



Center on Alcohol, Substance Use, And Addictions (CASAA): Update and Future Directions

J. Scott Tonigan, Ph.D. Director, CASAA 9-3-21

Overview of presentation

Why CASAA's work is especially important right now CASAA basics & responding to Covid-19 CASAA Finances, Grants, & Investigators CASAA research CASAA and New Mexico CASAA as a training institution The Future

Why CASAA's work is especially important now

60.1%

12.8%

27.0%

Pre-Post COVID-19 Drinking 2020 (N = 832)

- Drinking increased compared to pre-COVID-19
- Drinking decreased compared to pre-COVID-19
- Drinking did not change compared to pre-COVId-19

Reasons for Increased Drinking

Stress	45.7%
Boredom	30.1%
Increased alcohol availability	34.4%

Of those who consumed alcohol over the past 30 days, 34.1% reported binge drinking at least once and 7.0% reported extreme binge drinking over the past 30 days. Non-White respondents reported significantly higher rates of binge drinking relative to Whites

N. M. Alcohol Use and the Pandemic

- ALBUQUERQUE NM (KRQE) Alcohol sales have gone up quite a bit during the pandemic. "Everyone's been isolated, they feel bored, they feel scared," said UNM Distinguished Professor, Barbara McCrady. That's why, she says, more people are turning to alcohol as a way to cope. Survey data shows about 60% of people admitted they were drinking more throughout the pandemic, and McCrady says she noticed it in a study of her own, started in 2019.
- ALBUQUERQUE, N.M. (KOB) Experts say Americans are buying more alcohol to cope with the coronavirus outbreak. It's not clear if people are stocking up to comply with stay-at-home orders or drinking more frequently. Whatever the reason, a doctor at the University of New Mexico told KOB 4 it's the wrong time to start drinking because alcohol lowers the body's immune system.

ALBUQUERQUE N.M. (KOAT) New Mexico tops the list for alcohol-related deaths in the United States. The New Mexico Department of Health announced on Friday that our state continues to have the highest rate of alcohol deaths, according to a new <u>CDC study</u>. Researchers looked at data over four years ending in 2015.

They found that New Mexicans died at a rate of 52.3 per 100,000 people. That's almost twice the U.S. average of 27.4. The state that ranked close to New Mexico was Montana with a death rate of 37.4. "Not only are we fighting to reverse life-threatening alcohol use, we are also fighting a stress-inducing pandemic that is contributing to increased alcohol consumption. We must use every tool available to reduce alcohol-related death and years of potential life lost due to excessive alcohol use," New Mexico Department of Health Secretary Kathy Kunkel said.

Alexis Martinez & Danielle Ortiz

- Alexis Martinez (age 23) and Danielle Ortiz (age 23), each a mother of two children.
- Crash car on I-25 at 3 am March, 2021.
 Car went airborne and hit concrete wall.
- Two children killed in accident; boy (2 months old) and girl (age 7).
- Both Alexis and Danielle consumed alcohol and other substances prior to crash

Multifaceted impact of Covid-19

Primary and secondary school-based alcohol awareness and prevention programs placed on pause.

More barriers for accessing alcohol treatment programs.

Provision of alcohol treatment compromised, especially for individuals without internet access.

Availability of formal aftercare/case management and mutual help programs supporting treatment gains much more difficult to access.

CASAA's work is important

Addictive behaviors are common
Addictive behaviors lead to suffering for individuals, families, and communities
Alcohol and drug use affect health
Alcohol and drug use affect public safety
Alcohol and drug use affect economic productivity

 Addictive behaviors are one of the major sources of preventable illness, injury, and death

People affected by alcohol and drugs can change their lives for their better

CASAA Basics and Responding

To COVID-19 Pandemic

CASAA's mission

We use transdisciplinary approaches to conduct high quality scientific research related to substance use and other addictive behaviors

- To improve prevention and treatment
- To reduce suffering
- We focus on problems of health and social importance

Our core values:

- Scientific integrity
- Human diversity
- Our ultimate goals:
 - To share research products with the larger scientific community
 - To translate empirical knowledge into real world applications

CASAA overview

Category III Research Center since 1989

- ~70 full- and part-time faculty, staff, and funded students
- Core activities:
 - Research
 - Student training
 - Community service

Important Sidebar Comment:

From 1989 to 2020 the center name was, Center on Alcoholism, Substance Abuse, and Addictions (CASAA)

In September 2020, UNM Provost approved name change to, Center on Alcohol, Substance Use, And Addictions (CASAA) to eliminate stigmatizing terminology

CASAA: More than 50 partners

UNM Cross-Disciplinary partnerships

State and Treatment Provider Partnerships

National and International Partnerships

UNM partners

- Department of Anthropology
- Department of Economics
- Department of Family & Community Medicine
- Department of Neurosciences
- Department of Pediatrics
- Department of Psychology
- Department of Psychiatry
- Institute for Social Research
- Milagro program
- School of Law
- UNMH Care One
- UNMH Emergency Department

New Mexico partners

- Bernalillo County
- Department of Children Youth and Families
- Department of Health
- Eastern New Mexico University
- Heading Home, an intervention for vulnerable homeless populations
- Metropolitan Detention Center
- Mind Research Network
- NM Behavioral Health Collaborative
- NM Department of Health School-Based Health Centers
- New Mexico Institute of Mining and Technology

New Mexico State University Recovery Services San Juan College Santa Fe Community College Santa Fe drug court The Lifelink (Santa Fe) Turquoise Lodge Hospital Veterans Administration Medical Center Zuni Pueblo

National and international partners

Arizona State University Friends Research Institute Klein-Buendel, Inc. **Indiana University** (Bloomington) McMaster University New York University **Old Dominion University** Pacific Institute for Research and Evaluation **Rutgers University** Sanford Health Stanford University State University of New York, Buffalo Stellenbosch University

UCLA University of Colorado University of Georgia University of Iowa University of Massachusetts University of Miami University of Mississippi University of North Carolina -Chapel Hill University of Southern Denmark University of Washington Other partners in: Great Britain, Netherlands, Sweden

CASAA & COVID-19

March 2020, all in-person NIH research "paused", and access to CASAA facility severely restricted in response to NMDOH, NIH, UNM, and IRB mandates.

CASAA & COVID-19 (Cont.)

June 2020, CASAA approved to conduct limited in-person NIH research.

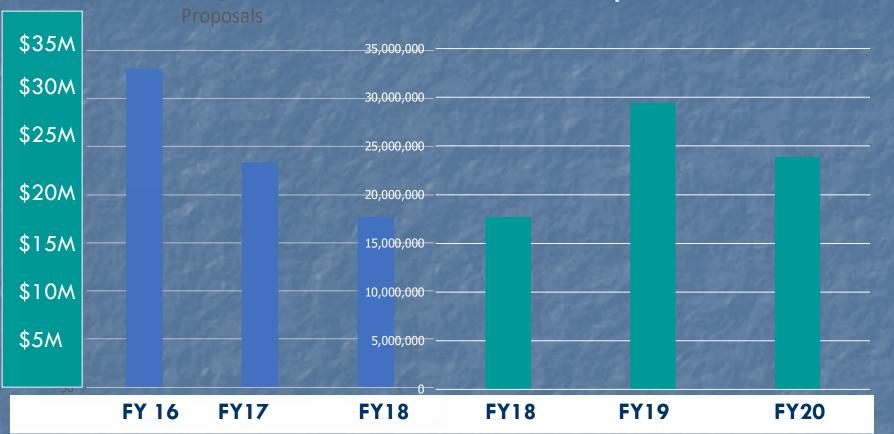
October 2020, NIH lifts pandemic "pause" and mandates FTE draws on grants must be commensurate with actual workload.

January 2021, NIH studies at CASAA adopt and receive IRB approval for hybrid or fully virtual research platforms. CASAA now under UNM telecommuting model.

Financial Side of CASAA

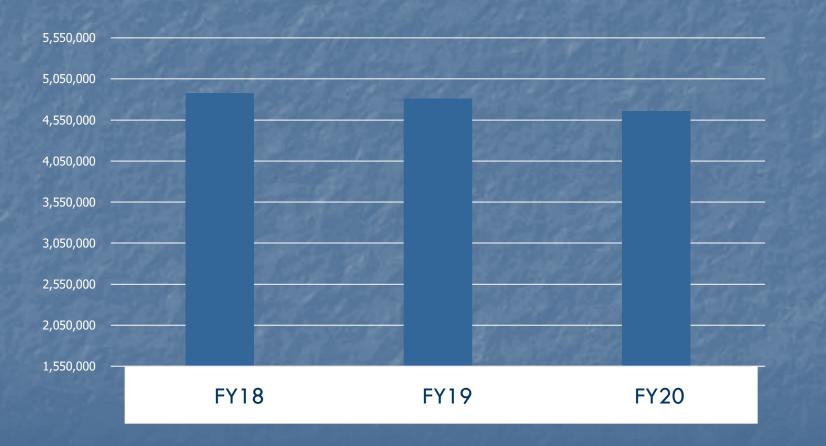


Total Funding "Requested" in CASAA Proposals by FY 2016-2020



CASAA AWARDS, FY 2018-2020

Awards



Revenue generated by CASAA FY 2018-2020



Revenue



2019

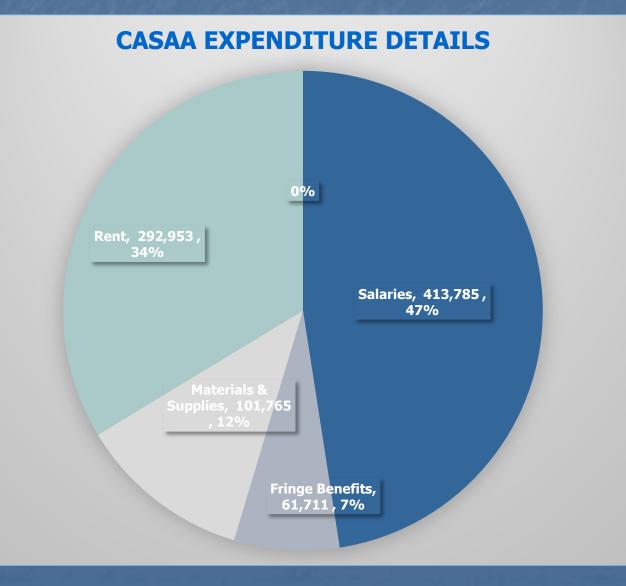
2020

\$787,000

\$1,647,000

\$1,565,000

FY2020: CASAA Expenditures



Current CASAA Grant Portfolio

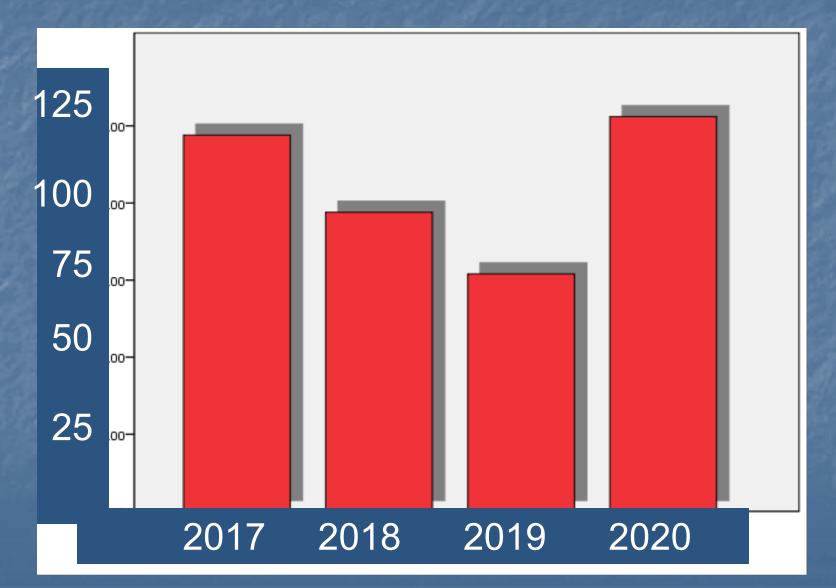
11 active NIH grants to 10 CASAA PI's grant mechanisms include pre and postdoctoral training awards, R21 developmental awards, largescale R01 awards, and cooperative U mechanisms.

3 NIH sub awards

CASAA Investigators



CASAA Research Dissemination: Peer-Reviewed Publications



CASAA Research

Applying a multidisciplinary approach to the development of new and improved substance use treatment & applying new technologies to understand effective approaches for treating substance misuse. Some examples....

Oxytocin to Enhance Alcohol Behavioral Couple Therapy, *(R01AA027212) MCCRADY, BARBARA

The development of effective pharmacotherapies to treat alcohol use disorder (AUD) is a public health priority. The objective of this Stage II study is to examine the effects of oxytocin versus placebo in combination with ABCT in reducing AUD severity and improving relationship functioning. We will also utilize advanced neuroimaging techniques before and after treatment to investigate the underlying pathophysiology of AUD among couples and identify prognostic indicators of treatment outcome.

To accomplish this, we will (1) employ a two-arm randomized, double-blind, between-groups experimental design that will consist of 12 weeks of ABCT treatment with oxytocin or placebo; (2) use standardized, repeated dependent measures of change including alcohol biomarkers at five time points (baseline, week 6, week 12, and 3- and 6-month follow-up); (3) measure impairment in associated mental and behavioral health problems (e.g., depression); and (4) use functional magnetic resonance imaging (fMRI) to examine changes in corticolimbic connectivity. Mindfulness-Based Resilience Training for Aggression, Stress and Health in Law Enforcement Officers, (U01AT009841) WITKIEWITZ, KATIE

Law enforcement officers (LEOs) are exposed to significant stressors leading to serious consequences, including elevated incidence of PTSD and alcohol misuse. Mindfulness training is an approach that is effective in reducing stress and increasing resilience. Our pilot study established initial feasibility, acceptability, and adherence to procedures in a single-site RCT assessing Mindfulness-Based Resilience Training (MBRT). The proposed study will establish procedures for a future full-scale, multi-site trial assessing effects of MBRT versus an attention control. The long-term objective of this line of research is to develop an intervention that will reduce violence and increase resilience among LEOs, as well as yield significant benefits for communities and residents they serve.

Leveraging CDC Opioid Overdose Surveillance Funding from the Albuquerque Area Southwest Tribal Epidemiology Center to Create Tribal Data and Culturally Center Medications for Opioid Use Disorder, (R61DA049382) VENNER, KAMILLA

Patients who take medication for opioid use disorder have improved treatment retention and reduced risk of overdose compared to patients not taking MOUD. The project will draw upon a community advisory board composed of clinicians and Indian health facility staff, and use a collaboration of epidemiologists and the NMDOH, and UNM and Columbia researchers. We will first enhance tribal specificity of AI/AN opioid use disorder and overdose data by linking and geocoding N.M. statistics and syndromic surveillance data. We will then use these data to determine the role of modifiable risk and protective factors for specific tribal communities. In Phase 2, we will develop a culturally centered implementation program for MOUD for use in AI/AN communities.

Development of a Comprehensive and Dynamic AA Process Model (R01AA027508) TONIGAN, J. SCOTT

This study will generate a comprehensive process model of AArelated behavior change. Using real-time daily data, we will see if four MOBC mediate the linkage between three types of AA prescribed behaviors and drinking outcome. Aim 2 will investigate whether the actions of the AA active ingredients are constant over time or, alternatively, if there are critical periods of influence. Aim 3 will determine if the four MOBC operate differently across distinct subpopulations. We propose a two-group randomized study. In one group (n = 130) we will collect 6-months of continuous EMA data. Assessment reactivity is a concern we will therefore include a traditional fixed assessment group (n = 60) interviewed at baseline, 3, and 6-months to identify potential measurement biases. Achievement of study aims will generate the first empirically validated AA process model that will inform TS with critical information for improving treatment outcomes.

Future (Submitted) CASAA Grants

HEAL Initiative: Integrative Management of Chronic Pain and OUD for Whole Recovery (IMPOWR): Research Centers (RM1 Clinical Trial Required; Witkiewitz & Pearson, MPI)

Impact of alcohol use and nutrition on health trajectories of COVID-19 long-haulers: A study of young people of color (Coakley, PI)

Responsible Budtending (Pearson, PI)

CASAA and New Mexico

CASAA as a primary platform for UNM Grand Challenge.

CASAA Service Units

UNM Grand Challenges are problems of global, national and regional significance that require researchers to work together across disciplinary boundaries to develop and implement solutions. Grand Challenges address problems that, when solved, have a significant positive impact on people and society. These challenges are large in scale, ambitious in scope, and multi-disciplinary.

In the Spring of 2019, UNM launched three Grand Challenges (one led by UNM Main Campus, one led by UNM Health Sciences Center, and one with shared leadership between the two campuses).

UNM's three Grand Challenges will focus on the following areas impacting N.M. : Sustainable Water Resources, Successful Aging, and Substance Use Disorders. Changes in Drinking During the COVID19 Stay at Home Order among a Community Sample of Non-Treatment Seeking Heavy Drinkers in New Mexico Dr. Katie Witkiewitz

The proposed pilot study will examine changes in alcohol consumption and other drug use over the 3 month period from March to May 2020, as well as experiences of loneliness, depression, anxiety, perceived stress, and social isolation, among a well-characterized longitudinal cohort of non-treatment seeking heavy drinkers in the Albuquerque Metropolitan area. Do granular classifications of ethnicity capture hidden heterogeneity in the causes of early and alcohol-related death?: A novel application of medical examiner data Dr. Heather Edgar

We are proposing to collect and analyze pilot data on 500 NMS decedents with alcohol-related causes of death who died between 2017 and 2019. Our Specific Aim is to determine whether at risk drinking patterns account for variation in cause of death among fine-grained ethnic categories. The NIAAA has prioritized the development of Hispanic/Latinx (HL) culturally adapted and sensitive behavioral interventions. In order for these interventions to succeed, ethnic labels used in research and practice must actually reflect ethnic identity in populations of interest.

Probing the Mechanisms of Narcotics Anonymous Using Ecological Momentary Assessment. Dr. Matthew R. Pearson

This pilot study will evaluate impressions of NA from the perspective of college students and evaluate how NA exerts its effect for individuals. We propose to conduct a two-part study. In the first part we will survey college student experiences of attending NA and evaluate responses to determine if NA is a good fit for college students. In the second part of the study, we propose an ecological momentary assessment (EMA) study (n = 20) investigating NA-related behavior change among NA members.

Assessment for a Center for the Collegiate Recovery Community. Dr. Randall Starling

Our project's aim is to determine the feasibility of creating and establishing a collegiate recovery community center (CRC) at UNM, the resources needed, the cost effectiveness, and need for a CRC. This will be an implementation project. With over 130 collegiate recovery programs across the United States (ARHE, 2019), there are many challenges for students in recovery as they are surround in heavy drinking cultures. CRCs are for students in recovery as well as students experiencing addictions while they pursue their education. CRCs provide a supportive and safe haven to adult students surrounded by heavy drinking cultures.

Trajectories and mental health predictors of perinatal alcohol and polysubstance use Drs. Pilar M. Sanjuan & Lawrence Leeman

This study will examine 5 years of UNM electronic medical records data of women (N = 875 to 1000) who were treated for prenatal substance use disorder (SUD) through the UNM Milagro Program, an integrated prenatal care and SUD treatment program, to determine the association between mental health diagnoses associated with continued prenatal benzodiazepine, methamphetamine, opioid, and alcohol polysubstance use during treatment. Most pregnant women in SUD treatment are able to reduce or completely abstain from substance use during pregnancy, but many relapse in the early postpartum period when protective factors are no longer in place.

Identifying the facilitators and barriers to effective implementation: An evaluation of the New Mexico naloxone co-prescribing law Dr. Margo Hurlocker

Opioid overdose is a major public health issue, and effective implementation of new legislation to mitigate opioid overdose is critical to evaluate its impact on patients and society. New Mexico passed the naloxone co-prescribing law on July 1, 2017, which requires certain individuals to provide opioid overdose education and offer the overdose reversal drug – naloxone – to individuals at-risk of opioid overdose. Individuals mandated to provide opioid overdose education and naloxone according to this legislation include opioid treatment center providers, law enforcement officers, and correctional facility personnel. This implementation project will explore the degree of legislation compliance among two of these mandated personnel – officers and providers.

Substance Use Patterns among College Students Peri- and Post-COVID-19 Shutdown

Dr. Matthew R. Pearson

Taking advantage of an existing large scale survey and daily diary study (Project ART and Project ART Part II), we will explore how substance use patterns among college students compare during and following COVID-19 shutdown. This tragic pandemic offers a unique opportunity to examine the effects of a strong, shared real-world stressor that likely increases social isolation, anxiety, and substance use

CASAA as a Training Institution

Training Domains

Student Training

- NIAAA pre- and post-doctoral research training grant (T-32)
- "@ UNM" Alcohol Treatment Clinic (in Psychology)

Basics in Addictions Counseling (in Psychology)
 Faculty & Service providers Training

 State contracts to train service providers
 Grant Writing Seminar

CASAA Training Graduates

Dr. Mandy Owens Research Scientist, UW Addictions, Drug & Alcohol Institute Affiliate Assistant Professor, UW Psychology

Dr. Kevin Montes California State University College of Natural and Behavioral Sciences Department of Psychology Assistant Professor





CASAA Training Graduates

Dr. Adrian Bravo William & Mary Psychological Sciences Assistant Professor



Dr. Margo Hurlocker University of New Mexico Department of Psychology Assistant Professor



CASAA Training Graduates

Dr. Kevin Hallgren University of Washington School of Medicine Department of Psychiatry and Behavioral Sciences Assistant Professor

Dr. Pilar Sanjuan University of New Mexico Department of Community and Family Medicine Associate Professor





Faculty & Service provider Training Research methods

National trainings on therapy coding

 National trainings on clinical research methods (Interview-based Alcohol Assessments; Form 90)

 Annual grant writing seminar for UNM investigators

CASAA NIH Grant Writing Seminar

8-Week hands-on seminar about how to write strong, competitive NIH applications
University-wide enrollment in seminar
Went virtual 2020 and was highly successful
Example: 53 registered, 42 attended 6 or more sessions.

Seminar generated 5 non-CASAA NIH applications

CASAA service programs Dr. Randall Starling:

- Campus Office of Substance Abuse Prevention (COSAP) is charged with two broad objectives:
 - To ensure UNM's compliance with federal regulations related to substance abuse
 - To coordinate, enhance, and develop substance abuse prevention programs
- Grants and projects:
 - Program to impact underage drinking and prescription opiate abuse and evaluate impact of the program
 - Program to make UNM a smoke-free campus
 - Higher education consortium to impact alcohol and drug use on NM campuses

CASAA service programs

Roberta Chavéz:

- Program Evaluation Services (PES):
 - Participant recruitment, conduct structured research interviews - intakes and follow-ups
 - Maintenance of participant records
 - Assures compliance with all IRB and Federal regulations
 - Follow-up rates in excess of 90% across more than 60 studies

<u>Matt O'Nuska:</u>

- Research Data Services (RDS):
 - Computerized test administration
 - Custom, study-specific data entry systems and databases for research
 - Assures clean and accurate datasets

CASAA Sponsorship of National Addiction Conferences

Conferences

 Mechanisms of Behavior Change
 International Conferences on the Treatment of Addictive Behaviors (ICTAB-13, Odense, Denmark, May, 2015)
 Collaborative Perspectives on Addiction

Questions and discussion