Welcome to the weekly newsletter from the Center for Addiction Research! Each newsletter includes highlights from addiction in the news topics, active funding opportunities offered by NIDA/NIAAA, and information about any new publications from CAR members. Please email Jen Rowe (roweji@ucmail.uc.edu) to change your communication preferences. Thank you.

Thank you for your interest in the Center for Addiction Research - our mission is to accelerate scientific progress in the prevention and treatment of substance use disorders and their consequences by fostering research collaborations across: 1) UC departments, colleges, and centers including Cincinnati Children's Hospital Medical Center; 2) Local, regional, and state community and governmental partners; and 3) Other academic institutions and industry."



## **UC/ Regional News**

The Center for Addiction Research will hold its final 2024 virtual Summer Speaker Series event, Wednesday, August 14 at 12pm on "Social and Psychosocial Determinants of Treatment Response and Recovery Among Black Adults Who Use Substances" with presenter, **Kathy Burlew, PhD,** Professor Emeritus of Psychology, College of Arts and Sciences and Simeon Goodwin, PhD, Outreach and Prevention Specialist, The Crossroads Center. The series is sponsored by Center for Clinical & Translational Science & Training. This presentation will be held virtually, is free and open to the public. (PDF event flyer attached)

## >> Register for this presentation

### **National News**

## New gut microbiome discovery: Sodium valerate could be key to reducing alcohol abuse

In a groundbreaking study, researchers at The Jackson Laboratory and UConn Health have discovered that sodium valerate, a short-chain fatty acid produced by gut microbes, can significantly reduce binge drinking behavior and blood alcohol levels in mice. This finding, published in the journal Microbiome, offers new insights into the gut-brain connection and suggests a novel treatment for excessive alcohol consumption. Alcohol use disorder (AUD) is a chronic condition characterized by an inability to control alcohol consumption despite adverse consequences. It affects millions of individuals worldwide, leading to...

### What happens to your brain when you drink with friends?

Grab a drink with friends at happy hour and you're likely to feel chatty, friendly and upbeat. But grab a drink alone and you may experience feelings of depression. Researchers think they now know why this happens. "Social settings influence how individuals react to alcohol, yet there is no mechanistic study on how and why this occurs," said Kyung-An Han, Ph.D., a biologist at The University of Texas at El Paso who uses fruit flies to study alcoholism. Now, Han and a team of UTEP faculty and students have taken a key step in understanding the neurobiological process behind social drinking and how it boosts feelings of...

### Drinking during a pregnancy: an expert offers guidance

It's a question many women may ask themselves during pregnancy: Will an occasional glass of wine harm the baby? While the latest research shows the answer is definitely yes for large quantities of alcohol or binge drinking, the answer is less clear for small amounts, although any alcohol consumption carries some risk, said Vidya Rajagopalan, a principal investigator at The Saban Research Institute of Children's Hospital Los Angeles. Her research includes studying the development of a baby's brain in utero using advanced MRI scans. Rajagopalan is also participating in the National Institutes of Health's HEALthy Brain and Child...

#### Alcohol use in older adults doubles risk of brain bleeds from falls

Nationally, falls remain the leading cause of both fatal and non-fatal injuries in older adults and are the leading cause of traumatic brain injury. In 2021, falls led to the deaths of 36,500 older adults in the United States and 3,805 older Floridians. While some studies have hypothesized that alcohol use contributed to these outcomes, there are few studies which have examined this issue. As such, little is known about the association between the frequency of alcohol use and the severity of injuries sustained after a fall in older adults. A study by Florida Atlantic University's Schmidt College of Medicine and collaborators, is...

## Decreased alcohol consumption in chronic heavy drinkers reduces incidence of cardiovascular diseases

A research team has demonstrated that reducing alcohol consumption in chronic heavy drinkers can significantly reduce the risk of major adverse cardiovascular and cerebrovascular events. Their research paper "Reduced Alcohol Consumption and Major Adverse Cardiovascular Events Among Individuals with Previously High Alcohol Consumption" was published in the JAMA Network Open. The collaborators include Prof. Dong Oh Kang and Prof. Dae-In Lee from the Cardiovascular Center of Korea University's Guro Hospital, Prof. Jin-Man Jung from the Department of Neurology at Korea University...

### Missouri bans sale of Delta-8 THC and other unregulated CBD intoxicants

JEFFERSON CITY, Mo. (AP) — Missouri is banning the sale of drinks, candy and other foods made with hemp-derived intoxicating substances, Republican Gov. Mike Parson announced in an executive order issued Thursday. The ban kicks in Sept. 1. Parson cited health concerns and lack of research on Delta-8 THC and similar unregulated CBD substances. He also made clear that his order does not prohibit consumption of psychoactive hemp products. The rules "are not here to punish consumers," Parson said. "Our goal is to safeguard the health and safety of Missourians, especially the most vulnerable: our…

### A simple test can predict whether smokers will manage to quit

Data from nearly 6,000 smokers with cancer show that it may be easier to predict who will stop smoking than was previously thought. It is often important to get cancer patients to quit smoking, but it is not always that easy. "Data suggest that between 15% and 60% of people who smoked before they were diagnosed with cancer continue to smoke after their diagnosis. It is crucial to help people with cancer quit smoking, because it will lead to better cancer treatment prognoses, prevent secondary cancer, and increase quality of life," says Rubén Rodríguez-Cano, an associate professor at NTNU's Department of Psychology. Degree...

## Using genetics to help smokers quit: Study investigates abnormal dreams on varenicline

Researchers have identified variants in a gene that influences the likelihood of smokers developing abnormal dreams while taking a medication to help them quit. The study is published in the journal Clinical Pharmacology & Therapeutics. Varenicline is a medication that is frequently used to help people who are attempting to quit smoking. While varenicline is one of the most effective medications for this purpose, at least 10% of users experience abnormal dreams. These can be vivid and even violent in nature, disrupting sleep, adding to the stress of quitting, and making success less likely. The research is by an international...

## **Are Vape Makers Using Dubious Nicotine 'Mimics' to Bypass Regulations?**

THURSDAY, Aug. 8, 2024 (HealthDay News) -- That vape pen might contain something even worse than nicotine, new research warns. Tobacco companies may be trying to duck federal restrictions on vaping products by replacing nicotine with "nicotine analogs" -- related chemicals that have similar properties but unknown health effects, researchers report. "Vaping products containing nicotine are subject to federal laws that prohibit sales to people under the age of 21," explained researcher Dr. Sairam Jabba, a toxicologist at Duke University School of Medicine, in Durham, N.C. "Nicotine analogs are currently not subject to…

#### Text messaging can help teens kick the vaping habit

An interactive text-message support program can help teenagers quit vaping, a groundbreaking new clinical trial finds. Teens who subscribed to the anonymous

program, called This Is Quitting, were 35% more likely to report not vaping nicotine by the end of a seven-month study, researchers reported Aug 7 in the Journal of the American Medical Association. This is the first clinical trial testing the effectiveness of a quit vaping program among teens, researchers said. "Until today, we haven't had data to tell us what works," said lead researcher Amanda Graham, chief health officer at Truth Initiative, an...

# Prescription painkiller misuse and addiction are widespread in chronic pain patients

A new scientific review of 148 studies enrolling over 4.3 million adult chronic pain patients treated with prescription opioid painkillers has found that nearly one in ten patients experiences opioid dependence or opioid use disorder and nearly one in three shows symptoms of dependence and opioid use disorder. This review provides a more accurate—and more concerning—rate of opioid misuse than has previously been calculated. It was conducted by researchers at the University of Bristol and appears in the scientific journal Addiction. Companies like Oxycontin manufacturer Purdue Pharma have claimed that...

#### Cocaine discovery could pave way for treatment for substance abuse

You have probably heard of dopamine. The substance also known as the "feel-good hormone." Drugs such as cocaine cause a surge of dopamine in the brain. Normally, a protein in the brain called the dopamine transporter (DAT) helps regulate dopamine levels and prevent the brain from thinking that every experience is pleasurable. However, when affected by cocaine, the brain is unable to regulate dopamine levels. Previously, researchers did not know how cocaine affects the different transporters in the brain, but a new study from the University of Copenhagen has changed that. The paper is published in the journal...

# New study defines relationships among heparan and chondroitin sulfate and associated proteins involved in drug abuse

Substance use disorder is a major concern with few therapeutic options. In 2019, close to 20.4 million people were diagnosed with substance use disorder, and nearly 71,000 people died of an overdose, with cocaine and methamphetamine (meth) responsible for approximately 15,000 deaths that year. A new study from researchers at Boston University Chobanian & Avedisian School of Medicine and the Scripps Research Institute reveals how altered molecules and related neurobiological mechanisms operate during substance abuse. These findings open avenues for developing new therapeutic targets and treatment strategies...

## Bipartisan lawmakers press Biden administration on MDMA treatment for PTSD

Bipartisan lawmakers in the House and Senate are pressuring the Biden administration about MDMA-assisted therapy to treat post-traumatic stress disorder (PTSD). In a letter to President Biden, retired Marine Corps Lt. Gen. and current Rep. Jack Bergman (R-Mich.) and 60 other members of the House asked the

administration to follow the science and approve a new treatment that uses MDMA—the chemical found in ecstasy or molly—with talk therapy to treat PTSD.

Bergman is the highest-ranking combat veteran in Congress. A similar letter to Food and Drug Administration (FDA) Commissioner Robert Califf from 19 senators...

### The Promise of 'Magic Mushrooms' for Mental Health Is Real

Looking for an election-year healthcare issue that could bring the two major political parties together? Think there is no such thing? Think again. A public opinion survey conducted last summer by the University of California, Berkeley, found 61% of U.S. voters support legalizing regulated therapeutic access to psychedelics. Breaking it down by party, liberal voter support for legalized therapeutic access to psychedelics was 80%, compared to moderates at 66%, and conservatives at 45%. To be clear: Use of psychedelics, such as psilocybin, for recreation is quite different than therapeutic interventions that are paired...

# University of California students push for a place to get — and stay — sober on every campus

Four years clean from methamphetamine and with five associate degrees in hand from a community college in California's Central Coast, Cheech Raygoza began his undergraduate studies at UC Berkeley in 2022 feeling like he was in prison — again. Away from his fiancé, kids and grandchildren, and plucked from his community in Santa Maria, he was alone — like all those years he served behind bars. "Something that came natural to me when I moved to Berkeley was isolating," Raygoza, 55, said. "I was in a cell for 13 years, so I know how to do time by myself." For the first year at one of the nation's top public universities, "I didn't...

## **Funding Opportunities**



RFA-DA-25-024

High Priority HIV and Substance Use Research (R01 Clinical Trial Optional)

NOT-AI-24-059

Notice of Special Interest (NOSI): Ending the HIV Epidemic (EHE)

PAR-24-267

<u>Functional Validation and/or Characterization of Genes or Variants Implicated in</u> Substance Use Disorders (R21/R33 Clinical Trial Not Allowed)

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