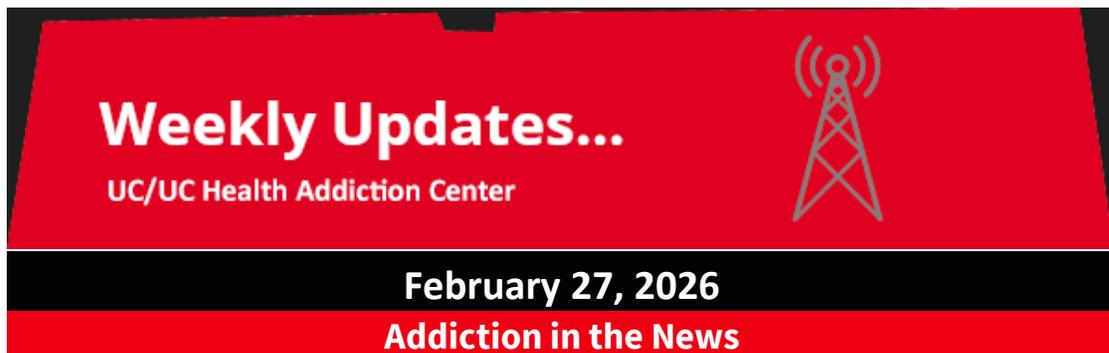


Welcome to the weekly newsletter from the University of Cincinnati/UC Health Addiction Center (UCAC)! Each newsletter includes highlights from addiction in the news topics, active funding opportunities offered by NIDA/NIAAA, and information about any new publications from UCAC researchers. Please email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

Thank you for your interest in the UC/UC Health Addiction Center - our mission is to generate new knowledge through innovative research, disseminate that knowledge through education and training, and provide high-quality, evidence-based treatment for individuals affected by addiction and related conditions. We are committed to supporting lifelong recovery and promoting dignity and respect for all individuals on their recovery journey.



UC/ Regional News

The University of Cincinnati Center for Addiction Research expands to establish the UC/ UC Health Addiction Center (UCAC)!

The University of Cincinnati (UC) and UC Health have launched the UC/UC Health Addiction Center (UCAC), a multidisciplinary initiative designed to unite research with clinical and educational expertise to improve addiction prevention and treatment outcomes in the Greater Cincinnati community and beyond. UC College of Medicine and UC Health will invest approximately \$2 million over the next five years to support administrative efforts, research, clinical improvement initiatives and fellowship programs. UCAC builds on the success of the Center for Addiction Research, leveraging the collaborative efforts of over 30 faculty members from five colleges and 12 departments. It is positioned to accelerate addiction science...

(Dr. T. John Winhusen, UCAC Director)

Announcing UC/ UC Health Addiction Center (UCAC) Inaugural Pilot Award Recipients

The UC/ UC Health Addiction Center (UCAC) is pleased to announce the inaugural recipients of its Pilot Research Program. The program is designed to support innovative addiction research projects by UC College of Medicine faculty that will generate critical data, foster interdisciplinary approaches, and strengthen competitiveness for future extramural funding. The two awardees for 2026-2027 are:

- **Davide Amato, MSc, PhD, PD, (UCAC Research Member)** Associate Professor of Pharmaceutical Sciences, James L. Winkle College of Pharmacy,

for his project: “*Characterization of subsecond dopamine dynamics of psilocybin with relevance for substance use disorders*”

- **Victor J. Schneider, PhD, (UCAC Research Associate Member)** Assistant Professor Clinical, Department of Psychiatry and Behavioral Neuroscience, for his project: “*Characterizing heavy drinking in midlife and older adults via mixed methods*”

We congratulate our inaugural pilot award recipients and look forward to the impact these projects will have on advancing addiction research.

Fentanyl overdoses hitting the elderly

The University of Cincinnati's Daniel Arendt was featured in Jacksonville news station News4Jax story on the increase in fentanyl overdose deaths in seniors. The station reported fentanyl deaths among the elderly have increased by 9,000% over the past eight years. "The overdose crisis has continually gotten worse," said Arendt, PharmD, associate professor in UC's James L. Winkle College of Pharmacy and a UC/UC Health Addiction Center member. "And it's still a public health epidemic."

(Dr. Daniel Arendt, UCAC Research Associate Member)

UC Research Rainmakers: Celebrating our Outstanding Researchers

The Office of Research is proud of the Research Rainmakers whose sponsored research awards in fiscal year 2025 placed them in the top 25% of earners at UC. Those recognized are from the arts, humanities, and social sciences as well as from the sciences, technology, engineering, mathematics, and medical fields. Below is the list of UC/UC Health Addiction Center researchers who were recognized for this accomplishment and the number of times they have been recognized since FY16.

College of Medicine

T John Winhusen, 10 **(UCAC Director)**

Teresa M Reyes, 6

Richard Ryan, 3

College of Education, Criminal Justice, and Human Services

Sarah Manchak, 4

2026 Faculty-to-Faculty Mentoring Awardee

Congratulations to **Jason Blackard, PhD, (UCAC Research Member)** Walter A. and George McDonald Foundation Professor of Medicine, Department of Internal Medicine, Division of Gastroenterology and Hepatology, and recipient of the Provost/VPR Faculty-to-Faculty Mentoring Awardee. This award recognizes the exceptional commitment and impact of faculty members who mentor their colleagues. This prestigious award honors the significant time, dedication, and care invested in advancing the career development and academic success of fellow faculty across research, education, service, and clinical practice. Dr. Blackard said, "Faculty-to-faculty mentorship is a cornerstone of academic success. Effective mentorship can increase productivity, help with retention and overall job

satisfaction, and support underrepresented and underserved groups. I have had outstanding mentors across various stages of my career and appreciate the opportunity to pay that forward with the next generation of researchers and educators."

Cychlorphine: New highly potent opioid detected in Ohio and Kentucky

CINCINNATI — A new synthetic and highly potent opioid is being found mixed into illicit drug supplies in Ohio and Kentucky, part of a concerning trend as Federal officials work to curb the supply of fentanyl and other dangerous narcotics from entering the United States. Cychlorphine is four to 10 times more potent than fentanyl and is part of an emerging new class of synthetic opioids called Orphines, said Seth Steele, the harm reduction supervisor at the Northern Kentucky Health Department. The substance is just as dangerous, if not more dangerous than fentanyl, Steele said. "I would say this is definitely more of a concern," ...

What the fight against total 'intoxicating' hemp ban looks like from rural Ohio

A group of Ohio farmers has joined the fight to repeal legislation that would completely ban "intoxicating" hemp products. From sunrise to sunset, the Ellwood family makes a living in their fields. "We have 19 acres," Joey Ellwood, who owns Modern Remedies, said. "I've always tried to think beyond just the conventional strategy." He isn't producing Ohio's usual crops — soybeans, corn or wheat. He's farming hemp, a plant part in the cannabis family. Ohio has fewer than 20 active hemp producers, according to federal data. Farmers have already had a tough few years in Ohio. Droughts have plagued rural areas, major cases of bird flu broke...

National News

Youth Alcohol Cravings May Rise While Scrolling Social Media, Study Suggests

For young adults, seeing alcohol-related social media content translated to greater desire to drink alcohol, especially when coming from lifestyle influencers whom they saw as highly credible, found a randomized trial. Among 2,000 young adult study participants, alcohol-related Instagram content exposure correlated with greater desire to drink compared with peers seeing similar content without alcohol-related imagery or mentions (adjusted odds ratio [aOR] 1.73, 95% CI 1.46-2.07, $P < 0.001$), according to Jon-Patrick Allem, PhD, of Rutgers University School of Public Health in Piscataway, New Jersey, and co-authors. When...

Could a gene lower nicotine dependence? What a CHRN3 variant suggests

Variants in a nicotine receptor gene are associated with a lower likelihood of heavy smoking, according to a study published in Nature Communications. The findings are based on data from populations in Mexico and validated in populations with Asian and European ancestries. Variants in the genes encoding nicotinic acetylcholine receptors, which mediate the "rewarding" effects of nicotine on the brain, have been linked to changes in smoking behavior in individuals. For example,

variants in a gene called CHRN2, which encodes one subunit ($\beta 2$) of these receptors (of which there are at least nine subunit types) have been linked...

Opioids aren't effective for many acute pain conditions, researchers warn

A large review of opioid pain relievers prescribed for acute pain has found these medicines provide only small, short-term relief for some acute conditions and are ineffective for some others. The study set out to review the efficacy and harms of opioid pain relievers (e.g. codeine, morphine, oxycodone, tramadol) compared with placebo for acute pain. The work includes 59 systematic reviews covering more than 50 acute pain conditions in children and adults, and comprehensively maps where opioids are effective and where evidence is lacking. The review, led by researchers from the University of Sydney, provides the strongest and...

Historical trends in U.S. heroin use: Initiation after 2000 differs from earlier patterns

The production, distribution, and consumption of illegal opioids create problems for public health and safety in many countries. Overdose rates are particularly high in Canada and the United States, which experienced three waves of deaths associated first with prescription opioids, then heroin, and most recently, illegally manufactured fentanyl. But we know little about historical patterns of initiation into use of such drugs. In a new study, researchers combined data from 1.7 million respondents to general population surveys over more than four decades to examine historical trends in U.S. individuals' self-reported first year of...

Methadone Treatment for Opioid Use Disorder has Increased, but Access Gaps Persist

Despite growth in the use of medications used to treat opioid use disorder (OUD) – including methadone, buprenorphine, and naltrexone – most people with OUD in the United States still do not receive medication. National estimates show only 25% of individuals with OUD receive medications for OUD (MOUD), underscoring a persistent gap between need and access. Research published in JAMA Health Forum found methadone treatment among Medicaid enrollees increased substantially over the past decade. After modest growth between 1999 and 2010, methadone use more than tripled in the years that followed, reaching 6.2...

Months after FDA calls it an addictive opioid, 7-OH still sold over the counter

CINCINNATI (WKRC) - The FDA warns that a substance "13 times more potent than morphine" threatens to be "the next wave of the opioid epidemic." Yet, that substance, 7-OH, continues to be sold over-the-counter at gas stations and vape shops in most states across the country. We're investigating the push to make it illegal and the debate about pulling it off the shelves. For two decades, a husband, father and successful businessman in the Midwest battled to break free from drugs, bearing the physical and emotional scars of a severe addiction to prescription pills and heroin he once shot into his arms. Because of the stigma attached...

App aids substance use recovery in vulnerable populations

Although drug overdose deaths declined in the U.S. last year, the rate of substance use disorder is rising, and the problem remains undertreated: Fewer than one in five people with substance use disorder report that they've received any treatment for it. An especially vulnerable group are those who use substances and do not have stable housing, who research shows are both far more likely to experience overdose and much less likely to receive treatment for their condition compared to those who have secure housing. A new study has shown that a mobile app developed by researchers at Washington University...

Invisible harms: Drug-related deaths spike after hurricanes and tropical storms

Tropical cyclones, including hurricanes and tropical storms, are linked to increased rates of drug-related deaths up to three months after the storm passes—particularly in higher-income, white communities and among younger populations. The study of more than 30 years of data by researchers at Columbia University Mailman School of Public Health points to one overlooked health impact of climate change, which is leading to more active and severe storms. The study is the first to quantify the association between tropical cyclone exposure and psychoactive drug-related deaths broadly and through a demographic...

Public Opinion on Legalizing Psychedelics

An increasing number of U.S. states are implementing or considering changes to psychedelics policies. To help improve policy discussions and provide baseline information to ground these debates, the authors fielded the 2025 RAND Psychedelics Survey (RPS). The 2025 RPS is the first probability-based and nationally representative survey to measure U.S. public opinion about legalizing three psychedelic substances: psilocybin mushrooms, LSD, and MDMA. For each substance, the authors asked whether use should be legal, for which reasons adults should be allowed to use the substances, and how they should be supplied if...

With federal research funding uncertain, states debate new science initiatives

On paper, little appears to have changed for UMass Chan Medical School over the past year, despite the cascade of paused and terminated grants and swift, unpredictable policy shifts that followed President Trump's return to office. The amount of bread-and-butter RO1 awards it received from the National Institutes of Health in the 2025 fiscal year dropped only 1.6% from 2024. But the reality is far different: That figure is padded by the NIH's transition to multiyear funding, where the budget for awards is allocated entirely in the first year. This means the school only has \$75.4 million of the \$88.6 million available to use this year. Add...

Ultraprocessed foods show addictionlike patterns comparable to tobacco, researchers say

That bag of chips you swore you'd only eat a handful of. The energy drink that somehow turns into three. The late-night fast-food run—whether it involves pizza, burgers or tacos—that feels impossible to resist. A new study suggests that it's not just about willpower. Researchers from the University of Michigan, Harvard University and Duke University argue that many ultraprocessed foods—including packaged snacks, sugary beverages, ready-to-eat meals and many fast foods—aren't simply junk food or bad nutritional choices. They're industrially engineered products designed to keep you coming back—using strategies once used to...

Funding Opportunities



There are no new NIH Grants Funding Opportunities to post this week.

UC Foundation Funding Opportunities

Please contact Carol Russell at (513) 556-6169 or russecg@foundation.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.

Brain and Behavior Foundation Takes Applications for Young Investigator Grants

Deadline: [March 4, 2025](#)

The Brain and Behavior Research Foundation invites applications for the Young Investigator Grant. This program supports promising early-career scientists conducting innovative research across a spectrum of mental illnesses. Awards serve as catalysts for obtaining critical proof of concept and pilot data to pursue larger federal and institutional grants. Each award provides up to \$70,000 over two years. About 150 awards are made each year. The program is designed to enable promising investigators to extend research fellowship training or begin careers as independent research faculty in neuroscience and psychiatry. The Foundation seeks innovative, impactful research proposals that advance understanding, prevention, diagnosis, and treatment of mental health disorders and contribute meaningfully to the future of neuroscience and psychiatry. Interested applicants are encouraged to review all eligibility and submission requirements carefully prior to applying.

Interact for Health Considers Changemaker Applications for Rural Communities

Deadline: April 14, 2025

Cincinnati-based Interact for Health is requesting proposals with a goal to promote health and well-being in the rural regions of its service area. Grant size and length will vary based on the scope of the effort, ranging from \$10,000 - \$70,000 over 12 to 18 months. Funds will be awarded for project-based or general operating support, depending on the proposed efforts and based on the needs and desires of the grantee. To be eligible for funding through the Rural Strategy, organizations must serve one or more of the following counties: In Indiana: Dearborn, Franklin, Ripley, Switzerland or Ohio counties; in Ohio: Clermont, Brown, Adams, Clinton, or Highland counties; and in Kentucky: Bracken, Gallatin, Grant, or Pendleton counties. In addition, applicants must be a public nonprofit or governmental organization. Organizations that are not public nonprofits or governmental entities may still seek funding through fiscal sponsorship. Funding will be provided to address grassroots of work related to the vital conditions for health and well-being resources that everyone needs to thrive, and to promote a shared sense of community belonging. The grants are intended to enable the funder to learn alongside partners and continue to inform Interact for Health's Rural Investment Strategy. Opportunities for technical assistance and more support to partners will be implemented on an as-needed basis as topics arise during learning sessions. Additional support may include hiring consultants, one-on-one grantee support, and group training sessions. Interact for Health works to ensure that people in the region have a just opportunity to live their healthiest lives, regardless of who they are or where they live.

UCAC Research Members New Publications

Single cell RNA transcriptome response to fentanyl use in persons with HIV infection

Krishna M. Roskin, Heidi L. Meeds, Janani Madhuravasal Krishnan, Matthew Juhascik, John M. Cafardi, Jennifer L. Brown, Caroline Freiermuth, Michael S. Lyons, Kenneth E. Sherman & Jason T. Blackard

Scientific Reports

DOI: <https://doi.org/10.1038/s41598-026-38854-4>

ABSTRACT

The US is experiencing a major drug epidemic largely attributed to synthetic opioids including fentanyl. We considered how illicit fentanyl use in persons living with HIV impacted gene expression profiles in the peripheral blood. Whole blood was collected from 10 HIV-positive adults with a diagnosis of opioid use disorder (OUD) and 7 HIV-positive non-opioid using controls. Mean HIV viral loads were higher for the OUD+ group, although this difference did not reach statistical significance (2.44 versus 1.00 log₁₀ copies/mL; p = 0.12; two-sample T test). 216,641 cells were evaluated by single cell RNAseq. Cell frequencies

were not different by opioid status except for NK cells (lower for opioid use; $p = 0.0045$). For CD4+ T lymphocytes, 10 differentially expressed genes (DEGs) were higher and 8 were lower in opioid-positive persons. In CD8+ T lymphocytes, there were 15 higher and 13 lower DEGs for opioid-positive study participants. In monocytes, 72 DEGs were higher and 37 DEGs were lower in opioid-positive participants. In B lymphocytes, 17 DEGs were higher and 10 were lower in opioid-positive versus opioid-negative participants. These findings highlight multiple pathways by which opioid use may contribute to HIV pathogenesis. Rigorous characterization of the interactions among HIV, opioids, and host cells can improve clinical management paradigms, facilitate rational public health policies, and reveal additional pathways for novel target-specific therapeutic interventions.

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