25th Anniversary
San Francisco, CA
February 20-23, 2019

PROGRAM
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MESSAGE FROM THE PROGRAM CHAIR

Dear Colleagues,

On behalf of the SRNT Program Committee, we welcome you to the 25th Annual Meeting of the Society for Research on Nicotine and Tobacco (SRNT) in San Francisco!

This year, the overarching program theme focuses on tobacco-related health disparities and underserved populations. While the overall prevalence of smoking is decreasing in many countries, these gains have been smaller among persons who: 1) live in low- and middle-income countries; 2) report other substance or mental health concerns; 3) are low-income; and/or 4) identify as members of certain ethnic, racial, and/or other groups. In addition, the changing landscape of nicotine and tobacco products poses new potential challenges and opportunities. This theme has guided our selection of plenary sessions, and we have aimed to include content in the program from basic science, epidemiological surveys, clinical studies, and policy to better understand and treat tobacco use among populations experiencing disproportionately high burden and health consequences from tobacco use. As always, the annual meeting offers you cutting-edge scientific presentations across the full spectrum of basic and applied research on nicotine and tobacco. There will be presentations on pivotal clinical trials, new electronic nicotine delivery systems, effective mobile strategies for treatment and engagement, insights from basic science on the effects of nicotine, plus hot topics in the areas of nicotine reduction, tobacco use epidemiology, genomics, biomarkers, non-cigarette tobacco products, tobacco product regulation, cessation, and tobacco control policy.

Several key highlights for the meeting are:

**Wednesday, February 20, 2019**
5:30 p.m.-6:45 p.m.

**Presidential Symposium**

**Tobacco Control for All: Addressing Smoking Disparities for Priority Populations**

**Chair:** Marina Picciotto, PhD, Charles B. G. Murphy Professor of Psychiatry and Professor in the Child Study Center, of Neuroscience and of Pharmacology; Deputy Chair for Basic Science Research; Deputy Director, Kavli Institute for Neuroscience, Yale University School of Medicine, New Haven, CT, USA

**Speakers:** Geoffrey Fong, PhD, Professor of Psychology and Public Health and Health Systems, University of Waterloo, Waterloo, Ontario, Canada; Senior Investigator, Ontario Institute for Cancer Research, Toronto, Ontario, Canada; Pebbles Fagan, PhD, MPH, Professor of Health Behavior and Health Education, and Director, Center for the Study of Tobacco, University of Arkansas for Medical Sciences, Little Rock, AK, USA; Monica Webb Hooper, PhD, Professor of Oncology, Psychological Sciences, Family Medicine and Community Health, Case Western Reserve University; Associate Director for Cancer Disparities Research; Director, Office of Cancer Disparities Research, Case Comprehensive Cancer Center, Cleveland, OH, USA; Andrew Waa, MPH, Ngāti Hine/Ngāpuh, Senior Research Fellow in Public Health, Eru Pomare Māori Health Research Centre, University of Otago, Dunedin, New Zealand; Linda Alexander, PhD, Senior Associate Dean for Academic, Student and Faculty Affairs; Professor, Social and Behavioral Sciences, West Virginia University, Morgantown, WV, USA
Thursday, February 21, 2019
8:30 a.m.-9:30 a.m.
**Basic Science Keynote Plenary**
**Nicotine During Adolescence: Mechanisms Leading to Long-Term Changes in Cognition**
*Huib Mansvelder, PhD*
Professor of Neurophysiology
Head of Department, Integrative Neurophysiology
Vrije Universiteit
Amsterdam, The Netherlands

Thursday, February 21, 2019
1:30 p.m.-2:30 p.m.
**Policy Keynote Plenary and Recipient of the 2019 Jarvik Russell Award**
**The Intersections Between Social Determinants of Health, Tobacco Marketing, Tobacco Control, and Tobacco Use**
*Kelvin Choi, PhD, MPH*
National Institute on Minority Health and Health Disparities, Division of Intramural Research, National Institutes of Health
Bethesda, Maryland, USA

Thursday, February 21, 2019
1:30 p.m.-2:30 p.m.
**Public Health Keynote Plenary**
**Tobacco Use and the Science of Minority Health and Health Disparities**
*Eliseo J. Pérez-Stable, MD*
Director, National Institute on Minority Health and Health Disparities, National Institutes of Health
Bethesda, Maryland, USA

Friday, February 22, 2019
1:30 p.m.-2:30 p.m.
**Clinical Keynote Plenary and Recipient of the 2019 Ove Fernö Award**
**Precision Therapy for Nicotine Dependence**
*Caryn Lerman, PhD*
Vice Dean for Strategic Initiatives, Perelman School of Medicine
John H. Glick, MD Professor in Cancer Research
Department of Psychiatry, University of Pennsylvania
Philadelphia, Pennsylvania, USA

Also, not to be missed:

- The Opening Reception on Wednesday, February 20, from 6:45 p.m.-8:00 p.m., which will include champagne, cake, and cash bar reception in celebration of the SRNT’s 25th Anniversary. All attendees are welcome!

- The Awards Ceremony on Friday, February 22, 1:00 p.m.-1:30 p.m., with special recognition of Ove Fernö Award Winner, Dr. Caryn Lerman; John Slade Award Winner, Dr. Geoffrey Fong; and Jarvik Russell Award Winner, Dr. Kelvin Choi.
The SRNT Members Meeting on Friday, February 22, 7:30 a.m.-8:15 a.m.

For meeting attendees arriving early, there are eight pre-conference workshops that will be held on Wednesday, February 20 (available at an additional fee). These include:

- Pre-Conference Workshop 1: Practical Considerations in Designing and Implementing Web Surveys for Rapid-Response Surveillance
- Pre-Conference Workshop 2: An Insider’s Guide to Conducting Tobacco Control Research and Interventions Among Sexual and Gender Minority Populations: Challenges Met and Unmet
- Pre-Conference Workshop 3: Countering the JUUL Epidemic Among Youth: Regulatory and Educational Strategies
- Pre-Conference Workshop 5: Authorship and Grantsmanship for Early Career Investigators in Tobacco and Nicotine Research
- Pre-Conference Workshop 6: Recruiting and Retaining Adolescents in Tobacco Control Research: Challenges and Opportunities
- Pre-Conference Workshop 7: An Update to the Basics: Current Approaches for Measuring and Understanding Key Individual Differences and Cessation Outcomes
- Pre-Conference Workshop 8: Implementing Precision Medicine in Smoking Cessation: Patients, Providers, Policy, and More

To follow, and as part of the general registration, please join us prior to the opening plenary session for a special session on Wednesday afternoon from 3:00 p.m.-5:15 p.m.:

- US FDA Center for Tobacco Products: An Update on FDA’s Comprehensive Plan for Tobacco and Nicotine Regulation

**Session Chair:** Mitch Zeller, JD, Director, FDA Center for Tobacco Products

**Presenters:** Mitch Zeller, JD, Director, FDA Center for Tobacco Products; Deirdre Lawrence Kittner, PhD, MPH, Deputy Director, Office of Science; Gem Benoza, Supervisory Health Communications Officer, Office of Health Communications and Education, FDA Center for Tobacco
SRNT received more than 1,000 abstract submissions for three years in a row. Over the past six months, we have worked thoughtfully to create a timely and high-quality scientific program spanning the full breadth of the nicotine and tobacco research field. We are offering seven concurrent podium presentations, so we hope there is something for everyone!

We encourage you to attend sessions that offer insights beyond your expertise, to engage with your colleagues and seek out new connections, and importantly, we hope that you enjoy the meeting and the vibrant city of San Francisco!

Kind Regards,
Lisa Fucito, PhD
Program Chair

Gideon St.Helen, PhD
and
Andrea Villanti, PhD, MPH
Program Co-Chairs
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<td>Christie D. Fowler, PhD</td>
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<td>Steven Fu, MD, MSCE</td>
<td>Minneapolis VA Health Care System</td>
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<td>Cassandra Gipson-Reichardt, PhD</td>
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<td>Elizabeth C. Hair, PhD</td>
<td>Schroeder Institute at Truth Initiative</td>
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<td>Alex Loukas, PhD, University of Texas</td>
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<td><strong>Basic Science</strong></td>
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<td>Heath Schmidt, PhD</td>
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<td>Tracy T. Smith, PhD</td>
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<td>Roger G. Sorensen, PhD, MPA</td>
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<td>Maggie M. Sweitzer, PhD</td>
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<td>Soha Talih, PhD</td>
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<td>Andy Tan, PhD, MPH, MBA, MBBS</td>
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<td>Gemma Taylor, PhD</td>
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<td>Illdiko Tombor, PhD</td>
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<td>Mark J. Travers, PhD, MS</td>
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<td>James Tsai, MD, MPH, CPH</td>
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<td>Shang-Yi Anne Tsai, PhD, MSPH</td>
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<td>Carlijn M. van der Aalst, PhD</td>
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<td>David J. Vandenbergh, PhD</td>
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<td>Damon Vidrine, PhD</td>
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SRNT would like to thank the Program Committee members and abstract reviewers for the effort and expertise they contributed to the 2019 SRNT Annual Meeting.
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<th>Year</th>
<th>President</th>
<th>Program Chair(s)</th>
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<td>1995</td>
<td>Ovide Pomerleau, PhD</td>
<td>Kenneth Perkins, PhD, Chair</td>
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<td>1996</td>
<td>John Hughes, PhD</td>
<td>Steve Heishman, PhD, Chair</td>
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<td>1997</td>
<td>Neal Benowitz, MD</td>
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<td>1998</td>
<td>Maxine Stitzer, PhD</td>
<td>Scott J. Leischow, PhD, Chair</td>
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<td>1999</td>
<td>Jack Henningfield, PhD</td>
<td>Joy Schmitz, PhD, Chair</td>
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<td>1999-2000</td>
<td>Dorothy Hatsukami, PhD</td>
<td>David Wetter, PhD, Chair</td>
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<td>2000-2001</td>
<td>William Corrigall, PhD</td>
<td>David Wetter, PhD, Chair, Thomas Eissenberg, PhD, Co-Chair</td>
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<td>2001-2002</td>
<td>Kenneth Perkins, PhD</td>
<td>Thomas Eissenberg, PhD, Chair</td>
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<td>2002-2003</td>
<td>Harry Lando, PhD</td>
<td>Thomas Eissenberg, PhD, Chair, Laura Cousino Klein, PhD, Co-Chair</td>
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<tr>
<td>2003-2004</td>
<td>Nancy Rigotti, MD</td>
<td>Laura Cousino Klein, PhD, Chair, David Drobos, PhD, Co-Chair</td>
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<tr>
<td>2004-2005</td>
<td>Ken Warner, PhD</td>
<td>David Drobos, PhD, Chair, Suzanne Colby, PhD, Co-Chair, Robert West, PhD, Co-Chair</td>
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<td>2005-2006</td>
<td>David Balfour, PhD</td>
<td>Suzanne Colby, PhD, Chair, Eric C. Donny, PhD, Co-Chair, Jennifer Tidey, PhD, Co-Chair</td>
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<tr>
<td>2006-2007</td>
<td>Ellen R. Gritz, PhD</td>
<td>Eric C. Donny, PhD, Chair, Janet E. Audrain-McGovern, PhD, Co-Chair, Cynthia A. Conklin, PhD, Co-Chair</td>
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<tr>
<td>2007-2008</td>
<td>Ray Niaura, PhD</td>
<td>Janet Audrain-McGovern, PhD, Chair, Bernard Le Foll, MD, PhD, Co-Chair, Robert Scholl, PhD, Co-Chair</td>
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<td>Year</td>
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<td>2008-2009</td>
<td>Scott J. Leischow, PhD</td>
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<td>Marcus Munafò, PhD, MSc, Chair</td>
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<td>Ann McNeill, BSc, PhD, Co-Chair</td>
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<td>Robert A. Schnoll, PhD, Co-Chair</td>
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<td>2009-2010</td>
<td>Sue Curry, PhD</td>
<td>Robert A. Schnoll, PhD, Chair</td>
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<td>Darlene Brunzell, PhD, Co-Chair</td>
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<td>Lisa Dierker, PhD, Co-Chair</td>
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<td>2010-2011</td>
<td>Caryn Lerman, PhD</td>
<td>Thomas Gould, PhD, Chair</td>
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<td>Lisa Dierker, PhD, Co-Chair</td>
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<td>Megan Piper, PhD, Co-Chair</td>
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<td>2011-2012</td>
<td>Robert West, PhD</td>
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<td>Joanna Cohen, PhD, Co-Chair</td>
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<td>Kelly Cosgrove, PhD, Co-Chair</td>
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<td>2012-2013</td>
<td>Gary Swan, PhD</td>
<td>Joanna Cohen, PhD, Chair</td>
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<td>Cristiano Chiamulera, PharmD, Co-Chair</td>
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<td>Sean P. David, MD, SM, DPhil, Co-Chair</td>
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<td>2013-2014</td>
<td>Anne Joseph, MD, MPH</td>
<td>Sean P. David, MD, SM, DPhil, Chair</td>
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<td>Angela Attwood, PhD, Co-Chair</td>
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<td>Judith Prochaska, PhD, MPH, Co-Chair</td>
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<td>2014-2015</td>
<td>Thomas Gould, PhD</td>
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<td>Maciej L. Goniewicz, PhD, PharmD</td>
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<td>Natalie Walker, PhD</td>
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<td>2015-2016</td>
<td>Robin Mermelstein, PhD</td>
<td>Natalie Walker, PhD, Chair</td>
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<td>Maciej L. Goniewicz, PhD, PharmD</td>
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<td>Rachel Grana, PhD, MPH</td>
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<td>2016-2017</td>
<td>Deborah Ossip, PhD</td>
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<td>Daniel Kotz, PhD, Msc, MPH</td>
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<td>2017-2018</td>
<td>Judith Prochaska, PhD, MPH</td>
<td>Rachel Grana Mayne, PhD, MPH</td>
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<td>Lisa Fucito, PhD</td>
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<td>2018-2019</td>
<td>Marina Picciotto, PhD</td>
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<td>Gideon St.Helen, PhD</td>
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<td>Andrea Villanti, PhD</td>
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</table>
Conference registration will be open daily located in the Yosemite Foyer (Ballroom Level) during the Annual Meeting. Hours for the SRNT registration desk during the conference are as follows:

Tuesday, February 19 ................................................................. 4:30 p.m.-6:30 p.m.
Wednesday, February 20 .......................................................... 7:00 a.m.-7:00 p.m.
Thursday, February 21 .............................................................. 7:15 a.m.-5:00 p.m.
Friday, February 22 ................................................................. 7:15 a.m.-5:00 p.m.
Saturday, February 23 ............................................................. 8:00 a.m.-12:15 p.m.

EDUCATIONAL OBJECTIVES

• Address nicotine and tobacco’s role in the changing health care environment
• Describe new research and clinical data on the effects of nicotine and tobacco
• Discuss recent advances in nicotine and tobacco research
• Highlight international research on tobacco control
• Through scientific exchange, integrate current research with implications for clinical practice
• Address clinical and public health implications of concurrent use of tobacco with other psychoactive substances and drugs.

TARGET AUDIENCE

The 25th Annual Meeting of SRNT is geared toward individuals involved in the research of nicotine and tobacco. This includes basic, clinical, policy, and public health scientists from academia, government, and industry.

Please note: Symposia that take place in advance of the meeting, after the meeting’s conclusion, or during evening hours are not part of the SRNT Official Program unless specifically noted. The Program Committee has not reviewed the scientific content of Satellite Symposia. Satellite Symposia presenters are responsible for providing disclosures during their session.
Boxed lunches will be served on Thursday and Friday (see below). Bring your badge with you, as it will serve as your ticket for lunch.

**Thursday, February 21, 2019**
Boxed lunches will be distributed in the SRNT CENTRAL – Yosemite Room (Ballroom Level) starting at 11:15 a.m.
Plan to attend Poster Session 1 in the Grand Ballroom A (Grand Ballroom Level) while eating your boxed lunch!

**Friday, February 22, 2019**
Boxed lunches will be distributed in the SRNT CENTRAL – Yosemite Room (Ballroom Level) starting at 11:15 a.m.
Plan to attend Poster Session 3 in the Grand Ballroom A (Grand Ballroom Level) while eating your boxed lunch!
Poster sessions have specific times designated for the authors to be present to discuss their posters with attendees in the Hilton San Francisco Union Square Hotel meeting space: Grand Ballroom A (Grand Ballroom Level). Have your SRNT badge at all times to gain access to this area. An attendant will be checking badges at all times. All posters must be removed immediately during the designated dismantle time for each session outlined below.

The schedule for poster presentation assembly, authors present, and dismantle is as follows:

**Thursday, February 21**

**Poster Session 1**

10:00 a.m.-11:00 a.m. ................................................................. Presenters set up posters
11:30 a.m.-1:00 p.m. ........................................ Poster Session 1 *(Presenters available at their poster)*
1:00 p.m.-2:00 p.m. ................................................................. Presenters remove their poster

**Poster Session 2**

2:30 p.m.-3:30 p.m. ................................................................. Presenters set up posters
4:30 p.m.-6:00 p.m. ........................................ Poster Session 2 *(Presenters available at their poster)*
6:00 p.m.-6:30 p.m. ................................................................. Presenters remove their poster

**Friday, February 22**

**Poster Session 3**

10:00 a.m.-11:00 a.m. ................................................................. Presenters set up posters
11:30 a.m.-1:00 p.m. ........................................ Poster Session 3 *(Presenters available at their poster)*
1:00 p.m.-1:30 p.m. ................................................................. Presenters remove their poster

**Poster Session 4**

2:30 p.m.-3:30 p.m. ................................................................. Presenters set up posters
4:30 p.m.-6:00 p.m. ........................................ Poster Session 4 *(Presenters available at their poster)*
6:00 p.m.-6:30 p.m. ................................................................. Presenters remove their poster

**Saturday, February 23**

**Poster Session 5**

10:00 a.m.-11:00 a.m. ................................................................. Presenters set up posters
12:00 noon-1:30 p.m. ........................................ Poster Session 5 *(Presenters available at their poster)*
1:30 p.m.-2:00 p.m. ................................................................. Presenters remove their poster
BADGES

Your badge will admit you to all the educational sessions, welcome reception, and poster sessions at the Annual Meeting. Please wear your badge at all times. Thank you.

SPEAKER READY ROOM

Important Information for all Oral Presentations:

The Speaker Ready Room is located in the Green Room meeting room (Grand Ballroom Level). Each speaker using computerized audio-visual equipment for their presentation at the 2019 Annual Meeting must report to the Speaker Ready Room to load their presentation on the laptop computer that will be used in their session room. Please review the following schedule and note these important times to stop by at least 24 hours prior to your scheduled session.

A technician from our audio-visual company will be available in the Speaker Ready Room to assist you. The Speaker Ready Room will be open at the following times:

<table>
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<tr>
<th>Day</th>
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<tr>
<td>Tuesday, February 19</td>
<td>4:30 p.m.-6:30 p.m.</td>
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<td>Wednesday, February 20</td>
<td>12:00 noon-7:00 p.m.*</td>
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<td>Thursday, February 21</td>
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<td>Friday, February 22</td>
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<td>Saturday, February 23</td>
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*All Pre-Conference workshop speakers on Wednesday, February 20, should report directly to their meeting room. An audio-visual tech will be available to assist upon your arrival. Please report at least 20-30 minutes prior to the session start time.

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<tr>
<th>If Your Presentation Date/Time is…</th>
<th>Then Your Time to Load Your Presentation is…</th>
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<tr>
<td>Thursday, February 21 between 8:00 a.m.-12:00 noon</td>
<td>Report to the Speaker Ready Room between 12:00 noon-7:00 p.m. on Wednesday, February 20</td>
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<tr>
<td>Thursday, February 21 between 1:00 p.m.-5:00 p.m.</td>
<td>Report to the Speaker Ready Room no later than 10:30 a.m. on Thursday, February 21</td>
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<tr>
<td>Friday, February 22 between 8:00 a.m.-12:00 noon</td>
<td>Report to the Speaker Ready Room no later than 3:00 p.m. on Thursday, February 21</td>
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<tr>
<td>Friday, February 22 between 1:00 p.m.-5:00 p.m.</td>
<td>Report to the Speaker Ready Room no later than 10:30 a.m. on Friday, February 22</td>
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<tr>
<td>Saturday, February 23 between 8:00 a.m.-12:00 noon</td>
<td>Report to the Speaker Ready Room no later than 3:00 p.m. on Friday, February 22</td>
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MEMBERS MEETINGS

The SRNT will hold its Members Meeting on Friday, February 22, from 7:30 a.m.-8:15 a.m. in the Imperial Ballroom A (Ballroom Level). All SRNT members are encouraged to attend.

2018-2019 SRNT BOARD OF DIRECTORS

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Member Delegate, North America, 2016-2019
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Member Delegate, Europe, 2018-2021
Caitlin Notley

Member Delegate, AAOLA, 2017-2020
Mira B. Aghi, PhD

Executive Director, Ex Officio Board Member
Bruce Wheeler

Journal Editor-in-Chief
Marcus Munafò, PhD

Dean, SRNT University
Natalie Walker, PhD

FUTURE SRNT MEETINGS

SRNT 26th Annual Meeting
March 11-14, 2020
Hilton New Orleans Riverside, New Orleans, Louisiana

SRNT 27th Annual Meeting
February 24-27, 2021
Hilton Baltimore, Baltimore, Maryland
SRNT's annual awards presentation will be Friday, February 22, 1:00 p.m.-1:30 p.m., in the Grand Ballroom B (Grand Ballroom Level). The awards are named after pioneers in the field of nicotine and tobacco research, and we are pleased to remember those pioneers.

THE JOHN SLADE AWARD

The John Slade Award honors individuals who have made outstanding contributions to public health and tobacco control through science-based public policy and public advocacy.

2019 Award Recipient:

Geoffrey T. Fong, PhD, FRSC, FCAHS
Professor of Psychology and Public Health and Health Systems, University of Waterloo
Senior Investigator, Ontario Institute for Cancer Research
Principal Investigator, International Tobacco Control Policy Evaluation Project (ITC Project)
Waterloo, Ontario Canada

JOHN SLADE

Dr. John Slade was an expert on the treatment of alcohol, tobacco, and drug addiction and one of America’s pioneer advocates for tobacco control.

He was a member of the team that conducted the first scholarly analysis of previously secret documents from the Brown and Williamson Tobacco Company, which formed the basis for the film “The Insider.” John’s analysis led to a landmark series of articles in the Journal of the American Medical Association in 1995, as well as a book, “The Cigarette Papers.” His groundbreaking research to prove that cigarettes are nicotine delivery devices helped make it possible for the Food and Drug Administration to claim regulatory authority over tobacco products under then-FDA Commissioner Dr. David Kessler.

John was appointed Professor of Medicine, Robert Wood Johnson Medical School of the UMDNJ, in 1998. He emerged as a leader in substance abuse prevention and tobacco control for the state of New Jersey through his teaching and clinical work as well as through his active involvement with the Medical Society of New Jersey and the New Jersey Public Health Association. John played a major role in helping New Jersey develop its tobacco prevention and treatment program, funded as part of the 1998 $206 billion settlement with tobacco companies.

He co-edited the first major clinical textbook on nicotine addiction and founded the Committee on Nicotine Dependence of the American Society of Addiction Medicine (ASAM).
2019 NEW INVESTIGATOR BEST ABSTRACT AWARD RECIPIENTS

Robyn Wootton, PhD
Research Associate in Genetic Epidemiology
Tobacco and Alcohol Research Group, School of Psychological Science,
University of Bristol and the MRC Integrative Epidemiology Unit, University of Bristol, Bristol, UK
CAUSAL EFFECTS OF LIFETIME SMOKING ON RISK FOR DEPRESSION AND SCHIZOPHRENIA.
EVIDENCE FROM A MENDELIAN RANDOMISATION STUDY

Hongchao Guo, PhD
Stanford Cardiovascular Institute, Palo Alto, CA, USA
SINGLE-CELL RNA-SEQUENCING OF HUMAN EMBRYONIC STEM CELL DIFFERENTIATION
DELINEATES ADVERSE EFFECTS OF NICOTINE ON EMBRYONIC DEVELOPMENT

Ilze Bogdanovica, MSc, MSc, PhD
Senior Research Fellow/Cancer Research UK Career Development Fellow
Division of Epidemiology and Public Health,
University of Nottingham & UK Centre for Tobacco and Alcohol Studies, England, UK
INVESTIGATING SWITCHING BETWEEN TOBACCO PRODUCTS IN RELATION TO IMPLEMENTATION OF PLAIN PACKAGING LEGISLATION IN THE UNITED KINGDOM

Krysten W. Bold, PhD
Associate Research Scientist
Yale School of Medicine, Department of Psychiatry, New Haven, CT, USA
LONGITUDINAL FINDINGS FROM A RANDOMIZED CLINICAL TRIAL OF VARENICLINE FOR ALCOHOL USE DISORDER WITH COMORBID CIGARETTE SMOKING

THE JARVIK-RUSSELL NEW INVESTIGATOR AWARD

The Jarvik-Russell Young Investigator Award, named after Murray Jarvik and Michael Russell, recognizes scientists early in their careers who have made extraordinary contributions to the field of nicotine and tobacco research.

2019 Award Recipient:

Kelvin Choi, PhD, MPH
National Institute on Minority Health and Health Disparities, Division of Intramural Research, National Institutes of Health, Bethesda, Maryland, USA

MURRAY E. JARVIK

Dr. Murray Jarvik was born in New York City in 1923. Following medical school, Murray worked at the Yerkes Laboratory in Florida. It was here that he serendipitously witnessed a monkey that would smoke cigarettes. A Fellowship at Mount Sinai Hospital in New York followed, where Murray became one of the pre-eminent researchers studying a newly discovered substance: LSD.

LSD research pivoted Murray into the emerging field of psychopharmacology in the mid-1950s and to a professorial position at the newly created Albert Einstein School of Medicine. It was here that Murray established himself as a premier researcher on effects of drugs on learning and behavior.
Murray’s interests in the mid-1960s turned toward tobacco smoking. Although Murray continued, initially, to study the effects of other drugs and memory, he eventually shifted his focus to smoking and nicotine addiction almost entirely.

One of the first projects he attempted, spurred by the very memorable observation at Yerkes, was to attempt to get monkeys to smoke. This was partially successful and led to experiments with humans and rats so that by 1970 Murray had collected sufficient data to suggest that nicotine was key in the reinforcement of smoking. His work was included in subsequent Surgeon General Reports on smoking and nicotine addiction.

Perhaps Murray Jarvik’s most notable achievement was work done with Jed Rose in the 1980s investigating the possibility of delivering nicotine through the skin in sufficient quantities to affect smoking behavior. At first, their approach was quite simple, a basic poultice of nicotine. After much development, they were able to patent the concept of a nicotine transdermal patch, which they turned over to UCLA. It soon made it into production as the second FDA-approved pharmacologic treatment for smoking cessation after nicotine gum. With both established efficacy and ease of use, it was highly successful, for several years among the top three most profitable patents for the University of California.

MICHAEL RUSSELL

By the 1960s, the emerging evidence of the danger of cigarette smoking was clear, but there was very little understanding of why people smoked. Cigarette smoking was generally thought of as a habit, with pharmacological factors receiving little or no attention.

Michael Russell was the man who did most to revolutionize our understanding. His research led to the 1988 report of the US Surgeon General, Nicotine Addiction, which finally brought recognition that cigarette smoking is a classic drug dependence. Russell was a psychiatrist in training at the Maudsley Hospital, in south London, when he chose the topic of cigarette smoking for his research thesis in 1967. Based on his review of what was then fragmentary research literature, he concluded in a 1971 paper that the drug nicotine was the motivating force underlying smoking behavior. He made the study of the interacting pharmacological and psychological determinants of tobacco dependence his life’s work.

Mike is regarded by many as the father of effective treatment to help smokers quit. But he is probably best known in the cessation field for a non-pharmacological intervention. In 1979 he published a trial examining the effectiveness of brief advice to quit smoking given by GPs in the course of routine consultations. The one-year success rate was 5%, compared with less than 1% in controls. A successful trial of nicotine chewing gum combined with brief advice in primary care followed. Mike Russell moved toward the concept of an integrated district smoking cessation service, in which routine delivery of advice and pharmacological therapy in primary care was combined with intensive clinic support. That vision has now been realized in Great Britain’s National Health Service.

THE FERNÖ CLINICAL RESEARCH AWARD

The Fernö Award, named after Ove Fernö, honors scientists who have made groundbreaking advances in clinical research in one of three areas: (1) the pharmacological and behavioral actions of nicotine; (2) increased understanding on why people use tobacco; or (3) interventions to prevent tobacco use, to encourage or help tobacco users stop, and/or to reduce the adverse effects of tobacco use.
OVE FERNÖ

Ove Fernö was the inventor of nicotine replacement (NR). He was born in Gothenburg in 1916 and was trained as an organic chemist at the University of Lund, Lund, Sweden. During the late 1960s and 70s he was responsible for the development of the first NR product—a chewing gum. Tens of millions of smokers have used nicotine gum to aid their cessation attempts. In the United States, Dr. Murray Jarvik and Dr. Nina Schneider were the first to experiment with the gum; they became great ambassadors and conducted many important studies. The nicotine gum was first presented at the World Conference on Smoking and Health in New York in 1975. Today, NR is marketed in some 70 countries. Ove Fernö’s thinking and foresight, and perhaps personal circumstances, made him a decisive driver in the development of Nicotine Replacement. His work has helped countless smokers to break the dependence. But he was also a great man to spend an evening with, usually over a glass of beer, to speculate about the future of NT and other matters of importance, very often philosophy.

2019 SRNT TRAVEL AWARD WINNERS

Aleksandra Alcheva, PhD, USA
Sabeeh Baig, USA
Kai-Wen Cheng, USA
Shannon S. Cigan, USA
Adam Cole, PhD, Canada
Laurel Curry, PhD, USA
Ghazaul Dezfuli, USA
Katherine East, United Kingdom
Noah Gubner, PhD, USA
Marzena Hiler, PhD, USA
Mirte Kuipers, PhD, Netherlands
Marin Kurti, PhD, USA
Tzu Tsun Luk, Hong Kong
Olusegun Owotomo, USA
Rebecca Richmond, PhD, United Kingdom
Kevin Schroth, PhD, USA
Matthew Stone, USA
Minoru Takeuchi, PhD, Japan
Soha Talih, PhD, Lebanon
Natalie Voos, PhD, USA
Wei Xia, Hong Kong

2019 SRNT HEALTH DISPARITIES TRAVEL SCHOLARS

Priti Bandi, USA
John Correa, PhD, USA
Patricia Escobedo, USA
Josephine T. Hinds, USA
Asti Jackson, PhD, USA
Dina Jones, MPH, USA
Stella Lee, USA
Anuja Majmundar, USA
Ahn Ngo, USA
Raina Pang, USA
Michael Ramsey, USA
Ce Shang, PhD, USA
Alayna Tackett, PhD, USA
Plan time in your schedule to visit with the SRNT sponsors and exhibitors. They are located in SRNT CENTRAL in the Yosemite Room (Ballroom Level).

Thanks to all the companies exhibiting this year. SRNT appreciates their financial support!

**Exhibit Hours:**

Wednesday, February 20, 2019 ................................................................. 6:45 p.m.-8:00 p.m.

Opening Welcome Reception

Thursday, February 21, 2019 ................................................................. 9:00 a.m.-3:00 p.m.

Friday, February 22, 2019 ................................................................. 9:30 a.m.-3:00 p.m.

**SRNT SUPPORTORS**

SRNT would like to thank Battelle, GlaxoSmithKline, Pfizer, La Jolla Alcohol Research, Inc., Achieve Life Sciences, and MicroAutomation for their financial support of the 2019 annual meeting and SRNT’s mission to stimulate the generation and dissemination of new knowledge concerning nicotine in all its manifestations, from cellular to societal.

**EVALUATION**

Thank you again for attending the meeting! We hope you enjoy the sessions and San Francisco, California, USA. An overall program evaluation will be emailed to all Annual Meeting participants following the conference. Your feedback is greatly appreciated!
Hilton San Francisco Union Square Hotel • Conference & Event Rooms

**COLOR KEY**

- **ESCALATORS AND STAIRS TO BALLROOM LEVELS**
- **LOBBY LEVEL**
  - Golden Gate, Urban Tavern, Lobby Bar, Herb ‘n’ Kitchen, Poached, Plaza A/B and Executive Conference Center (Seacliff, Presidio, Sunset, Marina)
- **BALLROOM LEVEL**
  - Continental, Imperial, Yosemite, Franciscan, Executive Boardroom
- **GRAND BALLROOM LEVEL**
  - Grand Ballroom and Green Room
- **UNION SQUARE ROOMS (4TH FLOOR)**
  - Rooms 1–25
- **NOB HILL ROOMS (6TH FLOOR)**
  - Rooms 1–10

**ACCESSIBLE FACILITIES**

Accessible restrooms are located on the following levels: L (LOBBY), B (BALLROOM), M (GRAND BALLROOM, MEZZANINE)

* Package Express located in Tower 3, Garage Level
* Pool located in Tower 3, 16th Floor
* Cityscape and Vista Located at Top of Tower 1

Located 13 miles from San Francisco International Airport and 14 miles from Oakland International Airport, both accessible by train (BART-Bay Area Rapid Transit).

Hilton San Francisco Union Square offers access to the city’s many cultural and tourist attractions. Located within walking distance of the Moscone Convention Center and the offices of major corporations.
SESSION SUMMARY
WEDNESDAY
FEBRUARY 20, 2019
TUESDAY, FEBRUARY 19, 2019

4:30 PM - 6:30 PM
  Yosemite Foyer (Ballroom Level)
  SRNT Registration

4:30 PM - 6:30 PM
  Green Room (Grand Ballroom Level)
  Speaker Ready Room

WEDNESDAY, FEBRUARY 20, 2019

7:00 AM - 7:00 PM
  Yosemite Foyer (Ballroom Level)
  Registration

8:30 AM - 11:30 AM
  Pre-Conference Workshops
  (Available at an additional fee)

8:30 AM - 11:30 AM
  Franciscan C (Ballroom Level)
  Pre-Conference Workshop #1
  Practical Considerations in Designing and Implementing Web Surveys for Rapid-Response Surveillance
  Sponsoring Organization: Office on Smoking and Health, CDC

8:30 AM - 11:30 AM
  Franciscan D (Ballroom Level)
  Pre-Conference Workshop #2
  An Insider’s Guide to Conducting Tobacco Control Research and Interventions Among Sexual and Gender Minority Populations: Challenges Met and Unmet
  Sponsoring Organization: SRNT Health Disparities Network
8:30 AM - 11:30 AM
Imperial Ballroom A (Ballroom Level)
**Pre-Conference Workshop #3**
Countering the JUUL Epidemic Among Youth: Regulatory and Educational Strategies
*Sponsoring Organization:* N/A

8:30 AM - 11:30 AM
Franciscan A (Ballroom Level)
**Pre-Conference Workshop #4**
*Sponsoring Organization:* National Cancer Institute, DCCPS, Tobacco Control Research Branch

8:30 AM - 11:30 AM
Plaza A (Lobby Level)
**Pre-Conference Workshop #5**
Authorship and Grantmanship for Early Career Investigators in Tobacco and Nicotine Research
*Sponsoring Organization:* SRNT Trainee Network

8:30 AM - 11:30 AM
Plaza B (Lobby Level)
**Pre-Conference Workshop #6**
Recruiting and Retaining Adolescents in Tobacco Control Research: Challenges and Opportunities
*Sponsoring Organization:* SRNT Adolescent Network

8:30 AM - 11:30 AM
Imperial Ballroom B (Ballroom Level)
**Pre-Conference Workshop #7**
An Update to the Basics: Current Approaches for Measuring and Understanding Key Individual Differences and Cessation Outcomes
*Sponsoring Organization:* SRNT Treatment Research Network
8:30 AM - 11:30 AM  
Franciscan B (Ballroom Level)  
Pre-Conference Workshop #8  
Implementing Precision Medicine in Smoking Cessation: Patients, Providers, Policy, and More  
Sponsoring Organization: SRNT Genetics and Omics Network

10:00 AM - 10:15 AM  
Yosemite Room (Ballroom Level)  
Pre-Conference Workshop Refreshment Break

11:30 AM - 1:00 PM  
Lunch Break (on your own)

12:00 PM - 7:00 PM  
Green Room (Grand Ballroom Level)  
Speaker Ready Room

1:00 PM - 3:15 PM  
Network Meetings

1:00 PM - 2:00 PM  
Union Square 1 & 2 (Fourth Floor)  
Adolescent Network Meeting

1:00 PM - 2:00 PM  
Union Square 5 & 6 (Fourth Floor)  
Genetics & Omics Network Meeting

1:00 PM - 2:00 PM  
Union Square 15 & 16 (Fourth Floor)  
Global Research Network Meeting

1:00 PM - 2:00 PM  
Plaza Room A (Lobby Level)  
Health Disparities Network Meeting
2:15 PM - 3:15 PM
Union Square 14 (Fourth Floor)
**Basic Science Network Meeting**

2:15 PM - 3:15 PM
Union Square 3 & 4 (Fourth Floor)
**Policy Research Network Meeting**

2:15 PM - 3:15 PM
Plaza Room B (Lobby Level)
**Treatment Research Network Meeting**

3:30 PM - 5:15 PM
Imperial Ballroom A (Ballroom Level)
**Special Symposium 1**
**FDA Center for Tobacco Products: An Update on FDA’s Comprehensive Plan for Tobacco and Nicotine Regulation**

**Chair:** Mitch Zeller, JD, Director, FDA Center for Tobacco Products  
**Presenters:** Mitch Zeller, JD, Director, FDA Center for Tobacco Products; Matthew R. Holman, PhD, Director, Office of Science, FDA Center for Tobacco Products; Gem Benoza, Supervisory Health Communications Officer, Office of Health Communications and Education, FDA Center for Tobacco Products

Announced by the FDA Commissioner in 2017, the Comprehensive Plan for Tobacco and Nicotine Regulation places nicotine, and the issue of addiction, at the center of the Agency’s tobacco regulatory activities. During this SRNT session, Center for Tobacco Products (CTP) speakers will address the multi-year roadmap to better protect youth and help addicted adult smokers quit; significantly reducing tobacco-related disease and death in the U.S. in the years to come. Topics to be covered include Regulatory Policies on Addiction, Appeal, and Cessation; Science-Based Review of Tobacco Products; and the Youth Tobacco Prevention Plan. Regulatory Policies on Addiction, Appeal, and Cessation will address seeking evidence and public comment on potential FDA regulations; increasing access to, and use of, medicinal nicotine products to help people quit; and educating the public and correcting misperceptions about nicotine. Science-Based Review of Tobacco Products will include an update on Modified-Risk Tobacco Product Applications and research to inform FDA’s regulatory activities and decisions. Data from CTP funded studies, including the PATH Study, will be presented highlighting recent findings to inform specific regulatory areas. The Youth Tobacco Prevention plan will address three main strategies: 1) preventing youth access, 2) curbing the marketing of products, and 3) educating youth and their families. This session will also address the changes to FDA’s tobacco and nicotine policy framework announced in November 2018 that focuses on flavored tobacco products including ENDS products marketed to youth, flavored ENDS products, flavored cigars, and menthol in combustible products, including cigarettes and cigars.
5:15 PM - 5:30 PM
  Break

5:30 PM - 6:45 PM
  Grand Ballroom B (Grand Ballroom Level)
  **Presidential Symposium: Tobacco Control for All: Addressing Smoking Disparities for Priority Populations**
  **Session Chair:** Marina Picciotto, PhD, Kavli Institute for Neuroscience, Yale University School of Medicine, New Haven, CT, USA
  **Presenters:** Geoffrey Fong, PhD, Professor of Psychology and Public Health and Health Systems, University of Waterloo, Waterloo, Ontario, Canada; Senior Investigator, Ontario Institute for Cancer Research, Toronto, Ontario, Canada; Pebbles Fagan, PhD, MPH, Professor of Health Behavior and Health Education, and Director, Center for the Study of Tobacco, University of Arkansas for Medical Sciences, Little Rock, AK, USA; Monica Webb Hooper, PhD, Professor of Oncology, Psychological Sciences, Family Medicine and Community Health, Case Western Reserve University; Associate Director for Cancer Disparities Research; Director, Office of Cancer Disparities Research, Case Comprehensive Cancer Center, Cleveland, OH, USA; Andrew Waa, MPH, Ngāti Hine/Ngāpuh, Senior Research Fellow in Public Health, Eru Pomare Māori Health Research Centre, University of Otago, Dunedin, New Zealand; Linda Alexander, PhD, Senior Associate Dean for Academic, Student and Faculty Affairs; Professor, Social and Behavioral Sciences, West Virginia University, Morgantown, WV, USA

6:45 PM - 8:00 PM
  SRNT CENTRAL, Yosemite Room (Ballroom Level)
  **Opening Welcome Reception**
  (All attendees are welcome! Cake, Champagne, and a Cash bar Reception.)
SESSION SUMMARY
THURSDAY
FEBRUARY 21, 2019
THURSDAY, FEBRUARY 21, 2019

7:15 AM - 5:00 PM
Yosemite Foyer (Ballroom Level)
Registration

7:15 AM - 5:00 PM
Green Room (Grand Ballroom Level)
Speaker Ready Room

8:30 AM - 9:30 AM
Grand Ballroom B (Grand Ballroom Level)
Welcome: Basic Science Theme Plenary — Nicotine During Adolescence: Mechanisms Leading to Long-Term Changes in Cognition
Session Chair: Marina Picciotto, PhD
Presenter: Huib Mansvelder, PhD, Professor of Neurophysiology, Head of Department, Integrative Neurophysiology, Vrije Universiteit Amsterdam, The Netherlands

9:00 AM - 3:00 PM
SRNT CENTRAL, Yosemite Room (Ballroom Level)
Exhibits Open

9:30 AM - 10:00 AM
SRNT CENTRAL, Yosemite Room & Yosemite Foyer (Ballroom Level)
Exhibitor Time
Refreshment Break

10:00 AM - 11:30 AM
Grand Ballroom B (Grand Ballroom Level)
Podium Presentation 1: Symposium 2
‘BACK TO SCHOOL WITH JUUL’: UNDERSTANDING EMERGING TRENDS IN VAPORIZED NICOTINE PRODUCTS
Chair: Maciej Goniewicz
Audience: PC, CL, PH, PO *
Brian King*, Doris Gammon, Ellen Coats, Kristy Marynak, Brett Loomis, Todd Rogers
SYM2B: CHEMICAL CHARACTERIZATION OF ‘POD’ PRODUCTS
Maciej Goniewicz*, Liam-Gavin Dell, Mary Plumbo, Taylor Vanderbush, Noel Leigh

Audience Key: BS: Basic Science; PC: Pre-Clinical; C: Clinical; PH/E: Public Health/Epidemiology; P: Policy; HD: Health Disparities; I: International; LMIC: Lower-Middle Income Countries; T=Treatment
SYM2C: EXPOSURE TO JUUL FLAVORS GENERATES REACTIVE OXYGEN SPECIES, POTENTIALLY ELICITING DIFFERENTIAL CYTOTOXIC AND INFLAMMATORY RESPONSES
Irfan Rahman*, Thomas Lamb, Thivanka Muthumalage

SYM2D: NICOTINE EXPOSURE AND SIGNS OF ADDICTION IN ADOLESCENTS USING PODS: AN IMPERATIVE FOR CLINICIANS TO ACT NOW!
Rachel Boykan*, Catherine Messina, Maciej Goniewicz

SYM2E: ROLE OF A NEW GENERATION ELECTRONIC CIGARETTE ON SMOKING DISPLACEMENT IN SMOKERS WITH SCHIZOPHRENIA: A PROSPECTIVE 3-MONTH FEASIBILITY STUDY
Pasquale Caponnetto*, Jennifer DiPiazza, Linda Bauld, Deborah Robson, Marilena Maglia, Askin Gulce, Kim Jason, Christos Paul, Riccardo Polosa

10:00 AM - 11:30 AM
Imperial Ballroom B (Ballroom Level)
Podium Presentation 1: Symposium 3
PAIN, NICOTINE, AND TOBACCO SMOKING: TRANSLATIONAL RESEARCH TO IDENTIFY MECHANISMS AND INFORM THE DEVELOPMENT OF NOVEL INTERVENTIONS
Chair: Emily Zale
Audience: PC, CL, PH

SYM3A: NEUROPATHIC PAIN IMPACTS NICOTINE DEPENDENCE IN MICE
M. Imad Damaj*, Yasmin Alkhlaif

SYM3B: PAIN STATUS AS A PREDICTOR OF SMOKING CESSATION INITIATION, LAPSE, AND RELAPSE
Lisa LaRowe*, Joseph Ditre, Jessica Powers, Bryan Heckman

SYM3C: A NOVEL INTERVENTION TAILORED FOR SMOKERS WITH CHRONIC PAIN INCREASED MOTIVATION TO QUIT AND SUBSEQUENT CESSATION TREATMENT ENGAGEMENT
Emily Zale*, Lisa LaRowe, Jesse Kosiba, Joseph Ditre

SYM3D: INTEGRATING GRADED PAIN EXPOSURE INTO STANDARD COGNITIVE BEHAVIORAL THERAPY FOR SMOKING: A PROOF-OF-CONCEPT CASE SERIES
Andrew Rogers*, Joseph Ditre, Michael Zvolensky
10:00 AM - 11:30 AM
Imperial Ballroom A (Ballroom Level)
Podium Presentation 1: Symposium 4
POLICY RESEARCH NETWORK SYMPOSIUM: ADVANCING THE TOBACCO ENDGAME

Chair: Joanna Cohen
Audience: PH, PO

SYM4A: THE IMPACT OF EXCLUSIVE USE OF VERY LOW NICOTINE CIGARETTES ON COMPENSATORY SMOKING
Tracy Smith*, Eric Donny, Joseph Koopmeiners, Cassidy White, Rachel Denlinger-Apte, Lauren Pacek, Dorothy Hatsukami, Neal Benowitz, Matthew Carpenter

SYM4B: EVIDENCE AND THE ENDGAME: OPPORTUNITIES AND CHALLENGES
Robert Schwartz*, Michael Chaiton

SYM4C: ASSESSING CANADIAN SMOKERS’ SUPPORT FOR TOBACCO ENDGAME MEASURES: A CASE STUDY OF ITC RESEARCH AND DISSEMINATION TO ADVANCE ENDGAME POLICIES IN CANADA
Geoffrey Fong*, Janet Chung Hall, Pete Driezen, Lorraine Craig

SYM4D: EMERGING LESSONS FROM COUNTRIES WITH TOBACCO ENDGAME GOALS. FINDINGS FROM THE INSPIRED PROJECT
Richard Edwards*, Louise Thornley, Robert Schwartz, Mervi Hara, David Evans, Sheila Duffy, Hans Gilljam

SYM4E: CAN FINLAND ACHIEVE THE GOAL OF ITS TOBACCO ENDGAME WITH EFFECTIVE BUT CONVENTIONAL MEASURES
David Timberlake*, Ulla Laitinen, Jaana Kinnunen, Arja Rimpela

10:00 AM - 11:30 AM
Plaza A (Lobby Level)
Podium Presentation 1: Symposium 5
ADVANCES IN SMARTPHONE AND SMARTWATCH APPLICATIONS FOR CESSION

Chair: Jonathan Bricker
Audience: CL

SYM5A: DESIGN OF THE ICANQUIT APP FOR SMOKING CESSION AND UPDATE ON ITS EVALUATION IN A LARGE US RANDOMIZED CONTROLLED TRIAL
Jonathan Bricker*, Noreen Watson, Kristin Mull, Jaimee Heffner

SYM5B: DOES A GROWTH MINDSET INTERVENTION ENHANCE ENGAGEMENT AND EFFECTIVENESS OF A SMARTPHONE APP FOR SMOKING CESSION? A PILOT RANDOMIZED CONTROLLED TRIAL
Vasundhara Sridharan*, Yuichi Shoda, Jaimee Heffner, Jonathan Bricker
SYM5C: RANDOMIZED CLINICAL TRIAL OF AN AUTOMATED SMARTPHONE BASED SMOKING CESSATION TREATMENT
*Michael Businelle, Emily Hebert, Darla Kendzor, Damon Vidrine

SYM5D: SCAMPI: A WECHAT-BASED APP TO SUPPORT CHINESE MEN TO QUIT SMOKING
Chen Jinsong*, Elsie Ho

SYM5E: RANDOMIZED CLINICAL TRIAL OF A JUST IN TIME INTERVENTION BASED ON WEARABLE BIOSENSORS DETECTING SMOKING GESTURES
Sherry McKee*, Abhinav Parate, Akshaya Shanmugam, Deepak Ganesan

10:00 AM - 11:30 AM
Franciscan CD (Ballroom Level)
Podium Presentation 1: Paper Session 1
NICOTINIC REINFORCEMENT: NEW EVIDENCE FROM BASIC SCIENCE
Chair: Brandon Henderson
Audience: PC

PA1-1: THE MEDIAL PREFRONTAL CORTEX SUPPORTS THE REINFORCING EFFECTS OF NICOTINE
Zheng-Ming Ding*, Cynthia Ingraham, William McBride

PA1-2: ACUTE AND CHRONIC MEMANTINE HAVE OPPOSITE EFFECTS ON NICOTINE SELF ADMINISTRATION IN RATS
Edward Levin*, Corinne Wells, Leah Yao, Wendi Guo, Anica Nangia, Sarah Howard, Erica Pippen, Andrew Hawkey, Jed Rose, Amir Rezvani

PA1-3: THE IMPACTS OF ACTUAL AND PERCEIVED NICOTINE ADMINISTRATION ON RESTING STATE FUNCTIONAL CONNECTIVITY BETWEEN THE INSULA AND THE ANTERIOR CINGULATE CORTEX IN SMOKERS
Robin Perry, Hera Schlagintweit, Sean Barrett*

PA1-4: DEVELOPMENT OF A RHEUS MACAQUE MODEL FOR NICOTINE SELF ADMINISTRATION VIA INHALATION
Matthew Ford*, David Jacobs, Thomas Mitchell, Michael Davies, Kathleen Grant, Eliot Spindel

PA1-5: AN ASSESSMENT OF THE THRESHOLD REINFORCING DOSE OF NICOTINE IN A RAT MODEL OF DEPRESSION
John Smethells*, Paul Pentel, Mark LeSage
10:00 AM - 11:30 AM
Franciscan AB (Ballroom Level)
**Podium Presentation 1: Paper Session 2**
**GENETIC BASIS OF ADDICTION AND TOBACCO-RELATED DISEASES**

*Chair:* Jill Turner  
*Chair:* Christie Fowler  
*Audience:* PC

**PA2-1: INFLUENCE OF TAAR1 GENOTYPE ON ORAL NICOTINE SELF ADMINISTRATION IN MICE**  
David Jacobs, Jamie Leitzinger, Matthew Ford*

**PA2-2: IDENTIFICATION OF A LOCUS ON CHROMOSOME FOUR MEDIATING NICOTINE WITHDRAWAL DEFICITS IN HIPPOCAMPAL LEARNING**  
Lisa Goldberg*, Munir Kutlu, Dana Zeid, Laurel Seemiller, Thomas Gould

**PA2-3: COLLABORATION WITH 23ANDME TO STUDY THE GENETIC BASIS OF IMPULSIVITY: IMPLICATIONS FOR SMOKING**  
Sandra Sanchez-Roige, Pierre Fontanillas, Sarah Elson, 23andMe Research Team, James MacKillop, Abraham Palmer*

**PA2-4: PREDILECTION OF CHRNA5 SNP TO SMOKING-RELATED CARDIOTOXICITY USING PATIENT-SPECIFIC IPSCS**  
Joe Zhang*, Tomoya Kitani, Ning Ma, Joseph Wu

10:00 AM - 11:30 AM
Plaza B (Lobby Level)
**Podium Presentation 1: Paper Session 3**
**SMOKING, CESSATION, AND MENTAL HEALTH**

*Chair:* Andrea Weinberger  
*Audience:* CL, PH *

**PA3-1: CAUSAL EFFECTS OF LIFETIME SMOKING ON RISK FOR DEPRESSION AND SCHIZOPHRENIA. EVIDENCE FROM A MENDELIAN RANDOMISATION STUDY**  
Robyn Wootton*, Marcus Munafò

**PA3-2: COMORBID DRUG USE DISORDERS AND AFFECTIVE DISORDERS AS VULNERABILITIES TO CURRENT SMOKING**  
Maria Parker*, Andrea Villanti

**PA3-3: SMOKING CHARACTERISTICS, HARM REDUCTION BEHAVIOURS AND ATTEMPTS TO QUIT SMOKING IN SMOKERS WITH SEVERE MENTAL DISTRESS**  
Leonie Brose*, Jamie Brown, Robert West, Ann McNeill
PA3-4: THE EFFECTS OF VARENICLINE, BUPROPION, NICOTINE PATCH, AND PLACEBO ON CESSATION AMONG SMOKERS WITH CURRENT AND PAST MAJOR DEPRESSION
George Kypriotakis*, David Lawrence, Charles Green, Robert Anthenelli, Chad Morris, Larry Samuels, Paul Cinciripini

PA3-5: BARRIERS AND SUPPORTS FOR SMOKING CESSATION AMONG LATINOS IN SUBSTANCE USE DISORDER TREATMENT
Anna Pagano*, Juan Cano, Jorge Hernandez, Anna Balassone, Juliet Lee

PA3-6: SERIOUS MENTAL ILLNESS AND CESSATION TREATMENT UTILIZATION: THE MEDIATING ROLE OF HEALTHCARE PROVIDER INTERACTIONS
Patrick Hammett*, Harry Lando, Brent Taylor, Rachel Widome, Darin Erickson, Steven Fu

11:30 AM - 1:00 PM
Grand Ballroom A (Grand Ballroom Level)
Poster Session 1: Policy/Pre-Clinical

11:30 AM - 1:00 PM
SRNT CENTRAL, Yosemite Room (Ballroom Level)
Lunch Break
Boxed lunches will be distributed starting at 11:15 a.m.
Plan to attend Poster Session 1 while eating your boxed lunch!

1:00 PM - 1:30 PM
Grand Ballroom B (Grand Ballroom Level)
Policy Keynote Plenary and Recipient of the 2019 Jarvik Russell Award
The Intersections Between Social Determinants of Health, Tobacco Marketing, Tobacco Control, and Tobacco Use
Presenter: Kelvin Choi, PhD, MPH, National Institute on Minority Health and Health Disparities (NIMHD) at the National Institutes of Health (NIH), Division of Intramural Research, Bethesda, Maryland
Session Chair: Monica Webb Hooper, PhD

1:30 PM - 2:30 PM
Grand Ballroom B (Grand Ballroom Level)
Public Health Keynote Plenary
Tobacco Use and the Science of Minority Health and Health Disparities
Presenter: Eliseo J. Pérez-Stable, MD, Director of the National Institute on Minority Health and Health Disparities (NIMHD) at the National Institutes of Health (NIH), Bethesda, Maryland
Session Chair: Andrea Villanti, PhD, MPH
2:30 PM - 3:00 PM
SRNT CENTRAL, Yosemite Room & Yosemite Foyer (Ballroom Level)
Exhibitor Time
Refreshment Break

3:00 PM - 4:30 PM
Plaza B (Lobby Level)
Podium Presentation 2: Symposium 6
MULTIPLE ROLES FOR NICOTINE IN REINFORCEMENT AND ADDICTION
Chair: Matthew Palmatier
Audience: PC, CL
SYM6A: NICOTINE INCREASES SIGN TRACKING BUT NOT GOAL TRACKING: EFFECTS ON SUBSEQUENT REWARD SEEKING
Matthew Palmatier*, Chloe Majors, Amanda Smith
SYM6B: REINFORCEMENT ENHANCEMENT BY NICOTINE IN ADULT RATS: PHARMACOLOGICAL AND BEHAVIOURAL ASPECTS
Paul Clarke*, Annie Constantin, Jennifer Wright, Suelyn Ren, Tsz Man Vanessa Chan, Doran Satanove
SYM6C: EXTENDING THE REINFORCEMENT-ENHANCING EFFECTS OF NICOTINE TO ALCOHOL REINFORCEMENT THROUGH BEHAVIORAL ECONOMICS
Scott Barrett*, Brady Thompson, Jessica Emory, David Kwan, Chris Larson, Rick Bevins
SYM6D: NICOTINE ENHANCES THE REINFORCING EFFECTS OF NON-DRUG REWARDS IN HUMANS
Kenneth Perkins*, Joshua Karelitz

3:00 PM - 4:30 PM
Imperial Ballroom B (Ballroom Level)
Podium Presentation 2: Symposium 7
LEVERAGING EPIDEMIOLOGICAL, ECOLOGICAL, AND CLINICAL DATA TO IMPROVE SMOKING CESSATION RATES AMONG HEAVY DRINKING SMOKERS
Chair: Sarah Dermody
Audience: PH, CL *
SYM7A: RELATIONSHIPS BETWEEN PROBLEMATIC ALCOHOL USE AND CIGARETTE SMOKING AMONG INDIVIDUALS IN THE UNITED STATES: EPIDEMIOLOGICAL INVESTIGATIONS
Andrea Weinberger*, Renee Goodwin

Audience Key: BS: Basic Science; PC: Pre-Clinical; C: Clinical; PH/E: Public Health/Epidemiology; P: Policy; HD: Health Disparities; I: International; LMIC: Lower-Middle Income Countries; T=Treatment
SYM7B: THE TIME-VARYING EFFECT OF ALCOHOL USE ON CIGARETTE SMOKING RELAPSE RISK
Sarah Dermody*, Saul Shiffman

SYM7C: SMOKING CESSATION OUTCOMES FOR HEAVY DRINKING SMOKERS USING VARENICLINE, NICOTINE PATCH, OR COMBINATION NICOTINE REPLACEMENT THERAPY
Jesse Kaye*, Megan Piper, Timothy Baker, Jessica Cook

SYM7D: THE RELATIVE IMPACT OF ALCOHOL, SUBSTANCE, AND COMORBID USE DISORDERS ON SMOKING CESSATION SUCCESS AND RELATED CONSTRUCTS
Adrienne Johnson*, Timothy Baker, Megan Piper

SYM7E: EARLY PREDICTORS OF RESPONSE TO VARENICLINE IN INDIVIDUALS WITH ALCOHOL USE DISORDERS AND CO-MORBID SMOKING
Lisa Fucito*, Ran Wu, Stephanie O’Malley, Krysten Bold, Allen Zweben, Ralitza Gueorguieva

SYM7F: LONGITUDINAL FINDINGS FROM A RANDOMIZED CLINICAL TRIAL OF VARENICLINE FOR ALCOHOL USE DISORDER WITH COMORBID CIGARETTE SMOKING
Krysten Bold*, Allen Zweben, Lisa Fucito, Mary Piepmeier, Srinivas Muvvala, Ran Wu, Ralitza Gueorguieva, Stephanie O’Malley

3:00 PM - 4:30 PM
Plaza A (Lobby Level)
Podium Presentation 2: Symposium 8
EXAMINING AND ADDRESSING COMMUNICATION INEQUALITIES IN TOBACCO CONTROL

Chair: Andy Tan
Audience: PH, PO *

SYM8A: CONCEPTUAL FRAMEWORK OF COMMUNICATION INEQUALITIES IN TOBACCO CONTROL RESEARCH AND PRACTICES
Andy Tan*

SYM8B: DISPARITIES IN THE APPEAL OF CIGARETTE ADVERTISING FEATURES BY RACE, SOCIOECONOMIC STATUS AND SEXUAL ORIENTATION
Meghan Moran*

SYM8C: REACTIONS TO TWO RECENT NATIONAL ANTI-SMOKING MESSAGES AMONG LOWER-SOCIOECONOMIC HISPANIC, NON-HISPANIC BLACK, AND NON-HISPANIC WHITE YOUNG ADULT SMOKERS
Kelvin Choi*

SYM8D: HOW TO DESIGN AND DELIVER MASS MEDIA CAMPAIGNS TO AVOID COMMUNICATION INEQUALITIES IN TOBACCO CONTROL: EVIDENCE FROM AUSTRALIA
Emily Brennan*

SYM8E: ASSESSING THE HEALTH EQUITY IMPACT OF CIGARETTE WARNING POLICIES: RESULTS FROM LONGITUDINAL STUDIES OF ADULT SMOKERS IN CANADA AND MEXICO
James Thrasher*
3:00 PM - 4:30 PM  
Grand Ballroom B (Grand Ballroom Level)  
Podium Presentation 2: Symposium 9  
THE HEAT IS ON: STATE OF THE SCIENCE ON HEATED TOBACCO PRODUCTS AND CONSIDERATIONS FOR FUTURE RESEARCH  
*Chair: Maciej Goniewicz  
Audience: PH, PO  
SYM9A: BELIEFS ABOUT THE RELATIVE HARMFULNESS OF HEATED TOBACCO PRODUCTS AND E-CIGARETTES VS. CIGARETTES: FINDINGS FROM ITC PROJECT SURVEYS IN JAPAN AND 21 OTHER ITC COUNTRIES  
Geoffrey Fong*, Mi Yan, Itsuro Yoshimi, Yumiko Mochizuki-Kobayashi, Shannon Gravely, Janine Ouimet, Anne Quah, Tara Elton-Marshall  
SYM9B: AWARENESS, INTEREST, AND USE OF IQOS AMONG YOUTH IN CANADA, USA, AND ENGLAND  
David Hammond*, Christine Czoli, Jessica Reid, Richard O’Connor, Maciej Goniewicz  
SYM9C: NICOTINE AND TOXICANTS IN EMERGING HEAT-NOT-BURN TOBACCO PRODUCTS: A CROSS-COUNTRY STUDY  
Maciej Goniewicz*, Denisha Robinson, Richard O’Connor, Noel Leigh  
SYM9D: CHARACTERIZING MAINSTREAM AND SIDESTREAM VOLATILE EMISSIONS FROM HEAT-NOT-BURN PRODUCTS  
Hugo Destaillats*, Lucia Cancelada, Mohamad Sleiman, Xiaochen Tang, Marion Russell, V. Nahuel Montesinos, Marta Litter, Lara Gundel  
SYM9E: THE EFFECTS OF IN VIVO EXPOSURE TO EMISSIONS FROM HEAT-NOT-BURN PRODUCT, E-CIGARETTE AEROSOLS AND TOBACCO SMOKE ON PULMONARY INFLAMMATION AND DAMAGE  
Yasmin Thanavala*, Tariq Bhat, Suresh Kalathil, Noel Leigh, Maciej Goniewicz

3:00 PM - 4:30 PM  
Franciscan AB (Ballroom Level)  
Podium Presentation 2: Paper Session 4  
PULMONARY TOXICITY OF ELECTRONIC CIGARETTES AND COMBUSTIBLE CIGARETTES  
*Chair: Heather Kimmel  
Audience: PC  
PA4-1: E-CIGARETTE USE CAUSES ENHANCED LUNG PROTEASE LEVELS  
Arunava Ghosh*, Raymond Coakley, Eric Davis, Andrew Ghio, Marianne Muhlebach, Charles Esther, Neil Alexis, Robert Tarran

*Audience Key: BS: Basic Science; PC: Pre-Clinical; C: Clinical; PH/E: Public Health/Epidemiology; P: Policy; HD: Health Disparities; I: International; LMIC: Lower-Middle Income Countries; T=Treatment
PA4-2: FLAVOR SOLVENT ADDUCTS IN ELECTRONIC CIGARETTE LIQUIDS ARE MODULATORS OF RESPIRATORY IRRITANT RECEPORS AND CYTOTOXIC TO HUMAN LUNG EPITHELIAL CELLS
Sairam Jabba*, Ana Caceres, Hanno Erythropel, Julie Zimmerman, Sven-Eric Jordt

PA4-3: EVALUATION OF CELLULAR PROLIFERATION AND MUCUS PRODUCTION IN THE MURINE LARYNX FOLLOWING SHORT TERM WHOLE BODY CIGARETTE SMOKE EXPOSURE
Meena Easwaran*, Joshua Martinez, Daniel Ramirez, Elizabeth Erickson DiRenzo

PA4-4: ASSOCIATION OF ELECTRONIC CIGARETTES USE WITH WHEEZING AND OTHER RESPIRATORY SYMPTOMS IN ADULTS: RESULTS FROM THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH (PATH) STUDY, WAVE 2
Dongmei Li*, Isaac Sundar, Scott McIntosh, Deborah Ossip, Maciej Goniewicz, Richard O'Connor, Irfan Rahman

PA4-5: EXPOSURE TO ELECTRONIC CIGARETTE AEROSOL INCREASES CISPLATIN RESISTANCE IN PHARYNGEAL CANCER CELLS
Jimmy Manyanga, Célia Bouharati, Balaji Sadhasivam, Vengatesh Ganapathy, Lurdes Queimado*

3:00 PM - 4:30 PM
Franciscan CD (Ballroom Level)
Podium Presentation 2: Paper Session 5
ASSESSING THE PROMISE OF NOVEL PHARMACOLOGIC AND NEUROSTIMULATOR THERAPIES
Chair: Rebecca Ashare
Audience: CL

PA5-1: PSYCHEDELIC (5-HT2AR AGONIST) PSILOCYBIN-FACILITATED SMOKING CESSATION: COMPARATIVE EFFICACY VS. NRT
Matthew Johnson*, Albert Garcia-Romeu, Michael McKenna, John Fedota, Elliot Stein, Roland Griffiths

PA5-2: EXOGENOUS PROGESTERONE FOR SMOKING CESSATION IN MEN AND WOMEN; A DOUBLE-BLIND, PLACEBO-CONTROLLED RANDOMIZED TRIAL
Nicole Tosun, Ann Fieberg, Lynn Eberly, Katherine Harrison, Angela Tipp, Alicia Allen, Sharon Allen*

PA5-3: LACK OF EFFECT OF TRANSCRANIAL DIRECT CURRENT STIMULATION ON SHORT TERM SMOKING CESSATION
Mary Falcone*, Leah Bernardo, E. Paul Wileyto, Cheyenne Allenby, Anne Marie Burke, Roy Hamilton, Mario Cristancho, Rebecca Ashare, James Loughead, Caryn Lerman
PA5-4: THE IMPACT OF GENDER, OVARIAN HORMONES AND OXYTOCIN ON STRESS REACTIVITY, CIGARETTE CRAVING, AND SMOKING IN A LABORATORY RELAPSE PARADIGM  
Erin McClure*, Nathaniel Baker, Kevin Gray, Rachel Tomko, Caitlyn Hood, Matthew Carpenter, Viswanathan Ramakrishnan, Cole Buchanan, Michael Saladin

PA5-5: SOCIOEMOTIONAL PROCESSING TRAITS MODERATE THE ACUTE EFFECTS OF INTRANASAL OXYTOCIN ON SMOKING WITHDRAWAL  
Ana Hilleboe*, Claudia Aguirre, Adam Leventhal, Lara Ray, Raina Pang, Matt Kirkpatrick

3:00 PM - 4:30 PM  
Imperial Ballroom A (Ballroom Level)  
Podium Presentation 2: Paper Session 6  
NUANCES IN NICOTINE REDUCTION

Chair: Lauren Pacek  
Audience: CL, PH, PO

PA6-1: EVALUATING HETEROGENEITY IN THE EFFECT OF REDUCED NICOTINE CONTENT CIGARETTES  
Joseph Koopmeiners*, Chuyu Deng, David Vock, Eric Donny, Dorothy Hatsukami

PA6-2: DO NON-DAILY SMOKERS COMPENSATE FOR REDUCED CIGARETTE CONSUMPTION WHEN SMOKING VERY-LOW-NICOTINE-CONTENT CIGARETTES?  
Saul Shiffman*, Jason Mao, Brenda Kurland, Sarah Scholl

PA6-3: CLINICAL OUTCOMES FROM A RANDOMIZED TRIAL TO COMPARE REDUCING NICOTINE WITH VERY LOW NICOTINE CONTENT CIGARETTES VERSUS REDUCING NUMBER OF CIGARETTES PER DAY  
Elias Klemperer*, John Hughes, Peter Callas

PA6-4: THE EFFECTS OF MENTHOL FLAVORING ON SMOKING BEHAVIOR AND BIOMARKERS OF EXPOSURE IN SMOKERS USING VERY LOW NICOTINE CONTENT CIGARETTES FOR 20 WEEKS  
Rachel Denlinger-Apte*, Michael Kotlyar, Joseph Koopmeiners, Jennifer Tidey, Xianghua Luo, Joni Jensen, Ryan Vandrey, Eric Donny, Dorothy Hatsukami

PA6-5: HOW TO INTRODUCE NICOTINE REDUCTION TO THE PUBLIC WITHOUT CAUSING MISPERCEPTIONS: EFFECTS OF NICOTINE CONTENT DESCRIPTIONS ON PERCEIVED NICOTINE QUANTITY, ADDICTIVENESS, AND RISK  
M. Justin Byron*, Marissa Hall

PA6-6: QUIT RATES AMONG SMOKERS WITH MOOD AND ANXIETY DISORDERS PARTICIPATING IN A RANDOMIZED CONTROLLED TRIAL OF REDUCED NICOTINE CONTENT CIGARETTES  

Audience Key: BS: Basic Science; PC: Pre-Clinical; C: Clinical; PH/E: Public Health/Epidemiology; P: Policy; HD: Health Disparities; I: International; LMIC: Lower-Middle Income Countries; T=Treatment
4:30 PM - 6:00 PM
  Grand Ballroom A (Grand Ballroom Level)
  **Poster Session 2: Public Health (Session 1)**

6:00 PM - 7:00 PM
  Union Square Foyer (Fourth Floor)
  **Trainee Network Mentoring Roundtables**
  (Check in at the Registration Table located on the Fourth Floor.)

7:00 PM - 8:30 PM
  Cityscape (46th Floor)
  **Trainee Network Mixer**
7:15 AM - 5:00 PM
  Yosemite Foyer (Ballroom Level)
  Registration

7:30 AM - 5:00 PM
  Green Room (Grand Ballroom Level)
  Speaker Ready Room

7:30 AM - 8:15 AM
  Imperial Ballroom A (Ballroom Level)
  SRNT Members Meeting
    (All members are welcome to attend)

8:15 AM - 8:30 AM
  Break

8:30 AM - 10:00 AM
  Franciscan CD (Ballroom Level)
  Podium Presentation 3: Symposium 10
  TRANSLATING FROM BRAIN MECHANISMS OF INHIBITORY CONTROL TO TREATMENT DEVELOPMENT FOR SMOKING CESSATION

  Chair: Brett Froeliger
  Audience: PC

  SYM10A: ABERRANT PREFRONTAL PLASTICITY AND NICOTINE WITHDRAWAL-INDUCED COGNITIVE DEFICITS
  Robert Cole*, Pavel Ortinski, Jill Turner

  SYM10B: INVESTIGATING THE NEURAL BASIS OF NICOTINE WITHDRAWAL-INDUCED ATTENTIONAL DEFICITS
  Jared Young*

  SYM10C: DISSOCIABLE EFFECTS OF THETA BURST TRANSCRANIAL MAGNETIC STIMULATION ON INHIBITORY CONTROL IN SMOKERS.
  Brett Froeliger*

  SYM10D: NEURAL CUE REACTIVITY DURING ACUTE WITHDRAWAL PREDICTS SHORT TERM SMOKING RELAPSE
  Cheyenne Allenby*, Mary Falcone, E. Paul Wileyto, Wen Cao, Leah Bernardo, Rebecca Ashare, Amy Janes, James Loughead, Caryn Lerman
8:30 AM - 10:00 AM
Franciscan AB (Ballroom Level)
Podium Presentation 3: Symposium 11
UNDERSTANDING SMOKING IN PATIENTS WITH CANCER: FROM PREVALENCE TO A PLACEBO-CONTROLLED TRIAL
Chair: Kristen McCarter
Audience: CL, PH *
SYM11A: SMOKING RATES DURING AND AFTER TREATMENT FOR HEAD AND NECK CANCER
Kristen McCarter*, Amanda L. Baker, Ben Britton, Gregory Carter, Christopher Wratten, Judith Bauer, Alison Beck, Erin Forbes
SYM11B: DOES SMOKING ABSTINENCE PREDICT CANCER PATIENTS’ QUALITY OF LIFE OVER TIME?
Úrsula Martínez*, Karen O. Brandon, Steven K. Sutton, Thomas H. Brandon, Vani N. Simmons
SYM11C: A CLOSER LOOK AT THE INTERSECTION OF INTENTION, CONFIDENCE, AND ATTEMPTS TO QUIT AFTER A TOBACCO-RELATED CANCER DIAGNOSIS: RESULTS FROM A DAILY ASSESSMENT STUDY
Jessica L. Burris*, Jessica N. Rivera-Rivera, Matthew J. Carpenter, K. Michael Cummings, Jamie S. Ostroff, Gregory T. Smith, Jamie L. Studts
SYM11D: A PLACEBO-CONTROLLED RANDOMIZED CLINICAL TRIAL OF 24-WEEKS OF VARENICLINE TO TREAT NICOTINE DEPENDENCE AMONG CANCER PATIENTS: CESSATION AND SAFETY OUTCOMES AND THE IMPORTANCE OF MEDICATION ADHERENCE
Brian Hitsman*, Frank Leone, Jessica Weisbrot, Anna Hitsman Veluz-Wilkins, Andrew Miele, Anita Hole, Nancy C. Jao, E. Paul Wileyto, Allison J. Carroll, Ravi Kalhan, Jyoti Patel, Corey Langer, Robert Schnoll
SYM11E: RESULTS FROM A RANDOMIZED CONTROLLED COMPARATIVE EFFECTIVENESS TRIAL OF TOBACCO TREATMENT IN CANCER CARE
Jamie S. Ostroff*, Elyse Park, Giselle Perez, Sue Regan, Alona Muzikanksy, Nancy Rigotti, Doug Levy, Jennifer Temel, Mary Cooley, Anne Partridge

8:30 AM - 10:00 AM
Imperial Ballroom B (Ballroom Level)
Podium Presentation 3: Symposium 12
MEASUREMENT OF ENDS EXPOSURE
Chair: Kevin Walton
Audience: CL, PH
SYM12A: ANALYTICAL CHALLENGES ASSOCIATED WITH ELECTRONIC CIGARETTES
Joseph Lisko*, Steve Pappas, Brian Hearn, Clifford Watson, Liza Valentín-Blasini
SYM12B: A NEW APPROACH TO ASSESS YIELD DELIVERED TO THE MOUTH OF ENDS USERS BASED ON PRODUCT EMISSIONS AND NATURAL ENVIRONMENT TOPOGRAPHY
Risa Robinson*, Edward Hensel

SYM12C: NICOTINE CLINICAL PHARMACOLOGY STUDIES IN THE ASSESSMENT OF ELECTRONIC NICOTINE DELIVERY DEVICES (ENDS)
Neal Benowitz*, Gideon St. Helen, Natalie Nardone, Arit Harvanko, Maciej Goniewicz

SYM12D: BIOMARKERS OF EXPOSURE: EFFECTS OF INSTRUCTIONS FOR ELECTRONIC CIGARETTE USE
Dorothy Hatsukami*, Ellen Meier, Bruce Lindgren, Richard O’Connor, Peter Shields

SYM12E: BIOMARKERS OF EXPOSURE AMONG DUAL USERS OF TOBACCO CIGARETTES AND ECIGARETTES FINDINGS FROM WAVE ONE OF THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH STUDY
Danielle Smith*, Carol Christensen, Dana van Bemmell, Nicolette Borek, Bridget Ambrose, Gladys Ervies, Karen Konkel, Raymond Niaura, Katy Edwards, Cassandra Stanton, Ben Blount, Lanqing Wang, Jun Feng, Kathy Caldwell, Dorothy Hatsukami, Stephen Hecht, Heather Kimmel; Elizabeth Lambert; Mark Travers; Andrew Hyland; Maciej Goniewicz

8:30 AM - 10:00 AM
Grand Ballroom B (Grand Ballroom Level)
Podium Presentation 3: Symposium 13
EVALUATING THE EFFECT OF MENTHOL FLAVOR ON NICOTINE USE, REINFORCEMENT, AND CESSION: FINDINGS FROM PRECLINICAL, EXPERIMENTAL, AND EPIDEMIOLOGICAL STUDIES
Chair: Krysten Bold
Chair: Neal Benowitz
Audience: PC, CL, PH, PO

SYM13A: MENTHOL AND OTHER TOBACCO FLAVORANTS ENHANCE NICOTINE REWARD THROUGH CHANGES IN MIDBRAIN DOPAMINE AND GABA NEURONS
Brandon Henderson*, Alicia Avelar, Austin Akers, Skylar Cooper

SYM13B: INFLUENCE OF MENTHOL AND GREEN-APPLE E-LIQUID FLAVORS IN YOUTH E-CIGARETTE USERS
Asti Jackson*, Harmanpreet Bhatti, Ralitza Gueorguieva, Eugenia Buta, Barry Green, Stephanie O’Malley, Suchitra Krishnan-Sarin

SYM13C: EVALUATING THE EFFECT OF SWITCHING TO NON-MENTHOL CIGARETTES AMONG CURRENT MENTHOL SMOKERS
Krysten Bold*, Suchitra Krishnan-Sarin, Lisa Fucito, Haleh Nadim, Sera-Maren Wieehert, Annabel Burnley, Tore Eid, Peter Jatlow, Stephanie O’Malley

SYM13D: THE IMPACT OF ONTARIO’S BAN OF MENTHOL CIGARETTES ON SMOKING BEHAVIOUR AFTER 1 YEAR: A COHORT STUDY
Michael Chaiton*, Robert Schwartz, Joanna Cohen, Eric Soule, Bo Zhang, Thomas Eissenberg
8:30 AM - 10:00 AM
Plaza B (Lobby Level)
**Podium Presentation 3: Paper Session 7**
**HEALTH WARNINGS: HISTORY AND HOW THEY WORK**

*Chair: Jennifer Cantrell*
*Audience: CL, PH, PO*

**PA7-1:** EXPLAINING WHY CIGARETTE PACK MESSAGES ABOUT TOXIC CHEMICALS INCREASE FORGOING CIGARETTES: APPLYING THE TOBACCO WARNINGS MODEL  
*Michelle Jeong*, Marissa Hall, Dongyu Zhang, Jennifer Mendel, Seth Noar, Kurt Ribisl, Noel Brewer

**PA7-2:** TESTING MESSAGES COMMUNICATING ABOUT NICOTINE AND COMPARATIVE RISK OF ELECTRONIC AND COMBUSTED CIGARETTES  
*Bo Yang*, Lucy Popova

**PA7-3:** EFFECTS OF PLAIN PACKAGING AND GRAPHIC HEALTH WARNING LABELS ON COMBUSTIBLE CIGARETTE USE, RISK PERCEPTIONS, AND HARM EXPOSURE: RESULTS FROM A RANDOMIZED TRIAL  
*Melissa Mercincavage, Benjamin Albelda, Valentina Souproutchouk, Andrew Strasser*

**PA7-4:** ASSUMPTION OF RISK AND THE ROLE OF HEALTH WARNINGS LABELS IN THE UNITED STATES  
*Michael Cummings*, Jonathan Gdanski, Nichole Veatch, Ernesto Sebrie

**PA7-5:** THE EFFECT OF GRAPHIC WARNING LABELS ON THE SENSITIVITY TO CIGARETTE PACK PRICES  
*Mathew Stone*, Claudiu Dimofte, Adriana Villaseñor, John Pierce, David Strong

8:30 AM - 10:00 AM
Plaza A (Lobby Level)
**Podium Presentation 3: Paper Session 8**
**IMPACT OF TOBACCO CONTROL POLICIES ON BEHAVIOR**

*Chair: Nancy Fleischer*
*Audience: PH, PO*

**PA8-1:** IMPACT OF LARGE AND SUSTAINED RECENT INCREASES IN TOBACCO TAXES ON AUSTRALIAN SMOKING PREVALENCE  
*Anna Wilkinson, Michelle Scollo, Melanie Wakefield*, Matthew Spittal, Frank Chaloupka, Sarah Durkin

**PA8-2:** INVESTIGATING SWITCHING BETWEEN TOBACCO PRODUCTS IN RELATION TO IMPLEMENTATION OF PLAIN PACKAGING LEGISLATION IN THE UNITED KINGDOM  
*Ilze Bogdanovica*, Magdalena Opazo Breton, John Britton
PA8-3: CHANGES IN MENTHOL AND NONMENTHOL CIGARETTE SALES IN ONTARIO AFTER THE 2017 MENTHOL SALES RESTRICTION
Elizabeth Brown*, Doris Gammon, Todd Rogers, Lindsay Olson, Ashley Ross, Martha Engstrom

PA8-4: IMPACT OF THE ‘STOPTOBER’ SMOKING CESSATION CAMPAIGN IN ENGLAND FROM 2012 TO 2017: A QUASI-EXPERIMENTAL REPEAT CROSS-SECTIONAL STUDY
Mirte Kuipers*, Robert West, Blaise Connolly, Emma Beard, Jamie Brown

PA8-5: DO LOCAL TOBACCO-21 LAWS REDUCE SMOKING AMONG 18 TO 20 YEAR-OLDS?
Abigail Friedman*, Rachel Wu

8:30 AM - 10:00 AM
Imperial Ballroom A (Ballroom Level)
Podium Presentation 3: Paper Session 9
ASSOCIATION OF E-CIGARETTE USE WITH SMOKING AND CESSATION
Chair: Bryan Heckman
Audience: PO, PH, CL

PA9-1: THE EFFECTIVENESS AND SAFETY OF COMBINING NICOTINE PATCHES WITH E-CIGARETTES (WITH AND WITHOUT NICOTINE) AND BEHAVIORAL SUPPORT, ON SMOKING ABSTINENCE: FINDINGS FROM A LARGE RANDOMISED TRIAL
Natalie Walker*, Marjolein Verbiest, George Laking, Murray Laugesen, Varsha Parag, Christopher Bullen

PA9-2: A RANDOMIZED PLACEBO-CONTROLLED TRIAL OF THE EFFECTS OF ELECTRONIC CIGARETTES IN CIGARETTE SMOKERS: CIGARETTE SMOKING AND CARBON MONOXIDE
Caroline Cobb*, Jonathan Foulds, Miao-Shan Yen, Susan Veldheer, Phoebe Brosnan, Jessica Yingst, Christopher Bullen, Thomas Eissenberg

PA9-3: PREVALENCE AND CORRELATES OF SWITCHING TO EXCLUSIVE E-CIGARETTE USE AMONG DAILY SMOKERS: FINDINGS FROM THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH (PATH) STUDY
Daniel Giovenco*, Torra Spillane, Sabeeh Baig

PA9-4: IS THE USE OF E-CIGARETTE ASSOCIATED WITH RELAPSE TO SMOKING?
Julia Bowen, Leonie Brose*

PA9-5: CONFLICTING E-CIGARETTE RECOMMENDATIONS INCREASE CYNICAL BELIEFS IN CURRENT AND FORMER SMOKERS: EVIDENCE FROM A RANDOMIZED CONTROL TRIAL
Natalie Herbert*, Sijia Yang, Qinghua Yang, Julia Alber, Yotam Ophir, Joseph Cappella
9:30 AM - 3:00 PM  
SRNT CENTRAL, Yosemite Room (Ballroom Level)  
Exhibits Open

10:00 AM - 10:30 AM  
SRNT CENTRAL, Yosemite Room & Yosemite Foyer (Ballroom Level)  
Exhibitor Time  
Refreshment Break

10:30 AM - 11:30 AM  
**Rapid Response Paper Sessions** (Titles and abstracts for these sessions are available in the Rapid Response Abstract Book.)

Imperial Ballroom A (Ballroom Level)  
**Examining Tobacco Flavor Packaging and Policy**  
Session Chair: Andrea Villanti, PhD, MPH

Plaza A (Lobby Level)  
**Late-Breaking Research on E-Cigarette Use and Health Effects**  
Session Chair: Gideon St.Helen, PhD

Grand Ballroom B (Grand Ballroom Level)  
**Evaluating Tobacco Control Communication Efforts**  
Session Chair: Megan Morean, PhD

Imperial Ballroom B (Ballroom Level)  
**Using Objective Markers to Tailor Cessation Treatment**  
Session Chair: Lisa Fucito, PhD

11:30 AM - 1:00 PM  
SRNT CENTRAL, Yosemite Room (Ballroom Level)  
**Lunch Break**  
Boxed lunches will be distributed starting at 11:15 a.m.  
Plan to attend Poster Session 3 while eating your boxed lunch!
11:30 AM - 1:00 PM
Grand Ballroom A (Grand Ballroom Level)
**Poster Session 3: Clinical**

1:00 PM - 2:30 PM
Grand Ballroom B (Grand Ballroom Level)
**Award Session**
Clinical Keynote Plenary and Recipient of the 2019 Ove Fernö Award
*Precision Therapy for Nicotine Dependence*
**Session Chairs:** Tom Glynn, PhD and Robert Schnoll, PhD
**Presenter:** Caryn Lerman, PhD, Vice Dean for Strategic Initiatives, Perelman School of Medicine, and John H. Glick, MD, Professor in Cancer Research, Department of Psychiatry, University of Pennsylvania, USA

2:30 PM - 3:00 PM
SRNT CENTRAL, Yosemite Room & Yosemite Foyer (Ballroom Level)
**Exhibit Time (Last Day)**
**Refreshment Break**

3:00 PM - 4:30 PM
Franciscan AB (Ballroom Level)
**Podium Presentation 4: Symposium 14**
*FACTORS THAT INFLUENCE CO-ABUSE OF ALCOHOL AND NICOTINE: A PRE-CLINICAL PERSPECTIVE ON COMORBIDITY*

**Chair:** Anna Lee
**Audience:** PC *
**SYM14A:** ADOLESCENT SOCIAL STRESS INFLUENCES LATER ETHANOL AND NICOTINE BEHAVIORS AND MICRORNAs EXPRESSION
*Helen Kamens*, *Michael Caruso*, *Sonia Cavigelli*
**SYM14B:** ADOLESCENT ALCOHOL BINGE DRINKING IN MICE IMPACTS NICOTINE DEPENDENCE LATER IN LIFE
*M. Imad Damaj*, *Rabha Younis*
**SYM14C:** DIVERSE NICOTINIC ACETYLCHOLINE RECEPTOR REGULATION OF NICOTINE USE AND ETHANOL REINFORCEMENT
*Darlene Brunzell*, *Alexandra Stafford*, *Kenneth Perkins*
**SYM14D:** BEHAVIORAL AND MOLECULAR INFLUENCES ON VOLUNTARY CONCURRENT NICOTINE AND ALCOHOL CONSUMPTION IN A NOVEL 3 BOTTLE CHOICE ASSAY IN MICE
*Anna Lee*, *Jillienne Touchette*, *Janna Moen*
3:00 PM - 4:30 PM
Plaza B (Lobby Level)
**Podium Presentation 4: Symposium 15**
**EFFECTS OF WATERPIPE CONSTITUENTS AND DESIGN ON TOXICITY OF WATER-PIPE TOBACCO SMOKE AND SMOKING BEHAVIORS**

*Chair:* Eva Sharma  
*Audience:* PC, CL

**SYM15A:** HEALTH WARNING LABELS ON THE WATERPIPE DEVICE ARE EFFECTIVE IN REDUCING SMOKING SATISFACTION, PUFFING BEHAVIOR, AND EXPOSURE TO CO  
*Wasim Maziak*, Ziyad Taleb, Mohammad Kalan, Thomas Eissenberg, James Thrasher, Alan Shihadeh, Taghrid Asfar

**SYM15B:** EFFECT OF HEATING METHOD AND WATER BOWL PREPARATION ON MAINSTREAM WATERPIPE TOXICANT YIELDS  
*Marielle Brinkman*, Andreas Teferra, Noura Kassem, Nada Kassem

**SYM15C:** THE EFFECT OF WATERPIPE SIZE AND SMOKING REGIMEN ON WTS PHYSICAL PROPERTIES AND TOXICITY  
*Karen Bernd*, Cindy Hauser, Dylan Carmack, Ronnai Mailig, Jenna Reed, Emilie Uffman

**SYM15E:** FRAMEWORK TO REPORT TOTAL PARTICULATE MASS AND ALDEHYDE EMISSION CHARACTERISTICS FROM HOOKAH  
*Edward Hensel*, Nathan Eddingsaas, Sean O'Dea, A Gary DiFrancesco, Risa Robinson

3:00 PM - 4:30 PM
Plaza A (Lobby Level)
**Podium Presentation 4: Symposium 16**
**APPLICATION OF BIOMARKERS FOR RISK ASSESSMENT AND INTERVENTIONS IN VULNERABLE POPULATIONS**

*Chair:* Irina Stepanov  
*Chair:* Mirjana Djordjevic  
*Audience:* PH, CL *

**SYM16A:** URINARY BIOMARKERS OF TOBACCO CONSTITUENT UPTAKE AND METABOLISM AS TOOLS TO INVESTIGATE THE ETHNIC/RACIAL DIFFERENCES IN LUNG CANCER RISK AMONG SMOKERS  
*Sharon Murphy*, Sungshim Park, Daniel Stram, Loic Le Marchand, Stephen Hecht

**SYM16B:** DIFFERENCES IN EXPOSURE TO TOXIC AND CARCINOGENIC VOLATILE ORGANIC COMPOUNDS BETWEEN BLACK AND WHITE CIGARETTE SMOKERS  
*Gideon St.Helen*, Neal Benowitz, Jennifer Ko, Peyton Jacob, III, Steven Gregorich, Eliseo Pérez-Stable, Sharon Murphy, Stephen Hecht, Dorothy Hatsukami, Eric Donny
SYM16C: TOBACCO AND ORAL CANCER: MULTI-PRONGED APPROACH TO UNDERSTANDING WHICH SMOKERS ARE AT THE HIGHEST RISK
Samir Khariwala*, Saonli Basu, Andres Gomez, Dorothy Hatsukami, Stephen Hecht, Irina Stepanov

SYM16D: OPTIMAL URINE AND PLASMA METABOLITES FOR ESTIMATING DAILY INTAKE OF NICOTINE FROM CIGARETTE SMOKING
Neal Benowitz*, Gideon St.Helen, Natalie Nardone, Lisa Sanderson Cox, Peyton Jacob, III

SYM16E: BIOMARKER APPLICATIONS TO CHARACTERIZE SECONDHAND EXPOSURES IN CHILDREN
Irina Stepanov*, Wenkui Geng, Jun Meng, Theodore Wagener, David Fedele, Mirjana Djordjevic

3:00 PM - 4:30 PM
Imperial Ballroom B (Ballroom Level)
Podium Presentation 4: Symposium 17
BRINGING IT ALL BACK HOME: MEASURING THE IMPLEMENTATION AND IMPACT OF SMOKE-FREE MULTI-UNIT HOUSING RULES

Chair: Brian King
Audience: CL, PH, PO *

SYM17A: EVALUATION OF SMOKE-FREE HOUSING POLICY IMPACTS ON TOBACCO SMOKE EXPOSURE AND HEALTH OUTCOMES
Lorna Thorpe*

SYM17B: AN ANALYSIS OF INDOOR AIR QUALITY IN RESPONSE TO THE IMPLEMENTATION OF HUD-MANDATED SMOKE-FREE HOUSING
Andy Plunk*

SYM17C: EXPOSURE AND PERCEPTIONS OF SECONDHAND SMOKE EXPOSURE AND SMOKE-FREE MULTI-UNIT HOUSING REGULATIONS AMONG AFRICAN AMERICANS IN LOS ANGELES
Lourdes Baezconde-Garbanati*

SYM17D: IMPLEMENTING TOBACCO CONTROL INTERVENTIONS IN PERMANENT SUPPORTIVE HOUSING FOR FORMERLY HOMELESS ADULTS
Natalie Alizaga*
3:00 PM - 4:30 PM  
Grand Ballroom B (Grand Ballroom Level)  
**Podium Presentation 4: Symposium 18**  
**TRAJECTORIES OF TOBACCO PRODUCT USE AMONG ADOLESCENTS AND YOUNG ADULTS: LOOKING BEYOND INITIATION**  
*Chair: Alexa Romberg  
*Audience: PH, PO *  
SYM18A: STABLE TRAJECTORIES OF ENDS USE AND THEIR RELATIONSHIP WITH CIGARETTE SMOKING AMONG TEXAS ADOLESCENTS  
*Melissa Harrell*, Christian Jackson, Anna Wilkinson, Alexandra Loukas, Cheryl Perry  
SYM18B: ENDS USE PREDICTS LONGITUDINAL TRANSITIONS IN CIGARETTE SMOKING ACROSS 2.5 YEARS AMONG YOUNG ADULTS  
*Alexandra Loukas*, David Marsden, Nathan Marti, Baojiang Chen, Anna Wilkinson, Melissa Harrell, Cheryl Perry  
SYM18C: LONGITUDINAL PATTERNS OF TOBACCO PRODUCT USE IN YOUTH: A LATENT TRANSITION ANALYSIS  
*Alexa Romberg*, Lindsay Pitzer, Elizabeth Hair, Raymond Niaura, Jennifer Cantrell, Erin Miller Lo, Allison Glasser, David Abrams, Donna Vallone  
SYM18D: IDENTIFYING LATENT TRAJECTORY GROUPS DESCRIBING THE USE OF CIGARETTES, E-CIGARETTES, AND CIGARillos/lITTLE CIGARS  
*Adam Cole*, Ashok Chaurasia, Ryan Kennedy, Scott Leatherdale  
SYM18E: TRAJECTORIES OF E-CIGARETTE USE AMONG SMOKING AND NON-SMOKING ADOLESCENTS  
*Erin Vogel*, Danielle Ramo, Kevin Delucchi, Mark Rubinstein

3:00 PM - 4:30 PM  
Franciscan CD (Ballroom Level)  
**Podium Presentation 4: Paper Session 10**  
**BIOLOGICAL AND COGNITIVE EFFECTS OF NICOTINE**  
*Chair: David Drobes  
*Audience: PC  
PA10-1: SINGLE-CELL RNA-SEQUENCING OF HUMAN EMBRYONIC STEM CELL DIFFERENTIATION DELINEATES ADVERSE EFFECTS OF NICOTINE ON EMBRYONIC DEVELOPMENT  
*Hongchao Guo*, Lei Tian, Joe Z Zhang, Tomoya Kitani, David T Paik, Joseph C Wu  
PA10-2: GUT, BRAIN, AND NICOTINE ADDICTION: NICOTINE SELF-ADMINISTRATION IS ASSOCIATED WITH CHANGES IN GUT MICROBIOTA AND ACCUMBENS PRO-INFLAMMATORY CYTOKINES  
*Cassandra Gipson-Reichardt*, Mark Namba, Shrinath Narayanan, Athena Aktipis
PA10-3: NEUROINFLAMMATORY MODULATION OF NICOTINE DEPENDENCE
Erin Anderson*, Adewale Adeluyi, Jill Turner

PA10-4: NICOTINE EFFECTS ON DEPENDENCE-RELATED ASSOCIATIVE LEARNING MECHANISMS IN HUMAN NON-SMOKERS
Britta Hahn*, Ashleigh Wells, Agatha Lenartowicz, Marie Yuille

3:00 PM - 4:30 PM
Imperial Ballroom A (Ballroom Level)
Podium Presentation 4: Paper Session 11
IMPROVING CESSION TREATMENT FOR YOUNG SMOKERS
Chair: Alicia Allen
Audience: CL, PH *

PA11-1: A MULTI-SITE DOSE-RANGING RANDOMIZED CONTROLLED TRIAL OF VARENICLINE FOR ADOLESCENT SMOKING CESSION: EFFICACY AND SAFETY FINDINGS
Kevin Gray*, Mark Rubinstein, Sarah Dubrava, Ann Holstein, Larry Samuels, Thomas McRae

PA11-2: DOES EVERY TRY REALLY COUNT? DO FAILED QUIT ATTEMPTS FACILITATE OR PREVENT FUTURE QUIT ATTEMPTS AMONG ADOLESCENT SMOKERS?
Margaret Fahey*, Kayla Turner, Kinsey Pebley, Leslie Robinson

PA11-4: “ISN’T THERE A BUNCH OF SIDE EFFECTS?”: A FOCUS GROUP STUDY ON YOUNG ADULT SMOKERS’ BELIEFS ABOUT CESSION TREATMENTS
Danielle Duarte*, Julia Chen, Kathleen Dang, Leah Orozco, Kelvin Choi

4:30 PM - 6:00 PM
Grand Ballroom A (Grand Ballroom Level)
Poster Session 4: Public Health (Session 2)
8:00 AM - 12:15 PM
Yosemite Foyer (Ballroom Level)
Registration

8:00 AM - 11:00 AM
Green Room (Grand Ballroom Level)
Speaker Ready Room

8:30 AM - 10:00 AM
Franciscan CD (Ballroom Level)
Podium Presentation 5: Symposium 19
SMOKELESS TOBACCO AND ARECA NUT: GLOBAL DIVERSITY OF PRODUCTS
AND PARALLELS IN ASSOCIATED HEALTH RISKS
Chair: Thaddeus Herzog
Chair: Irina Stepanov
Audience: PC, PH
SYM19A: GLOBAL DIVERSITY OF ARECA NUT-CONTAINING AND SMOKELESS TOBACCO
PRODUCTS
Irina Stepanov*, Prakash Gupta, Pankaj Chaturvedi, Sok Cheong, Olalekan Ayo-Yusuf, Samir
Khariwala, Mark Parascandola
SYM19B: ORAL DISEASE MANIFESTATIONS OF CHRONIC ARECA NUT USE
Samir Khariwala*, Irina Stepanov, Pankaj Chaturvedi
SYM19C: THE TRADITIONAL USE OF BETEL NUT (ARECA) PROMOTES SMOKELESS
TOBACCO ADDICTION IN SOUTH ASIA AND ASSOCIATED HEALTH RISKS, AND A
HYPOTHESIS FOR A NOVEL CESSATION THERAPY
Roger Papke*

8:30 AM - 10:00 AM
Franciscan AB (Ballroom Level)
Podium Presentation 5: Symposium 20
PERSPECTIVES ON TOBACCO CESSATION FOR PATIENTS WITH TB, HIV AND/OR
HEPATITIS C: EVIDENCE FROM FOUR COUNTRIES
Chair: Melanie Boeckmann
Audience: Cl, PH *
SYM20A: PREVALENCE OF TOBACCO SMOKING AMONG TUBERCULOSIS PATIENTS IN
BANGLADESH AND PAKISTAN
Anna-Marie Marshall*, Omara Dogar, Ada Keding, Rumana Huque, Deepa Barua, Anne
Readshaw, Kamran Siddiqi
SYM20B: IMPLEMENTATION AGAINST THE ODDS: TOBACCO CESSATION FOR TUBERCULOSIS PATIENTS IN NEPAL
Melanie Boeckmann*, Prabin Shrestha, Sudeepa Khanal, Sushil Baral, Daniel Kotz

SYM20C: IMPROVING TB OUTCOMES BY MODIFYING LIFESTYLE BEHAVIORS THROUGH A BRIEF MOTIVATIONAL INTERVENTION FOLLOWED BY SHORT TEXT MESSAGES (PROLIFE): PILOTING STUDY
Goedele Louwagie*, Kamran Siddiqi, Neo Morojele, Mona Kanaan, Noreen Mdege, John Tumbo, Max Bachmann, Olalekan Ayo-Yusuf

SYM20D: REFERRAL AND TREATMENT OF HOSPITALIZED SMOKERS LIVING WITH HIV IN AN ACADEMIC MEDICAL CENTER
Babalola Faseru*, Sharon Fitzgerald, Laura Mussulman, Kimber Richter

SYM20E: PATTERNS AND CORRELATES OF CIGARETTE SMOKING AMONG PATIENTS RECEIVING TREATMENT FOR HEPATITIS C
Irene Pericot-Valverde*, Alain Litwin

8:30 AM - 10:00 AM
Imperial Ballroom A (Ballroom Level)
Podium Presentation 5: Symposium 21
NEW PERSPECTIVES ON MULTIPLE TOBACCO PRODUCT USE AND IMPLICATIONS FOR TOBACCO REGULATION

Chair: Joe McClernon
Audience: PH, PO

SYM21A: ETHNIC DIFFERENCES IN PATTERNS OF TRANSITION BETWEEN CIGARETTE AND E-CIGARETTE USE: RESULTS FROM A POOLED ANALYSIS OF DATA FROM THREE PROSPECTIVE COHORT STUDIES
Jessica Barrington-Trimis*, Mariel Bello, Fefei Liu, Adam Leventhal, Grace Kong, Margaret Mayer, Tess Boley Cruz, Suchitra Krishnan-Sarin, Rob McConnell

SYM21B: HYPOTHETICAL REGULATIONS REGARDING E-CIGARETTE FLAVOR AVAILABILITY AFFECTS ANTICIPATED E-CIGARETTE AND COMBUSTED CIGARETTE USE AMONG DUAL USERS
Lauren Pacek*, Jason Oliver, Joe McClernon

SYM21C: PREDICTORS OF “IN THE MOMENT” PRODUCT CHOICE IN ADULT DUAL CIGARETTE AND ENDS USERS
Robin Mermelstein*, Donald Hedeker, Oksana Pugach

SYM21D: AN EXPERIMENTAL TOBACCO AND NICOTINE PRODUCT MARKETPLACE: A PLATFORM FOR TESTING POLICIES AND REGULATIONS
Dana Carroll*, Lori Strayer, Warren Bickel, Dorothy Hatsukami
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Imperial Ballroom B (Ballroom Level)
Podium Presentation 5: Symposium 22
EXPLORING COMBUSTIBLE CIGARETTE INNOVATIONS IN A SMOKEFREE WORLD

Chair: Janet Hoek
Audience: PH, PO

SYM22A: SMOKERS’ AND SUSCEPTIBLE NON-SMOKERS’ RESPONSES TO FLAVOUR CAPSULE VARIANT CIGARETTES: AN ONLINE SURVEY
Janet Hoek*, Philip Gendall, Christine Eckert, Jordan Louviere, Mei-Ling Blank, James Thrasher

SYM22B: PREVALENCE AND CORRELATES OF FLAVOR CAPSULE USE IN THE UNITED STATES: RESULTS FROM NATIONAL SURVEYS OF ADOLESCENTS AND YOUNG ADULTS, 2013-2016
James Thrasher*, Paula Lozano, Huizhong Yang, Yoojin Cho, Crawford Moodie

SYM22C: USE OF CIGARETTES WITH FLAVOUR-CHANGING CAPSULES AMONG SMOKERS IN THE UNITED KINGDOM: AN ONLINE SURVEY
Crawford Moodie*, Anne Marie MacKintosh, James Thrasher, Ann McNeill, Sara Hitchman

SYM22D: Discussant
Timothy Dewhirst*

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USING MOBILE HEALTH TO TARGET HARD-TO-REACH SUBGROUPS

Chair: Lion Shahab
Audience: CL *

PA12-1: DEVELOPMENT AND EFFICACY OF AN MHEALTH TOBACCO INTERVENTION TARGETING AFRICAN AMERICANS
Monica Webb Hooper*, David Miller, Enrique Saldivar, Ming-Chun Huang

PA12-2: A COMPARISON OF FACEBOOK CAMPAIGN SUCCESS IN RECRUITING ETHNICALLY DIVERSE SMOKERS INTO A SOCIAL MEDIA-BASED TOBACCO TREATMENT TRIAL
Connor Phillips*, Connie Pechmann, Douglas Calder, Judith Prochaska

PA12-3: INITIAL PILOT STUDY OUTCOMES OF THE PUT IT OUT PROJECT: A FACEBOOK SMOKING CESSION INTERVENTION FOR SEXUAL AND GENDER MINORITY YOUNG ADULTS
Erin Vogel*, Gary Humfleet, Judith Prochaska, Meredith Meacham, Alina Belohlavek, Danielle Ramo
PA12-4: PRELIMINARY OUTCOMES FROM THE SMOKING TOBACCO AND DRINKING STUDY AT THREE MONTH FOLLOW UP
Larissa Maier*, Manpreet Kaur, Danielle Ramo, Mandy Chan, Derek Satre

8:30 AM - 10:00 AM
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CANNABIS AND TOBACCO CO-USE: BEHAVIOR AND BIOMARKERS
Chair: Jennifer Pearson
Audience: CL, PH, PO

PA13-1: PREVALENCE OF MARIJUANA USE IN ELECTRONIC CIGARETTES AMONG YOUTH UNITED STATES 2017
Katrina Trivers*, Andrea Gentzke, Elyse Phillips, Gillian Schauer

PA13-2: CO-USE OF MARIJUANA AND TOBACCO PRODUCTS AMONG YOUNG ADULTS
Eric Pedersen*, Joan Tucker, Rachana Seelam, Michael Dunbar, Regina Shih, Elizabeth D’Amico

PA13-3: BIOMARKERS OF EXPOSURE AMONG CONCURRENT USERS OF TOBACCO AND CANNABIS FINDINGS FROM WAVE 1 OF THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH STUDY
Danielle Smith*, Richard OConnor, Binnian Wei, Mark Travers, Andrew Hyland, Maciej Goniewicz

PA13-4: ASSOCIATIONS OF RECREATIONAL AND MEDICAL CANNABIS USE WITH QUIT OUTCOME AMONG PRIMARY CARE PATIENTS ENROLLED IN A SMOKING CESSATION PROGRAM
Sabrina Voci*, Laurie Zawertailo, Anna Ivanova, Dolly Baliunas, Sarwar Hussain, Peter Selby

PA13-5: CANNABIS USE AND INCREASED RISK OF CIGARETTE SMOKING INITIATION, PERSISTENCE, AND RELAPSE AMONG ADULTS IN THE UNITED STATES: DATA FROM TWO WAVES OF THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH (PATH) STUDY
Andrea Weinberger*, Renee Goodwin

8:30 AM - 10:00 AM
Plaza B (Lobby Level)
Podium Presentation 5: Paper Session 14
IMPROVING CESSATION IN VULNERABLE SMOKERS: ADDRESSING RACIAL AND SOCIOECONOMIC DISPARITIES
Chair: Steven Fu
Chair: Norval Hickman
Audience: CL *

PA14-1: BREATHEFREE: PARTNERING WITH RESIDENTS TO INCREASE SMOKING CESSATION IN LOW-INCOME NEIGHBORHOODS
Erika Trapl*, Sarah Gonzalez

Audience Key: BS: Basic Science; PC: Pre-Clinical; C: Clinical; PH/E: Public Health/Epidemiology; P: Policy; HD: Health Disparities; I: International; LMIC: Lower-Middle Income Countries; T=Treatment
PA14-2: RACE DIFFERENCES IN EFFICACY OF PHARMACOTHERAPIES FOR SMOKING CESSATION: SUBGROUP ANALYSIS OF THE RANDOMIZED, ACTIVE- AND PLACEBO-CONTROLLED EAGLES TRIAL
Nicole Nollen*, Jasjit Ahluwalia, Lisa Sanderson Cox, Kola Okuyemi, Larry Samuels, David Lawrence, Neal Benowitz

PA14-3: ICAN QUIT IN PREGNANCY: A MULTI-COMPONENT INTERVENTION FOR SMOKING CESSATION CARE AMONG PREGNANT INDIGENOUS AUSTRALIAN WOMEN
Gillian Gould*, Michelle Bovill, Billie Bonevski, Maree Gruppetta, Lou Atkins, Yael Bar Zeev

PA14-4: MULTILEVEL INTERVENTIONS TO REDUCE CALIFORNIA TRIBAL YOUTH COMMERCIAL TOBACCO USE
Roland Moore*, Maya Goodblanket, Pedro Domingo, Juliet Lee, Dave Gilder, Daniel Calac

PA14-5: CULTURALLY SPECIFIC SERVICES INCREASE ENGAGEMENT AMONG AFRICAN AMERICAN QUITLINE ENROLLEES
Monica Webb Hooper*, Erica Salmon, Lacresha Johnson, Kimberlee Hunt, Kelly Carpenter

10:00 AM - 10:30 AM
SRNT CENTRAL, Yosemite Room (Ballroom Level)
Refreshment Break

10:00 AM - 10:30 AM
Seacliff Room (Lobby Level)
Meet-the-Editor Session
Editor-in-Chief: Marcus Munafò, PhD, Nicotine and Tobacco Research Journal

10:30 AM - 12:00 PM
Plaza A (Lobby Level)
Podium Presentation 6: Symposium 23
NEW STRATEGIES TO INCREASE THE DELIVERY OF EFFECTIVE TOBACCO CESSATION TREATMENT IN PRIMARY CARE
Chair: Melanie Boeckmann
Audience: CL

SYM23A: OFFERING TOBACCO TREATMENT OUTSIDE OF OFFICE VISITS TO A POPULATION OF SMOKERS IN A PRIMARY CARE NETWORK
Nancy Rigotti*, Sara Kalkhoran
SYM23C: MEDICATION SAMPLING FOR SMOKERS INITIAL RESULTS FROM A CLUSTER RANDOMIZED CLINICAL TRIAL IN PRIMARY CARE
Matthew Carpenter*, Amy Wahlquist, Robert Davis, Jennifer Dahne, Michael Cummings, Kevin GrayMD, Brent Egan

SYM23E: 12 MONTH EVALUATION OF AN EMR SUPPORTED STAFF ROLE CHANGE FOR PROVISION OF TOBACCO CESSATION CARE IN 8 PRIMARY CARE SAFETY-NET CLINICS
Susan Flocke*, Eileen Seeholzer, Steven Lewis, Elizabeth Antognoli, India Gill, Jeanmarie Rose, Elvira Ordillas

SYM23F: ELECTRONIC HEALTH RECORD BASED SMOKING TREATMENT REFERRAL: CLINIC STAFF ATTITUDES AND REFERRAL SUCCESS
Madeline Oguss*, Danielle McCarthy, David Fraser, Megan Piper, Jessica Cook, Tanya Schlam, Timothy Baker, Barbara Bowers, Eileen Partridge, Michael Fiore

SYM23G: WILL SMOKERS CONTINUE IN CHRONIC CARE ONCE THEY RELAPSE?
Tanya Schlam*, Megan Piper, Jessica Cook, Michael Fiore, Timothy Baker

SYM23H: TRAINING GENERAL PRACTITIONERS IN GERMANY TO PROVIDE BRIEF STOP-SMOKING ADVICE: PROCESS EVALUATION OF A PILOT STUDY
Sabrina Kastaun*, Verena Leve, Daniel Kotz

10:30 AM - 12:00 PM
Imperial Ballroom B (Ballroom Level)
Podium Presentation 6: Symposium 24
THE GROWING PUBLIC HEALTH RISKS FROM ASPIRING TRANSNATIONAL TOBACCO COMPANIES
Chair: Kelley Lee
Audience: PO

SYM24A: CHINESE TOBACCO INTERESTS IN EAST AFRICA: IMPLICATIONS FOR TOBACCO CONTROL REGIONALLY AND GLOBALLY
Julia Smith*, Jennifer Fang

SYM24B: GOING GLOBAL: THE ILLICIT TOBACCO TRADE FROM ASIA TO LATIN AMERICA AND THE CARIBBEAN
Eduardo Bianco*, Benoit Gomis, Jennifer Fang, Kelley Lee

SYM24C: “WE THINK GLOBALLY”: THE RISE OF PARAGUAY’S TABACALERA DEL ESTE AS A THREAT TO GLOBAL TOBACCO CONTROL
Kelley Lee*, Benoit Gomis, Natalia Carillo Botero, Philip Shepherd, Roberto Magno Iglesias

SYM24D: GRAND RIVER ENTERPRISES: THE RISE OF INDIGENOUS COMMERCIAL TOBACCO ECONOMIES
Rob Cunningham*
10:30 AM - 12:00 PM
Grand Ballroom B (Grand Ballroom Level)
Podium Presentation 6: Symposium 25
INNOVATIVE METHODS FOR RESEARCH ON E-CIGARETTES

Chair: Jessica Braymiller
Audience: PH

SYM25A: ASSESSMENTS OF E-CIGARETTE DEPENDENCE IN ADULT DUAL USERS: PSYCHOMETRICS AND VALIDITY OF THREE MEASURES
Megan Piper*, Robin Mermelstein, Timothy Baker, Donald Hedeker, Neal Benowitz, Douglas Jorenby

SYM25B: ESTIMATING THE CAUSAL EFFECT OF ELECTRONIC CIGARETTE USE ON CONVENTIONAL CIGARETTE SMOKING: ACCOUNTING FOR SHARED RISK USING PROPENSITY SCORE METHODS
Arielle Selya*, Sooyong Kim

SYM25C: AGE-VARYING ASSOCIATIONS BETWEEN E-CIGARETTE, HOOKAH, AND MARIJUANA USE AMONG YOUNG PEOPLE: FINDINGS FROM THE PATH STUDY
Jessica Braymiller*, Stephanie Lanza

SYM25D: MEASUREMENT OF ELECTRONIC NICOTINE EXPECTANCIES AMONG YOUNG ADULTS: FACTOR ANALYSIS, ITEM RESPONSE CHARACTERISTICS, AND PRELIMINARY CONCURRENT VALIDITY
Paul Harrell*, Stephen Stark, Kelli Will, Seok Joon Chun, Andrew Plunk, Laurel Brockenberry, Thomas Brandon

SYM25E: ASSESSING NICOTINE DEPENDENCE IN DUAL-USERS OF CIGARETTES AND ENDS: UNIQUE AND COMMON ELEMENTS OF DEPENDENCE
Eva Rest*, Robin Mermelstein, Donald Hedeker

10:30 AM - 12:00 PM
Franciscan CD (Ballroom Level)
Podium Presentation 6: Symposium 26
ADVANCES IN THIRDHAND TOBACCO SMOKE RESEARCH

Chair: Hugo Destaillats
Audience: PC

SYM26A: NICOTINE AND NNK IN THIRDHAND CIGARETTE SMOKE
Suzaynn Schick*

SYM26B: BIOMARKERS FOR THS, AND THE SEARCH FOR BIOMARKERS TO DISTINGUISH THS EXPOSURE FROM SHS EXPOSURE
Peyton Jacob, III*, Christopher Havel, Neal Benowitz
SYM26C: GENETIC SUSCEPTIBILITY TO THIRDHAND SMOKE-INDUCED LUNG CANCER DEVELOPMENT IN MICE  
Antoine Snijders*, Jian-Hua Mao, Bo Hang

SYM26D: THIRDHAND SMOKE POLLUTION AND REMEDIATION IN LOW-INCOME MULTIUNIT HOUSING  
Georg Matt*

10:30 AM - 12:00 PM  
Franciscan AB (Ballroom Level)  
**Podium Presentation 6: Paper Session 15**  
EMERGING EVIDENCE ON E-CIGARETTE TOXICITY  
**Co-Chairs:** Bartosz Koszowski, Wallace Pickworth  
**Audience:** PC

PA15-1: IN UTERO EXPOSURE TO E-CIGARETTES MODULATES PLATELET FUNCTION AND INCREASES THE RISK OF THROMBOGENESIS, IN MICE  
Zubair Karim, Keziah Hernandez, José Rivera, Fadi Khasawneh, Fatima Alshbool*

PA15-2: RELATIVE ENDOTHELIAL TOXICITY OF TOBACCO SMOKE AND E-CIGARETTE AEROSOL: A FUNCTIONAL AND MECHANISTICAL ASSESSMENT  
Leila Mohammadi*, Ronak Derakhshandeh, Daniel Han, Abel Huang, Adam Whitlatch, Suzaynn Schick, Matthew Springer

PA15-3: VAPING DEREGULATES CANCER-RELATED GENES AND ASSOCIATED MOLECULAR PATHWAYS IN THE ORAL EPITHELIUM  
Ahmad Besaratinia*, Stella Tommasi, Andrew Caliri, Amanda Caceres, Debra Moreno, Meng Li, Yibu Chen, Kimberly Siegmund

PA15-4: ASSESSING CARDIOVASCULAR RISKS ASSOCIATED WITH E-CIGARETTES WITH HUMAN INDUCED PLURIPOTENT STEM CELL-DERIVED ENDOTHELIAL CELLS  
Won Lee*, Yang Zhou, Sang-Ging Ong, Lei Tian, Natalie Baker, Hye Ryeong Bae, Leila Mohammadi, Matthew Springer, Suzaynn Schick, Aruni Bhatnagar, Joseph Wu

PA15-5: NEUROTOXIC REACTIVE ASTROCYTES AS ELECTRONIC CIGARETTES EXPOSURE AND INJURY BIOMARKERS  
Yiling Hong*

10:30 AM - 12:00 PM  
Imperial Ballroom A (Ballroom Level)  
**Podium Presentation 6: Paper Session 16**  
CIGAR USE: IMPLICATIONS FOR PROGRAM AND POLICY  
**Chair:** Cristine Delnevo  
**Audience:** PH, PO *
PA16-1: TRENDS IN CIGAR USE IN THE UNITED STATES BY RACE/ETHNICITY: 2002 TO 2016  
Lisa Cruz*, Andrea Weinberger, Renee Goodwin

PA16-2: FLAVORED CIGAR SMOKING AMONG AFRICAN AMERICAN YOUNG ADULT DUAL USERS: AN ECOLOGICAL MOMENTARY ASSESSMENT  
Julia Cen Chen*, Kelvin Choi, Thomas Kirchner, Robert Feldman, James Butler, Erin Mead

PA16-3: REASONS FOR LCC USE AMONG A NATIONAL SAMPLE OF YOUTH AND YOUNG ADULTS  
Morgane Bennett*, Haijun Xiao, Elizabeth Hair, Donna Vallone

PA16-4: “PHANTOM SMOKERS”: SMOKER IDENTITY AMONG TEEN USERS OF CIGAR PRODUCTS  
Rock Lim*, Karen Ishler, Erika Trapl, Sarah Koopman-Gonzalez, Elizabeth Antognoli, David Cavallo, Susan Flocke

PA16-5: SPATIAL ASSOCIATIONS BETWEEN STATE LEVEL CURRENT CIGAR USE AND CIGAR TAX TYPE  
Dina Jones*

PA16-6: CHANGES IN SALES OF EXPPLICIT- AND CONCEPT-FLAVORED CIGARS IN PROVIDENCE, RHODE ISLAND FOLLOWING IMPLEMENTATION OF A CITYWIDE SALES RESTRICTION POLICY  
Todd Rogers*, Ashley Feld, Doris Gammon, Elizabeth Brown, Lindsay Olson, James Nonnemaker, Martha Engstrom, Tarsha McCrae, Enver Holder-Hayes, Ashley Ross, Erin Boles Welsh, Geri Guardino, Deborah Pearlman

10:30 AM - 12:00 PM  
Plaza B (Lobby Level)  
Podium Presentation 6: Paper Session 17  
EFFECTS OF ANTITOBACCO MASS MEDIA INTERVENTIONS

Chair: Joseph Lee  
Audience: PH *

PA17-1: EFFECTS OF MASS MEDIA AND SOCIAL MEDIA COVERAGE OF ANTITOBACCO CONTENT ON YOUTH AND YOUNG ADULT SMOKING INTENTIONS  
Robert Hornik*, Laura Gibson, Steven Binns, Sherry Emery, Veronica Epstein, Michelle Jeong, Kwanho Kim, Yoonsang Kim, Elissa Kranzler, Stella Lee, Jiaying Liu, Matthew O’Donnell, Leeann Siegel, Hy Tran, Allyson Volinsky, Sharon Williams, Qinghua Yang

PA17-2: THE EFFECT OF A NATIONAL SMOKING PREVENTION MEDIA CAMPAIGN ON YOUTH INITIATION TO CIGARETTES  
Jennifer Duke, Anna MacMonegle*, James Nonnemaker, Matthew Farrelly, Xiaquan Zhao, Janine Delahanty, Alexandria Smith, Pamela Rao, Jane Allen

PA17-3: EFFECTS OF PROMOTING FREE CESSION MEDICATIONS ON QUITLINE CALLS AND CALLER CHARACTERISTICS DURING A NATIONAL ANTISMOKING CAMPAIGN  
Lei Zhang*, Nathan Mann, Jesse Thompson, Randi Frank, Robert Rodes, Kevin Davis, Rebecca Murphy, Stephen Babb
PA17-4: RECALL OF TOBACCO COMMUNICATION CAMPAIGNS: EXAMINING CROSS-CAMPAIGN CUMULATIVE EXPOSURE USING A NATIONAL SAMPLE OF ADOLESCENTS
Sarah Kowitt*, Tara Queen, Seth Noar, Adam Goldstein

PA17-5: AWARENESS OF AND RECEPTIVITY TO THE FRESH EMPIRE TOBACCO PUBLIC EDUCATION CAMPAIGN AMONG HIP HOP YOUTH
Jamie Guillory*, Amy Henes, Matthew Farrelly, Leah Fiacco, Ishrat Alam, Laurel Curry, Ollie Ganz, Leah Hoffman, Janine Delahanty

PA17-6: ANTI-TOBACCO CAMPAIGN TARGETING: A RISK FACTOR ANALYSIS OF PATH WAVE 2
Caitlin Weiger*, Meghan Moran

12:00 PM - 1:30 PM
Grand Ballroom A (Grand Ballroom Level)
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