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

# WLWT: Drop in Hamilton County overdose deaths called 'amazing' by doctor who works to reduce harm, stigma

Hamilton County is bucking a national trend on opioid deaths. Nationally, opioid deaths are up by 20% year-to-year from 2021 to 2022, but in Hamilton County, opioid deaths have dropped by 16% in the same period. WLWT produced a story on this topic, interviewing Rick Ryan, MD, of the Department of Emergency Medicine at the UC College of Medicine. "It's just unheard of. And it's a testament to everybody involved, " Ryan said. "This is just amazing news that over the last year, year-to-year, we have seen a 16% decrease in opioid deaths." Ryan said the drop in Hamilton County is the result of passionate experts who stay focused despite years of spiking overdose rates. "That passion – with dollars...

## **Outpatient detox now available in Butler County**

CINCINNATI (WKRC) - Local drug and alcohol treatment providers are reaching out during Mental Health Awareness Month to let families know help is available. If you or a loved one is struggling with addiction to drugs or alcohol, those who work in treatment say to consider outpatient therapy, starting with detox. According to Community First Solutions, this newer trend is one way to interrupt the risk of overdose, among other dangers. Community First is a nonprofit network of providers in Butler County that offer several mental health and addiction services. Erin Day, the organization's vice president of behavioral health, recently shared how outpatient detox works on Local 12's Sunday 6 a.m. ...

# National tour in partnership with Meta stops in Louisville to combat drug addiction

LOUISVILLE, Ky. —Mobilize Recovery, an advocacy group, and Meta, the parent company of Facebook, came to Louisville on Friday to host a community conversation about solutions to substance use disorder. Discussions about the state of addiction are at the forefront as overdose deaths in Kentucky have surpassed 2,000 in the last two years. Louisville is the first stop on the national tour which is focused on addressing the crisis. "We believe the people that are closest to the problem also happen to be closest to the solution," said Ryan Hampton, co-founder of Mobilize Recovery. Hampton praised the efforts already in place locally and on a state level. Many invest in the root causes of...

# In Kentucky rehab program, guitar-making helps those in recovery kick addiction

Hindman, Kentucky — Heartache has a way of pushing down hope in Hindman, Kentucky, an outpost in the Appalachian Mountains. Nathan Smith's drug addictions took 20 years of his life. Pain pills after a work accident got his spiral started, followed by crystal methamphetamine. "You could go about anywhere and find anything you was looking for," Smith told CBS News. There were over 109,000 drug overdose deaths in the U.S. in 2022, according to the latest projected numbers from the U.S. Centers for Disease Control and Prevention. More than two-thirds of those, over 75,000, were caused by synthetic opioids, the CDC found. "I knew that if something didn't happen, that I was either...

# Helping hooves and helping hands: How horses are helping in addiction recovery

NICHOLASVILLE, Ky. (LEX 18) — Every foal has a chance. Every person has a purpose. "It's just really fun out here man, it's a blessing," said Robert Osbourne, who walks the grounds at Taylor Made Farm. "Today, every morning I hit my knees and thank God that I'm alive, first of all." Through a partnership between Taylor Made Farm and Stable Recovery, individuals seeking recovery from addiction work to find some healing through the equine industry. "We've seen a lot of success," Osbourne said. "We've had about 40 graduates so far and 38 of them have full-time positions or are still sober." In a horse race, there's no "do-over." Taylor Made's School of Horsemanship and Stable Recovery believe in...

## Hopkins County home to several drug, alcohol harm reduction resources

In the past 20 years, every community has become affected by both substance use disorders and mental health issues. Hopkins County is no exception. Amy Aydelotte, the new market development director for Brightview, said in some cases the smaller communities are hit the hardest by substance use disorders and mental health issues. "The challenge becomes that in a lot of smaller communities, there is a lack of services and providers that can address these issues," she said. There are a few addiction treatment facilities in Hopkins County, Brightview being one of them.

There are also several public programs offered through the Hopkins County Health Department. Health Department Executive Director...

# Evansville's opioid settlement money to help mothers, babies dealing with drug addiction

EVANSVILLE — Seventy-seven people died in Evansville last year as the result of drug overdoses. Mayor Lloyd Winnecke is hopeful money approved by Evansville City Council on Monday evening is a step to reversing that trend. Social services organization YouthFirst and local business Forefront Therapy were allocated \$257,500 and \$387,642, respectively. Both organizations will work to expand their "evidence-based services" to help combat the issues the city deals with in regard to opioid use. The money comes from the city's participation in Indiana's opioid settlement, which the city council voted unanimously to rejoin in April 2022. In July 2021, Indiana Attorney General Todd Rokita announced a...

# National News

## Heavy drinkers risk muscle loss, new study finds

Heavy drinkers could be putting themselves at risk of muscle loss and frailty in later life, according to new research from the University of East Anglia. A new study published today shows with statistical modeling that people with the lowest amount of muscle were drinking 10 units or more a day—about a bottle of wine. Because larger people have more muscle mass, the research team scaled for body size. And they took into account factors such as protein consumption and physical activity. The team say that their findings, mainly in people in their 50s and 60s, suggest another reason to cut back on...

## How to Drink Less When Alcohol Is Sold Next to Candy Bars

I love to pick up a last-minute candy bar at the register. As much as I know that candy bars next to checkouts is just a marketing gimmick to trick buyers into buying something they don't need by exploding their decision fatigue, I often happily let myself indulge just a little bit. Last week, as I was ready to pick up my regular lastminute treat at the local grocery store, a new row of displaying baskets caught my eye. Each was filled with a few dozen attractively packaged beverages. The handdrawn art and bold colors were stunning. I picked one up with some excitement, only to realize it was hard...

### Psychiatrist to lead state-mandated psilocybin trial

In early May, Washington Gov. Jay Inslee signed Senate Bill 5263 governing recreational and medical use of psilocybin. The new law mandates that the University of Washington School of Medicine facilitate a study to explore the potential therapeutic value of the psychedelic compound found in mushrooms. "The big benchmark in the bill says that we need to start (treating) people Jan. 1, 2025. We have about a year and a half to get all the infrastructure developed," said addiction psychiatrist Dr. Nathan Sackett, who will oversee the trial. He's an acting assistant professor of psychiatry and behavioral sciences. Little...

### Marijuana harms development in first trimester of pregnancy, study finds

If you are pregnant and use any form of cannabis product, consider stopping. That's the takeaway from a new study that found a significant health impact of marijuana use on fetal development as early as the beginning of pregnancy. "That's why these findings are especially important — people can often be well into the first trimester and don't even know they are pregnant," said lead author Beth Bailey, professor of psychology and director of population health research at the College of Medicine at Central Michigan University in Mount Pleasant. "Our study drills down to look very specifically at a...

### Marijuana users three times more likely to develop peripheral artery disease

Findings from a study examining the relationship between marijuana use and peripheral artery disease (PAD) were presented today at the Society for Cardiovascular Angiography & Interventions (SCAI) 2023 Scientific Sessions. Results found marijuana users are at a significantly increased risk of developing PAD, compared to the general population. Marijuana use has increased in recent years with nearly 50 million people reporting using it at least once (CDC). While many studies have looked at the impact of marijuana use on health, little research has been done to study the effect of marijuana...

# Minnesota bill legalizing recreational pot passes Senate, heads to governor's desk

MINNEAPOLIS (AP) — Senators in Minnesota passed a bill Saturday that would allow recreational marijuana use by people over the age of 21 and make it the 23rd state to legalize the substance for adults. The measure has already been approved by the House and now goes to Democratic Gov. Tim Walz, who has pledged to sign it into law. Supporters of the bill said it would improve public health and safety and further social justice, while opponents said health and safety would actually worsen. Under the measure it would become legal by Aug. 1 to possess, use and grow marijuana at home. Retail...

# Cannabis can have serious health effects that Canadians may not be aware of, like nonstop vomiting and heart issues

Non-medical cannabis has been legal in Canada since 2018. Although a primary motivation for legalization was to enhance public awareness of the health risks associated with cannabis use, the Canadian government's online resources regarding cannabis harms may not reveal the full picture. Well-known health impacts of cannabis use include respiratory issues, decreased cognitive ability, psychosis and risk of future substance use. Recently, cannabis dependence has been identified as a risk for users of all ages. Approximately one in 10 adults and one in six adolescents who experiment with cannabis...

# Study finds uncertainty and misperceptions about sources of nicotine in ecigarettes among youth

Using e-cigarettes, or vaping, is highly popular among youth, with more than 2 million high school students using the products, according to the FDA. Recently, manufacturers have started to advertise and sell e-cigarettes with synthetic nicotine, which is made in a lab rather than derived from tobacco plants. There has been little research conducted with youth on their awareness of synthetic nicotine, or what the industry increasingly refers to as "tobacco-free" nicotine. Now, a study by University of North Carolina researchers finds widespread uncertainty and misperceptions about the sources of nicotine...

### Full ban on the sale of flavored tobacco products associated with lower use

Researchers from the University of California, Irvine found that residents of jurisdictions with a comprehensive sales ban have a 30% reduced odds of using flavored tobacco relative to those living in a jurisdiction without a ban. In contrast, lower use was not observed for residents of jurisdictions that enacted a partial sales ban. Experts expect that recent passage of Prop 31, which upheld a 2020 state law to prohibit retail sales of certain flavored tobacco products, will lead to an even greater decline in use of flavored tobacco across the state. In a paper published in the International Journal of Drug...

# Few adult smokers and non-smokers think e-cigarettes have lower levels of harmful chemicals than cigarettes, finds study

About half of cigarette smokers and young adult non-smokers believe that nicotinebased electronic cigarettes have the same amount or even more harmful chemicals than regular tobacco-based cigarettes, according to a recent Rutgers study. The study, published in Addiction, measured perceived levels of harmful chemicals in ecigarettes compared with cigarettes using national samples of more than 1,000 adults ages 18 and older who smoke cigarettes and 1,000-plus adults ages 18 to 29 who are non-smokers. The study also measured associations with ecigarette/cigarette relative harm...

# What's the relationship between cancer survivors' tobacco use, symptom burden, and motivation to quit smoking?

In a recent study, current smoking and vaping were associated with a higher burden of symptoms among adult cancer survivors, but these symptoms were not related to survivors' desire to quit smoking. The findings are published by Wiley online in Cancer, a peer-reviewed journal of the American Cancer Society. Continued smoking after a cancer diagnosis lowers survival rates, increases the likelihood of additional cancers, and decreases the effectiveness of cancer therapies. Understanding the relationship between tobacco use and the symptoms that patients experience may help clinicians tailor tobacco...

# Minnesota gets \$60.5M in settlement with e-cigarette maker Juul, tobacco giant Altria

ST. PAUL, Minn. — Minnesota settled its lawsuit against e-cigarette maker Juul Labs and tobacco giant Altria for \$60.5 million, Attorney General Keith Ellison announced Wednesday, saying the total is significantly higher per capita than any other state that sued Juul over youth vaping and marketing practices. The state's lawsuit was the first and still the only one of thousands of cases nationwide against the ecigarette maker to reach trial. It settled just ahead of closing arguments last month, but the terms had to be kept confidential for 30 days until the formal papers were filed publicly with the court. Ellison...

### FDA Approves New Buprenorphine Treatment Option for Opioid Use Disorder

Today, the U.S. Food and Drug Administration approved Brixadi (buprenorphine) extended-release injection for subcutaneous use (under the skin) to treat moderate to severe opioid use disorder (OUD). Brixadi is available in two formulations, a weekly injection that can be used in patients who have started treatment with a single dose of a transmucosal buprenorphine product or who are already being treated with buprenorphine, and a monthly version for patients already being treated with buprenorphine. "Buprenorphine is an important treatment option for opioid use disorder. Today's approval...

### **New Type of Opioid Reversal Agent Approved**

The first nalmefene hydrochloride nasal spray (Opvee) won FDA approval for the emergency treatment of known or suspected opioid overdose in adults and pediatric patients 12 years of age and up, the agency announced. If administered quickly, the opioid receptor antagonist provides fast onset and long duration reversal of opioid-induced respiratory depression. It will be available for use by prescription in healthcare and community settings. "The agency continues to advance the FDA Overdose Prevention Framework and take actionable steps that encourage harm reduction by supporting the development...

## Addiction Doc Urges Lawmakers to Rethink Methadone Prescribing Restrictions

Could loosening restrictions around methadone prescribing improve treatment for patients with substance use disorder? Are survivors of traumatic brain injury getting the mental health care they need? Lawmakers discussed these issues during a hearing of the Senate Health, Education, Labor and Pensions (HELP) Subcommittee on Primary Care and Retirement Security on Wednesday. Currently, methadone and buprenorphine are regulated under the Controlled Substances Act when used to treat pain, per a report from the Government Accountability Office, which notes that "methadone may...

## Vibrating Crib Mattress Eases Opioid Withdrawal for Exposed Infants

A crib mattress designed to vibrate gently for tactile sensory stimulation eased neonatal opioid withdrawal syndrome, reducing need for pharmacologic treatment,

a randomized clinical trial showed. This low-level random, or stochastic, vibrotactile stimulation (SVS) didn't reduce the number of newborns receiving morphine treatment (30.9% vs 35.6% with usual care, P=0.60). However, the average of 6 hours per day of use did cut administration of morphine treatment by a relative 50%, researchers led by Elisabeth Bloch-Salisbury, PhD, of the University of Pittsburgh School of Medicine, reported in...

#### The Opioid Treatment Dilemma in Jails

Those of us who work in jails sat up recently as we read this recent news: The Biden administration called on state Medicaid programs to fund opioid treatment programs in jails and prisons. Wow! To understand why that is such a big deal, let me introduce you to the typical jail's opioid treatment dilemma. The U.S. currently has a crisis of opioid abuse, fueled mainly by heroin and fentanyl. We used to talk about "heroin addicts," but it is unusual to find pure heroin on the street anymore. Heroin is usually mixed with fentanyl, meth, ketamine, or any one of a host of other substances. Fentanyl can be used...

#### **DEA: Clarify Your Stance on Harm Reduction**

With the elimination of the X-waiver requirement, all DEA-registered practitioners can prescribe medications to treat opioid use disorder. Now, in place of the Xwaiver, the DEA instituted a new training requirement: a one-time, 8-hour online training administered through a select number of accredited medical societies. Soon after this news broke, Regina LaBelle, JD, former acting director in the Office of National Drug Control Policy (ONDCP) and current director of the Addiction and Public Policy Initiative at the O'Neill Institute at Georgetown University Law Center, tweeted that the training...

#### US overdose deaths may be peaking, but experts are wary

NEW YORK (AP) — Have U.S. drug overdose deaths stopped rising? Preliminary government data suggests they may have, but many experts are urging caution, noting that past plateaus didn't last. U.S. overdose death rates began steadily climbing in the 1990s driven by opioid painkillers, followed by waves of deaths led by other opioids like heroin and — most recently — illicit fentanyl. Last year, more than 107,000 Americans died of drug overdoses — the highest tally in U.S. history. On Wednesday, the Centers for Disease Control and Prevention released provisional data on what happened through the first...

#### Medicare's Coverage of Methadone Could Help Get People Off Opioids

MONDAY, May 22, 2023 (HealthDay News) -- When Medicare expanded coverage for methadone, more people used this treatment for opioid use disorder, a new study shows. Use rose sharply but did not displace other opioid treatments such as buprenorphine, according to researchers. Much of the rise in methadone use was among Medicare Advantage enrollees under age 65. It was especially true among those who qualified for both Medicare and Medicaid. "These new policies represent an important step in increasing access to medication treatment for opioid use disorder for Medicare beneficiaries," said...

### Opioid overdose survivors face higher odds for death in following year

Surviving a trip to the emergency room for an opioid overdose dramatically increases a patient's odds of dying in the year after, U.S. health officials reported Tuesday. Of nearly 287,000 emergency room visits in 2016, more than 8,300 were for opioid overdoses. Of these, nearly 500 patients were dead from a drug overdose in the following year and 400 died from other causes, according to a new report from the U.S. Centers for Disease Control and Prevention. "If you're presenting in the emergency room, and you survived an overdose, you are at greater risk of dying of a drug overdose within a year...

# This opioid addiction drug is rarely misused. So why is there so much regulation?

Buprenorphine, an important drug in fighting the opioid crisis, has long been closely monitored over concerns it would be abused. But a first-of-its-kind government oversight report released Thursday finds Medicare recipients rarely misuse the drug, which is considered an underused tool to treat opioid addiction and stem overdose deaths. Less than 1% of Medicare recipients potentially misused or diverted the opioid-substitute medication in 2021, according to the report from U.S. Department of Health and Human Services inspector general investigators. The report concluded buprenorphine...

### Accidental Exposures to Fentanyl Patches Continue to Be Deadly to Children

Accidental exposure to medication is a leading cause of poisoning in children. Young children, in particular, have died or become seriously ill after being exposed to a skin patch containing fentanyl, a powerful opioid pain reliever. If you suspect that a child has been exposed to a fentanyl patch, call 911 and seek emergency medical help immediately. The U.S. Food and Drug Administration urges parents and caregivers to take precautions and make sure that these patches are stored, used and disposed of properly. Below are some ways to reduce the risk of exposure and safely dispose of these patches – and what...

### Up to one in three with rheumatoid arthritis 'at risk of long-term opioid use'

Up to one in three people diagnosed with rheumatoid arthritis could be at risk of long-term opioid use, a new study suggests. Academics warned that people diagnosed with rheumatic and musculoskeletal conditions (RMD) are "vulnerable" to long-term use of the strong pain relief medicines. Experts warned that people who use the drugs over a long period can become addicted and opioid dependency is linked to other harms. The new paper, published in the Annals of the Rheumatic Diseases, examined information on more than 800,000 people registered at GP surgeries across the UK who have a diagnosis...

# A Rural County's Choice: Use Opioid Funds to Pay Off Debt, or Pay Them Forward to Curb Crisis

Over the past two years, rural Greene County in northeastern Tennessee has collected more than \$2.7 million from regional and national settlements with opioid manufacturers and distributors. But instead of helping people harmed by addiction, county officials are finding other ways to spend it. They have put \$2.4 million toward paying off the county's debt and have directed another \$1 million arriving over more than a decade into a capital projects fund. In March, they appropriated \$50,000 from that fund to buy a "litter crew vehicle" — a pickup truck to drive inmates to collect trash along county...

### NJ Medicaid reforms tied to increased use of opioid addiction treatment

Reforms to New Jersey's Medicaid program successfully spurred ongoing increases in buprenorphine prescriptions for the treatment of opioid addiction, according to a Rutgers analysis. Although medications such as buprenorphine effectively combat opioid addiction, less than 30 percent of potential users receive them nationwide. New Jersey sought to increase prescription numbers with three Medicaid reforms that took effect in 2019. The reforms: Removed prior authorization requirements for buprenorphine prescriptions, increased reimbursement rates for in-office opioid addiction...

## Inside the Emerging Xylazine Addiction Crisis in the U.S.

Devin Bair, a 42-year-old Pennsylvania resident, had used opioids on-and-off for years, but she never experienced anything like xylazine. She first took it without knowing two years ago when it infiltrated her dealer's supply, and she unknowingly became addicted to it. Xylazine, a veterinary tranquilizer that isn't meant for use in humans, is an increasingly common adulterant pervading the U.S. illicit drug supply, but little is known about its effects on the human body or how to treat the intense withdrawal symptoms it causes. Xylazine has taken a stronghold in Philadelphia, a city at the forefront of addiction...

# Group Support and Tapering Reduce Opioid Dependence in Chronic Pain Patients

A new treatment shows promising results in helping people stop long-term opioid use for managing chronic pain. The study revealed that an intervention program combining group support and individual guidance allowed one in five people to quit opioids within a year, without increasing their pain or requiring substitute medication. The initiative, designed to teach alternative pain management techniques and assist gradual withdrawal, could potentially enhance patients' quality of life and save NHS resources. Key Facts: The innovative intervention program helped one in five people cease...

### Illicit Use of Ketamine Keeps Rising in U.S.

WEDNESDAY, May 24, 2023 (HealthDay News) -- Seizures of illicit ketamine by drug enforcement agents have surged throughout the United States, growing 349% from 2017 through 2022, a new study finds. Rising use of ketamine could increase the likelihood that people who use the drug recreationally may instead get a potentially harmful version of the substance, researchers say. "This dramatic rise in ketamine seizures by law enforcement may be indicative of rising nonmedical and recreational use," said study co-author Joseph Palamar, a researcher in the Center for Drug Use and HIV/HCV...

#### Ketamine Matches 'Gold Standard' in Major Depression Trial

SAN FRANCISCO -- When it came to improving treatment-resistant major depression in outpatients without psychotic features, ketamine worked just as well as electroconvulsive therapy (ECT), the ELEKT-D randomized trial found. Following a 3week treatment period, 55.4% of the patients in the ketamine group and 41.2% of those in the ECT group had a treatment response, a 14.2% difference (95% CI 3.9-24.2) that fell well within the trial's noninferiority threshold (P<0.001), reported Amit Anand, MD, of Brigham and Women's Hospital in Boston, and colleagues. Response was defined...

#### Oregon turns on, tunes in to the power of magic mushrooms

Tori Armbrust grows magic mushrooms. Not secretly or furtively, but commercially. Because in the western US state of Oregon, it's legal. Anywhere else in the United States "I would get in big trouble for this, 1,000 percent," she laughs. From this year, licensed growers like Armbrust have been able to sell what the Aztecs called the "flesh of the gods" to centers offering psychedelic therapy sessions, a legalization that proponents say could offer real help to people struggling with psychological problems. Hallucinogenic mushrooms have long been associated with America's counterculture, most closely with...

### Most Americans don't know what 988 suicide crisis hotline is for, poll shows

Only 13% of American adults understand the purpose of the 988 Suicide and Crisis Lifeline nearly a year after its widely publicized launch, a new survey from the Pew Charitable Trusts shows. "There is an opportunity and a need for state and local leaders to launch inclusive awareness campaigns in the months ahead," lead researcher and Pew senior manager Tracy Velázquez said in a statement, CNN reported. "The federal government's most recent investment into 988 shows a commitment to building a strong crisis care infrastructure in the country—one that is critically important, given the many people...

# **Funding Opportunities**



GRANTS & FUNDING NIH Central Resource for Grants and Funding Information

<u>PAR-23-185</u> <u>Alcohol Health Services Research (R01 Clinical Trial Optional)</u>

PAR-23-186 Alcohol Health Services Research (R34 Clinical Trial Optional)

PAR-23-187 Alcohol Treatment and Recovery Research (R01 Clinical Trial Required)

PAR-23-188 Alcohol Treatment and Recovery Research (R34 Clinical Trial required)

<u>RFA-DA-24-016</u> <u>Patient Engagement Resource Centers to Inform SUD Treatment Services Research</u> (<u>R24 Clinical Trial Optional</u>)

PAS-23-173 HIV Prevention and Alcohol (R01 Clinical Trials Optional)

PAS-23-172 HIV Prevention and Alcohol (R34 Clinical Trials Optional)

<u>RFA-DA-24-017</u> <u>Field-Deployable, Low-Cost Point-of-Need Approaches and Technologies to Lower</u> <u>the Barriers to Substance Use Disorders (SUD) Diagnosis and Treatment (R41/R42</u> <u>Clinical Trial Optional)</u>

<u>RFA-DA-24-018</u> <u>Field-Deployable, Low-Cost Point-of-Need Approaches and Technologies to Lower</u> <u>the Barriers to Substance Use Disorders (SUD) Diagnosis and Treatment (R43/R44</u> <u>Clinical Trial Optional)</u>

<u>RFA-DA-24-024</u> <u>Advancing Psychedelics Research for Treating Addiction (R61/R33 Clinical Trial</u> <u>Required)</u> RFA-DA-24-028

Advancing Psychedelics Research for Treating Addiction (R01 Clinical Trial Not Allowed)

<u>RFA-DA-24-029</u> <u>Advancing Psychedelics Research for Treating Addiction (R61/R33 Basic</u> <u>Experimental Study with Humans Required)</u>

<u>RFA-AA-23-001</u> <u>Specialized Alcohol Research Centers (P50 Clinical trial Optional)</u>

<u>RFA-AA-23-002</u> <u>Comprehensive Alcohol Research Centers (P60 Clinical trial Optional)</u>

PAR-23-151 Emergency Medicine Research Career Development Program in the Neurological Sciences (EMRCDP-NS) (K12 - No Independent Clinical Trial Allowed)

<u>NOT-AA-23-008</u> <u>Request for Information on Religion, Spirituality, and Alcohol Research Aims</u>

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