Science of Youth Cessation: Treatment Strategies and Research Needs**

Sponsoring Organization: Adolescent Network

**Intended Audience:** Tobacco control researchers; adolescent researchers; Public Health professionals

**Abstract:** This preconference workshop will focus on understanding adolescent nicotine addiction, identifying treatment strategies that have been found effective for helping adolescent cigarette smokers quit, and translating those findings to cessation of other tobacco products, notably e-cigarettes. The session will begin with an overview of adolescent nicotine addiction presented by Dr. Sharon Levy, Boston Children's Hospital. Next, Dr. Rachel Grana Mayne, National Cancer Institute, will provide an overview of treatment approaches for adolescent smokers and discuss challenges and research gaps related to adapting current treatment strategies to address e-cigarettes. Then, there will be presentations on the development of two unique e-cigarette cessation programs. Dr. Amanda Graham, Truth Initiative, will describe the development process and programmatic decisions made for the Truth Initiative's text-based e-cigarette cessation program, as well as describe early results. Dr. Thomas Ylioja, National Jewish Health, will describe the development of My Life, My Quit, a telephone and online tobacco cessation program. Dr. Ylioja will also discuss informational requests received by parents, educators, healthcare professionals, and community organizations. Finally, Dr. Yvonne Prutzman, National Cancer Institute, will discuss resources available for youth trying to quit using e-cigarettes, educators, healthcare providers, and the research community. She will review e-cigarette cessation resources from the National Cancer Institute's Smokefree.gov Initiative, as well as prevention programs from the CDC, the Stanford E-cigarette Prevention Toolkit, and Catch My Breath E-cigarette and JUUL Prevention Program. The workshop will involve substantial audience participation in the format of breakout group discussions. The goal of the workshop is to bring together leading scientists on adolescent tobacco cessation, share the most recent research findings, discuss lessons learned, and identify research gaps.
Pre-Conference Workshop #3
Wednesday, March 11, 2020
8:30 a.m.-11:30 a.m.
Location: Grand Ballroom D (First Floor)

**Applying Intersectionality to Achieve Health Equity for Marginalized Groups: Challenges and Opportunities for Tobacco Control Research and Practice**

Sponsoring Organization: Health Disparities Network

**Intended Audience:** Tobacco disparity researchers and practitioners (e.g., clinicians and community-based partners)

**Moderator:** Kelvin Choi, PhD, National Institute on Minority Health and Health Disparities

**Speakers:** (in alphabetical order): Tamar Antin, DrPH, Pacific Institute for Research and Evaluation; Julian Collins, MPH, Interact for Health; Pebbles Fagan, PhD, MPH, University of Arkansas for Medical Sciences; Josephine T. Hinds, MS, University of Texas at Austin; Jamie Ostroff, PhD, Memorial Sloan Kettering Cancer Center; Christine Sheffer, PhD, Roswell Park Cancer Institute; Phillip Smith, PhD, Miami University; Andy Tan, PhD, Dana-Farber Cancer Institute and Harvard TH Chan School of Public Health

**Background:** Tobacco-related health disparities exist across a range of social identities, including but not limited to race, gender, class, indigeneity, and sexual orientation. These identities are typically examined separately in research and practice, but understanding the intersection of factors such as race-gender-class will provide insight to how multifaceted injustices compound and impact health in individuals and communities.

**Purpose:** This workshop will serve as a forum to discuss the importance of and the practical challenges with incorporating an intersectional framework into tobacco-related research and clinical and public health practice.

**Workshop Structure:** We will provide interactive presentations and small-group moderated breakout sessions. Dr. Fagan will begin the workshop with an overview of intersectionality in tobacco control research and practice. Dr. Hinds will provide an overview of intersectionality as a construct, including key terms and definitions. Dr. Smith will discuss the use of intersectionality as a lens for understanding privilege and oppression, with an emphasis on community-based and structural approaches to reducing tobacco-related health disparities. Dr. Collins will lead an interactive exercise and discussion focused on the role of an intersectional perspective on implicit bias and in research, community-based work, and practice. Drs. Antin, Tan, Sheffer, and Ostroff will present examples of applying intersectionality to qualitative research, quantitative research, implementation science, clinical training, and clinical practice, with consideration of implications and limitations. Presenters will moderate a breakout session to discuss applying the intersectionality framework to attendees’ own work in small groups. Dr. Fagan will serve as discussant.

**Expected Outcomes:** Attendees will leave the workshop with an improved understanding of how intersecting oppression and privilege shapes the existence and sustainment of tobacco-related health disparities. Attendees will be able to identify specific actions through which they can apply their tobacco-related research and practice to achieve health equity.
Succeeding as Women in Nicotine and Tobacco Research

Organizers: Dana M. Carroll, PhD, University of Minnesota Masonic Cancer Center; Rachel L. Denlinger-Apte, PhD, Brown University; Sarah S. Dermody, PhD, Oregon State University; Jessica L. King, PhD, University of Utah, College of Health; Melissa Mercincavage, PhD, University of Pennsylvania Perelman School of Medicine; Lauren R. Pacek, PhD, Duke University School of Medicine; Tracy T. Smith, PhD, Medical University of South Carolina; Hollie L. Tripp, PhD, Wake Forest School of Medicine; Cassidy M. White, Wake Forest School of Medicine

Breakout Session Leaders: Dorothy Hatsukami, PhD, University of Minnesota Masonic Cancer Center; Judith Prochaska, PhD, Stanford University; other mid- and senior-career colleagues TBD

Background: Women earn half of all doctoral degrees, yet are underrepresented in higher-level academic positions, are less likely to apply for and receive extramural funding, and when awarded, receive smaller grants. Although these challenges are endemic to all women researchers, attempts to recognize and address these concerns within the nicotine and tobacco research and treatment fields may help to attract and retain future talent.

Purpose: This interactive workshop will spotlight career advancement obstacles facing women in the field to facilitate solution-focused discussions for those navigating these challenges first-hand and for those hoping to better support women mentees and colleagues.

Workshop Structure: The workshop will begin with a brief introduction to provide context and overall goals for attendees, followed by presentations by trainee and early career investigators introducing common issues faced by women nicotine and tobacco researchers. These issues will then be covered in depth during breakout group sessions led by mid- and senior-level colleagues on topics such as timing personal and professional goals, navigating unique challenges (e.g., campus visits/job interviews while pregnant/breastfeeding), balancing work responsibilities (e.g., research, teaching, service, leadership), time/life management, familial support (e.g., child-rearing responsibilities), and communication challenges (e.g., offer negotiations, managing staff and colleagues). Trainees will provide talking points if needed to facilitate conversation within each group. Breakout session leaders will summarize the discussions within their specific groups, and provide recommendations for actions to take to increase positive career outcomes among women researchers resulting from discussions. The workshop will conclude with an open Q&A session between attendees, presenters, and breakout session leaders.

Expected Outcomes: Through this workshop, participants will identify the obstacles they face as women researchers in the nicotine and tobacco field, and work with more senior colleagues to identify strategies that could help them overcome these challenges.

Introduction To Time-Varying Mediation Analysis With Application To Smoking Cessation Research

Organizer: Donna L. Coffman, PhD, Temple University

Abstract: Time-varying effect models have been increasingly used in nicotine and tobacco research (e.g., Liu et al., 2013; Mason et al., 2015; Shiyko et al., 2012; Vasilenko et al., 2014). These models can accommodate intensively measured longitudinal data such as that arising from ecological momentary assessments and they allow the effects of a treatment to vary as a function of time. These models have recently been extended to mediation analysis and allow the mediation effects to vary as a function of time. For example, a pharmacological smoking cessation treatment may have an effect on abstinence via decreased cravings and this indirect effect through cravings may vary as a function of time since quitting. That is, the indirect effect might be stronger shortly after quitting and diminish over time or vice versa. The application of time-varying mediation in tobacco and nicotine research has the potential to result in a more thorough understanding of the processes by which interventions influence smoking, addiction, craving, and other relevant outcomes and also how time influences these processes. We will illustrate methods for both an end-of-treatment (i.e., distal) outcome measured once as well as intensively measured longitudinal outcomes such as momentary smoking using data from the Wisconsin Smoker’s Health Study 2. We have implemented the methods in two R packages and will provide attendees with the code. Attendees do not need to be familiar with R or with time-varying effect models. We will provide a brief overview of time-varying effect models prior to extending them to mediation. Attendees should be familiar with basic regression and mediation analysis.
**Spatial Analysis of Tobacco Retailers: Implications for Regulation and Reducing Disparities**


**Intended Audience:** Researchers and tobacco control practitioners

**Presenters:** Kurt M. Ribisl, PhD, Chair, Gillings School of Global Public Health, University of North Carolina at Chapel Hill; Paul Delamater, PhD, Department of Geography, University of North Carolina at Chapel Hill; Amanda Y. Kong, MPH, Gillings School of Global Public Health, University of North Carolina at Chapel Hill; Joseph G. L. Lee, PhD, MPH, East Carolina University; Doug Luke, PhD, and Todd Combs, PhD, Washington University in St. Louis; Megan E. Roberts, PhD, Ohio State University; Louise Marsh, PhD, University of Otago; Jamie Pearce, PhD, School of Geosciences, University of Edinburgh; Derek Smith, MPH, San Francisco Department of Public Health

**Abstract:** The concentration of tobacco retail stores in specific areas (i.e., tobacco retailer density) may cause higher tobacco use through increased exposure to tobacco marketing, access to cheaper products, and establishing tobacco-use norms. Conversely, higher retail density may be driven by market demands in areas with higher rates of tobacco use. Across many countries, tobacco retailer density is higher in more economically deprived areas and those with more racially/ethnically diverse and indigenous populations. This session is intended for researchers and practitioners interested in understanding the impact of tobacco retailer density and measuring tobacco retailer density. Dr. Delamater will discuss spatial considerations, including geographical measures (e.g., proximity, spatial distribution) and the impacts of geographic scale. Ms. Kong will describe different operationalizations of tobacco retailer density (e.g., retailers per population, per land area, and per roadway) and will discuss results from a U.S. study showing how disparities differed based on operationalization. Dr. Lee will discuss the role of tobacco retailer proximity and density on adult smoking and health outcomes from a meta-analysis of quantitative studies (k=29). Dr. Marsh presents a systematic review on density or proximity of retailers and youth smoking that found a positive association between exposure to tobacco retail outlets and daily tobacco use, particularly for density near students’ homes. Drs. Luke and Combs will discuss an agent-based modeling program, Tobacco Town, that utilizes community mapping to advance policy change. Dr. Roberts will describe how licensing-law strategies could differentially impact density disparities based on a statewide Ohio study. Dr. Pearce will present the Scottish Government’s 5-year action plan that identifies restrictions on the number and density of tobacco retailers as a priority area for action. Mr. Smith will describe San Francisco’s efforts to reduce the number of tobacco retailers by half. Dr. Ribisl will conclude with a group discussion.

These presentations will help further understanding of the impact of retailer density on tobacco use behaviors, disparities, and policies to address retailer density.

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**Polygenic Risk Scores for Tobacco Dependence and Treatment: Promises and Pitfalls**

Sponsoring Organization: Genetics and Omics Network

**Intended Audience:** Researchers and clinicians interested in tobacco treatment, biomarkers and precision medicine as it relates to tobacco dependence treatment

**Moderators/Panelists:** Wilson Compton, MD, MPE, National Institute of Drug Abuse; Hilary Tindle, MD, MPH, Vanderbilt University; Sean David, MD, SM, DPhil, University of Chicago

**Speakers:** Andrew Bergen, PhD, BioRealm and Oregon Research Institute; Rachel Tyndale, PhD, University of Toronto; Jaakko Kaprio, MD, PhD, University of Helsinki; Laura Bierut, MD, Washington University; Lauren Schmitz, PhD, University of Wisconsin-Madison; Laurie Zawertailo, PhD, Centre for Addiction and Mental Health, University of Toronto; Li-Shiun Chen, MD, MPH, ScD, Washington University

**Abstract:** In building on last year’s very well-attended and successful pre-conference workshop on precision medicine as it relates to treatment of tobacco dependence with respect to both clinical research and clinical medicine, we are proposing a pre-conference workshop that focuses on the potential role of polygenic risk scores (PRS) in improving patient care and tobacco dependence treatment outcomes. The limited efficacy of “one-size-fits-all” pharmacotherapies for smoking cessation necessitates development of predictive biomarkers that might better match the right drug for the right patient at the right time and duration – and thereby enhance therapeutic efficacy. Futhermore, with the current understanding of the multigenic nature of tobacco dependence, PRS has the potential to both predict disease risk, including associated co-morbidities and other traits, as well as act as a biomarker. Genomic techniques that allow for the calculation of PRS are becoming increasingly widely available and affordable. However, while PRS holds great promise in advancing our understanding of the etiology of tobacco dependence and treatment, there are pitfalls to be aware of. This workshop will outline both the pros and cons of PRS based on current research evidence. The workshop will include presentations and discussion on the following: A) Etiology and PRS. We will describe and summarize current state of knowledge regarding PRS for predicting smoking behaviours and nicotine metabolism (Drs. Jaakko Kaprio, Andrew Bergen, and Rachel Tyndale). We will also discuss current findings on PRS x environment interactions and how PRS can be used to reveal causal pathways to tobacco dependence and potential relationships to co-morbid conditions (Drs. Laura Bierut and Lauren Schmitz); B) PRS as a prognostic indicator and to guide treatment. We will present evidence synthesis regarding polygenic risk prediction for smoking cessation (Drs. Li-Shiun Chen and Laurie Zawertailo); D) Finally, this workshop will conclude with an expert panel made up of both researchers and clinicians to discuss the challenges of advancing translation PRS into clinical practice for tobacco treatment. Led by panelists Drs. Compton, Tindle and David, the panel will address: 1) how to conduct impactful research; 2) what works in the real healthcare system; 3) translational research; and 4) proactive regulation in the era of precision medicine.

This workshop aims to synthesize the current state of knowledge regarding the use of polygenic risk scores in prediction and treatment of tobacco dependence and will discuss potential future research topics to inform evidence-based tobacco treatment guidelines for eventual implementation into clinical practice.
Pre-Conference Workshop #9
Wednesday, March 11, 2020
8:30 a.m.-11:30 a.m.
Location: Salon 19-22 (First Floor)

Research Methodologies in the Context of Global Tobacco Research: Challenges and the Importance of Harmonization

Sponsoring Organization: Global Research Network

Intended Audience: New and established investigators involved in a broad range of international tobacco research, from laboratory science to behavioral, surveillance, and intervention studies

Panelists: Linda Ferry, MD, MPH, Associate Professor, School of Medicine, Loma Linda University; Irina Stepanov, PhD, Associate Professor, School of Public Health, University of Minnesota; Scott Leischow, PhD, Professor and Associate Director, Arizona State University; Scott McIntosh, PhD, Associate Professor, University of Rochester Medical Center; Dongmei Li, PhD, Associate Professor, University of Rochester Medical Center

Abstract: Due to its multidisciplinary nature, tobacco research employs a broad range of methodologies and research tools. Harmonization of such methodologies is key to the tobacco research community’s ability to cross-reference and/or reproduce research findings, and to leverage the generated knowledge in the intervention and tobacco control efforts. This is of particular importance in the context of global tobacco research given the high variability of research capacity, training, ethics standards, and other relevant factors. This workshop will be led by the co-chairs of the SRNT Global Research Network, Drs. Irina Stepanov (University of Minnesota) and Scott McIntosh (University of Rochester), and will highlight the important role of using harmonized research methodologies, when possible, to achieve the maximum impact of international tobacco research on global tobacco control. Using examples from past and ongoing global tobacco research projects, development and application of harmonized research methodologies ranging from laboratory science to behavioral, surveillance, and intervention studies will be presented. The benefit of using standardized methods from the data analysis perspective will be also discussed using examples of PhenX and PATH research tools. The impact of discrepancies in research methods on the ability to interpret, cross-reference, and utilize data will be discussed. Participants will engage in an active discussion session on challenges and opportunities for harmonization of research methods and measures across international studies, and the impact of such harmonization on the development and implementation of tobacco control interventions and strategies. The longer-term aim of the workshop is to promote the use of standardized research tools and facilitate the development of new collaborative initiatives among the workshop participants.