

Addiction at the Crossroads of Mental and Physical Health

Fifth Annual Meeting
March 24-25, 2017
Albuquerque, NM



COLLABORATIVE
PERSPECTIVES on
ADDICTION

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The **SOCIETY OF ADDICTION PSYCHOLOGY**,

Division 50 of the American Psychological Association, promotes

advances in research, professional training, and clinical practice within the broad range of addictive behaviors including problematic use of alcohol, nicotine, and other drugs and disorders involving gambling, eating, sexual behavior, or spending.

Membership includes a subscription to the peer-reviewed journal *Psychology of Addictive Behaviors* and the newsletter of the Division.

Join at addictionpsychology.org



ABOUT CPA

Addiction is a significant public health problem that impacts nearly every family in the United States. The purpose of the **COLLABORATIVE PERSPECTIVES ON ADDICTION (CPA)** meeting, launched in 2013, is to bring together scientists and practitioners from the Society of Addiction Psychology and related American Psychological Association divisions. The ultimate goal of CPA is to improve the prevention and treatment of addiction through **ACCELERATING RESEARCH** and building **COLLABORATIVE RELATIONSHIPS**.

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COLLABORATIVE PERSPECTIVES on ADDICTION

Friday, March 24

8:00 am – 5 pm	Registration
9:00 – 9:15 am	Welcome!
9:15 – 10:15 am	Keynote (Miller)
10:30 – 11:45 am	Symposia
10:30 – 6 pm	Clinical Workshops
11:45 – 12:30 pm	Poster Session
12:30 – 1:30 pm	Networking Lunch
1:45 – 3:00 pm	Symposia
3:15 – 4:30 pm	Symposia
4:45 – 6:00 pm	Symposia
6:00 – 7:00 pm	Posters/Reception

Saturday, March 25

7:30 am – 5 pm	Registration
8:00 – 9:00 am	Posters/Breakfast
9:00 – 10:15 am	Symposia
9:00 – 5:45 pm	Clinical Workshops
10:30 – 11:45 am	Symposia
11:45 – 12:30 pm	Posters
12:30 – 1:30 pm	Networking Lunch
1:45 – 2:45 pm	Keynote (Grant)
3:00 – 4:15 pm	Symposia
4:30 – 5:45 pm	Symposium
5:45 – 6:00 pm	Awards
6:00 – 7:00 pm	Posters/Reception



Continuing education (CE) provided during the Collaborative Perspectives on Addiction meeting is provided by the Society of Addiction Psychology. The Society is approved by the APA

to sponsor CE for psychologists. The Society maintains responsibility for this program and its content. Sessions eligible for CE are **marked** with the amount of CE credits available. **You must sign-in/sign-out and complete a survey for all sessions to receive your CE completion certificate.** Please see the registration desk for more information.

HOTEL MAPS



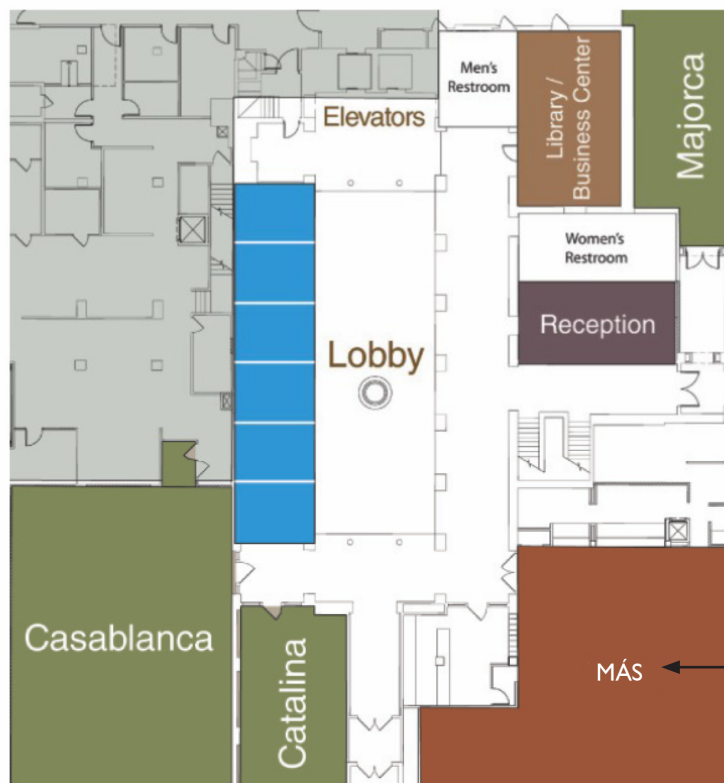
ANDALUZ

Hotel Andaluz
125 Second Street NW
Albuquerque, NM 87102
505.388.0088



ibiza!

SECOND FLOOR



MÁS
TAPAS Y VINO

FIRST FLOOR

STUDENT AND EARLY CAREER EVENTS

THURSDAY MARCH 23
8:00-10:00PM

Pre-Conference Student and Early Career Psychologists Social Hour



Hosted by Division 50

Hotel Andaluz Lobby and Más Restaurant

Students and early career psychologists, please join us at the Más Restaurant and Hotel Andaluz lobby in the Hotel Andaluz for drinks and casual conversation. Light Food Provided.

FRIDAY MARCH 24 12:30-1:30PM

There Is Such a Thing as a Free Lunch: The CPA Student & Early Career Professional Mentoring Event (ticket required)

Hosted by Division 50 Membership Committee

Hotel Andaluz Mezzanine

Attendees will learn about opportunities and challenges in building a career as an addiction psychologist and hear about the elements of success in transition from undergraduate to graduate, graduate school to internship or post doc, and post-doc to early career positions. RSVP required for boxed lunch.

FRIDAY MARCH 24 4:45-6:00PM

Early Career Addictions Researcher Showcase

Sponsored by CPA Program Committee, Co-chaired by Dr. Michael Amlung and Ms. Lauren Hoffman

Barcelona, Hotel Andaluz

This session features talks by three outstanding early career addictions researchers who are doing exciting work on the intersection of alcohol use disorder and sleep disturbance, comorbid psychiatric and medical conditions in drug users, and factors influencing drinking and driving. We are thrilled to have Dr. Barbara McCrady also joining us to share insights on pursuing a career in addictions research. Please come out and support our early career colleagues!

FRIDAY MARCH 24
8:00-10:00PM

Early Career Social and Networking Event



Hosted by Division 50

Ibiza Restaurant, Hotel Andaluz

Students and early career psychologists, please join us for a casual social event where you will have the opportunity to form new professional relationships with your peers and Division 50 leaders. Light food will be provided and a cash bar will be available.

GET INVOLVED WITH DIVISION 50!

Students and early career psychologists, Division 50 offers many professional positions for its student and early career members. You are the future of the Division and your involvement is vital to our continued success. A pamphlet detailing the student positions of various sub-committees can be found at the registration desk. Please contact Division 50 Student Reps for more information:

Megan Kirouac (mkirouac@unm.edu)
Tessa Frohe (tfrohe@ufl.edu)



TRAVEL AWARDS



Tessa Frohe



Laura Hatz



Dr. Mary Beth Miller



Dr. Monica Skews

Julia Gameon

With support from the American Psychological Association Board of Educational Affairs and generous donations from the "Friends of CPA" we are pleased to present the following individuals with Travel Awards to attend the 2017 Collaborative Perspectives on Addiction Meeting:

Presenters in the Early Career Showcase

Tessa Frohe is a second year Ph.D student at the University of Florida and interested in exploring the burden of pain conditions and relationships to both opioids and alcohol misuse. She plans to study attentional bias retraining as a means to improve outcomes in substance use disorder treatment, specifically when paired with mindfulness-based relapse prevention.

Laura Hatz is a third year graduate student in the clinical psychology PhD program at the University of Missouri. Her current research interests include acute effects of alcohol on decision making and the application of mathematical models of decision making to risk taking behaviors.

Dr. Mary Beth Miller is a second-year postdoctoral research fellow at the Center for Alcohol and Addiction Studies at Brown University. Her research aims to enhance understanding of the etiology of substance use disorders in order to improve the effectiveness and efficiency of treatment. She is particularly interested in the interplay of substance use and sleep disorders and the process by which personalized feedback on one's health and behaviors may facilitate behavior change.

1st Annual Mentor-Mentee Travel Award

Dr. Monica Skews and Julie Gameon of the Research, Education, and Culture Lab (REACH) at Montana State University. The REACH lab investigates health and health disparities from a cultural perspective. Health disparities are inequities in health behaviors, rates of illness, disease processes, and health outcomes affecting certain groups of people such as racial/ethnic minorities, women, LGBTQ populations, and people who live in rural areas.

Dr. Monica Skewes is an Assistant Professor of Psychology at Montana State University and the Director of the REACH lab. Currently Dr. Skewes is a project leader with the Center of American Indian and Rural Health Equity, and is working with the Fort Peck Reservation in Montana to develop a wellness program. Her research interests include health psychology, addictive behaviors, minority health disparities, substance abuse treatment, and harm reduction.

Julia Gameon is a 2nd year graduate student completing her Master's in Experimental Psychology at Montana State University and has recently been accepted to the Montana State University PhD program, which she begin next fall. Her main research in the REACH lab is sexual assault prevention.

KEYNOTE SPEAKERS

Motivational Interviewing at the Crossroads

William R. Miller, PhD

Friday March 24th 9:00am - 10:15am
Barcelona Room
Continuing Education: 1 CE



Dr. William R. Miller is Emeritus Distinguished Professor of Psychology and Psychiatry at the University of New Mexico where he served as Director of Clinical Training for the doctoral program in clinical psychology and as Co-Director of the Center on Alcoholism, Substance Abuse and Addictions (CASAA). Dr. Miller's publications

include over 50 books and 400 articles and chapters including the original 1983 description of the clinical method of motivational interviewing. Fundamentally interested in the psychology of change, he has focused in particular on the development, testing, and dissemination of behavioral treatments for addictions. With more than 40 years of experience in addiction research and treatment, he has served as principal investigator for numerous research grants and contracts, founded a private practice group, directed a large public treatment program, and served as a consultant to many organizations including the United States Senate, the World Health Organization, the National Academy of Sciences, and the National Institutes of Health. In recognition of his research contributions, Dr. Miller is a recipient of the international Jellinek Memorial Award, two career achievement awards from the American Psychological Association, and an Innovators in Combating Substance Abuse award from the Robert Wood Johnson Foundation. He maintains an active interest in the interface of spirituality and psychology. His books have been translated into 26 languages and

the Institute for Scientific Information has listed him as one of the world's most cited scientists.

Brain Imaging, Temperament and Cognitive Function in a Monkey Model or Chronic Alcohol Self-Administration

Kathleen A. Grant, PhD

Saturday March 25th 1:45pm - 2:45pm
Barcelona Room
Continuing Education: 1 CE



Dr. Kathleen A. Grant is a Professor, and Chief of the Division of Neuroscience at the Oregon National Primate Research Center (ONPRC). She is also a Professor in the Department of Behavioral Neurosciences at OHSU. She earned her Ph.D. in Psychology from the University of Washington in 1984. This was followed by a 3-year

postdoctoral fellowship at the University of Chicago. In 1987, she took an appointment as Staff Fellow at the National Institute on Alcohol Abuse and Alcoholism, becoming a Senior Staff Fellow in 1990. In 1991, she joined the faculty at Wake Forest University School of Medicine, where she remained until her appointment to the Primate Center and OHSU in 2005. Research in the Grant laboratory uses behavioral pharmacology to understand the risk for and consequences of heavy alcohol consumption. The macaque monkey model of voluntary alcohol self-administration has provided translational data addressing risk factors and consequences of chronic alcohol drinking. Recent advances can help identify and isolate variables in human subject studies to better address prevention and treatment approaches in alcohol use disorders.

SCIENTIFIC PROGRAM

FRIDAY MARCH 24th

9:00am - 10:15am

Conference Opening

Room: Barcelona

KEYNOTE ADDRESS

Keynote Address: Motivational Interviewing at the Crossroads..... 1 CE

William R. Miller, Ph.D.



Motivational interviewing (MI) evolved from the person-centered approach of Carl Rogers. With more than 500 published clinical trials, MI is an evidence-based psychotherapy for evoking and strengthening clients' own motivations for change.

It was originally developed for treating alcohol problems, but ambivalence about change is human nature and is a significant clinical issue in health care and social services more generally. After briefly describing the method Dr. Miller will discuss how therapists develop and maintain fidelity in providing a complex clinical method like MI, with more general implications for hiring and continuing professional education of providers.

10:30am - 11:45am

Obesity and Substance Use: A Complex Relationship.. 1.25 CE

Room: Barcelona



Excessive substance use and elevated body mass index (BMI) are leading causes of preventable death. Obesity and substance use disorders are associated with many of the same factors, including reward dysfunction. A greater understanding of

the complex relationship between obesity and substance use is needed to inform intervention efforts to reduce the impact of these conditions on public health.

Ashley Gearhardt, Ph.D.; Sonja Yokum, Ph.D.; Jenna R. Cummings, M.A.

The Pains of Chronic Pain and Opioid Use

Room: Majorca

Opioid use in the treatment of pain has increased exponentially. In adults, 300%+ increases in opioid availability are associated with 200%+ increases in opioid-related morbidity and mortality. Although described as a modern healthcare epidemic, many aspects of the scope of the opioid problem are unknown. This symposium highlights three critical issues related to opioid use in chronic pain.

Kevin E. Vowles, Ph.D., Melissa Pielech, M.A., Robert W Bailey, M.S., Mindy L McEntee, M.S.

10:30am - 12:30pm

Emotion Regulation Training (ERT) for Alcohol Use Disorders: Helping Clients Manage Negative Emotions 2 CE

Room: Catalina

Clinical Workshop Presented by Clara M. Bradizza, Ph.D., Kim Slosman, M.S., & Paul R. Stasiewicz, Ph.D.

CLINICAL WORKSHOP



The combination of negative affect and difficulties regulating negative affect has implications for the development, maintenance and treatment of alcohol use problems. This introductory mini-workshop on how to implement Emotion Regulation Training (ERT) for individuals with an alcohol use disorder will begin by presenting the conceptual underpinnings of the ERT intervention, describe its basic components, and provide illustrative case vignettes. Participants will receive instruction on how to identify a set of negative affect drinking situations. The remainder of the workshop will provide a step-by-step guide on how to implement a core therapeutic principle of ERT—learning to manage negative emotions and cravings.

11:45am - 12:30pm

Poster Session 1 (see page 12 for poster titles and numbers)

Room: Casablanca

POSTER SESSION 1

12:30pm - 1:30pm

There Is Such a Thing as a Free Lunch: The CPA Student & Early Career Professional Mentoring Event (ticket required)

Room: Mezzanine

STUDENT & EARLY CAREER

1:45pm - 3:00pm

Emotion Dysregulation in Substance Use and Substance Use Disorders 1.25 CE

Room: Barcelona



Although the link between emotion and substance use is broadly recognized, investigations continue to provide significant insight to the relationships between various affect-related domains and drug/alcohol use, misuse, and dependence. This session explores a broad range of affect-related factors and their dysregulation in the context of substance use.

Lauren A. Hoffman, MS; Katie Witkiewitz, PhD; Adam Leventhal, PhD;
Sara Jo Nixon, PhD

A Demonstration of Feasibility and Utility of Multi-Site Collaborations in College Student Substance Use

Room: Majorca

This symposium will focus on the rationale, development, and implementation of multi-site collaborations in substance-use research. Utilizing a myriad of research designs, we will discuss the pitfalls and benefits of multi-site collaborations and briefly present findings from collaborative projects.

Adrian Bravo, PhD; Matthew Pearson, PhD; Jamie Parnes, MS;
Clayton Neighbors, PhD

1:45pm - 4:30pm

Cognitive-Behavioral Therapy (CBT) for Alcohol and Drug Problems2.75 CE

Room: Catalina

Clinical Workshop Presented by
Barbara S. McCrady, Ph.D.

CLINICAL WORKSHOP



Cognitive behavior therapy (CBT) for alcohol and drug problems is a well-established treatment with a strong evidence base. The goal of this workshop is to provide clinicians-in-training and practitioners with training in other treatment approaches with an over-

view of the CBT approach and basic skills in conducting a functional analysis, using selected assessment approaches such as behavioral self-recording, and teaching clients basic abstinence-focused skills. The workshop will use active learning techniques including group exercises, role-play illustrations, and application of work

3:15pm - 4:30pm

Comorbid Substance Use and Mental Health Conditions: Implications for Prevention and Treatment 1.25 CE

Room: Barcelona



This symposium will take a lifespan approach to addiction and co-occurring psychopathology, underscoring factors that affect development, maintenance, screening, and treatment of these conditions.

Brenna Greenfield, PhD, Kevin Hallgren, PhD, Justin Anker, PhD,
Corey Roos, MS, and Sarah Bowen PhD

Impulsivity and Substance Use: Novel and Innovative Methodological Approaches

Room: Majorca

Impulsivity, or rash decision making, has been associated with increased alcohol use, behavioral problems, and neural dysfunction localized to both the pre-frontal cortex and reward centers in the brain. Our symposium will present novel methodological approaches to better understand the association between impulsivity and alcohol use.

Scientific Program

Benjamin Berey, M.S., Julie Patock-Peckham, Ph.D., Jordan P. Davis, M.S., Robert Leeman, Ph.D.

4:45pm - 6:00pm

Early Career Addictions Researcher Showcase

Room: Barcelona

EARLY CAREER

The 2017 CPA Program Committee is sponsoring an Early Career Addictions Researcher Showcase symposium to feature exemplary research being conducted by early career scientists, defined as graduate students, post-docs, or faculty members who are within 5 years from receiving their terminal degree.

Michael Amlung, Ph.D., Lauren Hoffman, M.S. (session co-chairs),
Mary Beth Miller, Ph.D., Tessa Frohe, B.A., Laura Hatz, B.S.
(awardees/presenters), Barbara McCrady, Ph.D. (discussant)

Person-Centered Approaches to Exploring Heterogeneity in Substance Use and Treatment Responses

Room: Majorca

Although variable-centered analyses (e.g., correlations, structural equation modeling) predominate psychological research, we demonstrate the range of research questions that can be answered using person-centered analyses (e.g., latent class/profile analysis, growth mixture modeling) in substance use research.

Adrian J. Bravo, Ph.D., Adam D. Wilson, M.Sc., Alyssa R. Allen, James M. Henson, Ph.D., Matthew Pearson, Ph.D.

Treating Suicidal Thoughts and Behaviors in Adults with Substance Use Disorders (SUDs) 1.25 CE

Clinical Workshop Presented
by Mark Ilgen, Ph.D. and Erin
Goldman, L.M.S.W.

CLINICAL WORKSHOP



Individuals with substance use disorders (SUDs) are at clear elevated risk for suicide. Our research group is in the process of testing the efficacy of an evidence-based intervention for suicide risk reduction with individuals in SUD treatment. This workshop will review the cognitive-behavioral model for suicidal thoughts and behaviors. We will provide descriptions of techniques and strategies to specifically target suicidal thoughts and behaviors among those with SUDs, as well as detailed case examples. The workshop is intended for SUD clinicians, administrators and researchers who are interested in improving skills for directly targeting suicide risk during SUD treatment.

6:00pm - 7:00pm

Poster Session 2 (see pages 12-13 for poster titles and numbers) and Social Hour

Room: Casablanca

POSTER SESSION 2

SATURDAY MARCH 25th

8:00am - 9:00am

Poster Session 3 (see page 13
for poster titles and numbers)
and Continental Breakfast

Room: Casablanca

POSTER SESSION 3

9:00am - 10:15am

Addressing the Needs of Pregnant Women in Substance Use Treatment..... 1.25 CE

Room: Barcelona



Prenatal substance use disorders (SUD) represent an ongoing problem with long-term consequences for affected mothers, children, and families. Pregnant women with SUD often have trouble engaging in treatment, high rates of psychiatric comorbidity, and high relapse rates during pregnancy and postpartum. This symposium will cover topics from laboratory studies to treatment approaches, presenting both empirical research and clinical experience including neuroimaging and clinical trial data, population-specific assessment techniques, and advances in treatment strategies to address needs of these patients.

Pilar M. Sanjuan, Ph.D., Julia Stephen, Ph.D., Scott Coffey, Ph.D., Mary Beth Sutter, M.D., Lawrence Leeman, M.D., MPH

Emotion Regulation Difficulties as a Concomitant Substance Use Problem..... 1.25 CE

Room: Majorca



Emotion regulation difficulties are defined by the absence of adaptive strategies and the use of maladaptive strategies for regulating emotional responses. This symposium will highlight the ways in which emotion regulation difficulties may result in increased marijuana, tobacco, and alcohol use problems.

Whitney C. Brown, PhD; Jennifer Fillo, PhD; Clara Bradizza, PhD

9:00am - 11:45am

SBIRT Basics: Development and Application of SBIRT Skills in Diverse Settings 2.75 CE

Room: Catalina

Clinical Workshop Presented
by Jessica L. Martin, Ph.D., M.
Dolores Cimini, Ph.D., & Laura M.
Longo, M.S.

CLINICAL WORKSHOP



This workshop will present cutting-edge research and training on integrating the evidence-based practice of screening, brief intervention, and referral to treatment (SBIRT) for alcohol and other drugs in primary health and mental health care settings. Participants will learn the practical implications of using SBIRT as well as challenges to implementing this intervention

in the workplace. The workshop will deliver the foundational knowledge and skills related to motivational interviewing (MI) and conducting SBIRT in various clinical settings, as well as ample opportunity for participants to practice and gain feedback on MI and SBIRT skills.

10:30am - 11:45am

The “Future’s So Bright”? Recent Trends in Technology-Enhanced Addiction Recovery Management..... 1.25 CE

Room: Barcelona



The innovation and increased reach offered by modern technologies may enhance self-management, facilitate recovery support, and supplement face-to-face treatment approaches for individuals with substance use disorder (SUD) and other harmful substance use. While computer-to-person web and text message-based tools confer benefit, comparatively less is known about several newer technologies, three of which are the focus of this symposium.

Brandon Bergman, PhD, Bettina Hoepfner, PhD, David Eddie, PhD, and John Kelly, PhD

Clinical Implications of Research on Protective Behavioral Strategies for Alcohol and Marijuana

Room: Majorca

Protective behavioral strategies (PBS) are behaviors that are used immediately prior to, during, and/or after substance use that reduce consumption, intoxication, and/or substance-related harm. Although the alcohol PBS field is large, the marijuana PBS field is nascent. The symposium integrates the use of qualitative and quantitative approaches as well as survey and daily diary designs to examine protective behavioral strategies for both alcohol and marijuana.

Mark A. Prince, Ph.D., Kevin S. Montes, Ph.D., Rachel Mumm, Adrian J. Bravo, Ph.D., Matthew R. Pearson, Ph.D.

11:45am - 12:30pm

Poster Session 4 (see page 14
for poster titles and numbers)

Room: Casablanca

POSTER SESSION 4

12:30pm - 1:30pm

Networking Lunch

Room: Mezzanine

1:45pm - 2:45pm

Keynote Address

Room: Barcelona

KEYNOTE ADDRESS

Brain Imaging, Temperament and Cognitive Function in a Monkey Model of Chronic Alcohol Self-Administration.... 1 CE



The macaque monkey model of voluntary alcohol self-administration has provided translational data addressing risk factors and consequences of chronic alcohol drinking. Recent advances include antecedent resting state MRI amygdalar-cortical connectivity, aggressive and anxious temperaments and cognitive flexibility as measured in set-shifting tasks. Each of these highly translational datasets can help identify and isolate variables in human subject studies to better address prevention and treatment approaches in alcohol use disorders.

3:00pm - 4:15pm

Heart Rate Variability as a Dynamic, Real-Time Indicator of Active Brain and Behavior Mechanisms 1.25 CE

Room: Barcelona



Heart rate variability (HRV) is a commonly used measure of automatic-visceral reactions and HRV biofeedback is being used with increasing frequency in the clinical treatment world. This session focuses on how psychophysiology provides insight into both physical and mental health and may be a useful adjunctive intervention for many addictive and other maladaptive behaviors.

Jennifer Buckman, PhD; Marsha Bates, PhD; Brandi Fink, PhD; T. Leyro, PhD

Trauma, PTSD and Substance Use: Epidemiology, Special Populations and a Systematic Review 1.25 CE

Room: Majorca



We will present findings from research relating substance use/substance use disorders to trauma, PTSD and other co-morbid psychiatric conditions. Notably, each presentation in this symposium utilized very different methodological approaches. The topic of this symposium is pertinent to clinicians and professionals in the areas of epidemiology and public health with interests in comorbidity among substance use, psychiatric and medical conditions.

Robert Leeman, Ph.D.; Cheryl Beseler, Ph.D, Amy Lansing, Ph.D., Tessa Frohe, B.A.; Ryan Trim, Ph.D.

3:00pm - 5:45pm

Drug Use, Misuse, and Abuse: Recent Advances in Psychopharmacology 2.75 CE

Room: Catalina

Clinical Workshop Presented by
Cecile A. Marczyński, Ph.D.

CLINICAL WORKSHOP



The purpose of this mini-workshop is to provide a general audience with an overview of how recreational drugs affect the brain and behavior and can lead to addiction. Converging evidence from a variety of different disciplines will be presented to

demonstrate how the use of legal and illegal drugs influences brain functioning. The biological basis of drug action in the brain for the major drugs of abuse (alcohol, nicotine, caffeine, marijuana, heroin, methamphetamine, cocaine, LSD, ecstasy, etc.) will be covered as part of this workshop. Findings from both human and animal research will be highlighted including recent advances in imaging the living brain. In addition, the current medications being used to effectively treat addiction will be highlighted.

4:30pm - 5:45pm

A Behavioral Economic Perspective on Persistent Tobacco Use in People with Psychopathology 1.25 CE

Room: Barcelona



Cigarette smoking rates are decreasing in the general population, but are stable among people with psychiatric disorders. Most people with psychiatric disorders are motivated to quit but are more likely to relapse during cessation attempts. This symposium will explore how a behavioral economics perspective can inform our understanding of mechanisms and potential treatments for tobacco dependence in people with psychiatric disorders, with applications to other drug comorbidities. 1.25 CE

Jennifer W. Tidey, Ph.D. Janet Audrain-McGovern, Ph.D., Adam Leventhal, Ph.D. James Murphy, Ph.D.

5:45pm - 6:00pm

Award Ceremony

Room: Barcelona

6:00pm - 7:00pm

Poster Session 5 (see pages 14-15 for poster titles and numbers) and Social Hour

Room: Casablanca

POSTER SESSION 5

The **SOCIETY OF ADDICTION PSYCHOLOGY**, Division 50 of the American Psychological Association, promotes advances in research, professional training, and clinical practice within the broad range of addictive behaviors including problematic use of alcohol, nicotine, and other drugs and disorders involving gambling, eating, sexual behavior, or spending.

Membership includes a subscription to the peer-reviewed journal *Psychology of Addictive Behaviors* and the newsletter of the Division.

Join at addictionpsychology.org



POSTER SESSIONS

POSTER SESSION 1

Friday March 24th 11:45am - 12:30pm

Clinical

1. Revision About The Feasibility of Gabapentin For Treating Substance Use Disorders. Gabriel Quintero PhD
2. Accurate Understanding Is Key: The Mediating Role of Empathy Between Readiness To Change and AUD Outcome. A.J. O'Sickey BA, Danielle Gallant, Nikki Rowell MS, Theresa Moyers PhD
3. The Importance of Treatment Integrity: An Example Using The SMART-ED Study. Lauren Nikki Rowell MS, A.J. O'Sickey BA, Jon Houck PhD, Theresa Moyers PhD
4. The Motivational Interviewing Technical Hypothesis: Exploring Sustain Talk. Lauren Nikki Rowell MS, Brigitte Stevens BA, Jon Houck PhD
5. The Association Between Shame and Substance Use: Results of A Systematic Review. Josh Kaplan MS, Melissa Platt PhD, Jason Luoma PhD
6. Fine-Grain Description of Self-Attempts To Quit Or Reduce Daily Cannabis Use. John Hughes MD

College/Young Adults

7. Motivations For Drugged Driving Among Urban Emerging Adults. Erin Bonar PhD, Rebecca Cunningham MD, Brooke Arterberry PhD, Alan Davis PhD, R. Lorraine Collins PhD, Frederic Blow PhD, Maureen Walton MPH PhD
8. Association Between Alcohol and Food-Related Addictive Behaviors With Body Mass Index Among College Freshmen. Tera Fazzino PhD, Taylor Kirby, Amani Raheel, Natalie Peppercorn, Kelsie Forbush PhD, Kenneth Sher PhD, Debra Sullivan PhD, Christie Befort PhD
9. "You Do What You Have To Do To Survive:" Using Substances To Cope With Unwanted Sexual Experiences. Julia Gameon BA, Monica Skewes PhD
10. Drinking Your Way To Osteoporosis? Heavy Episodic Drinking and Bone Mineral Density In College Students. Joseph LaBrie PhD, Hawley Almstedt, PhD, Sarah Boyle MA, Nicole Froidevaux BA, Daniel Smith BA
11. Reducing Harm From Marijuana Use: Daily Use of Protective Behavioral Strategies Among College Students. Peter Minge, Julianne Olguin, Natalie Wendel, Jamie Parnes MS, Adrian Bravo PhD, Bradley Conner PhD, Matthew Pearson PhD
12. Increased Prevalence of E-Cigarettes Corresponds With Greater Youth Exposure To Tobacco. Mark Myers PhD,

Guadalupe Bacio PhD

13. Individual Level Moderators of The Relation Between Heavy Episodic Drinking and Sexual Violence. Walter Venerable, William Corbin PhD, Kim Fromme PhD
14. Reward Deprivation, Depression, and Increasing Levels of Drug Use Among Young Adults. Lidia Meshesha MS, Matthew Martens PhD, James Murphy PhD
15. Alcohol Reward Value and Future Orientation Are Associated With Use of Protective Behavioral Strategies In College Drinkers. Andrew Voss BA, James Murphy PhD, Ashley Dennhardt PhD, Matthew Martens PhD
16. The Impact of Reductions In Drinking and Related Problems On Life Satisfaction. Ashley Dennhardt PhD, Lidia Meshesha MS, James Murphy PhD
17. Campus Differences In Drinking As A Function of Importance of Religion and Drinking Norms. Mary Tomkins MS, Clayton Neighbors PhD

POSTER SESSION 2

Friday March 24th 6:00pm - 7:00pm

Clinical

1. Impact of An Interdisciplinary Monitoring Team On Opiate Prescription In Primary Care. Aaron Bergman MA MS, Josh Kaplan MS, Jennifer Hill PhD
2. A Systematic Review of Stigma Interventions For Addiction Treatment Providers. Jennifer Bielenberg MS, Nancy Haug PhD, Anna Lembke MD
3. Buffering The Associations Between Negative Mood and Subjective Alcohol Craving: A Brief Mindfulness Induction. Adrian Bravo PhD, Matthew Pearson PhD, James Henson PhD
4. Suicidality In Individuals With Gambling Disorder. Meagan Carr MS, Jennifer Ellis MS, David Ledgerwood PhD,
5. Boredom and Its Relationship To Relapse In Substance Use Disorder Recovery. Natasha Smolkin MA

Epidemiology/Predictors of Outcome

6. Predictors of Medical and Psychiatric Conditions Among Cannabis and Opioid Users In NESARC. Tessa Frohe BA, Robert Leeman, Ph.D., Cheryl Beseler, Ph.D.
7. Anxiety Sensitivity Components In Relation To Alcohol and Marijuana Use, Motives, and Problems. Casey Guillot PhD, Heidemarie Blumenthal PhD, Michael Zvolensky PhD, Norman Schmidt PhD

8. Relationship Between Perspective Taking and Drinking Behavior In Project Match. C Robinson, K Fokas, K Witkiewitz

Legal/Policy Issues

9. Predictors To Intranasal Naloxone Dispensing By New Mexico Community Pharmacists. Ludmila Bakhireva PhD MPH, Adriana Bautista, Amy Bachyrycz, Shikhar Shrestha, Sandra Cano, Theresa Cruz
10. Medical Marijuana Legalization and Marijuana Use Among Youth In Oregon. Joel Grube PhD, Mallie Paschall PhD, & Anthony Biglan PhD
11. The Complex Relationships Between Heroin Use, Mental, and Behavioral Health In The Criminal Justice System. Albert Kopak PhD, Alyssa Raggio BA

Cognitive

12. Behavioral Economics of Blackout Drinking. Samuel Acuff BS, Ashley Dennhardt PhD, James Murphy PhD
13. Intoxicated Alcohol Demand and Drinking and Driving. Kayleigh McCarty MA, Laura Hatz BS, Michael Amlung PhD, Kali Falnes BS, & Denis McCarthy, PhD
14. Working Memory Capacity Moderates Perceived Risks of Driving After Drinking. Laura Hatz BS, Kalyeigh McCarty MA, Bruce Bartholow PhD, Denis McCarthy PhD.
15. Cannabis Use, Cannabis Coping Motives, and Emotion Regulation. Whitney Brown PhD, Maria Testa PhD, Samara Rice PhD
16. Distress Tolerance Replication and Findings Among Urban Drug Users. Kristina Volgenau BA, Marina Bornovalova PhD, Claire Gorey BA, & Troy Webber MA
17. Does Self-Reported Or Behavioral Impulsivity Predict Subjective Response To Low Dose Alcohol? Benjamin Berey BA, Robert Leeman PhD, Brian Pittman MS, Nicholas Franco BA, Suchitra Krishnan-Sarin PhD

POSTER SESSION 3

Saturday March 25th 8:00am - 9:00am

College/Young Adults

1. Impulsivity Facets and Marijuana Expectancies Related To Marijuana Use In High-Risk Young Adults and Their Siblings. Inga Curry PhD & Tamara Wall PhD
2. Social and Psychological Influences On Marijuana Use In College Students. Katherine Tepper BA, Maryia Schneider, Leah Wilson, Joanne Salazar, Arianna Weisen, Matthew Barnes, Michael Phillips, Kristina Phillips
3. Why I Get High: A Daily Diary Examination of Marijuana Use Motives Among College Students. Natalie Wendel, Peter Minge, Julianne Olguin, Jamie Parnes MS, Adrian Bravo PhD, Bradley Conner PhD, Matthew Pearson PhD

4. In The Process of Drinking To Cope: An Examination of Specific Vs. Global Coping Motives Among College Students. Julianne Olguin, Adrian Bravo PhD, Matthew Pearson PhD
5. Trajectories of Positive Alcohol Expectancies and Drinking: An Examination of Young Adults In The US and Sweden. Kevin Montes PhD, Katie Witkiewitz PhD

Measurement

6. Marijuana Purchase Task: Using Qualitative Methods To Inform Measure Development. Elizabeth Aston PhD, Jane Metrik PhD, Rochelle Rosen PhD, Miriam Midoun MSc, Robert Swift MD PhD, James MacKillop PhD
7. Perceptions and Overestimations of Descriptive and Injunctive Norms Differ By Drinking Location. Holly Boyle MA, Jennifer Merrill PhD
8. Treating Athletes With Substance Use Disorders: A Model For Assessment & Treatment. Harlan Austin PhD, LaTisha Bader PhD
9. The Yale Food Addiction Scale and Eating Behavior In Adolescents. Michelle Joyner MS, Erica Schulte MS, Ashley Gearhardt PhD
10. The Assessment of Addictive-Like Eating In Adolescents. Emma Schiestl, Ashley Gearhardt PhD
11. Viability of The WHOQOL-BREF To Assess Changes In Quality of Life After Alcohol Dependence Treatment. Megan Kirouac MS, Elizabeth Stein MS, Matthew Pearson PhD, Katie Witkiewitz PhD
12. Factor Structure of The Five Facet Mindfulness Questionnaire In A Treatment-Seeking, Alcohol-Dependent Sample. Samara Rice PhD, Gerard Connors PhD, Kimberly Walitzer PhD, Nancy Smyth, J. Reschke
13. Development and Validation of An Adolescent E-Cigarette Attitude Scale. Ty Schepis PhD & Joseph McKenna PhD
14. Test of Reactivity To Ecological Momentary Assessment In E-Cigarette Initiation In Daily Smokers. Melissa Schick BS, David Eddie PhD, Susanne Hoeppner PhD MS, Lourah Kelly MA, John Kelly PhD, Bettina Hoeppner PhD MS

Data Analysis

15. Person-Centered Analyses On Comorbid Trajectories of Adolescents' Tobacco, Alcohol, and Cannabis Use. Junhan Cho PhD, Raina Pang PhD, Adam Leventhal PhD, Matthew Stone BA
16. Structural Equation Model: Community Connection, AUDIT, and SES In A Sample of Non-Hispanic White and Native American College Students. Violette Cloud BA, Kamilla Venner PhD
17. A Mediation Analysis of Brief Interventions For Smokers Who Are Not Ready To Quit. Elias Klemperer BA, John Hughes MD
18. To What Extent Do Social Networks Impact Problem Marijuana Use? A Social Network Analysis. Dipali

POSTER SESSION 4

Saturday March 25th 11:45am - 12:30pm

Clinical

1. Menstrual Phase and Smoking Deprivation On Smoking-Related Outcomes. Jinha Chung, Raina Pang PhD, Gurmehar Brar, Matthew Kirkpatrick PhD, Adam Leventhal PhD
2. Transdermal Nicotine Patch and Ovarian Hormone Effects On Smoking Related Outcomes After Overnight Abstinence. Raina Pang PhD, Madalyn Liataud BA, Matthew Kirkpatrick PhD, Jimi Huh PhD, John Monterosso PhD, Adam Leventhal PhD
3. Breaking Up Is Easy To Do: Social Relationship Stability Among Substance Users. Tim Janssen PhD, Robert Stout PhD, Jordan Braciszewski PhD, & Adam Vose-O'Neal
4. Using Text Messages To Deliver Accurate Descriptive and Injunctive Drinking Norms: A Pilot Study. Jennifer Merrill PhD, Holly Boyle MA, Cassandra Suttan-Coats, Kate Carey PhD,
5. Dynamic Daily Associations Between Sleep and Alcohol Use In Adults With Chronic Pain. Mary Beth Miller PhD, Wai Sze Chan PhD, Jeff Boissoneault PhD, Michael Robinson PhD, Roland Staud MD, Richard Berry MD, Christina McCrae PhD
6. Assessing The Heart of Psychotherapy: Clinician Interpersonal Skills and Heart Rate Variability. Brigitte Stevens BS, Jon Houck PhD, & Nikki Rowell MS
7. Emergence of Therapeutic Factors In A Support Group For Parents and Family Members of Addicted Loved Ones. Nilofar Fallah-Sohy BS, John Kelly PhD, Julie Cristello BA, Brandon Bergman PhD,
8. Characterizing and Examining The Benefits of Recovery Community Center Membership. Nilofar Fallah-Sohy BS, Alexandra Abry BA, John Kelly PhD
9. What Types of Discrimination Do People Experience Who Are In Recovery From An Alcohol Or Other Drug Problem? Estimates From A US National Probability-Based Sample. Corrie Vilsaint PhD & John Kelly PhD
10. A Naturalistic Study of A Group Intervention For Parents of Youth With Substance Use Disorders. Victoria Ameral MA, Amy Yule MD, James McKowen PhD, Jessica Nargiso PhD, John Kelly, PhD
11. There Is An App For That – Or Is There? A Content Analysis of Publicly Available Smartphone Apps For Managing Alcohol Use. Bettina Hoepfner PhD, Melissa Schick BS, Lourah Kelly MA, Susanne Hoepfner PhD MS, John Kelly PhD
12. How Many Or How Much? Testing The Relative Influence of The Number of Social Network Risks Versus The Amount of

13. Coping With The Enduring Unpredictability of Opioid Addiction: An Investigation of A Rapidly Expanding Family-Focused Peer-Support Organization. John Kelly PhD, Nilofar Fallah-Sohy BA, Julie Cristello BA, Brandon Bergman PhD

Cognitive

14. Association of A BDNF Polymorphism With Alcohol Problems: Cognitive and Depressive Mediators. Sabrina Blackledge MA, Case Guillot PhD, Megan Douglas MS, Tiebing Liang PhD, Mitchell Berman PhD
15. Paced Breathing Changes Neural Reactivity To Alcohol Cues: An Fmri Study. Laura Banu BA, Deena Peyser MS, Sarah Grace Helton BA, Suchismita Ray PhD, Jennifer Buckman PhD & Marsha Bates PhD
16. Separating Craving To Cues From Presentation of Cues In Predicting Self-Control For Both Smokers and Drinkers. Jennifer C. Veilleux PhD & Kayla D. Skinner MA
17. Socioemotional Processing Measures Predict Abstinence-Induced Tobacco Withdrawal and Craving. Gurmehar Brar, Matthew Kirkpatrick PhD, Jinha Chung, Raina Pang PhD, Adam Leventhal PhD
18. Emotion Dysregulation Explains Relations Between Sleep Disturbance and Smoking Quit-Related Cognition and Behavior. Jennifer Fillo PhD, Candice Alfano PhD, Daniel Paulus MA, J A J Smits PhD, Michelle Davis MA, David Rosenfield PhD, Bess Marcus PhD, Timothy Church MD MPH PhD, Mark Powers PhD, Michael Otto PhD, Scarlett Baird BA, Michael Zvolensky PhD

POSTER SESSION 5

Saturday March 25th 6:00pm - 7:00pm

Clinical: Special Populations and Ethnic/Minority Groups

1. Factors That Influence Seeking Help For Alcohol Problems in A Native American Sample. R. Butler, K. J. Hagler, K. L. Venner, A. Henckel, J. N. Nation, A. Lawless
2. Trauma and Substance Use Trajectories of Hispanic/Latino Adolescents Receiving Substance Treatment. Evan Stanforth MA, Maite Mena PsyD, Daniel Santisteban PhD
3. How Illicit Drug Users Seeking Treatment Differ In Expectations By Ethnicity. Nyabang Buom BA, Pilar Sanjuan PhD, Jeff Tonigan PhD
4. Sex Differences In Mood and Withdrawal During Acute Tobacco Abstinence Among African-American Smokers. Madalyn Liataud BA, Adam Leventhal PhD, Raina Pang PhD
5. Abstinence Norms In Native American and Non-Hispanic White University Students. Andrea Henckel BA, Kylee Hagler MS, Rhett Butler BA, James Nation BA

6. Historical Trauma, Childhood Trauma, and Substance Abuse On An American Indian Reservation. Monica Skewes PhD, Julia Gameon BA, Scott Gardner BA, Emily Salois MSW, Paula FireMoon Med

Clinical: Co-Morbid Conditions

7. PTSD, Methamphetamine Use, and Outcome Expectancies. Christopher Domke
8. Comparing PTSD Symptom Presentation Among People With Substance Use Disorders. Emily Dworkin PhD, Sonya Wanklyn PhD, Paul Stasiewicz PhD, Scott Coffey PhD
9. Depression Severity Moderates Outcome But Not Program Engagement Among AA Affiliates. Carly Poremba BA
10. The Influence of Co-Occurring Psychiatric Disorder In Members of An Online Recovery Community. Nate Kelly BA
11. Effects of MI On Treatment Engagement and Outcomes In Women With Comorbid PTSD and SUD Mandated To Mindfulness-Based Relapse Prevention. Vanessa Somohano MA, Rachel Rutkie MA, Jacob Manuel MS, Kris Rehder MS, Sarah Bowen PhD

Adolescents

12. Real-Time Social Stress Response and Subsequent Initiation of Alcohol Use Among Female Adolescents. Heidemarie Blumenthal PhD, Renee Cloutier MS, Megan Douglas MS, Sydney McKinnis, Maris Adams
13. Examining Adolescent Alcohol Problems and Desires During Social Rejection Or Performance. Renee Cloutier MS, Maris Adams, Sydney McKinnis, Matthew Russo, Nathan Kearns BS, & Heidemarie Blumenthal PhD
14. Extracurricular Activities Are Associated With Less Severe Substance Use Disorder In Youth. Julie Cristello BA, Corrie Vilsaint PhD, John Kelly PhD
15. Substance Use and Externalizing Problems Among Young Men. Helene White PhD, Fiona Conway PhD, Jennifer Buckman PhD, Rolf Loeber PhD
16. Longitudinal Association of Electronic Cigarette Use With Subsequent Substance Use Among Adolescents. Matthew Stone BA, Jessica Barrington-Trimis PhD, Junhan Cho PhD, Nick Goldenson BA, Huiyi Chen BA, Adam Leventhal PhD
17. Marijuana and Tobacco Use and Co-Use and The Risk of Emotional Disorders In Adolescence. Rachel Wein, Adam Daniels, Jessica Barrington-Trimis PhD, Junhan Cho PhD, Adam Leventhal PhD, Matthew Stone BA



Continuing Education Grievance Procedure

The Society of Addiction Psychology (APA Division 50) and the Collaborative Perspectives on Addiction meeting are fully committed to conducting all activities in strict conformance with the American Psychological Association's Ethical Principles of Psychologists. The Society of Addiction Psychology (APA Division 50) and the Collaborative Perspectives on Addiction meeting will comply with all legal and ethical responsibilities to be non-discriminatory in promotional activities, program content and in the treatment of program participants. (American Psychological Association Education Directorate Continuing Education Grievance Procedure). The CE Chair (Cynthia Glidden-Tracey, PhD) in consultation with the 2017 Collaborative Perspectives on Addiction Meeting Co-Chairs, Robert Leeman, PhD, and James Murphy, PhD, will be responsible for monitoring and assessing compliance with APA standards.

While the Society of Addiction Psychology (APA Division 50) and the Collaborative Perspectives on Addiction meeting go to great lengths to assure fair treatment for all participants and attempts to anticipate problems, there will be occasional issues which come to the attention of the convention staff which require intervention and/or action on the part of the convention staff or continuing education committee. (American Psychological Association Education Directorate Continuing Education Grievance Procedure)

The guidelines for handling grievances are described below:

Participants should file grievances in written form for record keeping purposes. You do not need to sign the grievance.

Depending on the grievance, the following actions will be taken:

1. If your grievance concerns a speaker, the content presented by a speaker, or the style of presentation, please put your comments in written format. The CE Chair (Cynthia Glidden-Tracey, PhD) will keep your identity confidential and convey your comments to the speaker.
2. If your grievance concerns a specific CPA 2017 CE program, its content, level of presentation or the facilities in which the CE offering was conducted, please submit your grievance for review by the CE Chair Cynthia Glidden-Tracey, PhD via email at cglidden@asu.edu and CPA 2017 Program Co-Chairs Robert Leeman, PhD, via email at robert.leeman@ufl.edu or phone at (352) 294-1808, and James Murphy, PhD, via email at jgmurphy@memphis.edu or phone at (901) 678-2630.
3. If you request action, CPA 2017 Program Co-Chairs Robert Leeman, PhD, and James Murphy, PhD (robert.leeman@ufl.edu, jgmurphy@memphis.edu, in consultation with the CE Chair Cynthia Glidden-Tracey, (cglidden@asu.edu) will:
 - a. attempt to remedy the situation or
 - b. provide a partial or full refund of the CE fee.
4. If your grievance concerns the CE staff, the CE Chair will attempt to arbitrate.

MEETING ABSTRACTS: KEYNOTES & SYMPOSIA

Friday March 24 9:00 – 10:15 am

Motivational Interviewing at the Crossroads.

Motivational interviewing (MI) evolved

from the person-centered approach of Carl Rogers. With more than 500 published clinical trials, MI is an evidence-based psychotherapy for evoking and strengthening clients' own motivations for change. It was originally developed for treating alcohol problems, but ambivalence about change is human nature and is a significant clinical issue in health care and social services more generally. After briefly describing the method Dr. Miller will discuss how therapists develop and maintain fidelity in providing a complex clinical method like MI, with more general implications for hiring and continuing professional education of providers. **William R. Miller, Ph.D.**

KEYNOTE ADDRESS

Friday March 24 10:30 – 11:45 am

Obesity and Substance Use: A Complex Relationship.

Excessive substance use and elevated body mass index (BMI) are leading causes of preventable death. Obesity and substance use disorders are associated with many of the same factors, including reward dysfunction. Dr. Sonja Yokum will present research on how patterns of reward processing in the brain similarly predict the onset of future substance use and excessive weight gain during adolescence. However, the food-drug competition hypothesis proposes that because food and drugs of abuse engage similar reward-related neural circuitry, they may compete for shared brain reward sites. Thus, excess consumption of food may diminish desire for drugs of abuse (and vice versa) by occupying shared brain reward sites. In support of this hypothesis, Dr. Ashley Gearhardt will discuss research on how elevated BMI across adolescence is protective against problematic substance use in young adulthood and Ms. Jenna Cummings will present on how motivations to consume alcohol and sweet high-fat food compete within adults. A greater understanding of the complex relationship between obesity and substance use is needed to inform intervention efforts to reduce the impact of these conditions on public health. **Ashley Gearhardt, Ph.D.; Sonja Yokum, Ph.D.; Jenna R. Cummings, M.A.**

The Pains of Chronic Pain and Opioid Use. Opioid use in the treatment of pain has increased exponentially. In adults, 300%+ increases in opioid availability are associated with 200%+ increases in opioid-related morbidity and mortality. Although described as a modern healthcare epidemic, many aspects of the scope of the opioid problem are unknown. This symposium highlights three critical issues related to opioid use in chronic pain. First, Ms. McEntee will present findings from a systematic review of rates of problematic opioid use in adults with chronic pain. Considerable variability was found across studies; on average, prevalence ranged from 21% to 29% for misuse and from 8% to 12% for addiction. Second, Mr. Bailey will discuss the potential for misapplication of screening tools

in predicting aberrant use of opioids for chronic pain and detail statistical findings that suggest clear guidelines for screening instrument use. Finally, Ms. Pielech will present results from an epidemiological dataset (N = 40,040) on prescribing rates of opioids to youth, as well as demographic and medical factors associated with prescription rate and major outcomes (e.g., overdose). Finally, as chair, Dr Vowles will provide a critical appraisal of these data, synthesize them relative to the field as a whole, and comment on avenues of further study. **Kevin E. Vowles, Ph.D., Melissa Pielech, M.A., Robert W Bailey, M.S., Mindy L McEntee, M.S.**

Friday March 24 1:45 – 3:00 pm

Emotion Dysregulation in Substance Use and Substance Use Disorders.

Although the link between emotion and substance use is broadly recognized, investigations continue to provide significant insight to the relationships between various affect-related domains and drug/alcohol use, misuse, and dependence. This session explores a broad range of affect-related factors and their dysregulation in the context of substance use. Dr. Leventhal will apply a transdiagnostic emotional vulnerability model to understanding comorbidity between emotional psychopathology and alcohol, tobacco, and marijuana use in adolescents. He will demonstrate associations between diagnostic vulnerability factors common to several psychological disorders (e.g., negative urgency & anxiety sensitivity) and increased likelihood of substance use. Ms. Hoffman will discuss neurobehavioral correlates of emotional processing in alcohol dependent treatment seekers. Neurophysiological and behavioral data will speak to alcohol-related dysfunction in processing/identifying the outward emotional expressions of others and how they relate to interpersonal difficulties. Dr. Witkiewitz will describe the role of negative affect as a mediator of alcohol relapse in clinical trial participants. Moderators of these negative affect and relapse associations will also be addressed. Discussion, led by Dr. Nixon, will emphasize the role of emotion dysregulation in substance use and explore potential implications for research, prevention, and treatment. **Lauren A. Hoffman, MS; Katie Witkiewitz, PhD; Adam Leventhal, PhD; Sara Jo Nixon, PhD**

A Demonstration of Feasibility and Utility of Multi-Site Collaborations in College Student Substance Use.

This symposium will focus on the rationale, development, and implementation of multi-site collaborations in substance-use research. Utilizing a myriad of research designs, we will discuss the pitfalls and benefits of multi-site collaborations and briefly present findings from collaborative projects. First, Dr. Bravo will discuss Project CAS, an international study aimed at validating Spanish-versions of widely used alcohol protective behavioral strategies and alcohol-related consequences measures and examine cross-cultural differences among college students in Argentina, Spain, and the United States. Second, Dr. Pearson will discuss Project MOST, a large national study conducted across 11 universities (n>8,000) examining risk/protective factors related

to marijuana use among college students. Third, Mr. Parnes will discuss Project Daily, a diary study that examined daily use and consequences of marijuana before, on, and after April 20th (an event-specific marijuana use day) across 3 universities. Finally, Dr. Neighbors will discuss Project SNAP, a series of randomized controlled trials that examined the impact of social identity on the efficacy of novel social norms based interventions in reducing problematic alcohol use in college students across 3 universities. Each presenter will summarize the few best and worst experiences over the course of their involvement in multi-site studies. **Adrian Bravo, PhD; Matthew Pearson, PhD; Jamie Parnes, MS; Clayton Neighbors, PhD**

Friday March 24 3:15 – 4:30 pm

Comorbid Substance Use and Mental Health Conditions: Implications for Prevention and Treatment. This symposium will take a lifespan approach to addiction and co-occurring psychopathology, underscoring factors that affect development, maintenance, screening, and treatment of these conditions. Dr. Brenna Greenfield will discuss developmental trajectories of alcohol use disorder (AUD) and conduct disorder symptoms among Indigenous youth ages 10-18, including predictors and associated outcomes of these trajectories. Dr. Justin Anker will discuss factors that maintain co-occurring AUDs and internalizing conditions (e.g., anxiety, depression). Using a network analysis of AUD and internalizing conditions with 363 adults entering AUD treatment, he will show that co-occurring disorders are likely maintained through stress and drinking to cope. Dr. Kevin Hallgren will present data indicating a 10-fold increase in risk for ideating or attempting suicide among non-treatment-seeking drug users in primary care clinics, followed by a discussion of implications for screening and treatment of these conditions within primary care. Corey Roos will present data from a clinical trial evaluating the efficacy of mindfulness-based relapse prevention (MBRP) among 286 individuals with substance use disorders. He will show that MBRP may have the strongest effect in reducing substance use for individuals with the highest levels of co-occurring psychopathology, suggesting that MBRP may be a promising “transdiagnostic” treatment. Dr. Sarah Bowen will discuss overarching clinical and research implications. **Brenna Greenfield, PhD, Kevin Hallgren, PhD, Justin Anker, PhD, Corey Roos, MS, and Sarah Bowen PhD**

Impulsivity and Substance Use: Novel and Innovative Methodological Approaches. Impulsivity, or rash decision making, has been associated with increased alcohol use, behavioral problems, and neural dysfunction localized to both the pre-frontal cortex and reward centers in the brain. Our symposium will present novel methodological approaches to better understand the association between impulsivity and alcohol use. Jordan Davis will present on a longitudinal study investigating the effect of early victimization on binge drinking and impulse control from adolescence to young adulthood among juvenile offenders. Results indicate early victimization and binge drinking influence deficits in impulse control during adolescence, which carry over into young adulthood resulting in more binge drinking and victimization. Ben Berey will present on subjective response, binge drinking, and impulsivity. Results indicate initial dampened subjective response predicted recent

binge drinking and more impulsive individuals tended to perceive dampened recent subjective response patterns. Julie Patock-Peckham will present a cross-sectional latent variable model. Her results suggest that affect laden impulsivity is linked to self-medicating motives, while affect free impulsivity is linked to celebratory motives for drinking. Implications for maturing out will be discussed. Our symposium reports results involving novel approaches and methodological techniques for understanding the influence of impulsivity on alcohol use across range of participant severity and context. **Benjamin Berey, M.S., Julie Patock-Peckham, Ph.D., Jordan P. Davis, M.S., Robert Leeman, Ph.D.**

Friday March 24 4:45 – 6:00 pm

Early Career Addictions Researcher Showcase. The 2017 CPA Program Committee is sponsoring an Early Career Addictions Researcher Showcase symposium to feature exemplary research being conducted by early career scientists, defined as graduate students, post-docs, or faculty members who are within 5 years from receiving their terminal degree. The symposium will be co-chaired by Dr. Michael Amlung (McMaster University) and Lauren Hoffman (University of Florida). Speakers were selected by a panel of expert peer reviewers. This year, we are excited to feature talks by three outstanding early career researchers. Dr. Mary Beth Miller (Brown University) will present research examining dynamic daily associations between sleep disruption and heavy alcohol use among individuals with chronic pain. Ms. Tessa Frohe (University of Florida) will share findings from a study examining predictors of medical and psychiatric conditions among cannabis and opioid users in the NESARC sample. Ms. Laura Hatz (University of Missouri) will present data from an alcohol administration study showing that working memory capacity moderates the link between perceived risk and frequency of driving after drinking. Dr. Barbara McCrady will serve as discussant to provide insight and commentary on pursuing a career in addictions research. The chairs and Program Committee look forward to highlighting the highest quality of research being done by the next generation of addictions scientists. **Michael Amlung, Ph.D., Lauren Hoffman, M.S. (session co-chairs), Mary Beth Miller, Ph.D., Tessa Frohe, B.A., Laura Hatz, B.S. (awardees/presenters), Barbara McCrady, Ph.D. (discussant)**

Person-Centered Approaches to Exploring Heterogeneity in Substance Use and Treatment Responses. Although variable-centered analyses (e.g., correlations, structural equation modeling) predominate psychological research, we demonstrate the range of research questions that can be answered using person-centered analyses (e.g., latent class/profile analysis, growth mixture modeling) in substance use research. First, Bravo distinguishes four unique classes of individuals based on facets of mindfulness using latent profile analysis (LPA) and compares these classes on alcohol/substance use outcomes in college students and military members/veterans. Second, Wilson uses LPA to demonstrate the heterogeneity in drinking (3 classes) and psychosocial functioning (3 classes) among “heavy drinkers” (i.e., so-called treatment failures) 1-year following treatment in Project MATCH and COMBINE. Third, Allen examines a wide range of psychosocial variables (e.g., protective behavioral strategies, marijuana identification) to identify factors that best distinguish

between low vs. higher risk marijuana user classes in a large sample of college students (n=2128). Fourth, Henson uses growth mixture modeling (GMM) to identify heterogeneity in drinking trajectories in a large sample of college students who received an alcohol intervention (n=1000). Each speaker describes analysis challenges (e.g., model specification, model fit, etc.), provides tutorial-like solutions for these challenges with Mplus code, and offers suggestions for other research questions that can be answered using person-centered approaches. **Adrian J. Bravo, Ph.D., Adam D. Wilson, M.Sc., Alyssa R. Allen, James M. Henson, Ph.D., Matthew Pearson, Ph.D.**

Saturday March 25 9:00 – 10:15 am

Addressing the Needs of Pregnant Women in Substance Use Treatment. Prenatal substance use disorders (SUD) represent an ongoing problem with long-term consequences for affected mothers, children, and families. Approximately 5% of women entering treatment for an SUD in the U.S. are pregnant. Pregnant women with SUD often have trouble engaging in treatment, high rates of psychiatric comorbidity, and high relapse rates during pregnancy and postpartum. This symposium will cover topics from laboratory studies to treatment approaches, presenting both empirical research and clinical experience including neuroimaging and clinical trial data, population-specific assessment techniques, and advances in treatment strategies to address needs of these patients. Dr. Stephen will present data examining infant neurophysiological correlates of prenatal alcohol exposure and neonatal abstinence syndrome. Dr. Sanjuan will present two pilot studies 1) assessing daily PTSD symptoms and prenatal bonding in conjunction with episodes of substance use and 2) assessing prenatal bonding with EEG. Dr. Coffey will present a clinical trial of prolonged exposure therapy for PTSD for pregnant women in residential SUD treatment. Dr. Sutter will present data from a group prenatal care program for women on opioid maintenance therapy. Dr. Leeman, Medical Director of the UNM Milagro Program, as the discussant, will address unmet needs in the care of pregnant women with SUD. **Pilar M. Sanjuan, Ph.D., Julia Stephen, Ph.D., Scott Coffey, Ph.D., Mary Beth Sutter, M.D., Lawrence Leeman, M.D., MPH**

Emotion Regulation Difficulties as a Concomitant Substance Use Problem. Emotion regulation difficulties are defined by the absence of adaptive strategies and the use of maladaptive strategies for regulating emotional responses. This symposium will highlight the ways in which emotion regulation difficulties may result in increased marijuana, tobacco, and alcohol use problems. Dr. Brown's work shows an indirect effect of coping motives on the association of emotion regulation difficulties with marijuana use problems (e.g. "Did you ever use marijuana after you had decided not to?"). Dr. Fillo's investigation suggests that increased sleep disturbance is related to emotion dysregulation, which, in turn, contributes to more tobacco cessation-related problems, (e.g. low self-efficacy for abstinence). Dr. Bradizza will discuss the relationship between anxiety and mood disorder comorbidity among individuals with an alcohol use disorder and emotion regulation difficulties. This research suggests that individuals with multiple comorbidities have greater emotion regulation difficulties, which may contribute to increased vulnerability to alcohol relapse. Emotion regulation strategies need more attention as a risk factor for substance use problems.

Given its potential as a transdiagnostic variable, emotion regulation may also be an important treatment target for individuals with substance use disorders and other mental health comorbidities. **Whitney C. Brown, PhD; Jennifer Fillo, PhD; Clara Bradizza, PhD**

Saturday March 25 10:30 – 11:45 am

The "Future's So Bright"? Recent Trends in Technology-Enhanced Addiction Recovery Management. The innovation and increased reach offered by modern technologies may enhance self-management, facilitate recovery support, and supplement face-to-face treatment approaches for individuals with substance use disorder (SUD) and other harmful substance use. While computer-to-person web and text message-based tools confer benefit, comparatively less is known about several newer technologies, three of which are the focus of this symposium. First, we will present a content analysis of drinking-related smartphone "apps" available on Google Play (n = 266). Results showed that tracking-over-time features were particularly popular, both in terms of number of downloads and star ratings. Second, we present survey data characterizing participation and perceived benefit among members of a large, existing recovery-specific social network site (N = 123). Overall, members perceived similar participation-related benefits (e.g., enhanced abstinence/recovery motivation) irrespective of time in recovery. Third, we present an overview of two studies that tested heart rate variability biofeedback (HRV BFB) with smartphone app practice tools as an adjunct to SUD treatment-as-usual in young adult clinical samples. Results showed HRV BFB may complement treatment-as-usual by reducing craving and negative affect. The discussant will highlight both the potential impact of these technologies in treatment and recovery, and their potential transdiagnostic implications (e.g., negative affect). **Brandon Bergman, PhD, Bettina Hoepfner, PhD, David Eddie, PhD, and John Kelly, PhD**

Clinical Implications of Research on Protective Behavioral Strategies for Alcohol and Marijuana. Protective behavioral strategies (PBS) are behaviors that are used immediately prior to, during, and/or after substance use that reduce consumption, intoxication, and/or substance-related harm. Although the alcohol PBS field is large, the marijuana PBS field is nascent. The symposium integrates the use of qualitative and quantitative approaches as well as survey and daily diary designs to examine protective behavioral strategies for both alcohol and marijuana. First, Prince will report results from two qualitative studies examining why individuals choose not to use alcohol PBS (Study 1) and when they choose to use and how they select specific marijuana PBS to use (Study 2). Second, Montes will report results from 9 alcohol studies (n=3517) and one large marijuana study (n=2128) examining PBS use as a moderator of the effects of use on consequences. Third, Mumm will report results from two survey studies that examined gender as a moderator of a PBS norms model for alcohol PBS among college students (Study 1) and marijuana PBS among heavy users (Study 2). Fourth, Bravo will present results from two daily diary studies examining alcohol PBS (Study 1) and marijuana PBS (Study 2) among college students. All speakers discuss the clinical implications of their findings. **Mark A. Prince, Ph.D., Kevin S. Montes, Ph.D., Rachel Mumm, Adrian J. Bravo, Ph.D., Matthew R. Pearson, Ph.D.**

Saturday March 25 1:45 – 2:45 pm

Brain Imaging, Temperament and Cognitive Function in a Monkey Model or Chronic Alcohol Self-Administration.

KEYNOTE ADDRESS

The macaque monkey model of voluntary alcohol self-administration has provided translational data addressing risk factors and consequences of chronic alcohol drinking. Recent advances include antecedent resting state MRI amygdalar-cortical connectivity, aggressive and anxious temperaments and cognitive flexibility as measured in set-shifting tasks. Each of these highly translational datasets can help identify and isolate variables in human subject studies to better address prevention and treatment approaches in alcohol use disorders. **Kathleen A. Grant, Ph.D.**

Saturday March 25 3:00 – 4:15 pm

Heart Rate Variability as a Dynamic, Real-Time Indicator of Active Brain and Behavior Mechanisms.

Alcohol and drug use behaviors are determined on a 'moment-to-moment basis', with each moment being driven by intentional-cognitive processes and physiological reactions that occur outside of conscious awareness and proceed automatically (i.e., automatic-visceral reactions). Heart rate variability (HRV) is a commonly used measure of automatic-visceral reactions and HRV biofeedback is being used with increasing frequency in the clinical treatment world. This session focuses on how psychophysiology provides insight into both physical and mental health and may be a useful adjunctive intervention for many addictive and other maladaptive behaviors. The first presenter (M. Bates) will discuss the use of HRV to bolster against triggers for relapse during addiction treatment. The second (B. Fink) will discuss HRV as a potential index of emotion regulation in partners with a history of intimate partner violence. The third (T. Leyro) will discuss autonomic dysregulation as a physiological mechanism that may explain both attentional bias and emotion regulatory impairments that contribute to smoking maintenance, with specific relevance to anxious smokers. The final talk (J. Buckman) will discuss HRV as a lens for understanding the many integrated adaptive biological systems that contribute fundamentally to psychosocial risk and health outcomes through anatomically and chemically well-defined feedback loops. **Jennifer Buckman, PhD; Marsha Bates, PhD; Brandi Fink, PhD; T. Leyro, PhD**

Trauma, PTSD and Substance Use: Epidemiology, Special Populations and a Systematic Review.

We will present findings from research relating substance use/substance use disorders to trauma, PTSD and other co-morbid psychiatric conditions. Notably, each presentation in this symposium utilized very different methodological approaches. After a brief introduction from Dr. Leeman, Dr. Beseler will present findings from

secondary analyses of the NESARC Waves 1 and 2 comparing and contrasting cannabis and other drug users, with and without substance use disorder, in relation to PTSD, depression, anxiety, suicidality and various medical conditions. Dr. Lansing will then report results from research modifying an existing self-report measure of disinhibiting effects of alcohol, including efforts to incorporate disinhibiting effects related to PTSD symptomatology and other substance use among adolescents who are high-risk with histories of polysubstance use, delinquency and significant trauma. Ms. Frohe will follow with a report from a systematic review of the literature concerning substance-related information from the randomized controlled trial literature testing treatments for PTSD. Dr. Trim will close as Discussant with a summary and interpretation of the findings from these related yet unique presentations. The topic of this symposium is pertinent to clinicians and professionals in the areas of epidemiology and public health with interests in comorbidity among substance use, psychiatric and medical conditions. **Robert Leeman, Ph.D.; Cheryl Beseler, Ph.D, Amy Lansing, Ph.D., Tessa Frohe, B.A.; Ryan Trim, Ph.D.**

Saturday March 25 4:30 pm – 5:45pm

A Behavioral Economic Perspective on Persistent Tobacco Use in People with Psychopathology.

Cigarette smoking rates are decreasing in the general population, but are stable among people with psychiatric disorders. Most people with psychiatric disorders are motivated to quit but are more likely to relapse during cessation attempts. This symposium will explore how a behavioral economics perspective can inform our understanding of mechanisms and potential treatments for tobacco dependence in people with psychiatric disorders, with applications to other drug comorbidities. Dr. Tidey will discuss her laboratory research indicating that smokers with schizophrenia overvalue cigarette reinforcement relative to reinforcement from alternative sources, and will describe how tobacco regulatory policies could reduce tobacco use among people with serious mental illness. Dr. Audrain-McGovern will discuss her laboratory and longitudinal research that links overvaluation of cigarette reinforcement to smoking persistence among depression-prone smokers, and will describe how a novel behavioral economic/behavioral activation treatment may promote smoking cessation while preventing post-cessation weight gain. Dr. Leventhal will discuss his research indicating that anhedonia and other transdiagnostic factors contribute to the comorbidity between psychiatric disorders and tobacco dependence by amplifying the positive and negative reinforcing effects of smoking. Dr. Murphy will synthesize these findings and lead a discussion of implications for policy, cessation, and connections to other drug comorbidities. **Jennifer W. Tidey, Ph.D. Janet Audrain-McGovern, Ph.D., Adam Leventhal, Ph.D. James Murphy, Ph.D.**

MEETING ABSTRACTS: CLINICAL MINI-WORKSHOPS

Friday March 24 10:30 am – 12:30 pm

Emotion Regulation Training (ERT) for Alcohol Use Disorders: Helping Clients Manage Negative Emotions. The combination of negative affect and difficulties regulating negative affect has implications for the development, maintenance and treatment of alcohol use problems. This introductory mini-workshop on how to implement Emotion Regulation Training (ERT) for individuals with an alcohol use disorder will begin by presenting the conceptual underpinnings of the ERT intervention, describe its basic components, and provide illustrative case vignettes. Participants will receive instruction on how to identify a set of negative affect drinking situations. The remainder of the workshop will provide a step-by-step guide on how to implement a core therapeutic principle of ERT—learning to manage negative emotions and cravings. **Presented by Clara M. Bradizza, Ph.D., Kim Slosman, M.S., & Paul R. Stasiewicz, Ph.D.** 2 CE

Friday March 24 1:45 – 4:30 pm

Cognitive-Behavioral Therapy (CBT) for Alcohol and Drug Problems. Cognitive behavior therapy (CBT) for alcohol and drug problems is a well-established treatment with a strong evidence base. The goal of this workshop is to provide clinicians-in-training and practitioners with training in other treatment approaches with an overview of the CBT approach and basic skills in conducting a functional analysis, using selected assessment approaches such as behavioral self-recording, and teaching clients basic abstinence-focused skills. The workshop will use active learning techniques including group exercises, role-play illustrations, and application of workshop material to sample cases. **Presented by Barbara S. McCrady, Ph.D.** 2.75 CE

Friday March 24 4:45 – 6:00 pm

Treating Suicidal Thoughts and Behaviors in Adults with Substance Use Disorders (SUDs). Individuals with substance use disorders (SUDs) are at clear elevated risk for suicide. Our research group is in the process of testing the efficacy of an evidence-based intervention for suicide risk reduction with individuals in SUD treatment. This workshop will review the cognitive-behavioral model for suicidal thoughts and behaviors. We will provide descriptions of techniques and strategies to specifically target suicidal thoughts and behaviors among those with SUDs, as well as detailed case examples. The workshop is intended for SUD clinicians, administrators and researchers who are interested in improving skills for directly targeting suicide risk during SUD treatment. **Presented by Mark Ilgen, Ph.D. and Erin Goldman, L.M.S.W.** 1.25 CE

Saturday March 25 9:00 – 11:45 am

SBIRT Basics: Development and Application of SBIRT Skills in Diverse Settings. This workshop will present cutting-edge research and training on integrating the evidence-based practice of screening, brief intervention, and referral to treatment (SBIRT) for alcohol and other drugs in primary health and mental health care settings. Participants will learn the practical implications of using SBIRT as well as challenges to implementing this intervention in the workplace. The workshop will deliver the foundational knowledge and skills related to motivational interviewing (MI) and conducting SBIRT in various clinical settings, as well as ample opportunity for participants to practice and gain feedback on MI and SBIRT skills. **Presented by Jessica L. Martin, Ph.D., M. Dolores Cimini, Ph.D., & Laura M. Longo, M.S.** 2.75 CE

Saturday March 25 3:00 – 5:45 pm

Drug Use, Misuse, and Abuse: Recent Advances in Psychopharmacology. The purpose of this mini-workshop is to provide a general audience with an overview of how recreational drugs affect the brain and behavior and can lead to addiction. Converging evidence from a variety of different disciplines will be presented to demonstrate how the use of legal and illegal drugs influences brain functioning. The biological basis of drug action in the brain for the major drugs of abuse (alcohol, nicotine, caffeine, marijuana, heroin, methamphetamine, cocaine, LSD, ecstasy, etc.) will be covered as part of this workshop. Findings from both human and animal research will be highlighted including recent advances in imaging the living brain. In addition, the current medications being used to effectively treat addiction will be highlighted. **Presented by Cecile A. Marcinski, Ph.D.** 2.75 CE



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MEETING ABSTRACTS: POSTERS

POSTER SESSION 1

Friday March 24th 11:45am-12:30pm

1. Revision About The Feasibility of Gabapentin For Treating Substance Use Disorders. The present work evaluates the suitability of using gabapentin for treating different substance use problems. The present revision includes a total of more than 80 biographical references. The substances included in this work are: alcohol, cocaine, opioids, methamphetamine, cannabis and tobacco. Gabapentin has been successful for treating alcohol withdrawal symptoms, alcohol dependence and craving. However, more research is necessary to support its suitability for treating alcohol relapse. On the other hand, the research does not support the use of gabapentin for alleviating cocaine dependence, cocaine relapse, and cocaine subjective adverse's effects (based on standard routes of administration); however, gabapentin might be effective for treating specifically cocaine craving, but more studies are necessary for supporting this. About the use of gabapentin in treating opioid related problems, more investigation should be performed for recommending its use for treating opioid withdrawal symptoms and for reducing opioid consume during the detoxification process. Further research is necessary for advising the use of gabapentin (combined with flumazenil) for treating methamphetamine dependence problems. Moreover, more studies are necessary for supporting the use of gabapentin for alleviating cannabis dependence and withdrawal symptoms. Research findings do not support the use of gabapentin for treating tobacco related problems. **Gabriel Quintero PhD**

2. Accurate Understanding Is Key: The Mediating Role of Empathy Between Readiness To Change and AUD Outcome. Alcohol is the most widely used substance in the world, and its misuse leads to 3.3 million deaths annually (WHO, 2014). In the United States, more than 17 million people suffer from Alcohol Use Disorder (AUD) over a year period (Grant et al, 2004). Often treatments for AUD offer evidence of efficacy without specificity related to specific treatment technologies (Miller and Moyers, 2014) and research suggests that relational factors are important mechanisms of change in AUD treatment (Maisto, Roos, O'Sickey, Kirouac, Connors, Tonigan, & Witkiewitz, 2015). With readiness to change as a prominent predictor of outcomes in AUD treatment (Diclemente, Shludt, Gemmel, 2004) it is paramount to identify relational factors which may explain the association between this client variable and treatment outcome. To explore the potential significance of relational factors on readiness to change, in the present study we examined the mediating relationship of empathy between motivation and treatment outcomes in individuals seeking treatment for AUD (N=1383). Analyses of audio samples from the COMBINE study reveal that empathy mediates the association between total readiness to change for both primary and secondary treatment outcomes. These results have salient implications for the selection and hiring of therapists treating individuals with AUD. **A.J. O'Sickey BA, Danielle Gallant, Nikki Rowell MS, Theresa Moyers PhD**

3. The Importance of Treatment Integrity: An Example Using The SMART-ED Study. Introduction: Screening, Motivational Assessment, Referral, and Treatment in Emergency Departments (SMART-ED) was a randomized controlled trial aimed at investigating the effect of brief Motivational Interviewing (MI) in emergency departments for alcohol and drug users (Bogenschutz et al., 2014). This study found no significant results. Treatment integrity is the degree to which an intervention was implemented as it was intended and is rarely reported (Perepletchikova, 2011). The current secondary analysis will examine whether the MI quality may account for non-significant results in the SMART-ED study. Methods: The MI treatment group was divided by competency level (competent versus non-competent), as measured by the MI treatment fidelity code. The two new MI conditions will be compared with respect to days of primary drug use using a linear mixed model with random site effect, controlling for baseline substance use as a fixed effect. Results: No significant differences were found between the competent and non-competent treatment groups. Interestingly, only 6.8% of all participants received competent MI. Conclusions: Given so few participants received competent MI, these findings highlight the importance of measuring treatment integrity. Measuring treatment integrity is essential to sound scientific evidence for treatment efficacy. **Lauren Nikki Rowell MS, A.J. O'Sickey BA, Jon Houck PhD, Theresa Moyers PhD**

4. The Motivational Interviewing Technical Hypothesis: Exploring Sustain Talk. Motivational Interviewing has been found to be an effective intervention for substance abuse (Lundhal et al., 2013). A proposed causal mechanism for MI includes sustain talk: client language for the status quo. It is suggested that therapist reflections of sustain talk increases client sustain talk and this in turn leads to poorer client outcomes and evidence for this chain are mixed (Magill et al., 2014). Recent advances in MI fidelity coding now include a softening sustain talk (Softening) global. The aim of this investigation is to if Softening is associated with the sustain talk causal chain. Project MATCH data was used for a secondary data analysis. A mediated moderation was conducted with the following parameters: y=percent days abstinent, X= reflections of sustain talk, M=sustain talk, and Softening as a moderator. The total effect model was significant ($F=3.67, p=.038$). The total effect and the indirect effect of reflections of sustain talk on outcome was significant and the direct effect approached significance. This evidence provides partial support for the causal mechanism of sustain talk in motivational interviewing for substance abuse. **Lauren Nikki Rowell MS, Brigitte Stevens BA, Jon Houck PhD**

5. The Association Between Shame and Substance Use: Results of A Systematic Review. Although therapy addressing substance use issues often includes shame as a potential treatment target, empirical work explicating the nature and strength of the association between shame and substance is relatively scant and no systematic reviews exist. In addition, the directionality of causal relationships remains unclear. In order to address this uncertainty, we reviewed the existing literature

regarding the relationship between shame and substance use in all ages and populations. Three databases were searched (PsychINFO, PubMed, and Web of Science) using the search terms shame, substance, drink, drug, alcohol, illicit, smoke, nicotine, and variations of those terms. This search yielded 1809 initial titles, which were reduced to 210 after reviewing abstracts, and XXX after full paper review. The final set of articles was reviewed for quality and data were extracted and summarized. Results will examine various facets of the association between shame and substance, as well as implications for future research and treatment. Josh Kaplan MS, Melissa Platt PhD, Jason Luoma PhD

6. Fine-Grain Description of Self-Attempts To Quit Or Reduce Daily Cannabis Use. Daily users (n = 193) who intended to stop or reduce sometime in the next 3 months called an Interactive Voice Response system each morning for 3 months to report on cannabis use, attempts to stop or reduce, withdrawal symptoms, etc., on the prior day. This study replicated our prior findings that a) cannabis users trying to change make many, and often rapid, transitions among use as usual, reduction and abstinence; b) reduction attempts are more common than abstinence attempts; c) quit and reduction attempts are short-lived and few participants achieve long-term abstinence; d) alcohol and drug use are not greater on abstinence days; and e) few users seek treatment. Novel findings included f) a greater number of days of abstinence or intentional reduction predicted a greater decline in cannabis dependence; g) most users do not prepare before their quit attempt; h) coping outcomes during abstinence predict increased duration of abstinence; i) tobacco use is less common on days of abstinence; and j) withdrawal symptoms occur even with short quit attempts. **John Hughes MD**

7. Motivations For Drugged Driving Among Urban Emerging Adults. Drugged driving [DD] among emerging adults is a public health concern given increasing rates of DD in states with legalized medical and recreational cannabis. Understanding involvement with DD among emerging adults could inform prevention efforts in clinical settings (e.g., Emergency Departments [ED]). Emerging adults (N=586) ages 18-25 (54% male, 56% African American, 34% European American, Mean age = 22) seeking care in an urban ED completed past-year measures of demographics, DD frequency and reasons for DD, and substance use. DD was reported by 24% of the sample. DD with cannabis was most common (96%), followed by prescription opioids, sedatives, and stimulants (9%-19%). Common reasons for DD were: needing to go home (67%), not thinking drugs affected driving ability (44%), not having to drive far (33%), and not feeling high (32%). Gender, education, age, marital status, public assistance, and race were not associated with DD. Alcohol, cannabis, prescription drugs, and other drug use were more frequent among those reporting DD. Based on these data, ED-based interventions for marijuana and other drug use should include content on prevention of DD, with particular attention to motives such as planning ahead for alternatives to get home safely and weighing benefits and risks of DD. Erin Bonar PhD, Rebecca Cunninham MD, Brooke Arterberry PhD, Alan Davis PhD, R. Lorraine Collins PhD, Frederic Blow PhD, Maureen Walton MPH PhD

8. Association Between Alcohol and Food-Related Addictive Behaviors With Body Mass Index Among College Freshmen. Alcohol and food-related addictive behaviors may be associated

with body mass index (BMI) and obesity. The purpose of the study was to test the association between heavy episodic alcohol use, food addiction symptoms, and common motivational mechanisms with BMI among college freshmen. A random sample of freshmen (N=103) stratified by AUDIT-C-defined heavy drinking status (45% heavy drinking), sex (52% male), and race/ethnicity (42% Minority) were selected to participate. At a study visit, participants provided anthropomorphic measurements and completed questionnaires assessing alcohol use, eating habits, food addiction as measured by the Yale Food Addiction Scale 2.0 (YFAS), and motivation, assessed by the Drinking Motives Questionnaire-Revised (DMQ) and corresponding Palatable Eating Motives Questionnaire (PEMQ). Results of a multiple linear regression model indicated both YFAS and AUDIT-C scores were positively associated with BMI (YFAS: $b=0.49$, $p=.04$; AUDIT-C: $b=0.28$, $p=.04$), when accounting for demographic variables and binge-eating. Coping-based motivation to eat and drink alcohol were significantly associated with BMI (PEMQ: $b=0.49$, $p=.001$; DMQ= -0.34 , $p=.001$). Alcohol and food-related addictive behaviors were positively associated with BMI among freshmen. These behaviors and common motivational mechanisms should be examined as potential factors contributing to young adult weight gain and obesity. **Tera Fazzino PhD, Taylor Kirby, Amani Raheel, Natalie Peppercorn, Kelsie Forbush PhD, Kenneth Sher PhD, Debra Sullivan PhD, Christie Befort PhD**

9. "You Do What You Have To Do To Survive:" Using Substances To Cope With Unwanted Sexual Experiences. Sexual assault and substance use are common health problems on college campuses. Incapacitated rape is the most common form of sexual assault among college students, and women between the ages of 18 and 24 are at greatest risk. Following a sexual assault, individuals often turn to maladaptive coping strategies such as substance abuse. The current qualitative interview study was conducted to understand beliefs about sexual assault among students who self-identified as having had an "unwanted sexual experience." Data collection is ongoing, but to date we have interviewed 15 students using a semistructured interview guide developed in collaboration with a university sexual assault and domestic violence advocacy center. Data were transcribed and analyzed using the techniques of grounded theory. Findings showed that students believed the use of alcohol, cannabis, and non-medical use of prescription drugs to be closely interrelated with sexual assault in college, with regard to both the antecedents and consequences of an assault. Participants indicated that substance use was helpful in the immediate aftermath of an unwanted sexual experience, but prolonged the time needed to heal and caused harm in the long run. Preliminary findings suggest that substance abuse prevention and treatment services are needed for sexual assault survivors. **Julia Gameon BA, Monica Skewes PhD**

10. Drinking Your Way To Osteoporosis? Heavy Episodic Drinking and Bone Mineral Density In College Students. This research examines heavy episodic drinking (HED) as an additional lifestyle factor potentially related to bone mineral density (BMD) and the achievement of optimal peak bone mass during the college years. One hundred and seventy-five undergraduates (87 females and 88 males) completed a food frequency questionnaire, a physical activity survey, and reported the frequency with which they engaged in HED each year following their alcohol use initiation. Dual energy x-ray absorptiometry

(Hologic, Discovery A) was used to assess whole body lean body mass and both lateral (LAT) and anteroposterior (AP) projections of BMD at the lumbar spine. Concurrent sex-stratified linear regression models controlled for participants' calcium intake, lean body mass, and bone-loading physical activity prior to comparing bone mineral density at the lumbar spine among participants who reported frequent versus infrequent lifetime HED. Among females, BMD for both LAT and AP projections of the lumbar spine were significantly lower among those engaging in more frequent, relative to less frequent, HED. Among males, only the lateral projection of the lumbar spine BMD similarly differed by HED frequency. These cross-sectional findings are the first to suggest that lower BMD may be yet another serious negative consequence associated with HED among college students.

Joseph LaBrie PhD, Hawley Almstedt, PhD, Sarah Boyle MA, Nicole Froidevaux BA, Daniel Smith BA

11. Reducing Harm From Marijuana Use: Daily Use of Protective Behavioral Strategies Among College Students.

Marijuana protective behavioral strategies (PBS) are strategies that are used prior to, during, after, or instead of using marijuana with the explicit goal of minimizing harm from marijuana use. A growing research literature supports the effectiveness of marijuana PBS use in reducing marijuana use and experience of marijuana-related consequences (Bravo et al., 2016; Pedersen et al., 2016). However, we know of no published research examining marijuana PBS use at the daily level. We collected a 12-day daily diary sample of college student marijuana users ($n = 59$, 69.5% female) from one of three large U.S. universities located in Virginia, New Mexico, and Colorado. Using multi-level path analysis, we examined the intraindividual (i.e., within-subject) and interindividual (i.e., between-subject) associations between PBS use and marijuana-related outcomes. At the intraindividual-level, we found PBS use to be associated with lower number of use sessions per day and lower subjective intoxication. At the interindividual-level, we found PBS use was associated with lower number of use sessions, lower subjective intoxication, and experiencing fewer negative consequences. We discuss the implications of our findings for harm reduction interventions targeting marijuana use. **Peter Minge, Julianne Olguin, Natalie Wendel, Jamie Parnes MS, Adrian Bravo PhD, Bradley Conner PhD, Matthew Pearson PhD**

12. Increased Prevalence of E-Cigarettes Corresponds With Greater Youth Exposure To Tobacco. The rapid rise in prevalence and popularity of e-cigarettes has fueled concern that this will result in increased adolescent cigarette and other tobacco product use. Though initial reports support these concerns, few studies currently address this issue. The present study describes changes in the use of tobacco products across three waves of California Healthy Kids Survey data obtained for a high school district in Southern California (2011: $n=7,215$; 2013: $n=6,674$; and 2015: $n=7,027$). This biannual survey assesses the use of e-cigarettes, hookah and cigarettes along with other health behaviors. Analyses examined probabilities of changes in use frequency across waves of the survey. The probability of current (past 30-day) e-cigarette use increased over time from 4% to 19%, while use of cigarettes and hookah decreased (all $p<.05$). The probability of any current tobacco product use increased over time from 20% to 24%, a 17% increase. Current use of more than one tobacco product increased from 8.3% to 11.5% among all students, the latter representing 49% of current tobacco

users. The present data demonstrate that despite reductions in cigarette and hookah use, the dramatic increases in e-cigarette use have corresponded with greater youth exposure to tobacco products and more frequent poly-tobacco use. **Mark Myers PhD, Guadalupe Bacio PhD**

13. Individual Level Moderators of The Relation Between Heavy Episodic Drinking and Sexual Violence. Sexual violence is a major problem on college campuses and alcohol use is implicated in a large percentage of sexual assaults. Despite numerous calls for additional research investigating individual difference variables that may moderate alcohol effects on sexual violence, there is very little research on this topic. Utilizing a longitudinal data set from a large collegiate population, we addressed this gap in the literature. Among men ($n = 901$) assessed in the first and second year of college, we examined sociosexuality, descriptive norms, perceived risk, and alcohol outcome expectancies related to sexual violence as potential moderators of effects of heavy episodic drinking (HED) on sexual violence from freshman to sophomore year. With respect to interactions, men who engaged in more HED and who also perceived greater peer engagement in sexual violence showed increases in sexual violence relative to heavy drinkers who perceived less peer engagement, $b=.36$, $SE=.21$, $p=.09$. When all predictors were included simultaneously without the interaction terms, greater HED ($p=.01$), sociosexuality ($p=.03$), and alcohol expectancies ($p=.02$), were significant predictors of change in sexual violence over time. The findings may inform prevention/intervention efforts by identifying both global risk factors and those that enhance alcohol effects on sexual violence in college. **Walter Venerable, William Corbin PhD, Kim Fromme PhD**

14. Reward Deprivation, Depression, and Increasing Levels of Drug Use Among Young Adults. Reward deprivation has been implicated in substance use; however, the literature is inconsistent within young adults, especially in the context of depression. The indirect effect of depression between reward deprivation and substance use was investigated. Participants were 363 heavy drinking college students in a brief intervention trial. Analyses were conducted with pre-intervention baseline data. Measures included the Reward Probability Index, levels of depression, typical weekly drinks, and past month illicit drug use. Five drug use groups ranging from no drug use to heavy drug use were compared. On average, participants were 18.8 years-old ($SD = 1.07$), 60% women, and 78% White. Participants reported 16.49 ($SD = 11.88$) drinks per week, 5.83 ($SD = 8.70$) marijuana use days. Three mediation models estimated the indirect effect of depression on the relations between drug use severity and dimensions of reward probability while controlling for gender and alcohol consumption. The results indicated a significant effect of greater drug use severity, with an indirect effect of depression, on the total score of reward probability ($B = -3.18$), environmental suppressors ($B = -1.77$), and reward probability subscales ($B = -1.42$). Increasing levels of drug use indirectly influenced engagement in reward and enjoyment of available rewards through depression. **Lidia Meshesha MS, Matthew Martens PhD, James Murphy PhD**

15. Alcohol Reward Value and Future Orientation Are Associated With Use of Protective Behavioral Strategies In College Drinkers. Behavioral economic measures of alcohol reward value and future orientation have received support as

predictors of alcohol consumption, alcohol related problems, and response to intervention. However, no research has examined these measures as predictors of the use of protective behavioral strategies to limit drinking and/or avoid drinking related consequences. The current paper exams the association between measures of reward value (proportionate substance-related activity participation and enjoyment) and future orientation (consideration of future consequences), and use of protective behavioral strategies. Participants were 393 undergraduates (39.2% male, 85.2% Caucasian) who reported at least 2 recent binge drinking episodes. Alcohol reward value and future orientation were uniquely predictive of protective behavioral strategies after controlling for gender and level of alcohol consumption ($\Delta R^2 = .036, .023, p < .001, p < .01$ respectively) The current study provides support for the hypothesis that behavioral economic measures predict use of protective behavioral strategies among college drinkers. High levels of reinforcement from alcohol and low levels of future orientation may lead to a pattern of drinking that overrides protective regulatory behaviors and increases risk for deleterious outcomes. Alcohol interventions should attempt to increase future orientation and substance-free activities. **Andrew Voss BA, James Murphy PhD, Ashley Dennhardt PhD, Matthew Martens PhD**

16. The Impact of Reductions In Drinking and Related Problems On Life Satisfaction. Brief motivational interventions (BMIs) are associated with reductions in drinking and alcohol consequences in college students, but the impact of these reductions on general functioning indicators has not been examined. This study investigated the impact of changes in drinking and alcohol-related consequences on life satisfaction. Participants were 303 students who participated in a BMI. Participants reported a mean age of 18.77 ($SD = 1.06$), were 60.4% female, 85% White, and reported 6.23 ($SD = 4.06$) heavy drinking episodes (HDE) in the past month. A series of ANCOVAs controlling for intervention condition compared differences in life satisfaction 4 months post-intervention for participants who : a) reduced HDE and consequences, b) reduced only HDE, c) reduced only consequences, d) reduced neither HDE nor consequences. Results indicated that students who reduced HDEs and consequences or only consequences had higher current life satisfaction than those with no reductions or reduced HDEs only. Students reported that they believed they would be more satisfied with their future lives if they had reduced both drinking and consequences. These results suggest reducing alcohol consequences is most important for current life satisfaction in college students, but that students expect greater satisfaction in the future if they also reduce their drinking. **Ashley Dennhardt PhD, Lidia Meshesha MS, James Murphy PhD**

17. Campus Differences In Drinking As A Function of Importance of Religion and Drinking Norms. Religion has been consistently found as a protective factor for problematic drinking behaviors (Koenig, King, & Carson, 2012). However, the effectiveness of religion as a protective factor has never been explored by location. This study examined drinking behaviors of religious respondents at three different universities, a public northwestern university, a private western university, and a public southwestern university ($N=2106$). There are site differences between the schools with one school having lower drinking, higher importance of religion, and lower drinking norms. Zero-hurdle models indicated that site differences were diminished

among those who placed more importance on religion and augmented by those with higher perceived norms. A three-way interaction further indicated that differential influences of norms on drinking between one of the heavier drinking sites relative to the lower drinking site varied as a function of importance of religion. **Mary Tomkins MS, Clayton Neighbors PhD**

POSTER SESSION 2

Friday March 24th 6:00pm — 7:00pm

1. Impact of An Interdisciplinary Monitoring Team On Opiate Prescription In Primary Care. Prescription opioid abuse is a growing public health concern, with rapidly increasing hospitalization rates attributed to overdoses (Coben et al., 2010). The consequences are widespread among adolescent, college (McCabe, et al., 2005), veteran (Seal, et al., 2012), low-income (Spiller et al., 2009), and rural (Hall, et al., 2013) populations. The estimated annual cost of nonmedical use of prescription opioids is \$50 billion (Hansen, et al., 2010), driven by physicians pressured to over-prescribe these medications for pain management (Mendelson et al., 2008). Because eliminating access to these medications is neither feasible nor medically justifiable, monitoring programs are crucial to identify and address excessive prescription of opioids (McLellan and Turner, 2008). The current study assesses the impact of an interdisciplinary monitoring team in a primary care setting. In monthly meetings, the team identifies patients prescribed >120 mg./day of opioids for pain management and completes a standardized biopsychosocial review to coordinate a care plan between primary care physicians, pharmacists, and behavioral health providers. Preliminary analysis suggests that implementation of this program contributed to a 65% reduction in the number of patients prescribed >120 mg./day of opioids for pain management. Implications and suggestions for adoption of this program by other agencies are discussed. **Aaron Bergman MA MS, Josh Kaplan MS, Jennifer Hill PhD**

2. A Systematic Review of Stigma Interventions For Addiction Treatment Providers. Stigma is the experience of being held in contempt, shunned, or rendered socially invisible, and is highly associated with substance use disorders. Persisting at the self, social, and structural levels, stigma is a barrier to help-seeking among those with substance use disorders. Patients preoccupied with shame about their substance use may be less likely to seek treatment. Health care providers are prone to treat patients with SUDs with less compassion, and receive little education during medical training on how to screen or intervene for SUDs. We conducted a systematic review of interventions targeting reduction of provider stigma using PRISMA. A comprehensive search revealed five empirical studies that met inclusion criteria. Several qualitative and descriptive studies were also examined. Results identified that the use of client-centered language, motivational interviewing approaches, improved education and training that emphasizes contact-based interventions that elicit personal understanding of patients' experiences and strength, and institutional advocacy for provider support, are important components of reducing provider stigma in addiction treatment. Provider burnout, systemic obstacles, and cultural values are discussed as areas for future research. **Jennifer Bielenberg MS, Nancy Haug PhD, Anna Lembke MD**

3. Buffering The Associations Between Negative Mood and Subjective Alcohol Craving: A Brief Mindfulness Induction.

The present study examined state mindfulness (via a brief mindfulness induction) as a distinct factor that may buffer the association between negative mood states (i.e., sadness and anxiety), drinking to cope (DTC) motives, and subjective alcohol craving among college student drinkers. Participants were 207 undergraduate students from a large, southeastern university in the United States that consumed at least one drink per typical week in the previous month. The majority of participants identified as being either White, non-Hispanic (n = 81; 39.1%), or African-American (n = 86; 41.6%), were female (n = 170; 82.1%), and reported a mean age of 20.94 (SD = 5.48) years. Results indicated that collapsing across mood groups (i.e., sadness vs mood control) and across levels of both DTC-depression and DTC-anxiety motives, individuals in the mindfulness condition reported a significant change score (i.e., reduction) in subjective alcohol craving scores at post-mindfulness induction compared to individuals in the no-mindfulness condition. Albeit preliminary, the present study suggest that mindfulness based interventions may be effective for college student drinkers by decoupling the associations between negative mood states and subjective alcohol craving even among individuals with higher DTC motives. **Adrian Bravo PhD, Matthew Pearson PhD, James Henson PhD**

4. Suicidality In Individuals With Gambling Disorder.

Frequency of suicidal ideation is significantly elevated in individuals with gambling disorder (GD). Higher gambling severity, psychiatric comorbidity, and substance abuse are associated with both ideation and suicide attempts (SI/A). Financial stress has also been implicated as a significant risk factor. The aim of the present study was to examine factors related to SI/A among problem gamblers. Individuals with GD (N=143) were identified through use of a gambling helpline, as a part of a larger study exploring treatment initiation. Gamblers provided information related to gambling severity and legal, psychiatric, financial, and social consequences of gambling. Bivariate analyses revealed that amount of gambling wins and losses; a history of abuse; and financial, social, and psychiatric problems attributed to gambling were strongly associated with SI/A. Multivariate analyses revealed that the effect of financial stress on SI/A was mediated by interpersonal conflict in the form of neglect or abuse perpetration as well as spousal conflict. These results align with the limited literature base reporting high levels of suicidality among individuals who perpetrate violence. Based on these findings, treatments that include familial components may be of particular importance for GD individuals with high levels of SI. **Meagan Carr MS, Jennifer Ellis MS, David Ledgerwood PhD,**

5. Boredom and Its Relationship To Relapse In Substance Use Disorder Recovery.

Although it is often cited as a trigger for risk-taking behavior such as substance use, gambling, and substance addiction, boredom is overlooked as a vital treatment consideration in drug treatment programs. When treatment is conducted within a legitimate recovery program, a person is assessed using a set of common intake protocols that are designed to measure demographic data, personal and medical history, trauma history, preparedness for recovery, substance use history, acuteness of addiction, level of anxiety, depression, and general psychiatric condition. While these admissions procedures are comprehensive, assessing for boredom is not a regular part

of the intake protocol, which may lead to a failure to recognize and address the problem. This notion, along with the reviewed literature, highlight a chasm that needs to be bridged, and demonstrates the need for additional research on boredom's relationship to relapse. This quantitative study will be conducted this fall with adults, ages 18 and older, using four established measures to assess boredom propensity, and overall distress, as well as three formulas that were developed specifically for this study that will capture the data needed to accurately ascertain frequency and severity of relapse. Session will focus on key points in literature and research findings. **Natasha Smolkin MA**

6. Predictors of Medical and Psychiatric Conditions Among Cannabis and Opioid Users In NESARC.

Cannabis and opioid misuse is prevalent, and both are associated with negative outcomes. Commonalities exist between misuse of each substance, yet co-use may be more impactful. To address this uncertainty, we compared individual use of cannabis and opioids to co-use of both drugs with regard to psychiatric and medical variables using data from the National Epidemiologic Survey of Alcohol and Related Conditions (NESARC), waves 1 (W1) and 2 (W2) (n=34,653). We compared drug use groups regarding demographics, self-reported pain and pain-related medical conditions, psychiatric conditions, suicidality and impulsivity. Co-users self-reported more pain and some pain-related medical conditions though opioid-only users were more likely than co-users to report arthritis and high blood pressure. Co-users were more likely to report impulsivity and depression but co-users and opioid-only users did not differ on generalized anxiety. While co-users reported greater suicidality, differences between co-users and cannabis-only users on suicide attempts were particularly large. In summary, co-use was associated with greatest risk, but for some conditions, co-use did not confer greater risk than opioid-only use. Future research should address factors associated with shifts from individual to drug co-use to determine which users may be at particular risk of negative outcomes and identify intervention targets. **Tessa Frohe BA, Robert Leeman, Ph.D., Cheryl Beseler, Ph.D.**

7. Anxiety Sensitivity Components In Relation To Alcohol and Marijuana Use, Motives, and Problems.

Anxiety sensitivity (AS)—fear of anxiety-related experiences—has been implicated in motivation to use substances, though the components of AS (physical, cognitive, and social concerns) have not been studied much in relation to alcohol- and marijuana-related variables. In a cross-sectional design, we administered the Anxiety Sensitivity Index-3 and self-report measures of alcohol and marijuana use, motives, and problems to 364 treatment-seeking cigarette smokers with a history of alcohol and marijuana use. After statistically controlling for sex, race, age, educational attainment, hypertension status, and neuroticism, linear regression models indicated that AS cognitive and physical concerns were associated with greater alcohol and marijuana problems, respectively. AS social concerns were related to greater social and enhancement drinking motives, whereas AS cognitive concerns were most strongly associated with greater coping and conformity drinking motives. In regard to marijuana use motives, AS physical concerns were related to greater enhancement motives; AS cognitive concerns were associated with greater conformity motives; AS physical and social concerns were almost equally related to greater social motives; and physical and cognitive concerns displayed the strongest AS facet associations

with coping and expansion motives, respectively. The current profile of AS component relations shows both similarities and differences with prior substance-related studies. **Casey Guillot PhD, Heidemarie Blumenthal PhD, Michael Zvolensky PhD, Norman Schmidt PhD**

8. Relationship Between Perspective Taking and Drinking Behavior In Project Match. Family and spousal commitments, social connectedness, and a greater network of supportive others each predict better drinking outcomes among individuals with alcohol problems (Tucker, 1995; Havassy et al., 1991; Rosenberg, 1983). The association between social factors and drinking behavior may be a function of the ability to take the perspectives of other's mental/emotional states. Interestingly, drinking behavior has been found to be associated with lower perspective taking (PT)-related behaviors in a number of studies (Philippot et al., 1999; Trinidad, 2002; Uekermann & Daum, 2008; Maurage et al., 2009; 2011a; 2011b; Bosco et al., 2014). As such, it may be the case that PT may be associated with social support and drinking behavior among individuals with alcohol use disorder who are treatment seeking. The current project consisted of a secondary data analysis of Project MATCH (Matching Alcoholism Treatments to Client Heterogeneity; Project MATCH Research Group, 1997; N=1726) using structural equation modeling (SEM) to model PT and SS as latent factors predicting drinking behavior at baseline. It was hypothesized that PT would be negatively associated with drinking behavior, above and beyond the effects of social support. Results from the final model suggested adequate model fit ($\chi^2(134) = 578.671$, $p < 0.001$; CFI = 0.953; RMSEA = 0.044, 90% CI 0.040, 0.048) and significant relationships ($p < 0.05$) between PT and percent drinking days ($B = -2.487$) and total DrinC score ($B = -2.140$). Social support was also negatively associated with drinking behavior at baseline (all $p < 0.01$). The current study validated a model of perspective taking in a treatment-seeking sample of individuals with alcohol use disorder. Future work may consider perspective taking as a treatment-modifiable risk factor. **C Robinson, K Fokas, K Witkiewitz**

9. Predictors To Intranasal Naloxone Dispensing By New Mexico Community Pharmacists. Misuse and abuse of prescription opioids has reached epidemic proportions. Intranasal naloxone (INN) is an antidote to reverse symptoms of opioid overdose. While community pharmacists are uniquely positioned to provide access to INN to patients at-risk; many do not dispense INN. This presentation will summarize results of the 2016 POINt-Rx (Prevention of Opioid Overdose by New Mexico Pharmacists) survey of all licensed pharmacists in the state of NM to examine the barriers and facilitators to INN dispensing. Among 394 pharmacists who completed the survey, the majority expressed concerns about affordability of INN for patients (64.8%), inadequate reimbursement to pharmacies (54.6%), and inadequate privacy for counseling (51.1%). The majority also indicated the need for increased patient/family education (91.1%), greater awareness among the general public (81.4%), and additional training for pharmacists (61.1%). In multivariable logistic regression performed on the subset of community pharmacists ($n=182$), practice setting (chain grocery/'big box' store) and a greater number of concerns about INN were associated with decreased odds of dispensing INN (OR=0.86; 95% CI: 0.80; 0.92 and OR=0.38; 95% CI: 0.16; 0.92, respectively) after controlling for age, gender, number of years practicing as a pharmacist, type of preventive services offered by the pharmacy,

and rural/urban location. **Ludmila Bakhireva PhD MPH, Adriana Bautista, Amy Bachyrycz, Shikhar Shrestha, Sandra Cano, Theresa Cruz**

10. Medical Marijuana Legalization and Marijuana Use Among Youth In Oregon. Legalization of marijuana for medical and recreational use raises concerns about possible effects that resulting increases in availability may have on adolescents. We examined the associations between numbers of registered medical marijuana patients and licensed growers per 1,000 population and the prevalence of marijuana use among youth in 32 Oregon counties using data from 2006 to 2015. Data on registered medical marijuana patients and growers were obtained from the Oregon Medical Marijuana Program and data on youth marijuana use, perceived parent disapproval, and demographic characteristics were obtained from the Oregon Healthy Teens Survey. Multi-level analyses indicated that the prevalence of marijuana use among adolescents was significantly higher in counties with more marijuana patients and growers, controlling for youth demographic characteristics. Conversely, marijuana patient and grower rates were inversely associated with perceived parent disapproval of marijuana use, which attenuated their relations with youths' use. Changes in patient and grower rates across time were not associated with changes in the prevalence of marijuana use. Overall, these findings suggest that although greater numbers of registered marijuana patients and growers are associated with a higher prevalence of marijuana use among youths, these associations are likely attributable to broader norms favorable towards marijuana use. **Joel Grube PhD, Mallie Paschall PhD, & Anthony Biglan PhD**

11. The Complex Relationships Between Heroin Use, Mental, and Behavioral Health In The Criminal Justice System. Substance-related disorders have been found to affect more than two thirds of jail inmates, and to be the most prevalent behavioral health disorder in jails, regardless of sample demographics. A random sample of 200 rural county jail inmates completed the Comprehensive Addictions and Psychological Evaluation – Fifth Edition, which covers SUDs and MHDs compatible with the DSM-5. of the 200 participants, 33% met DSM-5 criteria for a severe heroin use disorder (HUD). of those, 62% also met criteria for a second severe SUD, with amphetamines being the most prevalent. This group was significantly more likely to report several clinical indicators of severe substance use, including a history of injection and recent drug use. They were also more likely to be booked into jail in the past year, experience a higher probability of being charged with a more serious offense, and more likely to be charged for property offenses compared to any other type of offense. This evidence can be used to guide a number of approaches to working with adults in the criminal justice system, including, but not limited to, identifying risks for continued heroin use, providing appropriate treatment options, and the development of specific programs for adults with severe HUDs. **Albert Kopak PhD, Alyssa Raggio BA**

12. Behavioral Economics of Blackout Drinking. Blackout drinking, or loss of memory of events while intoxicated, is a serious consequence of heavy drinking and independently predicts other alcohol-related problems. Behavioral economics, a perspective focused on reinforcement value of substances relative to environmental constraints, may be useful in understanding blackout drinking. This secondary analysis

examines the relation between blackout drinking, alcohol consumption, future orientation (Consideration of Future Consequences Scale), Reward availability (Reward Probability Index), and alcohol demand intensity (consumption at \$0, measured using the Alcohol Purchase Task) prospectively. Participants were 393 college students who reported past month binge drinking and were recruited as a part of a clinical trial for reducing drinking. Reward availability ($p=.02$) and intensity ($p=.02$) accounted for significant variance in blackout drinking at baseline, such that greater intensity and lower reward availability was associated with greater reported blackout drinking. Intensity ($p=.00$) and CFC ($p=.001$) predicted blackout drinking at 1 month; lower CFC predicted greater blackout drinking. Only CFC predicted blackout drinking prospectively at 6 months ($p=.00$). Prospective regression analyses controlled for baseline drinking. Our results demonstrate a modest prospective relation between blackout drinking and reward availability, alcohol demand, and future orientation, suggesting that behavioral economic indicators may be important in identifying particularly risky drinkers. **Samuel Acuff BS, Ashley Dennhardt PhD, James Murphy PhD,**

13. Intoxicated Alcohol Demand and Drinking and Driving.

Alcohol demand is a behavioral economic index of alcohol-related motivation, typically measured via alcohol purchase tasks (APTs). Individuals with high levels of alcohol demand have been found to be at increased risk for drinking and driving (DD; Teeters & Murphy, 2015). Recently developed single-item measures of alcohol demand have been found to be sensitive to the acute effects of alcohol (Amlung et al., 2015). This study tested the hypothesis that individual differences in the acute effects of alcohol on alcohol demand are associated with risk for DD. Participants ($n=53$, mean age=22.1, 60% male) completed an APT and reported on past-year DD. They then received a moderate dose of alcohol (target peak BAC=0.10g%). State demand was measured on both limbs of the blood alcohol curve (0.06g%, ascending and descending), and at peak BrAC (0.10g%). Negative binomial regression models indicated that on the descending limb, all single item indices (breakpoint, intensity, Omax) were predictive of DD, over and above equivalent trait indices. Omax was also associated with DD on the ascending limb and at peak intoxication. These results replicate prior findings on the association of alcohol demand and DD, and indicate that assessing alcohol demand while intoxicated can improve prediction of DD. **Kayleigh McCarty MA, Laura Hatz BS, Michael Amlung PhD, Kali Falnes BS, & Denis McCarthy, PhD**

14. Working Memory Capacity Moderates Perceived Risks of Driving After Drinking. In a series of previous studies, we have demonstrated that attitudes toward drinking and driving (DD), assessed while sober and intoxicated, are strongly predictive of DD behavior (e.g., Amlung et al., 2014; Morris et al., 2014). The present study tested working memory capacity (WMC) as a moderator of this association. Consistent with dual process models (Hoffman et al., 2008), we hypothesized that individuals high in WMC would act in accordance with their DD attitudes, as indicated by a stronger attitude-behavior association. Participants ($n = 106$) were assessed for WMC and frequency of past-year DD and were randomly assigned to either an alcoholic or placebo beverage condition. DD attitudes were assessed at multiple points following beverage consumption (mean BrAC = 0.077 - 0.093g%). Generalized linear models with a negative binomial

distribution, controlling for alcohol use and gender, tested the interaction of attitudes x WMC on DD frequency. Interactions were significant in the alcohol condition on the ascending limb and at peak intoxication. Probing these interactions supported our hypothesis—the association between perceived danger and DD frequency was stronger for those higher in WMC. Results are consistent with dual process theories, suggesting that WMC facilitates control of behavior by explicit cognitive processes.

Laura Hatz BS, Kalyeigh McCarty MA, Bruce Bartholow PhD, Denis McCarthy PhD.

15. Cannabis Use, Cannabis Coping Motives, and Emotion Regulation.

The literature on emotion regulation and cannabis use demonstrates that coping motives mediate the relationship between affect regulation-relevant constructs (e.g., craving, emotion regulation) and cannabis use problems (CUP; e.g., withdrawal, inability to complete responsibilities). In the current study, we examined a mediational model of emotion regulation difficulties (ERD)'s effect on cannabis use and CUP through coping motives for cannabis. Participants are 386 ($n = 195$ female) individuals who were cohabiting and in a relationship in which at least one partner used cannabis at least 3x/week. Consistent with hypotheses, coping motives mediate associations between ERD (Difficulties in Emotion Regulation Scale; Gratz & Roemer, 2004) and CUP for both the impaired control and problem use subscale of the Cannabis Use Problem Identification Test (Bashford, Flett, & Copeland, 2010). Findings demonstrate that individuals with ERD use cannabis to cope with negative emotions, which puts them at risk for future CUP. Yet it remains unclear whether specific emotion regulation strategies or difficulties with emotion regulation or both are key risk factors for CUP. This analysis will increase the specificity of this process by examining how subscales of the DERS may differentially predict future cannabis use problems. **Whitney Brown PhD, Maria Testa PhD, Samara Rice PhD**

16. Distress Tolerance Replication and Findings Among Urban Drug Users.

Distress tolerance (ability to persist through negative emotional states) increasingly receives attention as a trans-diagnostic construct. Previous work indicates that distress tolerance is related to multiple poor psychological outcomes. This study aimed to conduct a conceptual, multi-method replication of previous work by examining the relationship between distress tolerance and drug choice, psychopathology, treatment history, and criminal justice history in a sample of 253 United States urban drug users, followed longitudinally. We also examined if distress tolerance longitudinally predicts residential addictions treatment abscandance. A series of structural equation models tested the simultaneous associations between distress tolerance and cross-sectionally measured variables, essentially testing for the specificity of distress tolerance-psychopathology effect. Self-report but not behavioral measures were negatively associated with borderline and antisocial personality disorder traits, major depressive and anxiety disorder, current alcohol dependence and past outpatient treatment attempts. Multilevel Cox survival analysis indicated a distress tolerance by gender interaction, such that low distress tolerance predicted residential treatment abscodance among females but not males. This effect remained robust after controlling for all possible demographic, motivational, and psychopathology covariates. This study provides conceptual but not direct replication of previous findings and indicates that distress tolerance is a vulnerability

factor for psychopathology and treatment abscondance. **Kristina Volgenau BA, Marina Bornovalova PhD, Claire Gorey BA, & Troy Webber MA**

17. Does Self-Reported Or Behavioral Impulsivity Predict Subjective Response To Low Dose Alcohol? Alcohol use disorders (AUDs) are prevalent and economically burdensome. Impulsivity and subjective response to alcohol (SR) are independently associated with AUDs. While previous findings have been equivocal, Leeman and colleagues (2014) found that more impulsive social drinkers reported heightened stimulating and dampened sedating SR patterns. The present study aimed to extend this work using data from an alcohol challenge paradigm ($n=86$; 32.4% female; $M_{age}=31.03$, $SD=8.6$), which tested the efficacy of the NMDA antagonist memantine compared to placebo among non-treatment seeking heavy drinkers (Krishnan-Sarin et al., 2015). We focused on SR following low dose alcohol aimed to increase BALs to 0.03 g/gm. Response (Go No/Go Task) and choice (Experiential Discounting Task) impulsivity obtained prior to alcohol exposure did not predict alcohol-induced stimulation or sedation. Contrary to hypotheses, self-reported impulsivity (BIS-11) predicted greater sedation in models incorporating study condition, sex, and family history status. Post-hoc hypotheses posited that these results were an artifact of boredom. Accordingly, impulsivity became a non-significant predictor when a measure of pre-drinking boredom (i.e., POMS Fatigue Subscale) was included in the model. In summary, considering all covariates, neither cognitive task nor self-report measures of impulsivity related significantly to SR to low dose alcohol in this secondary analysis. **Benjamin Berey BA, Robert Leeman PhD, Brian Pittman MS, Nicholas Franco BA, Suchitra Krishnan-Sarin PhD**

POSTER SESSION 3

Saturday March 25th 8:00am – 9:00am

1. Impulsivity Facets and Marijuana Expectancies Related To Marijuana Use In High-Risk Young Adults and Their Siblings. This study tested for associations of marijuana use in a high-risk sample originally recruited on the basis of both substance use disorder and conduct disorder symptoms (i.e., probands), and their siblings. We hypothesized that facets of impulsivity (e.g., negative urgency, premeditation, perseverance, sensation seeking, and positive urgency) and marijuana outcome expectancies would correlate with marijuana use for both subsamples. Participants were 308 young adults (152 probands and 168 siblings; 46% female; $M_{age} = 23.7$ years) enrolled in a longitudinal study on antisocial drug dependence who completed the short version of the Impulsive Behavior Scale (UPPS-P), the Marijuana Expectancy Questionnaire (MEQ), and reported past-year frequency of marijuana use. Probands and siblings differed significantly on their frequency of use ($t(284) = 2.54$, $p = .01$), with probands reporting more frequent use than siblings. For the proband sample, UPPS-P negative urgency and expectancies for relaxation and tension reduction were significantly correlated with past-year use. For the sibling sample, sensation seeking, negative urgency, positive urgency, as well as tension reduction and cognitive and behavioral impairment expectancies significantly correlated with past-year use. **Inga Curry PhD & Tamara Wall PhD**

2. Social and Psychological Influences On Marijuana Use In College Students. A number of factors contribute to marijuana use and misuse in college students, including a range of social and psychological influences. We examined whether specific subscales (social facilitation, peer acceptance, emotional pain, sex seeking) of the Social Context of Cannabis Use Scale (Beck et al., 2009) predicted marijuana use frequency and problem use among 115 college students who reported at least monthly marijuana use over the last three months. Participants completed a range of measures and a urine screen. The first model examining marijuana use frequency was statistically significant ($p < .001$) and explained 50% (R^2) of the variance. Results indicated that social facilitation was significantly associated with days of marijuana use in the last month ($b = 0.722$, $p < 0.001$). Model 2 was also statistically significant ($p < .001$, $R^2 = .28$), with social facilitation ($b = 0.327$, $p < 0.001$) and emotional pain ($b = 0.317$, $p < 0.002$) associated with problem use as measured by the Rutgers Marijuana Problem Index (RMPI; White et al., 2005). Results are consistent with past literature that has shown that cannabis use disorder is associated with social facilitation and emotional problems. **Katherine Tepper BA, Maryia Schneider, Leah Wilson, Joanne Salazar, Arianna Weisen, Matthew Barnes, Michael Phillips, Kristina Phillips**

3. Why I Get High: A Daily Diary Examination of Marijuana Use Motives Among College Students. Motivational models of substance use propose that motives are the most proximal antecedent to substance use, and research demonstrates that motives for use are differentially related to substance-related outcomes. Buckner et al. (2015) found withdrawal and craving to be related to specific marijuana use motives, but did not examine motives as predictors of marijuana-related outcomes. The present daily diary study involved 59 current marijuana users recruited from one of three universities in the United States (VA, CO, NM). We used multi-level path analysis to examine both the within-subject and between-subject effects of marijuana use motives on four distinct marijuana-related outcomes (number of sessions, number of grams, subjective intoxication, and negative consequences). At the within-subject level, enhancement motives were robustly related to outcomes ($\beta = .15$, number of grams; $\beta = .23$, subjective intoxication; $\beta = .36$, negative consequences), and conformity motives predicted lower subjective intoxication ($\beta = -.33$). At the between-subject level, the analyses were underpowered, but found coping motives ($\beta = .86$) to be strongly predictive of increased negative consequences and conformity motives ($\beta = -.59$) being strongly predictive of decreased negative consequences. We discuss the clinical implications of motivational models of marijuana use. **Natalie Wendel, Peter Minge, Julianne Olguin, Jamie Parnes MS, Adrian Bravo PhD, Bradley Conner PhD, Matthew Pearson PhD**

4. In The Process of Drinking To Cope: An Examination of Specific Vs. Global Coping Motives Among College Students. The present study aimed to validate distinguishing between specific drinking to cope (DTC) motives (i.e., DTC-anxiety and DTC-depression) by testing whether these motives uniquely mediate the relationships between specific negative affect (both anxiety and depressive symptoms) and alcohol outcomes (i.e., consumption and problems) in independent models (i.e., only one DTC motive as a predictor) and a comprehensive model (both DTC motives as predictors). Further, we compared these models

to a single model examining a total score of DTC motives (latent factor). Across two independent samples of college student drinkers (Sample 1, $n=381$; Sample 2, $n=563$) we found that each specific DTC motive significantly mediated the relationships between both anxiety and depressive symptoms on alcohol outcomes (only DTC-depression was a significant mediator in the combined model). However, a total score of DTC motives explained more variance between negative affect and alcohol outcomes. Taken together, we found strong enough overlap (based on correlations and our models) between specific DTC motives to warrant combining them into a single index (i.e., total score). Further empirical work using ecological momentary assessment is needed to better determine the degree to which DTC motives should be examined more generally or specific to distinct affective states. Julianne Olguin, Adrian Bravo PhD, Matthew Pearson PhD

5. Trajectories of Positive Alcohol Expectancies and Drinking: An Examination of Young Adults In The US and Sweden. The current study adds to the extant literature by examining the growth trajectories of positive alcohol expectancies and drinking behavior among United States (US) and Swedish participants during a critical period where significant change in these outcomes may be expected to occur. A total of 870 (US, $N = 362$; Sweden, $N = 508$) high school seniors completed baseline, 6-month, and 12-month assessments of alcohol expectancies and drinking (i.e., drinks per week). Changes in positive alcohol expectancies and drinking behavior were examined using latent growth modeling. In both samples, higher baseline levels of positive alcohol expectancies were associated with a higher number of drinks consumed per week at baseline. In the US sample, lower baseline levels of positive alcohol expectancies were associated with a greater increase in positive alcohol expectancies at 12-month follow-up, and lower baseline levels of drinks per week were associated with a greater increase in drinks consumed per week at 12-month follow-up. In the Swedish sample, an increase in positive alcohol expectancies over time was associated with an increase in drinks consumed per week over the same period of time. Additional research is needed to examine when and for whom expectancy-based alcohol interventions are most efficacious. Kevin Montes PhD, Katie Witkiewitz PhD

6. Marijuana Purchase Task: Using Qualitative Methods To Inform Measure Development. Marijuana demand (relative value) has been measured by examining performance on hypothetical marijuana purchase tasks (MPTs). However, design and analytic concerns exist with components of current MPTs. The aim of this study was to improve a behavioral economic MPT measure using qualitative methods. Focus groups were conducted with frequent recreational marijuana users (total $n = 31$; n per group: 5-7; mean (SD) age = 26 (7); 28% female). Participants reported purchasing marijuana at least twice in the past 6 months. Focus groups were recorded, lasted approximately 60 minutes, and followed a semi-structured agenda. An executive summary of each group was made and key MPT themes were summarized. Double coding of group transcripts and Applied Thematic Analysis is underway. Analyses highlighted four critical areas for MPT improvement: unit of purchase, marijuana quality, time duration specified for use episode, and price. Participants suggested replacing the current unit of purchase (i.e., hits) with grams, tailoring marijuana quality to the individual,

clarifying intended episode length, and adjusting price points to correspond with grams. Qualitative methodology was used to effectively modify the MPT. Changes to the MPT are expected to improve participant comprehension, reflect real-world marijuana purchase and use, and facilitate data collection and analysis.

Elizabeth Aston PhD, Jane Metrik PhD, Rochelle Rosen PhD, Miriam Midoun MSc, Robert Swift MD PhD, James MacKillop PhD

7. Perceptions and Overestimations of Descriptive and Injunctive Norms Differ By Drinking Location. Beliefs about how common (descriptive norms, DN) and acceptable (injunctive norms, IN) certain drinking behaviors are among peers strongly predict drinking behavior among college students. We sought to extend research showing that DN for alcohol use differs by location, by examining both DN and IN for both alcohol use and consequences in different drinking locations. College students ($N=108$) completed an online survey about personal behavior, DN and IN across several locations (home, bar, party, sporting event). Significant differences across drinking locations were found among both DN and IN for both alcohol use and consequences ($ps<.01$). Further, participants consistently perceived that others drink more and experience more consequences in each location than they do themselves. However, how much they overestimated DN (i.e., differences between personal and perceived drinking behaviors) significantly differed by location for both number of drinks ($F(4,452)=23.48$, $p<.01$) and consequences ($F(4,388)=14.49$, $p<.01$). Planned post-hoc comparisons revealed, for example, that students had greater overestimations of drinking (but not consequences) among peers at parties than at home ($ps<.01$). The differences found in normative perceptions across contexts suggest that alcohol intervention efforts may benefit from discussion of students' preferred drinking locations, and from providing normative feedback specific to those locations. Holly Boyle MA, Jennifer Merrill PhD

8. Treating Athletes With Substance Use Disorders: A Model For Assessment & Treatment. The CeDAR Ascent Program provides patients with a whole person assessment that serves as the foundation for the development of a treatment program to meet the unique and comprehensive needs of athletes. We will introduce a model of multidimensional assessment, and suggest ways to complete these assessments with varying levels of support. Athletes are assessed using cognitive measures, neurocognitive screeners, personality assessments, attentional measures, structured interviews, trauma assessments, addiction inventories, and physiological measures/labs. Testing results are presented to the athlete through the lens of the Biopsychosocial Model (Engel, 1977; Rojas, 2012). Assessment results are then used to inform specific treatment goals in each of the six ASAM dimensions (ASAM, 2013). Examples of assessment results will be discussed, focusing on trends observed in personality and cognitive measures seen frequently with athletes that presented with a substance use disorder. Specific treatment goals linked to assessment results will be presented. We will also discuss an ideal continuum of care including a step down model from medically managed intensive inpatient (4) to early interventions (0.5). This will be a helpful topic to inform drug policy and services at the organizational level. Harlan Austin PhD, LaTisha Bader PhD

9. The Yale Food Addiction Scale and Eating Behavior In Adolescents. The Yale Food Addiction Scale (YFAS)

operationalizes addictive-like eating. Preliminary findings suggest that highly processed foods, with added fats and/or refined carbohydrates, are self-reported as most associated with YFAS food addiction symptoms. However, it is unknown how the YFAS relates to eating behavior, especially in adolescents. 141 adolescents (aged 13-16 years) completed the YFAS and had the opportunity to consume an unlimited amount of highly processed foods (e.g., cheeseburger, milkshake) and less processed foods (e.g., salad, fruit smoothie). Linear regression assessed associations between YFAS food addiction symptoms, consumption of highly processed and less processed foods, and total calories. YFAS food addiction symptoms were associated with more calories consumed from highly processed foods ($\beta=.202$, $p=.025$, adj. $R^2=.033$) and total ($\beta=.179$, $p=.047$, adj. $R^2=.024$) calories consumed but not calories consumed from less processed foods ($\beta=-.079$, $p=.38$, adj. $R^2=-.002$). This study observed that adolescents with elevated YFAS food addiction symptoms consumed more calories, particularly from highly processed foods, providing insight into addictive-like eating behavior. This supports that highly processed foods are implicated in food addiction, though future research should focus on identifying which food characteristics may have an addictive potential like drugs of abuse. **Michelle Joyner MS, Erica Schulte MS, Ashley Gearhardt PhD**

10. The Assessment of Addictive-Like Eating In Adolescents.

Evidence is growing that an addictive-process may contribute to overeating in humans. The Yale Food Addiction Scale 2.0 (YFAS 2.0) applies the diagnostic criteria for substance use disorders based on the Diagnostic and Statistical Manual for Mental Disorders Fifth Edition (DSM 5) to the consumption of highly processed foods. The YFAS is the only validated measure designed to assess addictive-like eating and is associated with psychological, behavioral, and biological factors implicated in addiction. While, the majority of this research has been conducted in adults, children and adolescents are more vulnerable to the effects of addictive substances. Therefore, if processed foods have an addictive potential, children may be more susceptible to these effects than adults. In the proposed poster, we will present on the development of the YFAS 2.0 for children (YFAS-C 2.0), which is designed to assess addictive-like eating in children and teenagers. In a sample of 140 adolescents between the ages of 13-16, we find that the YFAS-C 2.0 is internally consistent. Further, the YFAS-C 2.0 appears to have convergent, discriminant, and incremental validity. Thus, the YFAS-C 2.0 appears to be a sound measure to further investigate the potential role of an addictive process in adolescents. **Emma Schiestl, Ashley Gearhardt PhD**

11. Viability of The WHOQOL-BREF To Assess Changes In Quality of Life After Alcohol Dependence Treatment. Alcohol use disorder (AUD) treatment efficacy has been defined by increases in abstinence or decreases in drinking (Falk et al., 2010). However, many researchers have called for defining treatment efficacy via improvements in quality of life (e.g., Donovan et al., 2012; Tiffany, Friedman, Greenfield, Hasin, & Jackson, 2012). One barrier to evaluation of changes in quality of life is the dearth of information regarding which measure may be viable for use in samples of individuals with AUD. The present study describes psychometric properties of and prospective changes in the World Health Organization Quality of Life measure (WHOQOL-BREF; WHOQOL-Group, 1998) in

a sample of individuals with AUD from the COMBINE Study (COMBINE Study Group, 2003). Supported construct validity (via confirmatory factor analyses), measurement invariance across time, excellent internal consistency reliability ($\alpha>.9$), and medium effect sizes across time indicate the WHOQOL-BREF is a viable assessment tool for measuring changes in quality of life (e.g., pre- and post-treatment). Based on these findings, future researchers should use the WHOQOL-BREF to define treatment success via improvements in quality of life. Such an addition would allow researchers to move towards more clinically complex and meaningful outcome definitions in AUD treatment research (Kaskutas et al., 2014). **Megan Kirouac MS, Elizabeth Stein MS, Matthew Pearson PhD, Katie Witkiewitz PhD**

12. Factor Structure of The Five Facet Mindfulness Questionnaire In A Treatment-Seeking, Alcohol-Dependent Sample.

Mindfulness-based interventions have been shown to reduce alcohol craving, consumption, and negative consequences, but mindfulness measures often lack measurement invariance. The 39-item Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006) is comprised of five scales: Observing, Describing, Acting with Awareness, Non-judging, and Non-reacting. The current study assessed the factor structure of the FFMQ in a treatment-seeking, alcohol-dependent sample ($N=109$, 42% female). Given that there were too few participants to conduct an item-level confirmatory factor analysis, an Exploratory Factor Analysis (EFA) was conducted. An EFA using maximum likelihood extraction and promax rotation revealed: eight factors with eigenvalues over 1, both positive and negative loadings for the Describing scale, and three of the Observing items did not load on any factor. Findings suggest that simply summing the items comprising these scales may not be appropriate, or that perhaps a total score should be used. Although clinical outcome studies rarely achieve the large numbers of participants (e.g., 300) required to reliably test whether the psychometric properties of assessment instruments generalize to the target sample, study results imply that a consideration of factor structure is important before summing items into predetermined scales. **Samara Rice PhD, Gerard Connors PhD, Kimberly Walitzer PhD, Nancy Smyth, J. Reschke**

13. Development and Validation of An Adolescent E-Cigarette Attitude Scale.

The prevalence of adolescent e-cigarette use has increased significantly since 2011, and e-cigarette use at baseline is associated with an increased likelihood of follow-up combustible cigarette use. Nonetheless, little work has looked at adolescent attitudes toward e-cigarettes. The aims of this work were to develop and validate a measure of adolescent attitudes towards e-cigarettes. Adolescents ($n=659$) attending Central Texas high schools were surveyed with 87 items on attitudes towards e-cigarettes, e-cigarette use and future intentions to use. Sixty items assessing e-cigarette attitudes were entered into an exploratory factor analysis, using maximum likelihood methods and oblimin rotation, with factors retained using a scree plot. Six factors emerged: disapproval of other's use, cost of use, pressure to use, disapproval of use from others, harm and appeal. Current users had the highest total scale score, followed by past then never users; all differences were significant. Both disapproval subscales displayed a similar significant pattern. Both the total score and the six subscales differed significantly by future use intention. The scale and subscales differentiated adolescents by e-cigarette use status, providing preliminary evidence of validity.

Future work should examine the scale's utility in predicting e-cigarette initiation and cessation. **Ty Schepis PhD & Joseph McKenna PhD**

14. Test of Reactivity To Ecological Momentary Assessment In E-Cigarette Initiation In Daily Smokers. To test if daily smokers participating in ecological momentary assessment (EMA) report different e-cigarette use initiation outcomes than those not participating in EMA. Prospective, randomized controlled trial (RCT) in Massachusetts, USA with 59 adult daily smokers initiating e-cigarette use. Participants received an e-cigarette starter kit and were randomized to use a handheld digital device to complete EMA reports vs. not and completed biochemical assessment and surveys at baseline, e-cigarette initiation, and 1-week, 1-month, and 3-month follow-up. Participants in the EMA condition needed to pass a 1-week EMA screen test, and then completed three 1-week periods of EMA. Participants completed daily morning and evening reports, audibly prompted mini-surveys, and smoking and vaping reports. 17% of participants failed the EMA screen test. The remaining participants showed excellent compliance with the EMA protocol (e.g., 86% response rate to audibly prompted mini-surveys). No group differences were found on number of cigarettes smoked per day, exposure to smoke (CO), exposure to nicotine (salivary cotinine), motivation to quit smoking, or e-cigarette use (i.e., number of bouts per day, puffs per bout) at any timepoint. Concerns about reactivity should not preclude the use of EMA to study e-cigarette use initiation among daily smokers. **Melissa Schick BS, David Eddie PhD, Susanne Hoepfner PhD MS, Lourah Kelly MA, John Kelly PhD, Bettina Hoepfner PhD MS**

15. Person-Centered Analyses On Comorbid Trajectories of Adolescents' Tobacco, Alcohol, and Cannabis Use. Despite the prominence of comorbidity among substances and rapid changes during adolescence, little research has simultaneously considered both comorbidity and developmental trajectories. This study investigates distinct trajectories of adolescents' tobacco, alcohol, and cannabis use via person-centered analyses and psychosocial mechanisms predicting developmental heterogeneity of substance use patterns. A longitudinal survey of high school students (N=1,629) who reported any use of tobacco, alcohol, or cannabis products across four timepoints from the 9th grade (baseline) to 10th grade (18-month follow-ups) completed self-report measures assessing substance use frequencies and psychosocial characteristics including family substance use history, anhedonia, and depression. Using growth mixture modeling, the number of trajectory groups were determined, and multinomial logistic regressions were conducted. There were three trajectory groups including escalating cannabis users (12.9%), escalating tobacco/high alcohol users (7.7%), and experimenters reporting low substance use levels (reference: 79.4%). Family substance use history directly influenced membership in the escalating cannabis use group and indirectly through anhedonia. Also, depression mediated associations between family substance use history and membership in escalating tobacco/high alcohol users. Identifying heterogeneity of adolescents' substance use trajectories and specificity in psychosocial mechanisms suggests the need for targeted interventions based on multidimensional characterizations of adolescents' substance use. **Junhan Cho PhD, Raina Pang PhD, Adam Leventhal PhD, Matthew Stone BA**

16. Structural Equation Model: Community Connection, AUDIT, and SES In A Sample of Non-Hispanic White and Native American College Students. Lack of social support and socioeconomic status (SES) and have been linked with alcohol use problems. Structural equation modeling (SEM) was used to investigate the relationship between a latent construct "community connection" (CC) and scores on the Alcohol Use Disorders Identification Test (AUDIT) in a sample of college students (N=255; 40% Native American). The hypothesized latent factor CC was analyzed via confirmatory factor analysis (CFA), from five indicators. The measurement model resulted in adequate fit to the data. The χ^2 test was non-significant (χ^2 (5) = 10.691, p = 0.058) and CFI = 0.983, however, RMSEA = 0.067; 90% CI = 0.00, 0.123, suggesting reasonable error. A structural model was assessed to investigate the interrelations between the latent factor CC and AUDIT scores with SES. The SEM analysis of the model resulted in good fit to the data. The χ^2 test was non-significant (χ^2 (13) = 17.823, p = 0.1643) and CFI = 0.986 and RMSEA = 0.038; 90% CI = 0.000, 0.078. Structural model estimate of CC and AUDIT resulted in a significant negative association ($B(SE)=-3.211(0.787)$; $p < .001$; $\beta=-0.288$; $R^2=0.082$). These findings suggest community connection may be of interest in the research treatment and prevention of alcohol use disorders. **Violette Cloud BA, Kamilla Venner PhD**

17. A Mediation Analysis of Brief Interventions For Smokers Who Are Not Ready To Quit. Our recent randomized controlled trial (RCT) (N=560) failed to replicate our initial RCT's findings that brief motivational and reduction interventions increased quit attempts (QA) and point-prevalence abstinence (PPA) in smokers not ready to quit. The present study tests why our interventions were ineffective. A secondary analysis of a 3-arm RCT tested a) whether telephone-based motivational or reduction interventions changed the following hypothesized mediators (HMs) more than usual care: cigarettes per day (CPD), dependence, pros of smoking, cons of smoking, self-efficacy, or intention to quit; b) whether changes in these HMs predicted QAs and PPA at a 6-month follow-up, and c) whether the interventions affected QAs and PPA via the HMs. In comparison to usual care, the motivational intervention did not significantly influence the HMs. The reduction intervention resulted in a small but significantly greater decrease in CPD and pros of smoking and increase in self-efficacy and intention to quit than usual care, and change in these HMs were associated with increased QAs. The reduction intervention's influence on QAs was mediated by decreases in CPD and increases in self-efficacy and intention to quit. Findings regarding PPA were similar. Failure to replicate may be because, compared to usual care, a) the motivational intervention had no effect on the HMs, and b) the reduction intervention had a statistically significant but clinically insignificant effect on the HMs. **Elias Klemperer BA, John Hughes MD**

18. To What Extent Do Social Networks Impact Problem Marijuana Use? A Social Network Analysis. This study sought to examine the structural characteristics of social networks on problem marijuana use among college marijuana users. Participants included 70 college students who reported using marijuana at least once in the past year. Participants completed measures of marijuana use and marijuana-related problems, as well as reported on the past-year marijuana use of 25 individuals (alters) in their social networks. Additionally, participants reported

whether each alter was close to other alters in their respective networks (ties). Marijuana network exposure was measured as the proportion of alters who used marijuana at least once a month. Structural characteristics were assessed by examining the extent to which ties existed between alters (density). Results indicated that students who used marijuana in the past six months had networks that were denser with marijuana users than students who did not use marijuana. Additionally, greater marijuana network exposure was uniquely associated with problem marijuana use. Two-way interactions indicated that marijuana network exposure was associated more strongly with problems for those who had denser networks. These findings suggest that it isn't merely the association between the individual and their associates that impact problem behaviors, but the connection within networks that may also impact problem behaviors. **Dipali Venkataraman Rinker PhD, Heather Krieger MA, Clayton Neighbors PhD**

POSTER SESSION 4

Saturday March 25th 11:45am – 12:30pm

1. Menstrual Phase and Smoking Deprivation On Smoking-Related Outcomes. Studies utilizing “follicular” (i.e., menstrual onset to ovulation) and “luteal” (i.e., ovulation to next menstrual onset) phases have produced mixed findings regarding the influence of menstrual cycle phases on smoking behaviors and cessation. However, distinct estrogen profiles, which could impact smoking related outcomes, characterize early follicular (EF; low estrogen) and late follicular (LF; high estrogen) sub-phases. Non-treatment-seeking female daily smokers were assessed at three menstrual cycle phases marked by distinct hormonal profiles (EF, LF, midluteal [ML]) and were randomized to complete each session, following either overnight tobacco deprivation (n=13) or smoking ad libitum (n=14). During each experimental session, participants completed self-report measures of nicotine craving and smoking urge and completed a smoking task where they could either smoke or earn money. Regardless of phase, non-deprived compared to deprived participants reported lower craving and smoking urge ($F_s=8.33-8.56$, $p < .01$) and waited longer to smoke ($F=11.27$, $p < .01$). There was a significant phase effect on number of cigarettes smoked ($F=4.42$, $p < .05$). Pairwise comparisons showed participants smoked significantly fewer cigarettes during the EF than during the LF phase ($p < .05$). These findings suggest variation in ovarian hormone levels during the follicular phase of the menstrual cycle may differentially impact smoking behavior. **Jinha Chung, Raina Pang PhD, Gurmehr Brar, Matthew Kirkpatrick PhD, Adam Leventhal PhD**

2. Transdermal Nicotine Patch and Ovarian Hormone Effects On Smoking Related Outcomes After Overnight Abstinence. Estrogen and progesterone may interact with transdermal nicotine patch (TNP) to impact smoking urges and behaviors. Female smokers completed three sessions during hormonally distinct menstrual cycle phases. Following overnight abstinence, participants received a placebo patch (n=43) or 21 mg. TNP (n=39) and completed measures of withdrawal, smoking urges, and negative affect (NA) at repeated intervals followed by a smoking task. Participants receiving TNP compared to placebo showed greater reductions in withdrawal and smoking urges over time (patch \times time: estimates=-.03 to -.08, $ps < .04$), waited

longer to smoke (patch: estimate=14.43, $p=.001$) and smoked fewer cigarettes (patch: estimate=-0.44, $p=.03$). TNP amplified the effects of high versus low progesterone on decreasing NA (patch \times progesterone: estimate=-0.70, $p=.045$) and smoking urges across time (patch \times progesterone \times time: estimate=-1.38, $p < .001$). With TNP, higher than average estrogen showed greater decreases in NA (patch \times estrogen: estimate=-.08, $p=.01$) and a trend for smoking fewer cigarettes (patch \times estrogen: estimate=-.20, $p=.06$). However with placebo, higher than average estrogen showed smaller decreases in NA and smoking more cigarettes. These results suggest that the hormonal effects on mood and smoking related outcomes may vary depending on the use of TNP. **Raina Pang PhD, Madalyn Liataud BA, Matthew Kirkpatrick PhD, Jimi Huh PhD, John Monterosso PhD, Adam Leventhal PhD**

3. Breaking Up Is Easy To Do: Social Relationship Stability Among Substance Users. Recent evidence shows social connections can both harm and help maintain sobriety, and that these social connections undergo changes in number and quality over time. We investigate time to termination of relationships with important persons (IPs), specifically how and when they occur, and how they occur differently within relationship type (e.g., family and friend relationships). We utilized Cox proportional hazards models with both static (e.g., minority status, age, marriage status) and time-varying predictors (e.g., contact, substance use, HIV status). Results show that for family relationships, higher levels of substance use over time predict breakup ($p = .034$); however, participants also tend to break up relationships that actively promote substance use ($p < .0001$). For friend relationships, higher levels of substance use over time also predict breakup ($p = .009$), but IP reactions to participant drug use are not a significant predictor. We conclude that different predictors affect family vs. friend relationships, such that a clinical focus on the opinions/reactions of friends may not hold as strong of an impact as engaging family members in the change process. In future analyses, we will determine which specific relationship changes most strongly relate to outcome. **Tim Janssen PhD, Robert Stout PhD, Jordan Braciszewski PhD, & Adam Vose-O'Neal**

4. Using Text Messages To Deliver Accurate Descriptive and Injunctive Drinking Norms: A Pilot Study. Many efficacious interventions designed to reduce college student drinking aim to reduce exaggerated norms in order to lower alcohol consumption. The present study tests feasibility, acceptability, and efficacy of using text messages to promote pro-moderation descriptive and injunctive norms. Following a baseline survey, participants (n=68 heavy drinking college students) were randomly assigned to receive 28 daily messages with either accurate norms information (experimental group, n=34) or fun facts (control group, n=34). Participants rated each message on 5-point scale of interest, and at the end of the 28 days completed a follow-up assessment of normative perceptions and drinking behavior. The study protocol was feasible: targeted enrollment was met, 64% of eligible students completed the consent form and 93% agreed to participate. All messages were delivered and 98% were rated. Regarding acceptability, the mean interest rating across experimental group text message was 2.84 ($SD=1.30$), and no participants withdrew from the study. While group differences were not observed at follow-up, participants in the experimental group showed significant reductions between baseline and

follow-up on peak drinks, intentions to get drunk, negative consequences, and a measure of injunctive norms ($ps < .01$). Results lay the groundwork for development of a novel text-based prevention strategy for college settings. **Jennifer Merrill PhD, Holly Boyle MA, Cassandra Suttan-Coats, Kate Carey PhD**

5. Dynamic Daily Associations Between Sleep and Alcohol Use In Adults With Chronic Pain. Individuals with chronic pain are at risk for sleep disruption and heavy alcohol use; yet the daily associations between these behaviors are not well-characterized within this population. This study examined the daily associations between sleep and alcohol use among 73 adults (93% women) reporting symptoms of insomnia and chronic pain and alcohol use at least once during the course of the study. They completed daily diaries assessing sleep and alcohol use for 14 days. Reciprocal effects of sleep and alcohol use were assessed using multilevel modeling. Alcohol use was associated with decreased sleep onset latency the same night but increased sleep onset latency two nights later. Specifically, for every alcoholic drink consumed, time to sleep onset decreased by 4.9 minutes in the same night, but increased by 4.3 minutes two nights later. Alcohol use was not significantly associated with subsequent wake after sleep onset or total sleep time, and sleep parameters were not significantly associated with subsequent alcohol use. Findings suggest that one drink will have minimal impact on sleep, but heavier drinking (4-5 drinks) may have clinically significant impact (16-25-minute increase in sleep onset latency). Future studies may assess alcohol use as a point of intervention within this population. **Mary Beth Miller PhD, Wai Sze Chan PhD, Jeff Boissoneault PhD, Michael Robinson PhD, Roland Staud MD, Richard Berry MD, Christina McCrae PhD**

6. Assessing The Heart of Psychotherapy: Clinician Interpersonal Skills and Heart Rate Variability. Emotions and motivational behaviors are functionally regulated by an autonomic network interconnecting visceral and central nervous system dynamics. Heart rate variability (HRV) measures have the potential to index this system, in which inflexibility is often correlated with poor emotion regulation. Within substance abuse samples, poor emotion regulation is related to higher risk not only for sustained use, but also for relapse. This is relevant for psychotherapy, as engaging a client in a manner that elicits or fails to ameliorate aversive emotional states reduces the likelihood of behavior change. Effective psychotherapy depends in large part on clinician interpersonal skills, which are potential modulators of this emotional regulatory system. Within motivational interviewing (MI), clinician relational factors such as empathy are emphasized and assessed. We hypothesized that higher clinician relational skills during an MI session would be related to higher client HRV in that session. We obtained HRV data for 10 participants, collected during their MI sessions. Sessions were coded using the Motivational Interviewing Skills Code. HRV indices (SDNN, pNN50, rMSSD, IRRR, MADRR, and TINN) were significantly correlated with a computed measure of clinician empathy ($d = 1.3$). Clinician MI skill may influence client HRV, supporting client HRV as a potential index of clinician skill. **Brigitte Stevens BS, Jon Houck PhD, & Nikki Rowell MS**

7. Emergence of Therapeutic Factors In A Support Group For Parents and Family Members of Addicted Loved Ones. To address the opioid crisis in the United States, most efforts have been directed towards offering prevention services and

support to individuals suffering from opioid use disorder, while little is known about resources designed to help families of addicted individuals. Using qualitative methods, this study systematically examines potential benefits of participation in Learn to Cope (LTC), a growing support organization for families of addicted loved ones. Participants ($N = 509$) listed up to five qualitative responses detailing what they found most and least helpful about LTC. 481 participants (94.5%) reported at least one helpful aspect, generating 1770 unique responses. Responses were analyzed using grounded theory approach and ultimately coded in accordance with Yalom's therapeutic factors (TFs). Participants attributed the greatest therapeutic value of meetings to Yalom's categories of Imparting Information (41%), Cohesion (22%), Universality (19%), and Instillation of Hope (7%). Findings suggest the presence of TFs in a support group for families of addicted loved ones, with members placing particular value on the availability of information pertaining to their loved ones' condition. This may indicate a therapeutic idiosyncrasy unique to LTC, reflected in the organization's emphasis on formal psychoeducation by invited professionals, exchange of advice between members, and Narcan availability and training. **Nilofar Fallah-Sohy BS, John Kelly PhD, Julie Cristello BA, Brandon Bergman PhD**

8. Characterizing and Examining The Benefits of Recovery Community Center Membership. Over the past decade, the United States has seen rapid growth in a third tier of recovery supports, including Recovery Community Centers (RCCs). RCCs are peer-operated centers serving as a locatable source of recovery capital at the community level, supporting sustained recovery management by building personal, social, and environmental resources. This ongoing research aims to conduct the first systematic evaluation of RCCs to assess their clinical and public health utility; here, we characterize individuals using RCCs, their involvement, experiences, and benefits of participation towards recovery-related outcomes. Participants ($N = 306$) from 32 RCCs in New England and New York state completed an online cross-sectional survey measuring demographics, recovery status, center usage and engagement, quality of life, recovery capital, and psychological distress. RCC members ($Mage = 41.2$, range: 18-75) are primarily White (76%), non-Hispanic (89%), and in recovery (96%) from opioids (32.5%) or alcohol (28.1%). Time attending the center is significantly associated with greater quality of life and recovery capital, and lower psychological distress. Center volunteers report significantly greater recovery capital, ratings of the centers' helpfulness to their recovery and improved well-being and quality of life. Findings suggest that RCCs serve as a promising third-tier component to recovery-oriented systems of care. **Nilofar Fallah-Sohy BS, Alexandra Abry BA, John Kelly PhD**

9. What Types of Discrimination Do People Experience Who Are In Recovery From An Alcohol Or Other Drug Problem? Estimates From A US National Probability-Based Sample. Individuals with former alcohol and drug (AOD) problems face discriminatory policies that can restrict their access to appropriate healthcare, employment, public benefits, and rights (Leis et al., 2009), otherwise known as macroaggressions (Sue, 2010). This study provides the first unbiased national prevalence estimates of self-reported macroaggressive events that occurred to individuals after they resolved an AOD problem. An online survey was administered to a probability-based sample of the general

population of US adults (N = 25,229) who once had a problem with alcohol or drugs and no longer do (n = 2,047; the National Recovery Study, 2016). Almost 18.4% of the US population who has resolved an AOD problem reported unfair treatment by the police, 14.1% lost a job, 11.6% were denied a loan or did not bother to apply, 11.2% had insurance that would not cover some of their medical costs, 10.5% left a recovery or treatment environment due to unfair treatment, 9.5% were denied housing, and 7.9% were denied the right to vote. Macroaggressions may create barriers to re-establishing themselves and could even compromise their AOD remission status. More research is needed to identify who is at greatest risk for this kind of discrimination.
Corrie Vilsaint PhD & John Kelly PhD

10. A Naturalistic Study of A Group Intervention For Parents of Youth With Substance Use Disorders. Little research exists on support services for parents of youth with substance use disorders (SUD). In addition to facilitating treatment engagement for youth, such services may help mitigate the stress burden of children's SUD on parents. We evaluated early changes in parental stress and perceived confidence to effectively help their child in response to an 8-week clinician led group for parents of youths aged 14 to 26 with a SUD. The 90-minute manualized groups provided psychoeducation on SUD, contingency management training, and highlighted the importance of parental self-care. A total of n=141 parents completed the first 4 weeks of the 8-week group. Parents' overall stress levels (PSS-4) did not change significantly from baseline to week 4 (p=.13). However, parental self-efficacy, including confidence in being able to help their child, as well as SUD-specific stress, showed improvement (Bonferroni-corrected p's≤.001). Parents suffer greatly from the often grave and enduring unpredictability regarding their child's SUD. Findings here highlight the potential benefit of providing parent services to decrease SUD-specific stress and improve parents' helping self-efficacy. Future research is needed to evaluate whether these parent changes correspond with improvements in their children's treatment engagement and outcomes. **Victoria Ameral MA, Amy Yule MD, James McKowen PhD, Jessica Nargiso PhD, John Kelly, PhD**

11. There Is An App For That – Or Is There? A Content Analysis of Publicly Available Smartphone Apps For Managing Alcohol Use. The effectiveness of smartphone apps to manage alcohol use has recently been demonstrated in clinical populations. These advances may generate consumer interest in smartphone apps to manage alcohol use. It is not clear, however, what options currently exist in the public domain. To fill this gap, we conducted a content analysis of android apps available on GooglePlay (n=266). Our results show that consumers are faced with a large number of apps to choose from. The most common types of app were BAC calculators (37%), information provision apps (37%), tracking calendars (24%), and motivational tools (21%). Most apps were free (65%), or low in cost (mean=\$3.76; SD=\$5.80). Many apps provided tailored feedback (60%), but the extent of tailoring was limited. Univariate models predicting app popularity (i.e., >10,000 downloads vs. not) and user-rated quality (i.e., star rating) indicated that tailoring mattered to some extent, with the level of tailoring being positively related to popularity, and the existence of time-based tailoring (e.g., tracking) with quality. Together, these findings suggest that the tracking of information over time is an important component of smartphone apps seeking to support healthy alcohol behaviors, in line with

findings that highlight the importance of self-monitoring in health behavior change. **Bettina Hoeppepner PhD, Melissa Schick BS, Lourah Kelly MA, Susanne Hoeppepner PhD MS, John Kelly PhD**

12. How Many Or How Much? Testing The Relative Influence of The Number of Social Network Risks Versus The Amount of Time Exposed To Social Network Risks On Post-Treatment Substance Use. Clinicians have long coached individuals leaving substance use disorder treatment to reduce or eliminate contact with high-risk others still engaged in substance use, and increase interactions with non-substance using/abstinent others. While it is well known that high-risk friends confer particular relapse risk for young adults, it is not clear whether it is the total number of high-risk friends, versus the actual amount of time spent with high-risk friends that ultimately drives relapse risk. Furthermore, it is unclear to what extent low-risk/recovery supportive friends confer a protective recovery benefit. In this longitudinal study (N=302), we examined the relative influence of number of high-risk and low-risk friends, and the amount time spent with these friends on substance use outcomes measured by percent days abstinent (PDA). Results suggested the effect of number of high- and low-risk friends on PDA was fairly constant across assessment points, while time with high- and low-risk friends conferred variable risk across time. Post hoc analyses indicated that time spent with high- and low-risk friends conferred greater (high-risk friends) or lower (low-risk friends) risk potential the longer individuals were out of inpatient treatment. It is posited that this reflects a loss of resilience or buffering afforded by inpatient treatment. **David Eddie PhD, John Kelly PhD**

13. Coping With The Enduring Unpredictability of Opioid Addiction: An Investigation of A Rapidly Expanding Family-Focused Peer-Support Organization. Opioid overdose deaths have become a major public health crisis, and renewed efforts have focused on helping opioid addicted individuals directly by facilitating greater access to treatment. Little is known, however, about resources for affected family members, as they also suffer from the enduring unpredictability associated with opioid addiction and play a vital role in helping their loved-ones access care. This study investigated a free and growing support organization for family members of addicted individuals ("Learn to Cope" [LTC]). Participants (N=509) were primarily middle-aged mothers (77%), attending LTC meetings several times per month and using LTC online resources several times a week. Their addicted loved-ones were mostly male (73%), addicted to opioids (88%), with a criminal history (70%), with just under half (41%) having suffered at last one prior overdose. Almost three-quarters (71%), however, reported their loved one was "in recovery." of members trained in Narcan administration (66%), 86% had received their training at LTC meetings. LTC members reported having deployed Narcan for over 44 overdose reversals. The growing availability of LTC may provide a needed source of support and information for family members of opioid-addicted loved-ones and may help reduce overdose deaths through Narcan training and distribution. **John Kelly PhD, Nilofar Fallah-Sohy BA, Julie Cristello BA, Brandon Bergman PhD**

14. Association of A BDNF Polymorphism With Alcohol Problems: Cognitive and Depressive Mediators. Brain-derived neurotrophic factor (BDNF) is a protein that has been linked to depression, cognitive functioning, and addiction. Some studies

have also suggested that the A allele or AA genotype of one BDNF gene polymorphism, rs10835210, may be associated with alcohol use disorder, internalizing disorders (e.g., depression), and worse cognitive functioning. In this cross-sectional study of 143 European Americans, we examined whether the BDNF rs10835210 AA genotype is associated with greater depressive symptoms, poorer cognitive functioning, and greater alcohol problems and further examined if the association between BDNF A-homozygote status and alcohol problems is statistically mediated by depressive symptoms and cognitive functioning. All participants provided blood samples for genotyping, completed the Michigan Alcoholism Screening Test and the Depression scale of the Depression Anxiety Stress Scales, and were administered the Trail Making Test. Linear regression models revealed that BDNF A-homozygote status and alcohol problems were each significantly associated with greater depressive symptoms and less favorable executive functioning, and separate mediation models revealed that the association of the BDNF AA genotype with greater alcohol problems was significantly mediated by depressive symptoms and executive functioning. Current findings suggest that variations in BDNF may increase risk for alcohol problems via depressive symptoms and cognitive deficits.

Sabrina Blackledge MA, Case Guillot PhD, Megan Douglas MS, Tiebing Liang PhD, Mitchell Berman PhD

15. Paced Breathing Changes Neural Reactivity To Alcohol Cues: An Fmri Study. Alcohol cues increase arousal and affect neural response in individuals with alcohol use disorder (AUD). Paced breathing improves neurocardiac functioning and potentially, behavioral flexibility. This ongoing study examines paced breathing effects on neural reactivity to visual alcohol cues. Participants were 38 adults (42% female, ages 18-25) who met criteria for either DSM-IV-TR alcohol dependence or NIAAA "low-risk" alcohol consumption. Participants were randomized to one of two tasks: paced breathing (intervention) or control. BOLD data were collected while participants viewed alcohol-related images twice: before and after the task. FSL's FEAT was used to model within and between-subject effects. BOLD activation to cues was contrasted at the first level (pre>post, post>pre) and group effects were calculated at the second level (paced breathing > control). Activation was thresholded at $z > 2.33$ and considered significant at $p < .05$ (cluster corrected). During re-exposure to alcohol cues, the paced breathing group, compared to controls, showed increased activation in the left precuneus and posterior-cingulate cortices and decreased activation in left visual cortex. Next-step analyses will examine moderation by AUD. Physiological effects of paced breathing changed neural response to alcohol-related images and may support the use of paced breathing as an intervention for AUD. **Laura Banu BA, Deena Peyser MS, Sarah Grace Helton BA, Suchismita Ray PhD, Jennifer Buckman PhD & Marsha Bates PhD**

16. Separating Craving To Cues From Presentation of Cues In Predicting Self-Control For Both Smokers and Drinkers. Based on a recent review (Veilleux & Skinner, 2015), we investigated the differential effects of cue exposure from self-reported introspective responses to cues in terms of predicting subsequent self-control behavior. In two separate studies, we randomized current smokers (Study 1) and drinkers (Study 2) to view either cues depicting their desired substance or neutral cues in a standard cue exposure paradigm. We also randomized participants to either introspect on the cues by providing

craving and affect responses, or to rate the cues with sham "artistry" questions. Then, smoking participants completed a delay discounting task and alcohol participants completed a shopping task, with higher scores indicative of impulsive behavior associated with decreased self-control. For smokers, we found that people introspected on craving and affect had higher discounting (e.g., lower self-control) than smokers who were not asked to report craving and affect. For drinkers, we found that drinkers who saw neutral cues and did not introspect about craving had lower impulsive buying (e.g., greater self-control) than individuals who saw alcohol cues and/or introspected on craving and affect. Results suggest that introspecting on craving and affect during cue exposure can disrupt subsequent self-control for both smokers and drinkers. **Jennifer C. Veilleux PhD & Kayla D. Skinner MA**

17. Socioemotional Processing Measures Predict Abstinence-Induced Tobacco Withdrawal and Craving. Previous epidemiological research suggests that cigarette smokers with trait socioemotional processing dysfunction (e.g., high levels of social rejection sensitivity) are more likely to maintain smoking and relapse. This within-subjects laboratory study examined associations between two baseline measures of trait social functioning (rejection sensitivity and generosity) on self-reported nicotine craving and withdrawal in daily users of both cigarettes and e-cigarettes. Twenty-nine participants (mean age=35) completed a baseline and four experimental sessions following 16-hour abstinence. During the baseline session, they completed computerized tasks assessing levels of rejection sensitivity ("Cyberball") and generosity ("Welfare Trade-off Task"). During the experimental sessions, participants completed the Minnesota Nicotine Withdrawal Scale (MNWS) and Questionnaire of Smoking Urges (QSU), which measures two aspects of craving: desire for positive smoking effects (F1) and desire for relief from withdrawal symptoms (F2). Analyses showed that greater rejection sensitivity at baseline predicted greater craving (QSU F1: $\beta=0.38$, $p=0.031$; QSU F2: $\beta=0.47$, $p=0.009$) during abstinence. Similarly, decreased generosity at baseline predicted greater craving (QSU F1: $\beta=-0.29$, $p=0.085$; QSU F2: $\beta=-0.42$, $p=0.013$), as well as greater withdrawal (MNWS: $\beta=-0.31$, $p=0.04$). These results implicate rejection sensitivity and generosity in tobacco withdrawal. Future research on social functioning as a maintaining factor in tobacco dependence is warranted. **Gurmehr Brar, Matthew Kirkpatrick PhD, Jinha Chung, Raina Pang PhD, Adam Leventhal PhD**

18. Emotion Dysregulation Explains Relations Between Sleep Disturbance and Smoking Quit-Related Cognition and Behavior. Poor sleep quality and tobacco use are common and co-occurring problems, although mechanisms underlying the relations between sleep disturbance and smoking are poorly understood. Sleep disturbance lowers odds of smoking cessation success and increases odds of relapse. One reason may be that sleep loss leads to emotion dysregulation, which in turn, reduces self-efficacy and increases quit-related problems. To address this gap, the current study examined the explanatory role of emotion dysregulation in the association between sleep disturbance and smoking in terms of self-efficacy for remaining abstinent in relapse situations, the presence of a prior quit attempt greater than 24hr, and the experience of quit-related problems among 128 adults seeking treatment for smoking cessation. Results suggested that increased levels of sleep disturbance are related

to emotion dysregulation which, in turn, may lead to lower levels of self-efficacy for remaining abstinent, more quit-related problems, and being less likely to have had a quit attempt of 24hr or greater. Further, these indirect effects were present above and beyond variance accounted for by theoretically-relevant covariates. These findings suggest that this malleable emotional risk factor (emotion dysregulation) could serve as a target for intervention among those with poor sleep and tobacco use.

Jennifer Fillo PhD, Candice Alfano PhD, Daniel Paulus MA, J A J Smits PhD, Michelle Davis MA, David Rosenfield PhD, Bess Marcus PhD, Timothy Church MD MPH PhD, Mark Powers PhD, Michael Otto PhD, Scarlett Baird BA, Michael Zvolensky PhD

POSTER SESSION 5

Saturday March 25th 6:00pm — 7:00pm

1. Factors That Influence Seeking Help For Alcohol Problems in A Native American Sample. To examine the number of help-seeking attempts and the type of help sought for a sample of Native American (NA) adults who have overcome problem drinking. For the present study, we looked at a sample of 73 NA adults (54.7% male) with mean age of 45.91 years (SD=10.33). We found that the least commonly accessed form of treatment was residential drug treatment (8.2%; n=6). Sixty three participants in the study (86.7%) reported that they did not have access to alcohol and other drugs due to incarceration during at least one point in their lifetime. We found that 74% of participants (n=54) underwent at least one instance of medical hospitalization as a result of their alcohol or drug use. Our results showed that the number of help-seeking episodes was significantly and positively correlated with Alcohol Dependence Scale scores ($r=.34$, $p=.047$) and higher severity of alcohol dependence was associated with more treatment episodes. Involuntary abstinence was common, due to the individuals not having access to alcohol and other drugs during incarceration or hospitalization. This suggests that Native American adults could benefit from alcohol or drug treatment offered in hospital or criminal justice settings, in order to facilitate recovery. **R. Butler, K. J. Hagler, K. L. Venner, A. Henckel, J. N. Nation, A. Lawless**

2. Trauma and Substance Use Trajectories of Hispanic/Latino Adolescents Receiving Substance Treatment. Between 36-50% of adolescents enter substance treatment with co-occurring post-traumatic stress problems (Chan et al., 2008). Hispanics/Latinos and other racial/ethnic minorities disproportionately develop post-traumatic stress symptoms (Kilpatrick et al., 2003) and show other co-occurring problems (Chisolm et al., 2009). There is a need to understand interrelations between trajectories of co-occurring disorders and this study will fill this gap with a dual-process approach (Fleming et al., 2008) of examining trauma and substance use. Participants from this study will include 191 adolescents from a randomized control trial of a culturally informed family treatment for substance use and behavior problems. Data that will be analyzed have been collected. Analyses will be conducted after performing quality assurance. Measures included the Post-Traumatic Symptom Scale (Foa et al., 2001) and Timeline-Followback interview of substance use behavior (Sobell et al., 2003). Structural equation modeling will be used to simultaneously examine trajectories of substance use and trauma experiences. Trajectories will be estimated separately

if sample size prohibits simultaneous estimation. We expect positive associations between trauma and substance use at baseline (intercept terms) and between slope terms. We expect reductions in both types of problems. Implications for treating co-occurring disorders with Hispanic/Latino adolescents will be discussed. **Evan Stanforth MA, Maite Mena PsyD, Daniel Santisteban PhD**

3. How Illicit Drug Users Seeking Treatment Differ In Expectations By Ethnicity. Well documented, client change readiness and the meeting of expectations of SUD treatment are important considerations in terms of treatment compliance, retention, and outcome. Unfortunately, with a few notable exceptions, (e.g., Milligan, 2004), ethnic differences in motivation and expectations of SUD treatment remain unclear and are under-studied. This secondary analysis examined Hispanic ($n = 72$) and non-Hispanic ($n = 109$) White differences in motivation and treatment expectations among illicit drug users seeking outpatient treatment (R01DA009864, Miller). Measures central to this study included the Form90D (Westerberg et al., 1998), What I want from Treatment Inventory (Miller, et al., 1994), and the SOCRATES (Miller & Tonigan, 1991). Few between-group pre-treatment differences were found on measures of motivation, substance use, and life functioning. Likewise, with a few exceptions, the ethnic groups did not differ in their expectations of SUD treatment; both ethnic groups reported enthusiasm for skills-based therapy and increased knowledge of 12-step programs, while both groups also reported low enthusiasm for medications. Findings indicated that, in general, Hispanics and non-Hispanic Whites approached treatment with similar expectations of treatment and change readiness. Future investigations need to examine how, if at all, the pre-treatment measures of interest in this study may predict treatment outcomes. **Nyabang Buom BA, Pilar Sanjuan PhD, Jeff Tonigan PhD**

4. Sex Differences In Mood and Withdrawal During Acute Tobacco Abstinence Among African-American Smokers. Prior work documents that heightened abstinence-induced withdrawal symptoms disproportionately burden both females relative to males and African-Americans (AAs) relative to other racial groups. Yet, it remains unclear whether within-group sex differences in tobacco withdrawal observed in the general smoking population exist among AA smokers specifically. This study investigated sex differences in abstinence-induced changes in mood and several aspects of withdrawal among AA smokers. Following a baseline session, AA daily cigarette smokers ($N=253$; 45.5% female) attended two counterbalanced lab sessions (16 hrs. abstinent vs. non-abstinent), during which they completed self-report measures of mood and withdrawal followed by a laboratory analogue smoking lapse task in which they were monetarily rewarded for delaying smoking. Compared to males, females showed greater abstinence-induced increases in anxiety (estimates=-.14, $p=.04$), urge to smoke to relieve negative affect (estimates=-.14, $p=.02$), and withdrawal symptomatology (estimates=-.13, $p=.04$). Females also exhibited marginally greater abstinence-induced decreases in vigor (estimates=.10, $p=.11$) and willingness to delay smoking for money (estimates=.10, $p=.09$). Our results provide further evidence of sex differences in several aspects of tobacco withdrawal and suggest that female AA smokers may be especially vulnerable to exacerbations in withdrawal-provoked smoking relapse during a quit attempt.

Financial Support: NIDA grant K01-DA040043 and ACS grant RSG-13-163-01. **Madalyn Liautaud BA, Adam Leventhal PhD, Raina Pang PhD**

5. Abstinence Norms In Native American and Non-Hispanic White University Students. Alcohol abstinence is the norm in many reservation-based Native American (NA) communities (May, 1995). To date, no research has examined norms regarding alcohol abstinence among NA university students. Previous research has established a relationship between drinking norms and alcohol outcomes in university samples (e. g, Neighbors et al., 2008). However, concerning both non-Hispanic White (NHW) and NA university students, it is unclear whether abstinence norms are associated with alcohol outcomes. This study examined the relationship between abstinence norms and alcohol-related outcomes in a sample of NHW and NA students (n=393) attending a large Southwestern university. Participants were asked to estimate the percentage of the student body who did not drink at all, using three different reference groups (typical student, typical NHW student, and typical NA student). A one-way ANOVA revealed that, compared to NHW students, NA students estimated a significantly higher percentage of the student body abstained from alcohol use across all three reference groups (27.7% vs. 35.8%, respectively). Correlation analyses revealed that there were no significant relationships between abstinence norms and students' own alcohol. NA students perceive that the student body abstains from drinking, which is not showing as a significant relationship in actual abstinence and alcohol outcomes. Future research should examine the effect of abstinence norms on the likelihood of NA and NHW students personally abstaining from alcohol use.

Andrea Henckel BA, Kylee Hagler MS, Rhett Butler BA, James Nation BA

6. Historical Trauma, Childhood Trauma, and Substance Abuse On An American Indian Reservation. American Indian populations bear the burden of notable health disparities associated with addictive behaviors. Rural reservation communities are particularly affected by these disparities and the social determinants that drive them, such as poverty, unemployment, scarcity of services, and institutional racism. To address substance abuse in a frontier reservation community, a collaborative research project was undertaken by co-researchers from a public university and a tribal college in Montana. In-depth qualitative interviews were conducted with tribal members (N=25) to understand cultural conceptualizations of substance use and abuse, risk factors, protective factors, and resilience. Interviews took place over two sessions, were recorded and transcribed, and analyzed using the techniques of grounded theory. Within the framework of CBPR, researchers and members of a Community Advisory Board collaborated on all aspects of the research. Participants emphasized the importance of trauma, both childhood and historical, in current alcohol and drug use behavior. They identified historical trauma as the driving force behind health disparities, and viewed attempts to cope with early childhood trauma as a key cause of addiction. Participants identified revitalization of traditional language, cultural practices, spirituality, and ceremony as promising approaches to reducing substance abuse on the reservation. Implications and future directions will be discussed. **Monica Skewes PhD, Julia Gameon BA, Scott Gardner BA, Emily Salois MSW, Paula FireMoon MED**

7. PTSD, Methamphetamine Use, and Outcome Expectancies.

Recent research has demonstrated that between 41% and 53% of methamphetamine (meth) abusers also meet criteria for PTSD and, compared to non-PTSD methamphetamine abusers, those with PTSD are five times more likely to continue using meth years after receiving substance abuse treatment. The cost of overlooking or minimizing the impact of PTSD symptoms when treating comorbid meth users may be the relative non-effectiveness of treatment. It is clear that the presence of PTSD alters the treatment response and chronicity of meth use; therefore, additional research is needed to inform improved treatment approaches. The present study seeks to contribute to this growing body of research by collecting quantitative data on PTSD symptom-related methamphetamine outcome expectancies, or beliefs about how methamphetamine use is expected to directly affect PTSD symptoms. One hundred participants will be recruited from 12-step meetings and a dual-diagnosis treatment facility in Solano County, California. Participants will complete measures that capture meth use consequences, PTSD symptoms, and PTSD-related meth outcome expectancies (both positive and negative). Results of this study will be discussed within the context of the self-medication hypothesis, expectancy theory, and the practical implications for assessment and treatment of individuals presenting with this comorbidity. **Christopher Domke**

8. Comparing PTSD Symptom Presentation Among People With Substance Use Disorders.

Posttraumatic stress disorder (PTSD) and substance use disorders (SUDs) commonly co-occur, and there is some evidence to suggest that PTSD symptom clusters are differentially related to various substances of abuse. However, few studies to date have compared PTSD symptom patterns across people with different types of SUDs, and fewer still have accounted for the presence of comorbidity across types of SUDs in understanding symptom patterns. Thus, in the current poster, we present data from a treatment-seeking sample of people with elevated symptoms of PTSD and problem alcohol use to explore differential associations between SUDs and PTSD symptoms, while accounting for the presence of multiple SUDs. When comparing alcohol and drug use disorders (DUDs), findings suggest that avoidance symptoms are elevated in those with alcohol use disorder (AUD), while hyperarousal symptoms are elevated in those who have a current drug use disorder (DUD). In the subsample with AUD, hyperarousal symptoms were elevated in people with co-occurring cocaine use disorders and numbing symptoms were elevated in people with co-occurring sedative/hypnotic/anxiolytic use disorder. These findings highlight the importance of considering co-occurring SUDs when understanding the interplay between PTSD and SUD. **Emily Dworkin PhD, Sonya Wanklyn PhD, Paul Stasiewicz PhD, Scott Coffey PhD**

9. Depression Severity Moderates Outcome But Not Program Engagement Among AA Affiliates.

It is estimated that between 30 and 40% of early AA affiliates meet or exceed recognized thresholds for clinical depression. Little is known, however, about how clinical depression among AA members may moderate AA engagement and outcomes. To this end, this study examined how four clinically-prescribed cutoffs on the Beck Depression Inventory (BDI) explained proximal patterns of engagement and outcome of AA affiliates. Data for this study came from an NIAAA-funded study that examined behavioral change

processes in AA (R01-AA014197, Tonigan). Overall, more severely depressed individuals reported poorer drinking outcomes at the 3-month follow-up. Although lower depression scores at intake were associated with greater AA meeting attendance, few differences were found between the four BDI severity categories and endorsement of 12-step beliefs or in progress working the 12 steps. In contrast, the most severely depressed individuals reported the lowest rate of AA sponsor acquisition (a key predictor of AA-related success). However, a stepwise regression indicated that this deficit among the most severely depressed AA members did not account for the differential outcomes between BDI severity groups. Findings suggest that more severely depressed AA members may benefit from depression-focused treatment programs in addition to active participation in AA.

Carly Poremba BA

10. The Influence of Co-Occurring Psychiatric Disorder In Members of An Online Recovery Community. Recovery-specific social network sites (SNSs) are a novel technology-based resource for individuals with substance use disorder (SUD). InTheRooms.com (ITR), a large and robust SNS provides 24/7 access to a digital network of recovering peers and online video 12-step meetings. Little is known about recovery SNS membership and perceived benefits, particularly for those with co-occurring psychiatric disorders (COD). Results of a survey of ITR members (N = 123; 18+ years; 52% COD) showed COD participants were significantly younger (M age = 48 vs. 54, $p = .011$), and had less time in recovery (M years = 5.1 vs. 11.0, $p = .002$). Controlling for these baseline differences between COD and SUD-only participants, analyses of covariance showed SUD-only participants reported greater ITR participation per day ($p = .011$, $\eta^2 = .053$), while COD participants generally reported greater perceived benefit from ITR participation (e.g., decreased craving; $p = .02$, $\eta^2 = .15$). These preliminary data suggest individuals with COD may derive even more benefit, while needing systematic encouragement to participate, compared to their SUD-only counterparts. Future longitudinal research is needed to build on these preliminary findings suggesting recovery-specific SNSs may be valuable recovery support services for individuals with COD. **Nate Kelly BA**

11. Effects of MI On Treatment Engagement and Outcomes In Women With Comorbid PTSD and SUD Mandated To Mindfulness-Based Relapse Prevention. Over 60% of women in SUD treatment have comorbid PTSD (Cohen et al., 2006), putting them at increased risk for serious psychological conditions, interpersonal violence (Greenfield et al., 2010), and poorer treatment outcomes (Difede et al., 2014; Najt et al., 2011). Mindfulness-Based Relapse Prevention (MBRP) has demonstrated efficacy for SUD (Bowen et al., 2009, 2014; Witkiewitz et al., 2014). Training in mindfulness meditation, core to MBRP, has historically been voluntarily sought out. Effects of mandating clients to such training, however, is understudied. Research has shown motivation and treatment engagement predicts SUD outcomes (Field et al., 2012). The current study assesses effects of random assignment to brief motivational interviewing in women with comorbid SUD and PTSD symptoms, mandated to participate in MBRP as part of a residential treatment program. Preliminary results (N=6) suggest midcourse mean differences, adjusted for baseline levels, in engagement (minutes/week of formal mindfulness practice) (MI: M=102.38, SE=90.52; no MI: M=26.25, SE=12.37), craving (MI: M=5.27, SE=3.10; no-MI:

M=11.60, SE=3.93) and trauma symptoms (MI: M=39.62, SE=6.88; no-MI M=43.57, SE=8.47), however not in motivation (MI: M=7.33, SE=.76; no-MI: M=7.35, SE=1.11). Final full-sample analyses will further assess effects of MI on treatment motivation and engagement, as well as postcourse outcomes. **Vanessa Somohano MA, Rachel Rutkie MA, Jacob Manuel MS, Kris Rehder MS, Sarah Bowen PhD**

12. Real-Time Social Stress Response and Subsequent Initiation of Alcohol Use Among Female Adolescents. Alcohol use among adolescent girls is severely understudied (Foster et al., 2014). Individuals with social anxiety (SA) are at particular risk for problematic drinking (Buckner et al., 2013), and recent work suggests that this may be specific to women (Buckner & Turner, 2009). Preliminary data suggest that real-time stress elicits drinking among high SA adults (Abrams, 2002); however, findings are inconsistent (Battista et al., 2010), and this has yet to be examined among youth. The current study tested whether real-time social stress was related to 12-month incidence of drinking in a female adolescent sample. Participants were 88 community-recruited girls (12-15 years) reporting no prior alcohol use at screening. Following assent/consent, participants completed a modified Trier Social Stress Test (Yim et al., 2010) and questionnaires; follow-up interviews were conducted at 3-, 6-, 9-, and 12-months. Stressor response was indexed via self-reported anxiety (0-10) following acclimation (baseline), instruction (anticipation), and post-task. The Adolescent Alcohol and Drug Involvement Scale indexed alcohol use (Moberg, 2000), truncated to negative or positive responses only across follow-up. With baseline anxiety included, logistic regression analyses indicated that follow-up alcohol use was predicted by elevated anxiety in anticipation of the task ($p = .019$) but not following the task ($p = .232$). **Heidemarie Blumenthal PhD, Renee Cloutier MS, Megan Douglas MS, Sydney McKinnis, Maris Adams**

13. Examining Adolescent Alcohol Problems and Desires During Social Rejection Or Performance. Alcohol experimentation and initial problems often occur during adolescence. Coping-motivated consumption consistently relates to alcohol use problems across the lifespan; however, mixed results have emerged from research conducted with at-risk adults in terms of consumption following acute, relevant laboratory-induced stress, and no work has included adolescents in such 'real-time' protocols. In the present study we examined adolescents' anxiety and alcohol use desires following a rejection- versus a performance-stressor. We also examined whether preclinical problems (via AUDIT) would account for the current anxiety-alcohol desire relation for both stressors. 79 community-recruited adolescents (14-17 years) reporting (i) past-year drinking and (ii) no significant alcohol-related problems (AUDIT<10) were randomly assigned to complete either a laboratory-based rejection (Cyberball; $n=37$) or performance (TSST; $n=42$) stressor. Anxiety and alcohol desire were assessed at baseline, and following inclusion/exclusion (Cyberball) or speech preparation/speech/math task (TSST). As hypothesized, both stressors elicited anxiety and alcohol desires above their baseline. Anxiety positively correlated with alcohol desires across time-points ($r = .35-.52$). Alcohol problems positively related to alcohol desire following rejection ($r = .54$), but not inclusion ($r = .28$), or any performance stressors ($r < .10$). Findings were consistent after controlling for drinking frequency. This study indicated points of convergence and divergence with adults; additional research

with adolescents is needed. **Renee Cloutier MS, Maris Adams, Sydney McKinnis, Matthew Russo, Nathan Kearns BS, & Heidemarie Blumenthal PhD**

14. Extracurricular Activities Are Associated With Less Severe Substance Use Disorder In Youth. Higher severity of substance use disorder (SUD) is associated with poorer treatment response and is influenced by quantity of alcohol and other drug use, as well as other social determinants of health. Among youth, greater involvement in extracurricular activities has been used as a preventative measure regarding substance use; however, the relationship is complex given that high school and college athletes have been shown to use more substances than non-athletes. Among treatment seeking youth, these relationships are not as well understood. We examined baseline reports from N=101 treatment seeking youth (ages 14-21) with a SUD recruited from Boston, MA. A mean level test of SUD symptom severity showed that youth with no involvement in sports, clubs, recreational activities or hobbies (43.6%) reported significantly more symptoms ($M=6.48$ $SD=2.71$) than the 53.5% of youth who reported weekly involvement ($M=5.26$ $SD=2.84$). A multiple regression analysis showed that weekly involvement in extracurricular activities was associated with lower lifetime use, and significantly lower SUD symptoms; however, this protective effect was diminished at higher levels of use. Although the causal direction cannot be determined, in keeping with prevention and SUD recovery theories, extracurricular activities may serve as competing non-substance rewarding behaviors that could reduce substance-related impairment among less severe youth. **Julie Cristello BA, Corrie Vilsaint PhD, John Kelly PhD**

15. Substance Use and Externalizing Problems Among Young Men. The delinquency Pathways Model proposes that the majority of those who engage in serious delinquent acts have gone through a sequence of externalizing behaviors from less to more serious behaviors. This study examined whether any use, age of onset, and frequency of alcohol, marijuana, and hard drugs were associated with movement through these pathways. Data came from young men who were followed from mean age 7 through mean age 20 ($N = 503$). Sequences of offending were based on ages of onset of covert and overt delinquent behaviors. Ages of onset and frequency of substance use were related to reaching the highest levels within pathways but not to the length of time between levels. Alcohol and marijuana use, compared to hard drug use, had stronger associations with highest level achieved. Furthermore, alcohol and marijuana use and frequency were related to greater risk of moving from the lowest to highest level in both pathways. Preventing (or delaying) onset of substance use and reducing frequency of use may interrupt movement through the covert and overt pathways. **Helene White PhD, Fiona Conway PhD, Jennifer Buckman PhD, Rolf Loeber PhD**

16. Longitudinal Association of Electronic Cigarette Use With Subsequent Substance Use Among Adolescents. Increasing evidence suggests that e-cigarette use in adolescents is associated with subsequent use of combustible tobacco use, yet it is unknown whether e-cigarette use is associated with increased risk of using other substances. A longitudinal survey of students in ten high schools who reported no use of alcohol, drugs, or tobacco products other than e-cigarettes ($N=2,062$) completed measures every six months assessing substance

use and psychosocial characteristics from the start of 9th grade (baseline) to end of 10th grade (18-month follow-up). Binary logistic generalized estimating equations modeling was used to assess the association of baseline ever e-cigarette use with substance use at three follow-up timepoints. Substance use initiation across the three follow-up was more prevalent among baseline e-cigarette users ($OR[95\% CI]=4.67[3.53, 6.18]$, $P<.0001$); significant associations were observed for initiation of alcohol, marijuana, tobacco products, and other drugs ($ORs=2.26-4.18$, $Ps<.001$). Associations remained significant after adjusting for sociodemographic, environmental, and intrapersonal covariates linked to substance use. Adolescents who use (vs do not use) e-cigarettes at the beginning of high school were more likely to begin using substances in 9th and 10th grade. E-cigarettes should be further investigated as a possible risk factor for future substance use initiation. **Matthew Stone BA, Jessica Barrington-Trimis PhD, Junhan Cho PhD, Nick Goldenson BA, Huiyi Chen BA, Adam Leventhal PhD**

17. Marijuana and Tobacco Use and Co-Use and The Risk of Emotional Disorders In Adolescence. Evidence of the impact of marijuana and tobacco use on mental health in adolescents is vital for informing policy and prevention. Extant data has not addressed possible interactive-synergistic effects of co-use of marijuana and tobacco with subsequent risk of psychiatric disorders. A survey of students ($N=3,396$) assessed past-month use of tobacco and marijuana, as well as symptoms of Major Depressive Disorder (MDD), Generalized Anxiety Disorder (GAD), Panic Disorder (PD), Obsessive Compulsive Disorder (OCD), and Social Phobia (SP) during 10th (baseline) and 11th grade (follow-up). Logistic regression models were fit for each disorder ($N=2,225-2,480$) to test direct and interactive effects of marijuana and tobacco use on the probability of developing the disorder. Each additional day of tobacco use was associated with a 5.7%-8.6% increase in the odds of developing MDD, GAD, or SP ($Ps<.03$). There was a significant interaction between baseline marijuana and tobacco use on MDD, GAD, and PD ($ORs_{interaction}=1.08-1.13$) indicating a synergistic increase in symptomatology. Tobacco and marijuana use jointly increases the risk of developing several psychiatric disorders and should be tandemly considered in research and prevention. If these associations are deemed causal, prevention efforts aimed at reducing co-use may limit the mental health burden. **Rachel Wein, Adam Daniels, Jessica Barrington-Trimis PhD, Junhan Cho PhD, Adam Leventhal PhD, Matthew Stone BA**



MISSION:

The goals of the Alcohol, Tobacco and Other Drugs (ATOD) Section of the American Public Health Association (APHA) are to:

- Develop, foster, and advocate for sound research, policy and practice in the fields of ATOD epidemiology, prevention and treatment.
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The Center of Alcohol Studies (CAS) at Rutgers, the State University of New Jersey, announces the resumption of the **Smithers Prevention Endowment Post-doctoral Fellowship** program. These positions are geared toward providing postdoctoral training to develop new skills, build a strong publication track record, and increase fellows' competitive edge in seeking faculty positions. The focus is on addiction prevention, broadly defined, including both human neuroscience and behavioral areas. Two immediate positions, supported up to four years, are available in the [Cardiac Neuroscience Laboratory](#) to work with a NIH-supported transdisciplinary research team led by Marsha Bates and Jennifer Buckman.

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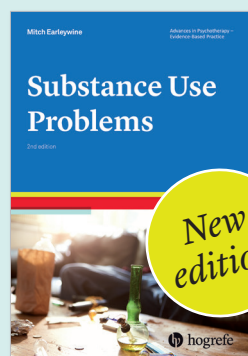
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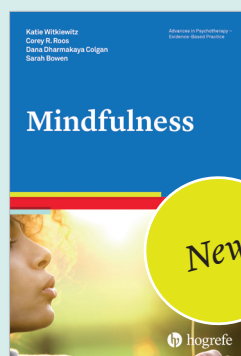
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Substance Use Problems

(Advances in Psychotherapy – Evidence-Based Practice, vol. 15)
2nd edition 2016. viii + 104 pp.
US \$29.80 US \$23.84
ISBN 978-0-88937-416-4
Also available as eBook

This fully updated new edition of the popular text separates the facts from the myths about drug and substance use and provides practical, evidence-based guidance on dealing with them. It provides trainees and professionals with a handy, concise guide for helping problem drug users build enjoyable, multifaceted lives using approaches based on decades of research. This highly readable text explains not only what to do, but when and how to do it. Seasoned experts and those new to the field will welcome the chance to review the latest developments in guiding self-change for this intriguing, prevalent set of problems.

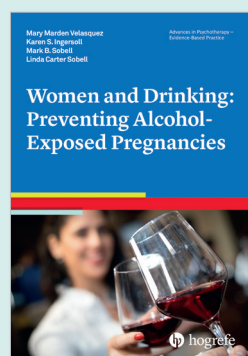


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Mindfulness

(Advances in Psychotherapy – Evidence-Based Practice, vol. 37)
2017. viii + 80 pp.
US \$29.80 US \$23.84
ISBN 978-0-88937-414-0
Also available as eBook

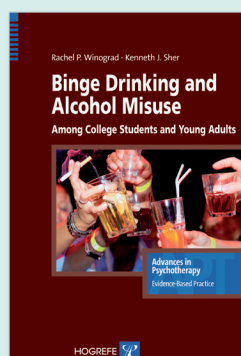
This clear and concise book provides practical, evidence-based guidance on the use of mindfulness in treatment: its mechanism of action, the disorders for which there is empirical evidence of efficacy, mindfulness practices and techniques. Empirical evidence for the efficacy of mindfulness techniques is growing, making this book invaluable reading for all substance-use professionals curious about the latest science and when and how to incorporate it into clinical practice.



Women and Drinking: Preventing Alcohol-Exposed Pregnancies

(Advances in Psychotherapy – Evidence-Based Practice, vol. 34)
2016. xii + 80 pp.
US \$29.80 US \$23.84
ISBN 978-0-88937-401-0
Also available as eBook

This essential resource for anyone providing help or services to women at risk for alcohol-exposed pregnancies outlines clinical definitions and the history of Fetal Alcohol Spectrum Disorders (FASD), epidemiology and effects across the lifespan, evidence-based prevention practices such as CHOICES and CHOICES-like interventions, and opportunities for dissemination. The information and resources presented will help a wide variety of practitioners in diverse settings, ranging from high-risk settings such as mental health and substance abuse treatment centers to primary care clinics and universities, deliver interventions targeting behavior change.



Binge Drinking and Alcohol Misuse Among College Students and Young Adults

(Advances in Psychotherapy – Evidence-Based Practice, vol. 32)
2015. vi + 92 pp.
US \$29.80 US \$23.84
ISBN 978-0-88937-403-4
Also available as eBook

This book provides clear guidance about effective, evidence-based approaches to treating alcohol misuse in young adults. It provides practitioners and trainees with a range of evidence-based treatment approaches to help clients change their alcohol use habits. The information presented is both thorough and concise and will help readers with varied backgrounds and experience improve their understanding of the many nuanced factors involved in assessing and treating problematic drinking in young adults.

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SCHEDULE AT A GLANCE

Friday	Barcelona Ballroom		
March 24	Barcelona	Majorca	Catalina
9:00 AM	Opening of the Meeting		
9:15 AM	Keynote Address: Dr. William Miller Motivational Interviewing at the Crossroads 1 CE		
10:15 AM	Break (Mezzanine)		
10:30 AM	Obesity and Substance Use: A Complex Relationship 1.25 CEs	The Pains of Chronic Pain and Opioid Use	Clinical Workshop: Emotion Regulation Training for Alcohol Use Disorder: Helping Clients Manage Negative Emotions 2 CEs
11:45 AM	Poster session 1 (Casablanca)		
12:30 PM	Ticketed Lunch or Lunch on Your Own		
1:45 PM	Emotion Dysregulation in Substance Use and Substance Use Disorders 1.25 CEs	A Demonstration of Feasibility and Utility of Multi-Site Collaborations in College Student Substance Use	Clinical workshop: Cognitive-Behavioral Therapy (CBT) for Alcohol and Drug Problems 2.75 CEs
3:00 PM	Break (Mezzanine)		
3:15 PM	Comorbid Substance Use and Mental Health Conditions: Implications for Prevention and Treatment 1.25 CEs	Impulsivity and Substance Use: Novel and Innovative Methodological Approaches	
4:30PM	Break (Mezzanine)		
4:45 PM	Early Career Showcase	Person-Centered Approaches to Exploring Heterogeneity in Substance Use and Treatment Responses	Clinical Workshop: Treating Suicidal Thoughts and Behaviors in Adults with SUDs 1.25 CEs
6:00PM	Poster Session 2 & Social Hour (Casablanca)		
Saturday	Barcelona Ballroom		
March 25	Barcelona	Majorca	Catalina
8:00 AM	Poster Session 3 & Continental Breakfast (Casablanca)		
9:00 AM	Addressing the Needs of Pregnant Women in Substance Use Treatment 1.25 CEs	Emotion Regulation Difficulties as a Concomitant Substance Use Problem 1.25 CEs	Clinical Workshop: SBIRT Basics: Development and Application of SBIRT Skills in Diverse Settings 2.75 CEs
10:15 AM	Break (Mezzanine)		
10:30 AM	The “Future’s so Bright”? Trends in Technology-Enhanced Addiction Recovery Management 1.25 CEs	Clinical Implications of Research on Protective Behavioral Strategies for Alcohol, Marijuana	
11:45 AM	Poster Session 4 (Casablanca)		
12:30 PM	Networking Lunch (Mezzanine)		
1:45 PM	Keynote Address: Dr. Kathleen Grant Brain Imaging, Temperament and Cognitive Function in a Monkey Model or Chronic Alcohol Self-Administration 1 CE		
2:45 PM	Break (Mezzanine)		
3:00 PM	Heart Rate Variability as a Dynamic, Real-Time Indicator of Active Brain and Behavior Mechanisms 1.25 CEs	Trauma, PTSD and Substance Use: Epidemiology, Special Populations and a Systematic Review 1.25 CEs	Clinical Workshop: Drug Use, Misuse, and Abuse: Recent Advances in Psychopharmacology 2.75 CEs
4:15 PM	Break (Mezzanine)		
4:30 PM	A Behavioral Economic Perspective on Persistent Tobacco Use in People with Psychopathology, then Awards Ceremony 1.25 Ces		
5:45 PM	Awards Ceremony (Barcelona)		
6:00 PM	Poster Session 5 & Social Hour (Casablanca)		