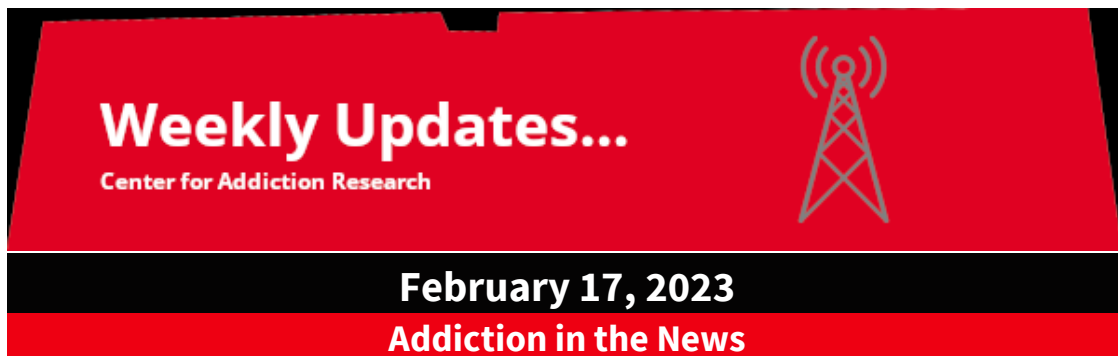


UC CAR Weekly Newsletter 2.17.2023

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

“Hamilton County Public Health Webinar Series: A Progressive Community Risk Reduction Effort Targeting the Second Largest Township in the State of Ohio”

When: Tuesday, March 7th from 1:00-2:00 pm ET

Register: [Zoom](#)

Summary:

In Hamilton County, Ohio, a progressive risk reduction approach was established in February 2021 where a Community Health Coordinator (CHC) position was developed to be the liaison between the health department and Colerain Township. This new position ultimately aimed to help township employees and community members connect with resources. With Colerain as the second largest township in Ohio, there is a significant population of people who need assistance. Our goal for this position was to collaborate with first responders through referrals and the Colerain community to provide the residents with linkage to care for issues such as addiction, mental health, domestic violence, homelessness, and basic needs. We offered harm reduction supplies (naloxone, fentanyl test strips, etc.) and treatment services by visiting residents who have experienced an overdose through the Quick Response Team. Lastly, we worked with the Northwest Local School District to deliver early interventions for students who were first time drug/alcohol offenders at the schools. By implementing these programs through the CHC position, residents had a safe space to reach out about their needs and find resources to help improve their safety, health, and wellness. During this webinar, you will hear from HCPH, The Community Health Coordinator and Colerain Township Department of

Fire and EMS. We hope you can join us for this Hamilton County Public Health Webinar and participate in this very critical conversation.

Learning Objectives:

1. Participant will be able to describe the need for innovative harm and risk reduction efforts in large townships and communities.
2. Participant will be able to identify key elements on how to replicate this program in other communities and create buy-in from external partners.

Stay up-to-date on research projects being conducted by CAR members: [Projects \(uc.edu\)](#)

Stay up-to-date on CAR member publications: [Publications \(uc.edu\)](#)

National News

[New Research Characterizes Alcohol Use Disorder Profiles To Predict Treatment Outcomes](#)

Alcohol use disorder (AUD) is a heterogeneous disorder, meaning individuals with AUD differ in their clinical symptoms and in the biological and psychological factors that contribute to their disorder. A better understanding of individual differences in AUD could inform the development of tailored treatment approaches to increase treatment effectiveness. New research from the University of New Mexico, the University of Washington, and Syracuse University published in *Psychology of Addictive Behaviors* shows that assessing patients based on biological and psychological domains of addiction...

[Harmful effects of long-term alcohol use documented in blood protein snapshot](#)

Biochemist Jon Jacobs has analyzed the blood of patients with diseases and conditions such as Ebola, cancer, tuberculosis, hepatitis, diabetes, Lyme disease, brain injury and influenza. But never has he seen blood chemistry gone so awry as when he and colleagues took an in-depth look at the protein activity in the blood of patients with alcohol-associated hepatitis, a severe form of liver disease caused by heavy drinking for many years. "The proteins in these patients are more dysregulated than in any other blood plasma that we've analyzed," said Jacobs, a biochemist at the Department of Energy's Pacific...

[Risk for alcohol use disorder increased after COVID-19 infection](#)

There appears to have been an increased risk for alcohol use disorder (AUD) after COVID-19 infection versus non-COVID-19 respiratory infections in some time periods during the pandemic, according to a study published online Feb. 9 in *JAMA Network Open*. Veronica R. Olaker, from the Case Western Reserve University School of Medicine in Cleveland, and colleagues examined the association of COVID-19 infection with a new diagnosis of AUD over time from January 2020 through January

2022 in a retrospective cohort study of electronic health records. New diagnoses of AUD were compared...

What Binge Drinking Does to Your Gut and Your Brain

John Cryan and Ted Dinan are a pair of dynamic Irish researchers who, over the past decade, have been busily advancing the remarkable science of the gut-brain axis. They coined the term psychobiotic to refer to probiotics and prebiotics that can improve your mood. The idea that mere gut microbes could affect the lofty human brain is humbling. As Cryan puts it, "If microbes are controlling the brain, then microbes are controlling everything." Cryan, Dinan, and their team at APC Microbiome, based at University College Cork, recently looked at what happens to gut microbes in young binge drinkers. Once...

Dementia: Heavy drinking tied to higher risk, but mild intake may be OK

The evidence is clear that long-term, excessive alcohol consumption causes severe, life-threatening harm to health, including stroke, heart disease, liver disease, and cancer. In the United States alone, around 140,000 people die every year as a result of excessive drinking, which shortens their lives by an average of 26 years. So it comes as a surprise that several population-based studies have found an association between light or moderate alcohol consumption and a lower incidence of dementia. There may be alternative explanations for the findings, however, and it is important to note that...

Cannabis May Interfere With Pregnancy

Adverse outcomes in pregnancy appeared more frequent if the child-to-be was exposed to cannabis in the early stages of pregnancy, retrospective data from a multicenter study suggested. Of more than 9,000 pregnancies, the primary composite endpoint of small for gestational age, medically indicated preterm birth, stillbirth, or hypertensive disorders of pregnancy occurred in 27.4% of the cannabis-exposed group compared with 18.1% of the non-exposed group ($P < 0.001$), reported Torri Metz, MD, MS, of the University of Utah in Salt Lake City, at the Society for Maternal-Fetal Medicine...

CBD shows promise for reducing cigarette smoking

Cannabidiol or CBD, a non-psychoactive component of cannabis, inhibits the metabolism of nicotine, new research has found, meaning it could help tobacco users curb the urge for that next cigarette. A team led by Washington State University researchers tested the effects of CBD and its major metabolite on human liver tissue and cell samples, showing that it inhibited a key enzyme for nicotine metabolism. For the nicotine-addicted, slowing metabolism of the drug could allow them to wait before feeling the need to inhale more of it along with all the other harmful things found in...

A smart necklace to help people stop smoking

A necklace that could help you stop smoking is now on the horizon. Northwestern Medicine researchers have developed a smart neck-worn device resembling a lapis blue pendant that detects a user's smoking much more reliably than previous systems. It does so by capturing heat signatures from thermal sensors. The necklace, called SmokeMon, completely maintains a smoker's privacy, only tracking heat, not visuals—which is a critical factor for people to feel comfortable wearing it. "This goes way beyond how many cigarettes a person smokes per day," said senior investigator Nabil Alshurafa, associate...

Majority Of Americans Support Banning Tobacco Products

More than half of all Americans support a complete ban on all tobacco products, according to a new poll published by researchers at the Centers for Disease Control and Prevention (CDC), and nearly two-thirds say they support a ban on menthol cigarette sales. Published Thursday in the journal *Preventing Chronic Disease*, the poll included surveys from nearly 6,500 adults conducted in 2021; before the US Food and Drug Administration (FDA) proposed a ban on menthol and flavored cigarette products. Overall, 57% of adults supported a policy that would see the sale of tobacco products banned, while...

New tobacco product marketing depends on demographics

A study by the Rutgers Center for Tobacco Studies and the University of Kentucky Markey Cancer Center will help establish policy on the sale and marketing of two different tobacco products recently introduced to the United States market. The study, published in *Preventive Medicine Reports*, is one of the first to examine the retail availability of disposable electric cigarettes and oral nicotine pouches and gives an early indication that the products are targeted to different audiences. As the products go through the Food and Drug Administration's premarket authorization...

Quitting smoking tied to better survival in head, neck squamous cell carcinoma

Smoking cessation for >10 years is significantly associated with reduced overall mortality and head and neck squamous cell carcinoma (HNSCC)-specific mortality, according to a study published online Jan. 18 in *Cancer*. John J.W. Lee, M.D., from University of Toronto, and colleagues assessed whether smoking cessation and increased duration of abstinence were associated with improved overall and HNSCC-specific survival. The analysis included prospective data from 2,482 patients with HNSCC (2006 to 2019). The researchers found that former smokers had a lower risk for overall mortality...

Learning about the health risks of vaping can encourage young vapers to rethink their habit

Vaping is most prevalent in Canada among 15- to 24-year-olds, and has significantly increased since e-cigarettes with nicotine were legalized in 2018. Ensuring that

young people understand the health risks involved may help encourage them to steer clear of vaping. Recent data from Statistics Canada show that more than one-third of teenagers between the ages of 15 and 19 have tried vaping, and 15 percent report having done so within the last 30 days. Of those who reported vaping in last 30 days, approximately 80 percent had vaped nicotine. Unfortunately, teens may underestimate the...

Researchers endorse widespread naloxone over the counter to prevent drug overdose deaths

In 2021, 100,306 Americans died from drug overdoses—a 28.5 percent increase from the prior year—with 75,673 attributed to opioids. Synthetic opioids, primarily fentanyl and natural and semi-synthetic opioids, are major contributors. In addition, illicitly manufactured fentanyl often is added to other recreational drugs because of its low cost and increased potency. As a result, the risk of fatal overdose increases for all users, especially first-time or occasional users. About six out of 10 fentanyl-laced illegal drugs sold on the street now contain a potentially lethal dose of fentanyl. Naloxone is an opioid...

FDA Panel Says Opioid Overdose Antidote Safe to Sell Over-the-Counter

THURSDAY, Feb. 16, 2023 (HealthDay News) -- A nasal spray that can reverse an opioid overdose should be sold over-the-counter, two expert panels to the U.S. Food and Drug Administration recommended Wednesday. Research has shown that wider availability of naloxone -- brand named Narcan -- could save lives as the opioid epidemic rages on in this country. The FDA advisors voted unanimously in favor of making the drug easier to access after a daylong meeting that focused on whether untrained users would be able to safely and effectively use the nasal spray in emergencies, the...

Buprenorphine for Chronic Pain, Not Full Agonist Opioids, New VA Guidance Says

Buprenorphine, rather than a full agonist opioid, should be used for patients taking daily opioids for chronic pain, given its lower risk for overdose or misuse, new guidelines from the Department of Veterans Affairs (VA) and Department of Defense (DoD) recommended. But "the guideline development group does not recommend use of opioid analgesics in the daily management of chronic pain," wrote James Sall, PhD, of the VA in New Braunfels, Texas, and co-authors in *Annals of Internal Medicine*. "The benefits that opioids can provide are small and are outweighed by the risks to the patient," they...

Opioid tapering may have unintended negative consequences

For patients prescribed long-term opioid therapy (LTOT), opioid tapering may have unintended negative consequences, including more emergency department visits and hospitalizations, according to a study published online Feb. 7 in *JAMA Network Open*. Elizabeth M. Magnan, M.D., Ph.D., from the University of California at Davis,

and colleagues conducted a retrospective cohort study to examine tapering among adults prescribed stable doses of LTOT at 50 morphine milligram equivalents or more per day during a 12-month baseline period. Data were included for 113,604 patients...

Newly-discovered brain circuit could put the brakes on risky behaviors

A team of researchers in the College of Medicine at the Medical University of South Carolina (MUSC) has discovered a brain circuit that inhibits motivated behaviors. They report in Nature Communications that the circuit is located in a region of the brain called the thalamus. When active, it can prevent reward-seeking behavior in a preclinical model. In the same model, blocking, or inhibiting, the circuit leads to reward seeking even in high-risk contexts. Importantly, administering opioids causes immediate and significant disruption of the circuit, resulting in even riskier behaviors. The findings from...

Machine learning model helps doctors predict opioid prescription risk for patients

Researchers at the University of Alberta are using a form of artificial intelligence to help doctors better predict which patients are at risk of adverse outcomes from opioid prescriptions. In newly published research, the collaborative team created a machine learning model to estimate the risk of an emergency department visit, hospitalization or death within 30 days of filling an opioid prescription. Machine learning allows computers to find patterns in huge volumes of data, getting more accurate over time as they continually validate and retrain with updated information. The...

No-Opioid Strategy Sharply Reduced Prescribing After Urologic Cancer Surgery

A protocol focusing on non-opioid pain control measures, as well as patient education, helped eliminate the need for post-discharge opioid prescriptions after major urologic cancer surgery, according to a cohort study. Among nearly 650 opioid-naive patients, the rate of opioid prescriptions at discharge was 57.9% for those who received an instruction sheet that explained the rationale for avoiding opioids and using non-opioid medications for postoperative pain control (lead-in group) and 2.2% among those who followed the NOPIOIDS protocol, compared with 80.9% of the control...

Cocaine Addiction Makes The Human Brain 'Age' Faster, Scientists Warn

Our brains experience a litany of changes as we age, right down to the way its DNA is translated. Now a new study has found that in people with cocaine use disorder those changes can accumulate at an accelerated rate. Cocaine is one of the most addictive substances known to humans. It interferes with the brain's reward pathways, forcing its cells to continue to pump out pleasurable signals until the drug wears off. Estimates from the US suggest that one in five people who use

cocaine go on to develop an addiction. But precisely how a drug that interferes with the junctions between...

Cocaine use disorder alters gene networks of neuroinflammation and neurotransmission in humans

Individuals with cocaine use disorder exhibit gene expression changes in two brain regions: the nucleus accumbens, a region associated with reward, and the caudate nucleus, a region mediating habit formation, according to research conducted at the Icahn School of Medicine at Mount Sinai and published February 10 in *Science Advances*. These changes, which contribute to the persistent behavioral abnormalities seen in addiction to drugs, occur because cocaine use sets off a series of chemical reactions that lead to increases in the amount of messenger RNA being produced from some...

Scientists identify how repeated cocaine use increases addictiveness

Scientists have identified the brain structures responsible for compulsive drug-seeking behaviors due to repeated use of cocaine. The findings, published in *Biomedicine*, identifies the structures involved and neural pathways activated with repeated exposure to the drug. Researchers hope the study could help inform treatment for drug addiction. Researchers from the Federal University of São Paulo, Brazil, and the University of Bristol Veterinary School, UK, aimed to identify the brain structures involved in behavioral responses to cocaine. Scientists believe the phenomenon underpins...

Is the brain wired differently in people with addiction?

Some 10% to 15% of people will have a substance abuse problem at some point in their life, making it one of the most common psychiatric disorders. Risks associated with substance abuse include dangerous driving, missed work, problems with depression, anxiety, health and money problems. Yet people with addictions seem to experience a sort of myopia, getting in deeper and deeper to cope with unpleasant emotions and to feel good, regardless of the cost. Research has clearly established that psychosocial and environmental factors play a role in the development of substance abuse...

Drug Czar Issues Challenge to Docs: Help Us Devise Better Substance Use Tx Options

WASHINGTON -- The Biden administration's drug czar has a challenge for America's doctors, especially members of the American Medical Association (AMA): help figure out the best way to treat substance use disorder (SUD) patients. "While the Biden administration has improved access to care for millions of people with OUD [opioid use disorder], we've got a lot more work to do," Rahul Gupta, MD, director of the White House Office of National Drug Control Policy, said Tuesday at the AMA's National Advocacy Conference here. "This is where we need your help. We need more docs screening and case-finding..."

The Role of Grief in Addiction

Most people tend to associate grief with death, but we now know that we can experience grief through the loss of anything to which we are attached and is important to us. There is no right or wrong way to grieve. Grief is painful. Unfortunately, we will all have to experience it. One of the ways people may try to cope with that pain is by numbing themselves through the use of substances. Doing this, however, can only extend the feelings we are trying to suppress and make things worse. Research and experience have shown that there is a strong connection between substance abuse and complicated grief...

Funding Opportunities



[NOT-DA-23-017](#)

[Notice of Joint NSF/NIDA Initiative to Support Research in the Incorporating Human Behavior into Epidemiological Models Program](#)

UC Foundation Funding Opportunities

Please contact Carol Russell at (513) 556-6169 or carol.russell@uc.edu **at least 5 business days before the deadline**, prior to applying to the below opportunities, to ensure coordination and to facilitate assistance with approaches.

[Amos Awards Develop Underrepresented Faculty in Medicine, Dentistry, Nursing](#)

Deadline: March 15, 2023. Applications are open until 3 p.m.

Robert Wood Johnson Foundation (RWJF) has announced the Harold Amos Medical Faculty Development Program for physician, dentist or nurse faculty committed to advancing a Culture of Health. This grant cycle, RWJF will fund up to 10 four-year awards of up to \$420,000 each. Scholars will receive an annual stipend of up to \$75,000 each, complemented by a \$30,000 annual grant to support research activities.

The [Harold Amos Medical Faculty Development Program](#) offers four-year postdoctoral research awards to physicians, dentists, and nurses from historically marginalized backgrounds who seek to:

- Achieve senior rank in academic medicine, dentistry, or nursing.
- Foster the development of other physicians, dentists, and nurses from historically marginalized backgrounds.

- Improve the health of underserved populations and eliminate health disparities.

The program offers scholars an opportunity to:

- Enhance leadership and research skills and become more effective influencers.
- Receive mentoring from a distinguished national advisory committee.
- Deepen understandings of social determinants of health, health equity, and a Culture of Health.
- Strengthen communications skills to advance the impact of scholars' research.

[RWJF Rewards Doctoral Students Across Disciplines to Advance Culture of Health](#)

[Deadline: March 15, 2023](#)

Health Policy Research Scholars (HPRS), established by the Robert Wood Johnson Foundation, is a leadership development program for full-time doctoral students entering their second year of study and are also from populations underrepresented in specific doctoral disciplines and/or historically marginalized backgrounds. HPRS includes scholars from disciplines as diverse as economics, political science, psychology, architecture, transportation, sociology, social welfare, and environmental health. The foundation is looking for students from any research-focused discipline that can advance a Culture of Health. The award pays \$30,000 annually for up to four years. Eligible individuals include first-generation college graduates, individuals from lower socioeconomic backgrounds, individuals from communities of color, and individuals with disabilities. RWJF wants applicants to apply their research to advance health and equity, and their innovation helps build a Culture of Health, one that enables everyone in America to live longer, healthier lives.

Applicants must be:

- Full-time doctoral students, starting their second year of studies in fall 2023, who will have at least three years of doctoral study remaining as of September 2023.
- From historically marginalized backgrounds and/or populations underrepresented in specific doctoral disciplines. Examples of eligible individuals include but are not limited to first-generation college graduates; individuals from lower socioeconomic backgrounds; individuals from communities of color; and individuals with disabilities.
- Pursuing a research-focused discipline that can advance a Culture of Health.
- Interested in health policy and interdisciplinary approaches.

Mary Kay Domestic Violence Shelter Grant Program Provides Operating Funds

Deadline: April 30, 2023

The Mary Kay Foundation Domestic Violence Shelter Grant Program awards grants to emergency women's domestic violence shelters. The funds may be used for operating expenses. Eligibility: Applicants operating emergency shelter (immediate overnight housing) for survivors of domestic violence are eligible to apply. The Foundation will award a grant of \$20,000 to at least one domestic violence shelter in every state that applies. Many grants have gone to rural areas.

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