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**

# Google's Low-Tech Plan to Solve the Opioid Crisis

A rehab clinic in Ohio meant to highlight the company's futuristic approach to medicine has instead shown the value of old-school care. Christopher Boggs started smoking pot in his teens, moved on to cocaine, and finally settled on opioids, which allowed him to evade the drug testing program at the car factory where he worked. He sounds like a seasoned pharmacist as he ticks off the drug regimen he built up. "Any kind of opioid you could get. Oxycodone, hydromorphone, oxymorphone, fentanyl patches—just everything," he...

# 'A light in the darkness': Legal settlements, work of non-profits to turn tide in opioid epidemic

CLEVELAND — As one pandemic winds down, the ongoing opioid epidemic continues to shred families and communities throughout Northeast Ohio. However, with millions of dollars expected to fill the coffers of city and county governments by way of a litany of different legal settlements, non-profit leaders hope the combined effort will turn the tide. According to the most recent data from Cuyahoga County Medical Examiner's Office, it is projected that 650 people will die of drug overdoses in 2022, based on data through Sept. 12th. If proven...

# **Ky. Opioid Abatement Advisory Commission to oversee opioid settlement money**

ASHLAND, Ky. (WCHS) — One of the members of a special commission in Kentucky, who will decide how to spend millions of dollars to fight the opioid epidemic knows

firsthand what's at stake. This man fought the addiction battle himself. Jason Roop is one of nine voting members of the Kentucky Opioid Abatement Advisory Commission. "I can just provide some firsthand experience of what it is like to suffer in the midst of the chaos," Roop said. Roop's addiction started in college and he has tried many different drugs. "I was what's known...

# **National News**

# Medical Cannabis Could Replace Addictive Opioids For Pain Relief, Study Suggests

TOPLINE Medical cannabis could be a viable substitute for effective, but highly-addictive, opioids often used for pain relief, a new survey suggests, as researchers continue to explore the potential health benefits of cannabis amid a growing national opioid crisis. Roughly 90% of more than 2,100 participants in the survey published on Wednesday in the journal Substance Use & Misuse said cannabis was "very" or "extremely" helpful in treating medical conditions, including anxiety, chronic pain, depression, insomnia and post-traumatic stress disorder, while 88.7% said it was important to their quality of life. Of the more than three-fifths of the participants in the survey who had been taking opioids...

## Driving high? Chemists make strides toward a marijuana breath analyzer

A UCLA chemist and colleagues are now a step closer to their goal of developing a handheld tool similar to an alcohol Breathalyzer that can detect THC on a person's breath after they've smoked marijuana. In a paper published in the journal Organic Letters, UCLA organic chemistry professor Neil Garg and researchers from the UCLA startup ElectraTect Inc. describe the process by which THC introduced, in a solution, into their laboratory-built device can be oxidized, creating an electric current whose strength indicates how much of the psychoactive compound is present. With the recent legalization or decriminalization of marijuana in many states, including California, the availability of a...

## **Exposure to advertising tied to teen E-cigarette use**

Yu Wang, Ph.D., from the School of Public Health at Georgia State University in Atlanta, and colleagues examined how e-cigarette advertising exposure and parental and peer use are associated with e-cigarette use among U.S. adolescents. The analysis included data from waves 4 (8,548 adolescents; December 2016 to January 2018), 4.5 (10,073 adolescents; December 2017 to December 2018), and 5 (11,641 adolescents; December 2018 to November 2019) of the Population Assessment of Tobacco and Health study. The researchers found that more than 60 percent of adolescents reported past 30-day e-cigarette advertising exposure at each survey. Among adolescents who had never used e-cigarettes, e-cigarette...

# Study: Lack of naloxone linked to high rates of overdose deaths in rural areas

Pennsylvania has one of the highest rates of opioid overdose in the nation, and, according to Penn State researchers, one's chances of surviving that overdose can

depend on where the person lives. Using data from the Pennsylvania Overdose Information Network from the years 2018-20 and American Community Survey data from 2015-19, Penn State geography researchers looked at the prevalence of overdoses in the state and found the availability of the anti-overdose therapeutic naloxone to be a key factor in overdose survival. The findings were reported in the Journal of Drug and Alcohol Dependence. Data showed individuals who received at least one dose of naloxone were nine times as likely to survive...

## Putting the brakes on heroin relapse

Neuroscientists from the Medical University of South Carolina (MUSC) report in Science Advances that star-shaped brain cells known as astrocytes can "turn off" neurons involved in relapse to heroin. Drug-related cues in the environment can intensify the drive to seek drugs, leading to relapse. In this article, a team led by Peter Kalivas, Ph.D., and Anna Kruyer, Ph.D., both of the Department of Neuroscience, examined how astrocytes interact with neurons and whether astrocytes play an important role in regulating the response to drug cues. When we learn how to ride a bike or solve a math problem, the messenger cells in our brain, known as neurons, create connections that enable them to communicate better so that...

### SF Officials Say They'd Back 'Safe Supply', Or Legal Narcotics

San Francisco lawmakers and health leaders say they're open to "safe supply," a controversial drug policy that provides regulated access to narcotics. The first public indication came at a Board of Supervisors hearing on Thursday, when Department of Public Health behavioral health director Hillary Kunins said that the city is looking to broaden access to medically assisted treatment for people suffering from drug dependency. Kunins pointed to Canada and Switzerland, which offer prescription opioids—including heroin and fentanyl—in an effort to stabilize the drug supply and destigmatize drug use. The health department is looking to the federal government to change laws around the practice...

# This Halloween, Be on the Lookout for 'Rainbow Fentanyl' Masquerading as Candy

First it was razorblades in apples then marijuana-laced gummies, but this year, parents have a new Halloween worry – rainbow fentanyl. Officials at the Drug Enforcement Agency (DEA) put word out that this new form of deadly fentanyl, found in at least 21 states, looks like real candy. Although not yet seen on the streets in Connecticut, the State Office of the Attorney General announced an arrest last week of two men attempting to sell 15,000 of rainbow fentanyl pills. What is rainbow fentanyl? This form of fentanyl gets the name because it comes in a variety of bright colors, shapes and sizes. This highly addictive synthetic opioid is 50 times more potent than heroin and 100 times more potent than morphine. Rainbow...

### Pain relief without side effects and addiction

New substances that activate adrenalin receptors instead of opioid receptors have a similar pain-relieving effect to opiates, but without the negative aspects such as respiratory depression and addiction. This is the result of research carried out by an international team of researchers led by the Chair of Pharmaceutical Chemistry at FAU. Their findings, which have now been published in the journal Science, are a milestone in the development of non-opioid pain relief. They are a blessing for patients suffering from severe pain, but they also have serious side effects: Opioids, and above all morphine, can cause nausea, dizziness and constipation and can also often cause slowed breathing that can even result...

# <u>Hospitals have specialists on call for lots of diseases — but not addiction. Why</u> not?

Marie lives in the coastal town of Swampscott, in Massachusetts. Last December, she began having more and more trouble breathing. One morning, three days after Christmas, she woke up gasping for air. A voice in her head said, "You're going to die." Marie dialed 911. "I was so scared," Marie said later. Describing that day, the 63-year-old's voice filled with tension, and her hand clutched at her chest. Marie was admitted to Salem Hospital, north of Boston. The staff treated her COPD, a chronic lung condition that includes emphysema and chronic bronchitis. After her worst symptoms subsided, a doctor came the next day to check on her. He told Marie her oxygen levels looked good and that she was stable and ready to...

# Current rules stymie opioid studies, researchers say

ASKING FOR SYNTHETIC OPIOIDS TO BE RECLASSIFIED — More than 100 researchers, scientists and public health professionals want fentanyl-related substances to no longer be Schedule I drugs — saying a different classification has the potential to unlock research for more drugs to treat opioid addiction. As first reported in Pulse, the experts outlined their concerns in a letter Tuesday, sent to the White House along with leaders at the DEA, DOJ and HHS. They ask the administration to overturn a temporary Trump-era decision to tightly restrict all substances related to fentanyl, a synthetic opioid. The group argues that some fentanyl-related substances could have therapeutic uses and should not carry severe...

# Scientists create 'non-psychedelic' compound with same anti-depressant effect

While illegal for recreational use, psychedelic drugs are showing great promise as treatments for severe depression and anxiety, as well as alcohol addiction and other conditions. Some advocates and scientists believe the actual psychedelic trip -- hallucinations and profound emotional experiences- is what leads to long-lasting therapeutic effects. Other scientists speculate that if the 'trip' could be eliminated from such drugs, then only the therapeutic effects might remain. Researchers at UNC-Chapel Hill, UC San Francisco, Yale, Duke, and Stanford have taken a major

step toward answering that question. Published in Nature, this research in animal models show it's possible to create a compound that hits the same...

## Addiction experts fear the fallout if California legalizes sports betting

Since the U.S. Supreme Court ruled in 2018 that states could legalize betting on sports, California — with 40 million people and numerous professional teams — has been the great white whale, eluding gambling companies and casino-hosting tribal communities. At stake is \$3.1 billion in annual revenue, according to one industry consulting firm. It's little surprise, then, that voters will face not one but two ballot propositions this fall aimed at capturing California's sports betting market. Although neither appears to have strong public support, gambling addiction experts are worried about one far more than the other. Proposition 26, supported by some of the state's largest tribal casino owners, would permit sports...

# **Funding Opportunities**



### RFA-CA-22-043

Advancing Adolescent Tobacco Cessation Intervention Research (R01 Clinical Trial Required)

#### RFA-CA-22-042

Advancing Adolescent Tobacco Cessation Intervention Research (R34 Clinical Trial Optional)

### RFA-CA-22-052

<u>Cannabis and Cannabinoid Use in Adult Cancer Patients During Treatment:</u>
<u>Assessing Benefits and Harms (U01 Clinical Trial Not Allowed)</u>

#### RFA-CA-22-053

<u>Coordinating Center for Cannabis and Cannabinoid Use in Adult Cancer Patients</u> <u>During Treatment: Assessing Benefits and Harms (U24 Clinical Trial Not Allowed)</u>

#### RFA-DA-23-061

NIDA REI: Reaching Equity at the Intersection of HIV and Substance Use: Novel Approaches to Address HIV Related Health Disparities in Underserved Racial and/or Ethnic Populations (R01 Clinical Trial Optional)

#### RFA-DA-23-062

NIDA REI: Reaching Equity at the Intersection of HIV and Substance Use: Novel Approaches to Address HIV Related Health Disparities in Underserved Racial and/or Ethnic Populations (R34 Clinical Trial Optional)

### NOT-DA-23-009

Notice of Special Interest (NOSI): HEAL Initiative: Grand Opportunity in Medications Development for Substance-Use Disorders

### **Other Funding Opportunities:**

**2022-2023 UCGNI - UC Neurobiology Research Center Pilot Research Project** Due Date: Full proposals due November 7, 2022

This program is designed to support pilot and feasibility projects that identify clear paths toward extramural applications and funding of neuroscience-related research. The program will consider basic, translational and clinical projects, and encourages submission of collaborative projects. Although a clear neuroscience focus is required, this competition is open to all UC faculty as well residents, clinical fellows and post-doctoral fellows. You need not be a member of the Neuroscience training program or UCGNI to apply. Guidelines for the submission process are attached. Please contact Jennifer Bedel, Jennifer.bedel@uc.edu, for application packets & instructions.

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