

Research Society on Marijuana
7th Annual Scientific Meeting
July 21-23, 2023
Long Beach, California

Who are we?

The Research Society on Marijuana (RSMj) is a network of scientists with the shared goal of promoting understanding through empirical research of the determinants, correlates, consequences, contexts, and assessment of marijuana use as well as the treatment of problematic marijuana use, including cannabis use disorder.

RSMj Guiding Principles

- 1. We are first and foremost a research society. Thus, we are guided by research in the marijuana field, not by any personal or political agenda.**
- 2. We are a nonprofit organization. We will not be influenced by the profit motive. There are other organizations that may be sympathetic to our mission, but to maintain objectivity, we will not accept sponsorship from any for-profit or political advocacy group.**
- 3. We are a society concerned with improving human adversity. Therefore, we focus most of our attention on furthering research that has immediate benefit to reduce human suffering or improve human well-being.**

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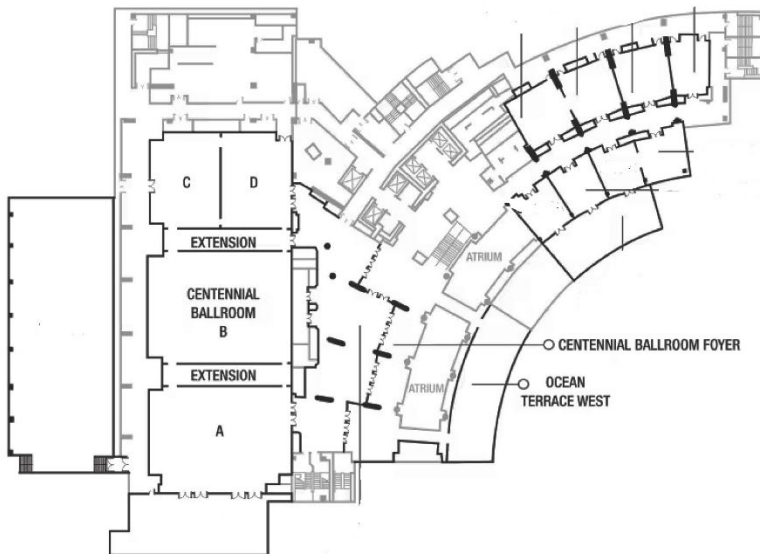
Meeting Space

On Friday we will be on both the Lobby Level in the Ocean Ballroom and on the 3rd Floor in the Centennial Ballroom, Salons C and D, and Ocean Terrace West

On Saturday we will be on the 3rd Floor in the Centennial Ballroom, Salons B, C, and D

On Sunday we will be on the 3rd Floor in the Centennial Ballroom, Salon B

THIRD LEVEL



Thursday July 20, 2023

6:00-9:00 pm

Pre-Conference Social Event at the Congregation Ale House, 201 E Broadway Ave

FRIDAY JULY 21, 2023

Ocean Ballroom, Lobby Level

Centennial Ballroom D, 3rd Floor

Centennial Ballroom, C

8:00-9:00 AM

Continental Breakfast and Coffee Service in the Centennial Ballroom, Salon D Foyer

8:45-9:00 AM

Opening Remarks: Brad Conner

9:00-10:00 AM

Keynote: Dr. Pacula

10:15-11:30 AM

Emerging adults in an emerging market: A spotlight on the 4 P's of cannabis marketing in California and their impact on youth (Padon)

Cannabis use patterns, behavior, and change over time in vulnerable populations (Cohn)

11:30AM-12:45 PM

BREAK FOR LUNCH

12:45-2:00 PM

Recent Innovations in Cannabis Protective Behavioral Strategies Research (Gray)

Parents' cannabis use and its impacts on families across multiple developmental stages (Lee)

2:15-3:30 PM

Marketing of cannabinoid products in the United States (Cornacchione Ross)

Arrested Development: Cannabis Use and Behavioral Health Outcomes from Adolescence through Young Adulthood (Davis)

3:30-5:00 PM

Poster Session I

5:00-7:00 PM

Happy Hour Sponsored by the USC Institute for Addiction Science, Ocean Terrace West, 3rd Floor

SATURDAY JULY 22, 2023

Centennial Salon B, 3rd Floor

Centennial Ballroom D, 3rd Floor

Centennial Ballroom, C

8:00-9:00 AM

Continental Breakfast and Coffee Service in the Centennial Salon C Foyer

9:00-10:00 AM

Keynote: Dr. Cooper

10:15-11:30 AM

Not Your Typical Consequences: Investigations Beyond Common Cannabis Consequences (Arkfeld)

Assessing Substance Reward Value among those who use Cannabis: Examining Co-use, Executive Function, and Utility of Daily Assessment (Aston)

11:30 AM-12:45 PM

BREAK FOR LUNCH

12:45-2:00 PM

Medical cannabis patient characteristics and product use patterns from a statewide survey in Florida: Similarities and differences across health conditions (Wang)

The Green Part of the Rainbow: Toward Improved Understanding of Cannabis Use among Members of 2SLGBTQ+ Communities (Wardell)

2:15-3:30 PM

Considerations for the Study of Cannabis and Polysubstance Use: Neuroscience and Acute Laboratory Administration to Field Study and Survey Methods (Piercey)

Cannabis and Tobacco Co-Use Among Underserved and Priority Populations (Shorey Fennell)

3:30-5:00 PM

Poster Session II

SUNDAY JULY 23, 2023

Centennial Salon B, 3rd Floor

Centennial Ballroom D, 3rd Floor

8:00-9:00 AM

Continental Breakfast and Coffee Service in the Centennial Salon C Foyer

9:00-10:15 AM

Patterns of cannabis use across the lifespan in diverse adult populations in Hawai'i (Phillips)

10:30-11:45 AM

Cannabis symposium (Pedersen)

11:45 AM-12:00 PM

Concluding Remarks: Brad Conner

Thursday, July 20, 2023

6:00pm - 9:00pm

Pre-Conference Social Event

*Congregation Ale House
201 E Broadway, Long Beach, CA 90802*

*Please Join Us for a Pre-Conference Welcome
The venue is walking distance from the Conference Hotel
Food and Drinks are available for purchase.*

Friday, JULY 21, 2023

8:00am – 4:30pm

Check-In/Registration

Foyer in Front of Centennial Ballroom, Salon C & D, 3rd Floor

8:00am – 9:00am

Continental Breakfast

Foyer in Front of Centennial Ballroom, Salon C & D, 3rd Floor

8:45am – 9:00am

Conference Opening/Introduction

Ocean Ballroom, Lobby Level

Bradley Conner (Colorado State University)

9:00am – 10:00am

Keynote Address

Ocean Ballroom, Lobby Level

Rosalie L. Pacula, Ph.D. (University of Southern California)



Rosalie Liccardo Pacula, Ph.D., holds the Elizabeth Garrett Chair in Health Policy, Economics & Law at the Sol Price School of Public Policy, University of Southern California, and is a Senior Fellow with the Leonard D. Schaeffer Center for Health Policy & Economics, where she co-directs the RAND-USC Schaeffer Opioid Policy Tools & Information Center of Excellence (OPTIC) in addition to leading numerous National Institute of Health funded studies examining the impact of federal, state and local laws on the supply, demand and access to treatment for cannabis.

Friday, JULY 21, 2023

10:15am – 11:30am

Symposium

Ocean Ballroom, Lobby Level

Emerging Adults in an Emerging Market: A Spotlight on the 4 P's of Cannabis Marketing in California and their Impact on Youth

Chair: Alisa A. Padon (Public Health Institute)

The era encompassing adolescence and emerging adulthood is a critical period of development in which experimentation with cannabis is common. Cannabis use in adolescence, especially when use is initiated young or is frequent, has been shown to be associated with negative, often long-term, health consequences including increased risk of injury, atypical cognitive development, and susceptibility to substance use disorder in adulthood. The legalization of adult-use cannabis affects minors despite legal limitations on their ability to purchase. This symposium will bring together four approaches to examining cannabis marketing in California and their impact on youth: Products, Price, Place and Promotion. For products, we will identify cannabis product categories that appeal to young adult buyers, based on sales at licensed recreational retail stores in California from 2020-2021. For price, we present findings of an analysis of the online marketing and discounting behaviors of cannabis retailers operating in California. For place, we examine the differences between storefront and non-storefront retailers on the types of health promoting messages utilized, the various age-gating methods employed, and their effectiveness on precluding underage access. For promotion, we report on cannabis advertisement content from the California market and identify features that appeal to youth.

PRESENTERS:

Identification of Younger versus Older Adult Appealing Cannabis Product Categories

Connie Pechmann, Douglas Calder (University of California Irvine)

Promotion and Discounting Practices used by Licensed Cannabis Retailers in California

Aurash J. Soroosh, Alisa A. Padon, Bethany Simard, Lynn D. Silver (Public Health Institute)

The Age-Gating and Health Marketing Differences Between Storefront and Non-Storefront Cannabis Retailers

Joshua Unbin Rhee (University of California Irvine), Alisa A. Padon, Lynn D. Silver (Public Health Institute), David Timberlake (University of California Irvine)

Youth Appealing Cannabis Advertising in California and Implications for Regulation

Alisa A. Padon (Public Health Institute), Dara Ghahremani (University of California Los Angeles), Bethany Simard, Aurash J. Soroosh, Lynn D. Silver (Public Health Institute)

Discussant: Connie Pechmann (University of California Irvine)

Friday, JULY 21, 2023

10:15am – 11:30am

Symposium

Centennial Ballroom, Salon D, 3rd Floor

Cannabis Use Patterns, Behavior, and Change over Time in Vulnerable Populations

Chair: Amy M. Cohn (TSET Health Promotion Research Center, Department of Pediatrics, University of Oklahoma Health Sciences Center)

The cannabis market has changed dramatically over the last decade in response to legalization, bringing with it a variety of new products and choices. Vulnerable groups with high rates of cannabis and other substance use may be particularly impacted by these changes, which could increase health disparities and undermine the proposed benefits of medical and recreational legalization. This symposium presents data on cannabis use behavior across a diverse group of vulnerable populations (patients receiving cancer treatment, sexual and gender minorities, adults with mental health problems, pregnant women) to better understand the benefits and potential health consequences of legal and non-legal cannabis use. Using data collected from a legal medical cannabis state (Oklahoma), Ms. Niznik will present data assessing differences at baseline and changes over time in trajectories of cancer-related symptoms across adults in cancer treatment with various cannabis use patterns; and Dr. Cohn will present data on differences in modes of cannabis use among adults with and without depression or anxiety, using data from a large statewide cross-sectional web-based survey. Dr. Romm will present data on disparities in cannabis use behavior, perceptions of risk, and social norms across young adult sexual orientation groups recruited from 6 metropolitan statistical areas across the U.S. Lastly, Dr. Zaring-Hinkle will present data from Waves 1 through 5 of the Population Assessment of Tobacco and Health (PATH) study examining the association of past 30-day cannabis use in currently pregnant women to subsequent birth and pregnancy outcomes. Discussant, Dr. Leventhal, will discuss the application of study findings to reducing cannabis-related health disparities.

PRESENTERS:

Symptom Trajectories Over Time by Cannabis Use Status Among Patients Undergoing Cancer Treatment - Student Travel Awardee

Taylor Niznik, Laili Boozary, Meng Chen, Amy M. Cohn (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center), Susanna V. Ulahannan, Christina E. Henson (University of Oklahoma Health Sciences Center), Adam C. Alexander (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center), Kathleen N. Moore, Laura L. Holman (University of Oklahoma Health Sciences Center), Darla E. Kendzor (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center)

Routes of Cannabis Administration among Adults with and without Mental Health Problems: Assessing Differences in Prevalence and Rankings of Past 30-day Use

Amy M. Cohn (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center), Sarah J. Ehlke (Old Dominion University), Michael A. Smith, Katelyn F. Romm, Erin A. Vogel, Darla E. Kendzor (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center)

Disparities in Cannabis Use Behaviors, Perceived Risk, and Social Norms across Sexual Orientation Groups of US Young Adult Women and Men

Katelyn F. Romm, Amy M. Cohn (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center), Laura A. Beebe (University of Oklahoma Health Sciences Center), Carla J. Berg, (George Washington University)

Association between Cannabis Use during Pregnancy and Adverse Pregnancy and Birth Outcomes, PATH Waves 1-5

Brittany Zaring-Hinkle (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center), Hoda Elmasry (Independent Contractor), Amy M. Cohn, PhD (TSET Health Promotion Research Center, University of Oklahoma Health Sciences Center)

Discussant: Adam Leventhal, PhD (Population and Public Health Sciences, USC Institute for Addiction Science Health, Norris Comprehensive Cancer Center, Keck School of Medicine University of Southern California)

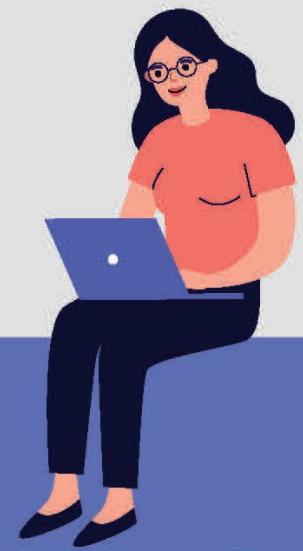
11:30am – 12:45pm

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Developed by psychologists at San Diego State University, the Cannabis eCHECKUP TO GO has been motivating individuals to reduce high-risk cannabis use since 2003.



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SCREENERS

Friday, JULY 21, 2023

12:45pm – 2:00pm

Symposium

Ocean Ballroom, Lobby Level

Recent Innovations in Cannabis Protective Behavioral Strategies Research

Chair: Bethany A. Gray, MS (Colorado State University)

Cannabis Protective Behavioral Strategies are behaviors that one can use to reduce cannabis use and/or minimize one's risk of experiencing negative consequences. Over a decade of research on protective behavioral strategies (PBS) demonstrates a modest negative relationship between PBS and cannabis use and outcomes. In the first talk, Ms. Smith-LeCavalier will examine demographic differences in PBS use and in the relationship between PBS use and cannabis outcomes using a modern multilevel methodology for examining PBS use rates and the strength of the associations between PBS and outcomes across intersectional identities. Next, Dr. Pearson will examine how one's self-perception is associated with cannabis-related outcomes using self-determination theory. He will emphasize the importance of integrating clients' motivations to use PBS into harm reduction focused treatment plans. In the third study, Ms. Gray implements an unsupervised machine learning method, i.e., Structural Topic Modeling (STM), to extract themes from two large sets of write-in qualitative responses in both English and Spanish related to self-generated PBS. Results indicate that STM is a viable option for analyzing text data and may be helpful for improving and expanding PBS assessment tools. Finally, Ms. Bolts will demonstrate a newly developed open-source online application that provides a personalized list of PBS based on the contexts in which participants report using cannabis and specific consequences they wish to avoid. This app can bridge the gap between science and practice. Together, these talks highlight recent innovations in PBS research and provide recommendations for improving assessments and intervention strategies.

PRESENTERS:

An Examination of Cannabis Protective Behavioral Strategies across Intersectional Identities

Kirstyn N. Smith-LeCavalier, Mary E. Larimer, Christine M. Lee, Anne M. Fairlie (University of Washington), Mark A. Prince, PhD (Colorado State University), Marijuana Outcomes Study Team, Protective Strategies Study Team

Applying Self-Determination Theory to Understand (Motivations for) Responsible Cannabis Use

Matthew R. Pearson, Dylan K. Richards (University of New Mexico), Addictions Research Team

Using Structural Topic Modeling to Identify and Compare Topics Describing Protective Strategies for Cannabis Use in an International Dataset

Bethany A. Gray (Colorado State University), Adrian J. Bravo (William & Mary), Mark A. Prince (Colorado State University), Cross Cultural Addictions Study Team

A Shiny App for Recommending Cannabis Protective Behavioral Strategies

Olivia L Bolts (Colorado State University), Eric R Pedersen, Reagan E Fitzke (Keck School of Medicine of USC), Mark A Prince (Colorado State University)

Discussant: Adrian J. Bravo, PhD (William & Mary)

Friday, JULY 21, 2023

12:45pm – 2:00pm

Symposium

Centennial Ballroom, Salon D, 3rd Floor

Parents' Cannabis Use and Its Impacts on Families across Multiple Developmental Stages

Chair: Jungeun Olivia Lee (University of Southern California)

Prenatal cannabis use is increasingly studied. Yet the existing literature is limited in few critical ways. The modes of prenatal cannabis use and health care experiences of individuals who use cannabis prenatally are poorly studied, particularly for BIPOC communities. Further, the impacts of mothers' cannabis use on children beyond the prenatal period are not well understood. This panel will elucidate mothers' cannabis use during pregnancy, including BIPOC mothers, and the impacts of maternal cannabis use on families, including mothers' perceptions of the harms of their cannabis use on children. In the first study, data from 18 focus groups revealed heterogeneity in preference for different modes of prenatal cannabis use and the need for evidence-based information. In the second study, in-depth interviews with seven BIPOC mothers documented that care provider settings were perceived as punitive rather than supportive. In the third paper, data from a public forum suggested that mothers were concerned about negative impacts of cannabis use on their children and relied on peers rather than health care providers for information. Finally, the fourth paper, a longitudinal study, revealed that maternal cannabis use may have a more prominent impact on children's cannabis use during early adolescence than other developmental stages. Together, these papers highlight the experiences of mothers who use cannabis and the impacts of their use on families. The symposium has many features that will likely be of interest to attendees, including a focus on maternal cannabis use, BIPOC communities, and the impacts of maternal cannabis use on children.

PRESENTERS:

Exploring Preferences for Different Modes of Cannabis Use among Pregnant Individuals with Prenatal Cannabis Use: A Qualitative Study

Maha N. Mian (Kaiser Permanente Northern California; University of California, San Francisco), Tara R. Foti, Andrea Green, Esti Iturralde, Andrea Altschuler, Melanie Jackson-Morris, Monique B. Does, Deborah Ansley, Amy Conway, Nancy Goler (Kaiser Permanente Northern California), Kelly C. Young-Wolff (Kaiser Permanente Northern California; University of California, San Francisco)

Threatened, Punished, and Judged: BIPOC Peoples' Experiences of Using Cannabis during Pregnancy in California

Rachel Carmen Ceasar, Erin Gould (University of Southern California), Jen Laughter (California State University), Jordan Granacki, Jasmine Joy Santos (University of Southern California), Katherine Kirsch (McGill University), Lizbeth Becerra (University of Southern California)

A Descriptive Analysis of a Popular Pregnancy Forum: Comments on the Developmental Consequences of Prenatal Cannabis Use on Offspring

Lauren Micalizzi, Elizabeth R. Aston (Brown University), Jacqueline Nesi (Brown University; Rhode Island Hospital), Dayna Price, Rachel L. Gunn (Brown University)

The Effect of Maternal Cannabis Use on the Cannabis Use of Children of Teen Mothers: Sensitive Periods

Jungeun Olivia Lee, Lei Duan, Woo Jung Lee, Julie A. Cederbaum (University of Southern California)

Discussant: *Jungeun Olivia Lee (University of Southern California)*

Friday, JULY 21, 2023

2:15pm – 3:30pm

Symposium

Ocean Ballroom, Lobby Level

Marketing of Cannabinoid Products in the United States

Chair: Jennifer Cornacchione Ross, PhD (Boston University)

Given the rapid increase of diverse cannabinoid products in the United States (U.S.), there is a need to describe and understand marketing strategies that are being implemented that could influence consumer perceptions and behaviors. Decades of alcohol and tobacco marketing research has shown that the industry utilizes marketing strategies, including the use of misleading text and image-based content, to reduce harm perceptions and increase use. However, limited research has examined the marketing practices of cannabinoid products in the U.S. In this symposium, we will present data from four studies that assess cannabis marketing. First, we will describe self-reported exposure to marketing of cannabis, delta-8 THC, and cannabidiol (CBD) products among a national sample of adults who use cannabis, delta-8 THC, and/or CBD in the U.S. Next, we will discuss the use of health claims prohibited by the U.S. Food and Drug Administration (FDA) at the point-of-sale by CBD retailers in three states (CO, MD, NC). Then, we will present data on the informational content (e.g., chemovars, cannabinoid content, net weight, universal THC symbol, type of imagery used, psychoactive effects, medical effects, health warnings, etc.) provided in online promotional materials for herbal cannabis products by cannabis retailers in California. Finally, we will discuss on-package marketing practices used by the cannabis industry for the promotion of cannabis edible products. A better understanding of the range of marketing strategies and their impact on consumer perceptions and use is needed, particularly when considering future regulations on marketing and prohibiting misleading content.

PRESENTERS:

Self-reported Exposure to Cannabis, Cannabidiol (CBD), and Delta-8 THC Products among a National Qualtrics® Panel of Adult Users of Cannabinoid Products in the United States

Kathleen L Egan (East Carolina University), Melissa J Cox (University of North Carolina at Chapel Hill), Eric K Soule (East Carolina University)

Health Claims about Cannabidiol (CBD) at the Point-of-Sale

Kimberly G Wagoner, Olivia Horton, Renee Parker (Wake Forest University School of Medicine), Allison J Lazard (University of North Carolina at Chapel Hill), E Alfonso Romero-Sandoval, Beth A Reboussin (Wake Forest University School of Medicine)

Online Cannabis Product Features Promoted in the California Market

Mannat Rakar, Kimberly G Wagoner, Beth A Reboussin, E. Alfonso Romero-Sandoval (Wake Forest School of Medicine)

A profile and content analysis of cannabis edible products marketed online in the United States

Beth A Reboussin (Wake Forest University School of Medicine), Allison J. Lazard (University of North Carolina at Chapel Hill), Kimberly G Wagoner (Wake Forest University School of Medicine), Jennifer Cornacchione Ross (Boston University), Erin L. Sutfin, Alfonso Romero-Sandoval, Cynthia K. Suerken, Alexandra Zizzi (Wake Forest University School of Medicine), Maddie Boucher, Alondra Janicek (Wake Forest University), Emily M Wagoner (NC State University)

Friday, JULY 21, 2023

2:15pm – 3:30pm

Symposium

Centennial Ballroom, Salon D, 3rd Floor

Arrested Development: Cannabis Use and Behavioral Health Outcomes from Adolescence through Young Adulthood

Chair: Jordan P Davis (University of Southern California)

Besides alcohol, cannabis is the most used substance among young adults (ages 18 to 25), with 34.5% (11.6 million) reporting past year use. The changing landscape of cannabis in the U.S. raises important concerns about how young people may be adversely affected. This symposium will present novel findings across several disciplines to expand our understanding of how cannabis use influences long-term behavioral health outcomes across adolescent and young adult development. Dr. Davis will begin this symposium by describing a test of two competing theoretical models to untangle the directional (and developmental) associations between cannabis use and depression and anxiety. Dr. Conn will then discuss how the association of childhood trauma with problematic cannabis use in emerging adulthood is moderated by motivations for using cannabis. Next, Dr. Dae will address poly-cannabis use, presenting results that show far greater risk of cannabis use disorder for those on an escalating trajectory of poly-cannabis use. Finally, Dr. Wong will describe how changes to legalization of cannabis differentially impacts trajectories of cannabis use for individuals across varying racial/ethnic and gender groups. Dr. Barrington-Trimis will conclude the symposium with a discussion of the results from these four prospective cohort studies of youth in Southern California aging into young adulthood, including risk factors for adverse cannabis use outcomes and the role of legalization.

PRESENTERS:

Directional Associations between Cannabis Use, Depression, and Anxiety

Jordan Davis, Eric Pedersen (USC), Elizabeth D'Amico, Joan Tucker, Michael Dunbar, Anthony Rodriguez, Rachana Seelam (RAND), John Prindle (USC)

Coping and Health-related Cannabis Motives Mediate the Relationship between Childhood Trauma and Problematic Cannabis Use Over Time among Emerging Adult Cannabis Users

Bridgid M. Conn (Children's Hospital Los Angeles)

Prospective Associations between Poly-Cannabis Product Use and Cannabis Use Disorder Trajectories

Dayoung Bae (USC)

Gender by Ethnicity Differences in Trajectory of Cannabis Use among Cannabis-Using Young Adults during Pre- and Post-Recreational Cannabis Legalization (RCL) in Los Angeles

Carolyn Wong (Children's Hospital Los Angeles)

Discussant: *Jessica Barrington-Trimis (University of Southern California)*

Friday, JULY 21, 2023

3:30pm – 5:00pm

Poster Session I (see pages 23-26 for details)

Centennial Ballroom, Salon C, 3rd Floor

5:00pm – 7:00pm

Friday Evening Social Event Sponsored by the University of California Institute For Addiction Science

Ocean Terrace West, 3rd Floor

Please Join Us for a Happy Hour Social Event Sponsored by the University of California Institute for Addiction Science

Appetizers are provided by the Institute for Addiction Science.
Drinks are available for purchase.

Open Faculty Recruitment

DIRECTOR OF CLINICAL RESEARCH OF THE USC INSTITUTE FOR ADDICTION SCIENCE

Tenure-Track Open Rank Faculty Member in the Department of Population and Public Health Sciences in the Keck School of Medicine of USC

USC Institute for
Addiction Science

The Institute for Addiction Science at the University of Southern California (USC) and the Department of Population & Public Health Sciences invites applications for a tenure-track open-rank faculty position. We seek an outstanding scholar to advance clinical and experimental behavioral research in the addictions at USC. Candidates should have a PhD, MD or equivalent degree and a track record of leading externally funded multi-investigator collaborative research teams or the strong potential for such leadership. We welcome applicants from any discipline who bring a thoughtful scientific vision for addiction research and an appreciation for diversity, equity, and inclusion. Applicants should have expertise conducting human lab studies and/or patient-oriented clinical trials related to any drug, including alcohol, nicotine, cannabis, opioid, or poly-drug use.

The recruit will:

- Join the senior leadership team of the USC Institute for Addiction Science (IAS) as the inaugural Director of Clinical Research;
- Have a primary academic appointment as an associate professor or professor (dependent on qualifications) in the Keck School of Medicine's Department of Population & Public Health Sciences (dpchs.usc.edu);
- Have the opportunity/expectation to:
 - Lead externally-funded multi-investigator research programs;
 - Facilitate the development of new research programs amongst institutional colleagues at USC;
 - Actively contribute to diversity, equity, and inclusion;
 - Recruit, mentor, and train junior faculty, postdoctoral, doctoral, masters, and undergraduate trainees;

Attractive recruitment packages are available, including support to offset costs of home purchase. The annual base salary range for this position is \$120,000-\$350,000. When extending an offer of employment, the University of Southern California considers factors such as (but not limited to) the scope and responsibilities of the position, the candidate's work experience, education/training, key skills, internal peer equity, federal, state, and local laws, contractual stipulations, grant funding, as well as external market and organizational considerations.

For more information, or to apply, please visit:

[USC Institute for Addiction Science Employment Opportunity](#)

REQ20132579

Saturday, JULY 22, 2023

8:00am – 4:30pm

Check-In/Registration

Foyer in Front of Centennial Ballroom, Salon C & D, 3rd Floor

8:00am – 9:00am

Continental Breakfast

Foyer in Front of Centennial Ballroom, Salon C & D, 3rd Floor

9:00am – 10:00am

Keynote Address

Centennial Ballroom, Salon B, 3rd Floor

THC-sparing Effects of Cannabis Constituents: Potential to Reduce Harms and Improve Outcomes? Ziva D. Cooper, Ph.D. (University of California – Los Angeles)

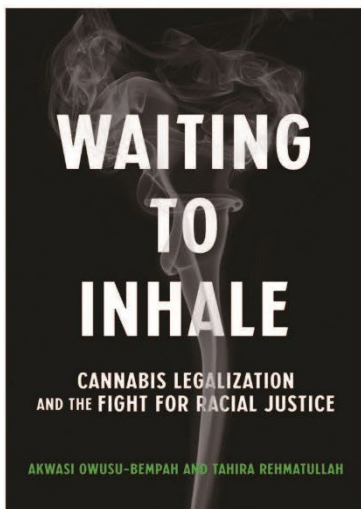


Ziva D. Cooper, Ph.D., is the Director of the University of California Los Angeles Center for Cannabis and Cannabinoids in the Jane and Terry Semel Institute for Neuroscience and Human Behavior, and Associate Professor in the Department of Psychiatry and Biobehavioral Sciences and Department of Anesthesiology at the David Geffen School of Medicine. Her current research involves understanding variables that influence both the therapeutic potential and adverse effects of cannabis and cannabinoids

through double-blind, placebo-controlled studies.



New from the MIT Press



The roots of a racial reckoning through the lens of cannabis.

“*Waiting to Inhale* dives into the racist history of cannabis from two different points of view. Owusu-Bempah and Rehmatullah shed light on the unjust past of what is now a multibillion-dollar industry that has yet to reflect the pain and suffering our community has experienced for far too long.”

– Al Harrington, Viola CEO and sixteen-year NBA veteran

learn more



Saturday, JULY 22, 2023

10:15am – 11:30am

Symposium

Centennial Ballroom, Salon B, 3rd Floor

Not Your Typical Consequences: Investigations Beyond Common Cannabis Consequences

Chair: Patrice A. Arkfeld, M.S. (Colorado State University)

As the United States moves further into the decriminalization and legalization of both medical and recreational cannabis, greater emphasis has been placed on research that provides detailed accounts of both short- and long-term consequences of cannabis use across the lifespan. Current research supports that cannabis use is associated with greater risk for substance co-use, cognitive impairments, increases in mental health symptomology, and psychosocial disruptions. These findings seem to only scratch the surface within the field of cannabis consequences and serve as a call to action for researchers to better investigate a wider range of cannabis consequences. Therefore, the purpose of this symposium is to move beyond common cannabis consequences by highlighting the consequences that are understudied in the current cannabis literature, exploring the ways that unique cannabis consequences appear in both common and rare research samples, and discussing the importance of critically evaluating and updating the ways that we capture cannabis consequences to better inform motivations to change or decrease one's cannabis use. The projects discussed in this symposium will also serve as beacons for future cannabis consequences research given that all four projects are proposed and driven by current graduate students who are passionate about moving cannabis research forward.

PRESENTERS:

An Exploration of Grief and Traumatic Experiences in Relation to Cannabis Misuse

Emma E. Smith, Bradley T. Conner (Colorado State University)

The Chicken or the Egg: Investigating Personality as a Consequence of Cannabis Use Within a Developmental Sample

Patrice A. Arkfeld, Bradley T. Conner, Ph.D. (Colorado State University)

Exploring the Cannabis Hangover: Symptoms, Predictors, and Harm Reduction Strategies

Naomi M. McFarland, Mark A. Prince, Ph.D. (Colorado State University), Jonah Stickney, Benjamin O. Ladd (Washington State University Vancouver)

Number Of Standard Doses of Tetrahydrocannabinol and Cannabis-Related Negative Consequences

Alex J. Tyskiewicz, Bradley T. Conner, Ph.D. (Colorado State University)

Discussant: *Bradley T. Conner, Ph.D. (Colorado State University)*

Saturday, JULY 22, 2023

10:15am – 11:30am

Symposium

Centennial Ballroom, Salon D, 3rd Floor

Assessing Substance Reward Value among Those Who Use Cannabis: Examining Co-use, Executive Function, and Utility of Daily Assessment

Chair: Elizabeth R. Aston (Brown University School of Public Health)

Cannabis is legal for recreational and medical use in nearly 50% and over 75% of US states, respectively. This represents a significant increase in cannabis availability and purchase, simultaneously increasing the prevalence of initiation and progression to hazardous use. Consequently, those who use cannabis now make up a substantial percentage of the US population. Behavioral economic approaches prioritize the study of reinforcer valuation and thus are well-suited for assessing substance value. Demand, an integral behavioral economic element characterizing reinforcing value, has been highly effective in the detection of excessive substance valuation, particularly among those who use cannabis. Using varying research methodologies, these talks will examine substance demand among those who use cannabis, and will comment on public health implications of demand assessment within this population in the wake of rapidly shifting cannabis legalization. Dr. Wardell will present on associations between executive function and cannabis demand among young adults who use cannabis. Dr. Cassidy will present data characterizing the relationship between cannabis use and tobacco cigarette demand among adolescents endorsing tobacco use. Dr. Merrill will present findings from work assessing the utility of administering brief, daily cannabis demand items to assess cannabis demand at the daily level among young adults endorsing cannabis use. Dr. Aston will present data on the acute effects of cannabis administration and alcohol cue exposure on alcohol demand to characterize cross-substance demand effects. Dr. Metrik will synthesize findings from these studies by discussing the utility of demand assessment in the context of fluctuating cannabis policy.

PRESENTERS:

Executive Functions and Behavioural Economic Demand for Cannabis Among Young Adults: Indirect Associations with Cannabis Consumption and Cannabis Use Disorder

Sophie G. Coelho (York University), Christian S. Hendershot (University of North Carolina–Chapel Hill), Elizabeth R. Aston (Brown University), Anthony C. Ruocco, Lena C. Quilty, Rachel F. Tyndale (University of Toronto), Jeffrey D. Wardell (York University, University of Toronto)

The Relationship between Marijuana Use and Demand for Cigarettes in Adolescents who Smoke Cigarettes

Jennifer Cornacchione Ross (Boston University), Rachel L. Denlinger (Wake Forest University), Jennifer W. Tidey, Suzanne M. Colby, Rachel N. Cassidy (Brown University)

Utility of a Brief, Daily Measure of Cannabis Demand

Jennifer E. Merrill, Elizabeth R. Aston, Holly K. Boyle, Benjamin L. Berey, Gabriela López (Brown University)

Acute Effects of Cannabis and Alcohol Cue-Exposure on Relative Alcohol Valuation

Elizabeth R. Aston, Rachel L. Gunn, Benjamin L. Berey (Brown University), James MacKillop (McMaster University/St. Joseph's Healthcare Hamilton, Brown University), Christopher W. Kahler (Brown University), Robert Swift, Jane Metrik (Brown University, Providence VA Medical Center)

Discussant: *Jane Metrik (Brown University)*

11:30am – 12:45pm

LUNCH ON YOUR OWN

Saturday, JULY 22, 2023

12:45pm – 2:00pm

Symposium

Centennial Ballroom, Salon B, 3rd Floor

Medical cannabis patient characteristics and product use patterns from a statewide survey in Florida: Similarities and differences across health conditions

Chair: Yan Wang (University of Florida)

Although cannabis has become a popular alternative treatment for various health conditions, few studies have investigated the characteristics of medical cannabis patients and products used or perceived as effective by patients with different health conditions. In this symposium, we will report the findings from a statewide survey study called Medical Marijuana and Me (M3) conducted in Florida. The M3 study included a cross-sectional survey and a longitudinal cohort survey. This symposium includes four talks focusing on the cross-sectional data, which provides a contemporary snapshot of medical cannabis users with various health conditions. The first talk will provide an overview of the M3 study design and sample characteristics, including the risks for cannabis use disorders (CUD). The other talks will each focus on one of the three health conditions, chronic pain, anxiety, and insomnia, which are not on the state's qualifying condition list yet most commonly reported reasons for medical cannabis use in this sample. These three talks will describe the demographic and health characteristics of patients in each subgroup compared to patients with other conditions, as well as provide information on the medical cannabis products they used and perceived as effective. Overall, our findings suggest each subgroup of patients had their unique demographic and health characteristics, although the commonly used cannabis products were similar across the groups. Future research is needed to further investigate the efficacy and safety of medical cannabis especially among those with limited prior exposure, more comorbidities, and/or more concurrent substance/medication use.

PRESENTERS:

Does Risk of Cannabis Use Disorder Vary by Gender or Cannabis Use Patterns among Adults Receiving Medical Cannabis in Florida?

Robert L. Cook, Hannah Fechtel, Gabe Spandau, Ruba Sajdeya, Yan Wang (University of Florida)

Characteristics and Medical Cannabis Products Used among Individuals with and without Chronic Pain in the M3 Cross-sectional Survey

Yan Wang, Kendall Robinson, Hannah Fechtel, Ruba Sajdeya, Gabriel Spandau, Robert L. Cook (University of Florida)

A Survey of Individuals who Use Cannabis as a Medicine for Anxiety in Florida

Catalina Lopez-Quintero, Juan G Perez-Carreño, Yan Wang, Hannah Fechtel, Ruba Sajdeya, Krishna Vaddiparti, Gabriel Spandau, Robert L. Cook (University of Florida)

Cannabis Use and Sleep: Patterns and Factors Associated with Sleep Quality Improvement among Medical Cannabis Patients in Florida

Juan G Perez-Carreño, Robert L Cook, Yan Wang, Krishna Vaddiparti, Hannah Fechtel, Ruba Sajdeya, Gabriel Spandau, Catalina Lopez-Quintero (University of Florida)

Discussant: Robert L. Cook (University of Florida)

Saturday, JULY 22, 2023

12:45pm – 2:00pm

Symposium

Centennial Ballroom, Salon D, 3rd Floor

The Green Part of the Rainbow: Toward Improved Understanding of Cannabis Use among Members of 2SLGBTQ+ Communities

Chair: Jeffrey D. Wardell (York University, Centre for Addiction and Mental Health, and University of Toronto)

Recent changes in cannabis prevalence have highlighted important disparities in cannabis use and related outcomes among individuals with 2SLGBTQ+ identities. Despite growing visibility and public acceptance of diversity in sexual orientation and gender identities, many 2SLGBTQ+ individuals still encounter significant stigma, discrimination, and marginalization. The Minority Stress Model suggests that 2SLGBTQ+ people may use substances, including cannabis, to cope with stress associated with their minority sexual orientation and/or gender identity status. Thus, an understanding of the unique context surrounding cannabis use (including minority stress but also strength and resilience processes), cannabis use patterns (including co-use with other substances), and cannabis-related outcomes that are most relevant to 2SLGBTQ+ people is needed to inform tailored, culturally sensitive interventions. However, most prior research is limited to descriptive (and largely cross-sectional) studies that do not examine underlying mechanisms that may be important intervention targets. Further, research has been hampered by a tendency to lump all 2SLGBTQ+ identities into a single category, ignoring the diversity among – and intersectionality between – these identities. Accordingly, the four papers in this symposium address these research gaps by drawing on a variety of methods (e.g., systematic review, ecological momentary assessment, latent class analysis) and data sources (e.g., national surveys, cohort studies) to gain new insight into cannabis use among 2SLGBTQ+ individuals. The goal is to provide a more nuanced examination of mechanisms and dynamic processes involved in cannabis use among 2SLGBTQ+, with an emphasis on the importance of heterogeneity and intersectionality in 2SLGBTQ+ identities.

PRESENTERS:

LGBT-THC: A Systematic Review of Mechanisms Linking Sexual and Gender Minority Stress and Cannabis Use

Jamie E. Parnes (Brown University), Wouter J. Kiekens (University of Groningen), Ethan H. Mereish (University of Maryland, College Park & Brown University), Robert Miranda Jr. (Brown University)

Examining Daily Substance Use Consequences among Transgender and Gender-Diverse Youth Who Co-Use Cannabis and Alcohol

Stephanie Penta (Toronto Metropolitan University), Jeffrey D. Wardell (York University, Centre for Addiction and Mental Health, and University of Toronto), Alex Abramovich (Centre for Addiction and Mental Health and University of Toronto), Sarah S. Dermody (Toronto Metropolitan University)

Disambiguating LGBTQ+: Examining Cannabis Use Patterns Across Different Subgroups in LGBTQ+ Communities

Thomas E. Schlechter, Bradley T. Conner (Colorado State University)

Tracking Differences in Cannabis and Polysubstance Use Over Time at the Intersection of Gender, Sex, and Sexual Orientation

Gowri Sunder, Alexis Ceja (University of California, San Francisco; The PRIDE Study/PRIDENet), Nadra E. Lisha, Torsten B. Neilands (University of California, San Francisco), Bradley E. Aouizerat (New York University), Micah E. Lubensky (University of California, San Francisco; The PRIDE Study/PRIDENet), Matthew Capriotti (San Jose State University), Zubin Dastur, Mitchell R. Lunn, Juno Obedin-Maliver (Stanford University, The PRIDE Study/PRIDENet), Annesa Flentje (University of California, San Francisco; Alliance Health Project; The PRIDE Study/PRIDENet)

Discussant: *Bradley T. Conner (Colorado State University)*

Saturday, JULY 22, 2023

2:15pm – 3:30pm

Symposium

Centennial Ballroom, Salon B, 3rd Floor

Considerations for the Study of Cannabis and Polysubstance Use: From Neuroscience and Acute Laboratory Administration to Field Study and Survey Methods

Chair: Cianna J. Piercey (Colorado State University)

Polysubstance use involves using more than one substance at the same time (i.e., simultaneous use) or on separate occasions (i.e., concurrent use). Both patterns of polysubstance use are common among people who use cannabis, with recent NSDUH findings indicating that over 90% of past-30-day cannabis users also used other substances in the past month. While researchers have often concluded that polysubstance use increases risk and exacerbates consequences compared to single-substance use, burgeoning evidence suggests that some individuals may co-use cannabis with other substances as a mechanism of harm reduction. For example, cannabis may be used as a substitution for more toxic/lethal substances (e.g., alcohol), either by reducing frequency of use or dose needed to achieve desired subjective effects. Our symposium will explore these nuances and address considerations for the study of cannabis alongside drugs such as alcohol, MDMA, and psychedelics. Leveraging data from community participants in Colorado and across the U.S., we employ multiple methodologies ranging from neuroscience and acute laboratory administration to field study and survey methods. Meggan Drennan will present on interactions between cannabis and alcohol consumption, the endocannabinoid system, and mental health. Sam DiCecco will present on methodological challenges related to administering cannabis and alcohol within the context of neuroimaging studies. Brenna Carter will present survey data exploring the importance of controlling for alcohol use when conducting cannabis research. Finally, Cianna Piercey will present field data from concerts and music festivals in Colorado investigating co-use of cannabis with alcohol and club drugs (e.g., MDMA, psychedelics, cocaine, ketamine).

PRESENTERS:

Cannabis, Alcohol, and Mental Health: Current State of the Neuroscientific Evidence

Meggan L. Drennan, Hollis C. Karoly (Colorado State University)

Methodological Considerations for Neuroimaging-based Cannabis and Co-Use Studies

Sam DiCecco, Cianna J. Piercey, Eleftherios Hetelekides, Patti Davies, Bill Gavin, Mark A. Prince, Bradley T. Conner, Hollis C. Karoly (Colorado State University)

Considerations for Prolific Data Collection on Cannabis Use: Alcohol as a Confounding Factor in Cannabis Data

Brenna A. Carter, Eleftherios Hetelekides, Hollis C. Karoly, Bradley T. Conner (Colorado State University)

Cannabis Use among Concert and Festival Attendees in Colorado: Polysubstance Use Harm Reduction?

Cianna Piercey, Devin Henry, Wes MacLean, Maia Bransom, Joseph Cameron, Jeffrey Snodgrass, Bradley T. Conner, Hollis C. Karoly (Colorado State University)

Discussant: *Bradley T. Conner (Colorado State University)*

Saturday, JULY 22, 2023

2:15pm – 3:30pm

Symposium

Centennial Ballroom, Salon D, 3rd Floor

Cannabis and Tobacco Co-Use Among Underserved and Priority Populations

Chair: Bethany Shorey Fennell (Moffitt Cancer Center)

Cannabis and tobacco co-use (co-use) is increasingly prevalent in the U.S. and is associated with increased risks of negative health outcomes (e.g., cannabis use disorder, nicotine dependence, poorer tobacco cessation outcomes), relative to the use of either substance alone. However, co-use is not well characterized, particularly in underserved and priority populations. This symposium describes co-use and correlates among four priority populations. First, Fennell and colleagues describe the prevalence of co-use, reasons for co-use, and preferred mode of cannabis administration among people living with HIV (PWH) who are seeking tobacco cessation treatment. Demographic, smoking, and HIV-related characteristics are described for PWH who do and do not co-use. Next, Fennell, Cottrell-Daniels, and colleagues characterize co-use among adults who are seeking services at food pantries and are enrolled in tobacco cessation treatment. Demographic and psychosocial variables known to be associated with smoking cessation (e.g., stress, loneliness) are compared among people who do and do not co-use. Then, Romm and colleagues examine associations among sociodemographic characteristics, mental health symptoms, and other substance use with patterns of cannabis and tobacco use and co-use among sexual minority adults participating in the Population Assessment of Tobacco and Health (PATH) study. Finally, Cohn and colleagues present data from a longitudinal study of cannabis vaping among youth ages 13-17. Demographic, health risk perception, and health correlates, including cigarette use, are described. These presentations demonstrate that co-use is common among priority and underserved populations, and should be assessed by researchers studying cannabis or tobacco.

PRESENTERS:

Cannabis and Tobacco Co-use among People Seeking Tobacco Treatment Who are Living with HIV

Bethany Shorey Fennell, Cherell Cottrell-Daniels, Sarah R. Jones, Jennifer I. Vidrine, Damon J. Vidrine (Moffitt Cancer Center)

Cannabis and Tobacco Co-Use Among People Seeking Tobacco Treatment Who Are Receiving Services from Food Pantries

Bethany Shorey Fennell, Cherell Cottrell-Daniels, Sarah R. Jones, Damon J. Vidrine, Jennifer I. Vidrine (Moffitt Cancer Center)

Psychosocial Correlates of Patterns of Cannabis and Tobacco Use among Sexual Minority Adults: Findings from Wave 5 of the PATH Study

Katelyn F Romm (Stephenson Cancer Center, University of Oklahoma Health Sciences Center), Carla J Berg, Yan Wang (George Washington University), Amy M Cohn (Stephenson Cancer Center, University of Oklahoma Health Sciences Center)

Characterizing the Demographic, Substance Use, and Mental Health Correlates of Youth Who Report Cannabis Vaping

Amy M Cohn (Stephenson Cancer Center, University of Oklahoma Health Sciences Center), Sarah J Ehlke (Old Dominion University), Erin A Vogel, Katelyn F Romm, Michael A Smith, Darla Kendzor (Stephenson Cancer Center, University of Oklahoma Health Sciences Center)

Discussant: Bethany Shorey Fennell (Moffitt Cancer Center)

3:30pm – 5:00pm

Poster Session II (see pages 27-30 for details)

Centennial Ballroom, Salon C, 3rd Floor

Sunday, JULY 23, 2023

9:00am – 10:15am

Symposium

Centennial Ballroom, Salon B, 3rd Floor

Patterns of Cannabis Use across the Lifespan in Diverse Adult Populations in Hawai'i

Chair: Kristina T Phillips (Kaiser Permanente Hawaii)

Recent changes to the legal status of cannabis across the U.S. have led to corresponding increases in the number of adults who use cannabis non-medically (recreationally) and medically, thus increasing the potential for negative health outcomes. Asian American, Native Hawaiian, and Pacific Islanders (AANHPIs) represent one of the fastest growing demographic groups in the U.S.; however, they are one of the least studied groups in the context of cannabis use. Although AANHPIs are often regarded as a “low risk” group, when disaggregated, AANHPI subgroups show marked health disparities, with Native Hawaiian and Pacific Islanders (NHPIs) indicating disproportionately higher rates of substance use and higher burden of mortality. In Hawai'i, the state with the largest proportion of AANHPI subgroups, there are significant substance-related disparities. The current symposium will contribute to the extant literature by addressing cannabis-related disparities among and between AANHPI and other racial/ethnic groups in Hawai'i. Presentations will focus on diverse adult populations and will utilize cross-sectional and longitudinal designs to identify cannabis use patterns. The first presentation (K. Phillips) will discuss racial and ethnic differences in cannabis use frequency, methods of ingestion, co-use with cigarettes and alcohol, cannabis-related knowledge, and medical vs non-medical use in adults over age 50. The second presentation (M. Phillips) will summarize recent alcohol, cannabis, and nicotine poly-substance use patterns and prevalence and associations with mental health outcomes. The third presentation (P. Pokhrel) will discuss ethnic differences in the effects of electronic cigarette use on cannabis abuse symptoms among Hawaii young adults.

PRESENTERS:

Characterizing Medical and Non-medical Cannabis Use Patterns and Cannabis Knowledge among Adults Age 50+ in Hawai'i: Differences by Race and Ethnicity

Kristina T. Phillips, Kathryn L. Pedula, Catherine Erickson, Jonathan Lai (Kaiser Permanente Hawaii), Samantha Wong, John Massey (University of Hawai'i at Mānoa), Vanessa Simiola (Kaiser Permanente Hawaii), Derek D. Satre (University of California, San Francisco)

Poly-substance Use of Alcohol, Cannabis, and Nicotine in Hawai'i: Behavioral Risk Factor Surveillance System (BRFSS), 2020-2021

Michael M. Phillips, Mika Thompson, John Massey, Laura Johnston (University of Hawai'i at Mānoa)

The Effects of E-cigarette Use on Marijuana Abuse Symptoms in an Ethnically Diverse Sample of Young Adults

Pallav Pokhrel, Crissy T. Kawamoto, Scott K. Okamoto (University of Hawai'i Cancer Center)

Discussant: *Steve Sussman (University of Southern California)*

Sunday, JULY 23, 2023

10:30am – 11:45pm

Symposium

Centennial Ballroom, Salon B, 3rd Floor

Highlighting the Research in Cannabis

Chair: Eric R. Pedersen (University of Southern California)

The purpose of this symposium is to highlight recent research published in *Cannabis*, RSMj's flagship journal. *Cannabis* is an open access peer-reviewed journal dedicated to the scientific study of marijuana/cannabis from a multidisciplinary perspective. Consistent with the mission of the Research Society on Marijuana (RSMj), the journal publishes empirical research of the determinants, correlates, consequences, contexts, and assessment of marijuana use as well as the treatment of problematic marijuana use, including cannabis use disorder. In addition to individual research talks presenting a range of new empirical findings on cannabis and its effects, this symposium will include a brief overview of the journal from the current editor of *Cannabis*, Dr. Pedersen.

PRESENTERS:

Introduction

Eric R. Pedersen (Keck School of Medicine, University of California)

A Content Analysis of Social Media Discussions on THC-O-Acetate

Carlton "CB" Bone (Department of Anthropology, Portland State University)

State Variation in U.S. Medical Cannabis Limits, Restrictions, and Therapeutic Cannabis Dosing

Shelby R. Steuart (Crown Family School of Social Work, Policy, and Practice; University of Chicago)

Cannabis Use and Perceptions Among Current and Former Military Service Members

Jessica A. Kulak (Department of Community Health and Health Behavior, University at Buffalo)

A Latent Variable Analysis of Psychomotor and Neurocognitive Performance After Acute Cannabis Smoking

Shelby J. Smith (Department of Biostatistics and Informatics, Colorado School of Public Health, University of Colorado Anschutz Medical Campus)

A Comparison of Task-Based and Questionnaire Assessments of Executive Control Aspects in Relation to Adolescent Marijuana Initiation

Ying Guo (School of Public Health; University of Nevada, Las Vegas)

11:45am – 12:00pm

Concluding Remarks

Centennial Salon B, 3rd Floor

Bradley Conner (Colorado State University)

POSTER SESSION I: CENTENNIAL BALLROOM, SALON C

FRIDAY, JULY 21, 2023 3:30 PM – 5:00 PM

Posters are to be displayed on the board that corresponds to the number of your poster, you can put your poster up any time during the day on Friday by 3:30pm, Please remove your poster at 5:00pm

- 1. Examining the Chemical Behavior of Cannabinoids and Terpenes in Cannabis sativa L**
Antonio Junior, Sadanand Dhekney, Michael Foland (Laboratory of Plant Biotechnology, Department of Agriculture, Food and Resource Sciences, University of Maryland Eastern Shore)
- 2. Blood and Urinary Metal Levels among Marijuana Users in NHANES (2005-2018)**
Katlyn E. McGraw, Anne E. Nigra, Joshua Klett, Marisa Sobel (Columbia University Mailman School of Public Health), Xin Hu (Emory University), Elizabeth Oelsner (Columbia University), Ana Navas-Acien, Tiffany R. Sanchez (Columbia University Mailman School of Public Health)
- 3. Five Years of Temperature Controlled Stability Data of 17 Cannabinoids in Clinical Trial Plant Material and a Range of Five Medicinal Cannabis Plant Products**
Rebecca Gordon, Peter Galettis, Jennifer Martin (University of Newcastle, Australia)
- 4. An LCMSMS Method for Detection of CBDV and Metabolites, Applied to Phase I Clinical Trial of Epilepsy in Adolescent Girls with RETT Syndrome.**
Rebecca Gordon, Peter Galettis (University of Newcastle, Australia), Ellen N Hurley, Carolyn J Ellaway, Alexandra M Johnson, Linda Truong, Jennifer H Martin, John A Lawson
- 5. Changes in Blood Pressure/Heart Rate after Cannabis use and the Relationship to Self-Reported Drug Effect and THC concentration**
Sarah A. Limbacher, Julia Wrobel, Alexis Krause, Lauren Turow, Ashley Brooks-Russell (Colorado School of Public Health)
- 6. Accuracy of Labeled THC Potency Across Product Types in Colorado**
Gregory R. Giordano, Angela D. Bryan, Marco Ortiz Torres (University of Colorado Boulder, Boulder, Colorado), Colin Brook, Duncan Mackie (MedPharm Holdings LLC, Denver, Colorado), L. Cinnamon Bidwell (University of Colorado Boulder, Boulder, Colorado)
- 7. Cannabis Use Frequency is Linked to Altered Cardiac and Vascular Functioning**
Neel Muzumdar, Kelsey Piersol, Antony P. Pawlak, Kelly Sun, Amanda Colangelo, Jennifer F. Buckman (Rutgers University)
- 8. Risks and Therapeutic Benefits of Cannabis among College Students Amidst the COVID-19 Pandemic**
Selina Espinoza, Melissa-Ann Lagunas, Claudia Rocha, Jennifer L. Lovell (California State University, Monterey Bay)
- 9. Cannabis and College Students: Self-Perceived Mental Health Prior to, During, and After the Pandemic**
Deanna L. Romero, Sean L. L. Himebaugh, Thomas A. Clobes, PhD. (California State University Channel Islands)
- 10. A Cannabis Beliefs Scale**
Andrew P. Weinstein, Clayton Neighbors (University of Houston)

- 11. Sleep-Related Cannabis Expectancy Questionnaire (SR-CEQ): Factor Analysis Replication, Reliability, and Validity**
Patricia A. Goodhines, Krutika Rathod (University of Maine), Lisa R. LaRowe (Massachusetts General Hospital, Harvard Medical School), Amelia V. Wedel (Syracuse University)
- 12. Factors Related to Riding with a Drunk/Drugged Driver among US and Israeli Adults: Cannabis, Alcohol, Both, or Neither**
Cassidy R. LoParco, Yuxian Cui, Zongshuan Duan (George Washington University), Yael Bar-Zeev (The Hebrew University of Jerusalem and Hadassah), Yan Wang (George Washington University), Hagai Levine (The Hebrew University of Jerusalem and Hadassah), Lorien C. Abrams (George Washington University), Amal Khayat (The Hebrew University of Jerusalem and Hadassah), Carla J. Berg (George Washington University)
- 13. Comparing young adults' perceptions of and strategies related to driving under the influence of alcohol, cannabis, and Delta-8 THC: A mixed methods study**
LoParco, C. R. (George Washington University), Olsson, S. (Texas Christian University), Greene, K. M. (Montana State University), Berg, C. J. (George Washington University), Henry, D. (University of North Texas), Walters, S. T., Zhou, Z., Rossheim, M. E. (University of North Texas Health Science Center)
- 14. Event-level Associations among THC, CBD, Social Context, and Subjective Experience during Cannabis Use episodes**
Yi-Chun Chang, Renee E. Magnan, Benjamin O. Ladd (Washington State University Vancouver)
- 15. Characterizing Cannabis Use in Rural College Students: The Novel Role of Belongingness and Negative Mood**
Krutika Rathod (University of Maine), Alexis Wagner (Husson University), Taylor Broadaway (University of Maine), Audrey Tesi (University of Akron), Patricia A. Goodhines (University of Maine)
- 16. Cannabis Expectancies as Moderators of the Day-Level Association Between Cannabis Quantity and Driving Under the Influence of Cannabis**
Megan N. Fleming, Lindsey K. Freeman, Tayler J. Vebares (University of Missouri), Andrea W. Wycoff (Brown University), Timothy J. Trull (University of Missouri)
- 17. The Impact of Personality Risk Factors on Motives and Cannabis Consequences in Emerging Adulthood (student travel awardee)**
Alexandra Shifrin, Jasmin L. Katz, Camara Azubuike, Abby L. Goldstein (University of Toronto)
- 18. Comprehensive Characterization of Sexual and Gender Minority Cannabis Use Disparities among Emerging Adults (student travel awardee)**
Paul W. Martines, Junhan Cho, Adam M. Leventhal (University of Southern California), Evan A. Krueger (Tulane University), Dae-Hee Han, Dayoung Bae, Alyssa F. Harlow, Melissa Wong, Jessica L. Barrington-Trimis (University of Southern California)
- 19. Does Marijuana Use Impact Other Drug Outcomes for Sober Living House Residents?**
Elizabeth Mahoney, Meena Subbaraman, Amy Mericle, Doug Polcin (Public Health Institute)
- 20. Development and Initial Validation of the Safe Cannabis Consumption Identity Measure**
Luke D. Salomone, Robert D. Dvorak (University of Central Florida)

- 21. College Adjustment, Rumination, Marijuana Coping Motivations, and Problematic Marijuana Use: A Path Model among Freshmen College Students**
Rebecca J. Dunaief, Adrian J. Bravo (William & Mary), Cross-Cultural Addictions Study Team
- 22. Risky Family Dynamics, Rumination, Marijuana Coping Motives, and Problematic Marijuana Use: A Cross-Cultural Examination**
Isabela Ortiz Caso, Adrian J. Bravo (William & Mary), Cross-cultural Addictions Study Team
- 23. COVID-19 Stress, Ruminative Thinking, Marijuana Coping Motivations, and Problematic Marijuana Use: A Path Model among U.S. College Students**
Maya Reddy, Adrian J. Bravo (William & Mary)
- 24. Sensitivity to both reward and non-reward as predictive of subjective mood ratings to delta-9-tetrahydrocannabinol (THC) among young adults**
Julia Brooks, Zoa Glab, Shahd Smadi, Rebecca Denson, Natania Crane (University of Illinois at Chicago)
- 25. College Marijuana Beliefs, Marijuana Motives, Protective Behavioral Strategies, and Cannabis Use Disorder Symptoms: A Path Model among U.S. College Students**
Zannie L. Montgomery, Adrian J. Bravo (William & Mary)
- 26. Predicting Positive Outcomes: An Operant Conditioning Framework for Cannabis Use**
Theodore J. Fetterling (San Francisco VA Health Care System), Jamie E. Parnes (Center for Alcohol and Addiction Studies, Brown University)
- 27. Blunt Smoking Initiation, Progression, and De-Escalation among Youth and Young Adults: A 3-State Markov Model of Panel Data**
Dale S. Mantey (University of Texas Health Science Center School of Public Health), LaTrice Montgomery (University of Cincinnati College of Medicine), Benjamin Cristol, Baojiang Chen, Melissa Harrell (University of Texas Health Science Center School of Public Health)
- 28. Insomnia Symptoms, Cannabis Protective Behavioral Strategies, Cannabis-related Problems and Suicide Ideation among U.S. College Students**
Maria M. Wong, Hannah K. Lesnick (Idaho State University), Matthew R. Pearson (University of New Mexico), Addictions Research Team
- 29. Characterizing Prenatal Cannabis Use Patterns in People's Own Words**
Alexandria Capolino (Brown University), Anastasia Philippopoulos (Stony Brook University), Rachel L. Gunn, Jacqueline Nesi, Elizabeth R. Aston, Lauren Micalizzi (Brown University)
- 30. Protocol for Sensitivity to Cannabis Effects and Cue Reactivity as Markers of a Developing Disorder in Adolescents**
Hayley Treloar Padovano, Robert Miranda Jr., Jane Metrik, Elizabeth Aston (Brown University)
- 31. THC-O-Acetate: Understanding Consumer Experiences with a Novel Semi-Synthetic Cannabinoid**
Daniel Kruger (University of Michigan), Carlton "CB" Bone, Charles Klein (Portland State University), Jessica Kruger (University at Buffalo), Meredith Meacham (University of California San Francisco)

- 32. THC-O-acetate: Examining Consumer Attitudes and Beliefs Related to the Risks of Consuming the Semi-Synthetic Cannabinoid THCO**
"Carlton ""CB"" Bone, Charles Klein (Portland State University), Jessica S. Kruger (University at Buffalo), Meredith Meacham (University of California San Francisco), Daniel Kruger (University of Michigan)
- 33. The Moderating Effect of Campus Climate on the Relation between Loneliness and Cannabis Use**
Kira Sturgess, Bradley Conner (Colorado State University)
- 34. Preliminary Psychometric Testing of the Treatment Self-Regulation Questionnaire for Assessing Motivations for Responsible Cannabis Use: An Application of Self-Determination Theory**
Haydee Andujo, Joey C. Mok (University of New Mexico), Jakub D. Gren (Institute of Psychiatry and Neurology), Dylan K. Richards, Matthew R. Pearson (University of New Mexico), Addictions Research Team
- 35. Identifying Profiles of Cannabis Users Based on Their Motivations to Use Cannabis Responsibly: An Application of Self-Determination Theory**
Joey C. Mok, Haydee Andujo (University of New Mexico), Jakub D. Gren (Institute of Psychiatry and Neurology), Dylan K. Richards, Matthew R. Pearson (University of New Mexico), Addictions Research Team
- 36. Profiles of Ethnic Experiences among a Hispanic College Students and Cannabis-Related Outcomes**
Verlin W Joseph (University of New Mexico), Craig A Field (University of Texas-El Paso), Matthew R Pearson (University of New Mexico)
- 37. Examining Associations Between Cannabis Hangover Symptoms and Protective Behavioral Strategies Used**
Sarah Elder, Benjamin O. Ladd (Washington State University Vancouver)
- 38. The Impact of Chronic and Non-chronic Cannabis Use on Overall Quality of Life**
Rachel M. Murley, Bradley R. Forbes, AshyInn Steinbaugh, Talamahe'a Tupou, Henry Eve, Rayna Hirst, Ph.D. (Palo Alto University)
- 39. Disentangling the Association Between Personality Traits and Cannabis Use and Disorder in People of European Ancestry**
Samantha G. Cassidy (Emory University, Kent State University), Chelsie E. Benca-Bachman, Kathleen P. Martin. Rameez A. Syed, Rohan H.C. Palmer (Emory University)

POSTER SESSION II: CENTENNIAL BALLROOM, SALON C

SATURDAY, JULY 22, 2023 3:30 PM – 5:00 PM

Posters are to be displayed on the board that corresponds to the number of your poster, you can put your poster up any time during the day on Saturday by 3:30pm, Please remove your poster at 5:00pm

1. Theoretical Correlates of Cannabis Use and Intentions among US and Israeli Adults

Cassidy R. LoParco, Yuxian Cui, Zongshuan Duan (George Washington University), Hagai Levine, Yael Bar-Zeev (The Hebrew University of Jerusalem and Hadassah Medical Center), Lorien C. Abrams, Yan Wang (George Washington University), Amal Khayat (The Hebrew University of Jerusalem and Hadassah Medical Center), Carla J. Berg (George Washington University)

2. State Requirements for Cannabis Retail Personnel among States with Legal Adult Non-medical Cannabis Markets in the US

Cassidy R. LoParco, Alexandria Pannell, Carla J. Berg (George Washington University)

3. A Web Intervention to Prevent Alcohol and Cannabis-impaired Driving among Adolescents in Driver Education

Karen Chan Osilla (Stanford School of Medicine), Elizabeth J. D'Amico, Justin Hummer, Anthony Rodriguez (RAND Corporation), Elizabeth Ueland, Katherine Nameth (Stanford School of Medicine)

4. A Scoping Review of Interventions for College Students' Harmful Cannabis Use

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