Welcome to the Biannual Bulletin from the Center for Addiction Research! The biannual bulletin contains news stories and summaries provided by CAR members about the great work they are doing. Thank you to those who shared stories for this edition! To have your work included in the next issue, coming in late January 2022, please send a brief summary/story accompanied by pictures or graphics (if available) to Jen Rowe (rowej@ucmail.uc.edu) any time prior to January 15th. Thank you!

**CAR Biannual Bulletin**

*July 2021*

---

### Member Research Updates

#### 2022 Bulletin Release Dates:
- Late January & July

#### 2022 Deadlines for Submitting Stories:
- January & July 15th

---

**Center for Addiction Research 2021 Summer Speaker Series:**

*Hosted by: Urban Health Pathway of Next Lives Here*

---

#### CAR Presenters

The **Center for Addiction Research** is offering monthly events to discuss and promote the innovative work and ongoing projects related to prevention, intervention, and treatment. Each event has been well attended with a diverse audience consisting of students/staff/faculty and community members. Feedback from the initial sessions has been overwhelmingly positive, “very informative, great presentations on important topics”.

The first event, held May 5, focused on “Addressing Disparities Through Community Collaboration” featuring CAR member, Dr. **Kathy Burlew**, Professor of Psychology Emerita, University of Cincinnati, and Jamahal C. Boyd, Sr., Chief Executive Officer, The Crossroads Center.

The second event, held June 9, focused on “Recreational Opioid Use and Viral Infections” featuring CAR member, Dr. **Jason Blackard**, Professor, Department of Internal Medicine, University of Cincinnati, and Dr. John Cafardi, Department of Infectious Diseases, The Christ Hospital.

The third event, held July 14, focused on “Prenatal Opioids, Mothers, and Babies” featuring CAR member, Dr. **Stephanie Merhar**, Associate Professor, Division of Neonatology, Cincinnati Children’s Hospital Medical Center, along with Angie Scroggins, MSN, RN, Nurse Manager, The Maternal Fetal Center, Baby Steps Program, Preadmission & Childbirth Education and Lucy Rolfes, BSN, RN, NOWS Community Nurse Liaison, Baby Steps Program, both from St. Elizabeth Healthcare.

We invite you to join us for one more session to be held on Wednesday, August 11 from 12-1pm, focusing on “QRT+: Role of Academic and Community Partnership in Evolution of Outreach Intervention to Engage Individuals in Treatment for Opioid Use Disorder” featuring CAR member, Dr. **Michael Lyons**, Associate Professor, Department of Emergency Medicine, University of Cincinnati, and Col. Thomas W. Synan, Jr., Chief of Police, Newtown, Ohio. Please use the link below to register for the last session in August or to watch the recordings of the previous month’s sessions.

[>> Register for the August presentation, view previous month's event recordings]
As part of the Serving At-risk youth Fellowship Experience – specialty Training (SAFE-T), UC Psychiatric Mental Health Nurse Practitioner, Counseling, and Social Work students participate in a graduate-level integrated care course. The final course assignment is an original unfolding simulation care scenario-and standardized patient, developed by UC CAR members Drs. Clark, Brubaker, Acquavita, and Wilder, in partnership with Dr. Wagner that allows students to demonstrate competence of roles and communications of the integrative care team. During the case, students engage in all aspects of management of the chronic disease pathway from emergency pain management, to screening, treatment engagement using screening brief intervention and referral to treatment, and the development of a long-term comprehensive plan of care, including medication management, for a transitionally aged Latino female who is pregnant and has limited social support. The case background highlights current challenges communities and families in rural Ohio are facing. Findings from the SAFE-T simulation experience have been disseminated to the Macy Foundation’s work group addressing COVID-19’s impact on medical and nursing education and the manuscript, *Pandemic-Related Disruptions in Nursing Education: Zooming Out for an Innovative Interprofessional Simulation*, will be featured in a special supplement of Academic Medicine for publication.

Angie Clark, RN, Ph.D., CNE, FAAN; Robin Wagner, RN, DNP; Michael Brubaker, Ph.D., LICDC-CS, NCC; Shauna Acquavita, PhD, MSW, LISW-S; Christine Wilder, M.D., MHES

Newly published research shows that a screening program in the University of Cincinnati Medical Center Emergency Department helped detect an outbreak of HIV among persons who inject drugs in Hamilton County, Ohio, from 2014-18. The study was published in PLOS One (link at bottom).

The results of the study highlight UC contributions to public health surveillance as yet another reason why emergency departments should be screening for undiagnosed HIV infections, according to Michael Lyons, MD, associate professor in the Department of Emergency Medicine at the UC College of Medicine.

“The importance of emergency department screening has been established for over 20 years,” says Lyons. “Diagnosing people as early as possible allows for changes in behavior to stop spreading the illness and treatment that improves their health and makes them much less infectious to others.”

Since 2015, an increasing number of HIV outbreaks among those who inject drugs have been reported in the United States. The study found this single testing site contributed 20% of new
HIV diagnoses regionally during a period of rapidly increasing HIV infection in that group.

An Early Intervention Program (EIP) was founded at UC in 1998, the first program of its kind in the country. The EIP offers HIV intervention/prevention counseling, testing, linkage to care and many other services to assist individuals.

This study highlights that a contribution to surveillance is an important public health outcome. In this case, it helped public health authorities to identify a serious HIV outbreak and trigger a Centers for Disease Control and Prevention investigation and response planning.

**Michael Lyons, MD, of the Department of Emergency Medicine**

“Everyone understands that early diagnosis of HIV is critical for individuals and public health,” says Lyons. “Everyone knows that when you screen, that data goes into surveillance systems. This study highlights that a contribution to surveillance is an important public health outcome. In this case, it helped public health authorities to identify a serious HIV outbreak and trigger a Centers for Disease Control and Prevention investigation and response planning. That’s not to say that we solved this public health problem, but your chances of helping are a lot better if you know about the crisis than if you don’t.”

The screening is done through a blood test or an oral swab. The blood test method is the most common, and the sample is sent to the lab, with results returned typically in 90 minutes. If the patient has been discharged, the emergency staff follows up with them later. The health department is notified of all positive results for surveillance and to facilitate partner counseling and referral services.

Lyons says the screening program at UC follows a few different program models. They have publicly funded health promotion advocates who are adjunct health care workers in the department who help with screening. There are also integrated screening workflows in the electronic health record where the nurses and providers are prompted to order testing as well.

Lyons and the other researchers would like to see this study have an impact on public health policy as well as the frequency of HIV screening in emergency departments across the country.

“I hope that public health and policymakers continue to realize that understanding disease epidemiology through surveillance data is essential for fighting infectious disease and that emergency department data is very important to those surveillance efforts,” says Lyons. “I also hope that emergency departments are even more motivated to expand HIV screening given their role in monitoring trends in epidemiology that guide public health response.”

**Learn more about this study in the Journal PLOS ONE:** [https://doi.org/10.1371/journal.pone.0251756](https://doi.org/10.1371/journal.pone.0251756)

Montgomery joins journal editorial team

LaTrice Montgomery, PhD, research associate professor in the Department of Psychiatry and Behavioral Neuroscience, has been appointed as an associate editor of the journal Cannabis.

Cannabis is an open access peer-reviewed journal dedicated to the scientific study of marijuana/cannabis from a multidisciplinary perspective. Consistent with the mission of the Research Society on Marijuana, the journal publishes empirical research of the determinants, correlates, consequences, contexts, and assessment of marijuana use, as well as the treatment of problematic marijuana use, including cannabis use disorder.

Montgomery, a researcher, and licensed clinical psychologist in the department’s Center for Addiction Research/Addiction Sciences Division, focuses her research on cannabis and tobacco co-use, especially via blunts. She also investigates medical marijuana and racial disparities in the prevention and treatment of substance use disorders. She also is an associate editor and social media editor for the Journal of Substance Abuse Treatment, a peer-reviewed journal that features research articles on the assessment and treatment of substance use and addictive disorders, including alcohol, illicit and prescription drugs, and nicotine.

The story above was featured in the Dean’s List Weekly News email from the College of Medicine on 2/22/2021.

The dangers of drugged driving are outpacing drunk driving

Sexual minorities, African Americans and males report higher instances of drugged driving in U.S.

A recent study of drugged driving, by a team of University of Cincinnati researchers, shows that a sizable percentage of individuals reported the use of marijuana and other illicit drugs while behind the wheel.

“We need to focus our efforts on drugged driving, in addition to drunk driving, because drugged driving causes such a high level of fatalities, says Andrew Yockey (CAR affiliate member), a doctoral student in UC’s College of Education, Criminal Justice and Human Services and researcher at the UC Center for Prevention Science.

Yockey is lead author on the study “Drugged driving among U.S. adults: Results from the 2016-2018 national survey on drug use and health” — published in the Journal of Safety Research (linked at bottom).

“Even though less people are driving, drugs are increasing in availability and are being found in more reports of drugged driving in the U.S.,” says Yockey.

The study found that while 8.52% of adults reported driving under the influence of alcohol, compared to 4.49% who drove under the influence of marijuana, a sizable number of adults used both marijuana and other drugs while under the influence of alcohol.
The most commonly reported drugs used while drugged driving are marijuana and opioids, with nearly one in five individuals reporting the use of marijuana while driving a vehicle, according to the Centers for Disease Control and Prevention.

Additionally, the study states:

- Sexual minorities drove under the influence of alcohol more often than heterosexuals, and a sizable percentage also used marijuana and other drugs including inhalants (70.34%), cocaine (68.9%) and hallucinogens (63.7%) while driving.
- Multiracial individuals had heightened involvement in driving under the influence of marijuana.
- Males were significantly more likely than females to engage in drugged driving.

The research looked at sample data in the United States, the most recent available at the time of the study collected from the National Survey Drug Use and Health Survey; researchers say that current estimates are trending the same, despite fewer people driving during the pandemic.

According to the most current data from the National Institutes of Health, in 2016, among people killed in driving accidents that year, 43.6% of drivers who were drug tested and had positive results: 50.5% were positive for two or more drugs and 40.7% were positive for alcohol.

There is serious concern as to how legalization will affect driving behaviors among adults.

Keith King, Professor, and director of UC's Center for Prevention

The UC study is the first of its kind to examine drugged driving over multiple years among adults in the U.S., says Yockey and the study’s co-authors: Keith King, the center’s director, and co-director Rebecca Vidourek, both professors at UC's School of Human Services.

As legalization of marijuana and other drugs becomes more prevalent, King says, “There is serious concern as to how legalization will affect driving behaviors among adults,” adding that more research is needed to specifically evaluate the impact of legalization; particularly among those found to be most vulnerable such as sexual minorities.

While the team utilizes research to identify the risk factors, their efforts also concentrate on education, preferably at an early age, and identifying prevention strategies that are culturally relevant.

For example, Vidourek says that some cultures and communities are less likely to view marijuana as a drug and potentially harmful substance, which may affect its use while driving. “Identifying messages and strategies that are culturally relevant is imperative,” she says. “We need to be vigilant because the trends are increasing,” says Yockey.

Learn more about this study in the Journal of Safety Research: https://doi.org/10.1016/j.jsr.2020.10.006
CAR Member Recognition

Please join us in congratulating the following CAR members on their well-deserved achievements!

- **Kenneth Sherman, MD, PhD**, Gould Professor of Medicine and Director of the Division of Digestive Diseases in the Department of Internal Medicine received the 2021 Distinguished Research Professor Award by the University of Cincinnati for the STEM disciplines. Sherman’s work and expertise in liver disease contributed to the first U.S. Food and Drug Administration-approved direct acting drugs for hepatitis C. Sherman and his colleagues today are one of only a few groups in the U.S. working on diagnostic improvement and innovation for hepatitis viruses like hepatitis B and E.

- **Michael Lyons, MD**, Associate Professor, Department of Emergency Medicine was honored with the Public Health Leadership Award from the Society for Academic Emergency Medicine (SAEM) for his exceptional contributions to addressing public health challenges through interdisciplinary leadership in innovation locally, regionally, nationally, and internationally. These contributions and accomplishments demonstrate foresight and leading-edge innovative thinking.

- **Jayme McReynolds, PhD**, Assistant Professor, Department of Pharmacology and Systems Physiology was honored with the CoM Institute Pilot Funding toward her research on the Role of neuroimmune signaling in the effects of stress on addiction.

**CAR Mission**

To accelerate scientific progress in the prevention and treatment of substance use disorders and their consequences by fostering research collaborations across:

- UC departments, colleges, and centers including Cincinnati Children’s Hospital Medical Center
- Local, regional, and state community and governmental partners
- Other academic institutions and industry

The CAR includes three research concentrations (cores):
work on opioid, stimulant, cannabis, and alcohol use disorders

- Addiction Treatment Development and Testing (ATT)
- Perinatal Addiction/Developmental-consequences (PAD)
- Population Health and Health Services (PHHS)

Find out more about the CAR using the website link below: https://med.uc.edu/institutes/CAR/home

© [2020 Center for Addiction Research]