



CAPPI Catch-Up

**Center for Addiction and Pain Prevention and
Intervention**

THE UNIVERSITY OF ALABAMA AT BIRMINGHAM



About CAPPI

Welcome to the CAPPI Catch-Up newsletter! Our quarterly newsletter will be a way to stay connected and let you all know the events for upcoming months. The Center for Addiction and Pain Prevention and Intervention (CAPPI) is now a year old! The goal of CAPPI is to improve addiction and pain outcomes through research, education, patient care, and community outreach. We are doing this through supporting and enhancing research and collaborations as well as educating the next generation of scientists and practitioners on pain and addiction. Through these activities, we seek to improve patient care and reduce the stigma associated with addiction and pain.

Contents

Directors' Message - 2-4

Upcoming Events - 5

CAPPI News - 6

Member Spotlight - 7

CAPPI Manuscripts - 8



Message from Directors

As the temperature is rising and spring is starting around Alabama, our work through the Center for Addiction and Pain Prevention and Intervention (CAPPI) is in full bloom. Congratulations to Angela Carter, Ph.D., an instructor in general surgery, for receiving a CAPPI Pilot Grant of \$25,000. This grant will be used to examine novel therapeutic targets for stimulants like cocaine and methamphetamine. Be sure to read about her pilot study [here](#).

CAPPI remains committed to the mentorship of undergraduate, graduate, postdoctoral and junior faculty. Our students are working on projects that span the basic sciences to better understand the underlying causes of disease to clinical research applications that brings novel treatments to our patients. Please check out our talented group of current graduate students and other trainees and learn about their research projects on our [website](#).

In addition to training activities and support of junior faculty, CAPPI members have been busy conducting ground breaking research. Peter Hendricks, Ph.D. is the site investigator on a new NIH grant testing psilocybin, a classic psychedelic, for smoking cessation. This project is one of the first to be awarded by NIH and tests psilocybin as a therapeutic agent.

Further, UAB represents one of only a handful of medical centers doing this innovative research with psilocybin. Be sure to read more about this exciting work in our newsletter or on our [website](#).

CAPPI members Michael Vinikoor, MD and Karen Cropsey, Psy.D. were recently awarded a large project to test a behavioral approach, Common Elements Treatment Approach (CETA), to reduce alcohol use and other disorders (e.g., depression, trauma, other drug use, etc.) in rural HIV clinics in Alabama and Lusaka, Zambia. This center grant will be one of the first to test CETA in rural clinics in the US and may lead to successful treatment interventions that can be used and sustained in low resources settings. Read more about this project in our newsletter and [here](#).

(Continued on page 3...)

Message from Directors (cont'd)

Kudos to Jeremy Day, Ph.D. for being awarded the McKnight grant. Dr. Day was selected for this award by a board of prominent neuroscientists from around the US as part of The McKnight Endowment Fund for Neuroscience. His research will examine the epigenetic factors associated with cocaine use and will be able to examine these mechanisms at the single-cell level. Understanding these processes can increase understanding of relapse to drug use, which occurs in about 60% of people treated for their substance use disorder. Congratulations on this important study! [Read more about this work.](#)

In addition, UAB Heersink School of Medicine received a generous gift of \$95 million from the Heersink family and \$5 million from Triton Health System to bring the total gift to UAB School of Medicine to \$100 million. This transformative gift will be used to support recruitment of talented faculty and will elevate UAB SOM's capacity for truly groundbreaking research. You can read more about this gift in this newsletter or at [this link.](#)

Finally, I just want to close by reminding us why we at CAPPI do the work that we do. The following statistics highlight the importance of our work and the need for more research into the best ways to treat addiction and pain:

- Pain and substance use disorders (SUD) represent arguably the two most prevalent and costly public health conditions in the United States.
- Tobacco use remains the leading cause of preventable death in the US, responsible for 480,000 deaths.
- Alcohol use is responsible for over 85,000 deaths annually.
- Unintentional drug overdoses have doubled in the past five years and topped 100,000 deaths for the first time in 2021, a 28.5% increase from rates in 2020.
- From 2002-2018 rates of chronic pain increased 10% across all demographic groups and impacts approximately 20% of the US population at any time.

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Message from Directors (cont'd)

- While pain is the leading cause of disability, overdoses have resulted in declining life expectancy over the past 4 years, a trend that has not been seen since World War II.
- The U.S. Deep South including Alabama is comprised of the greatest proportion of people living with chronic pain.
- In 2021, 343 out of 400 (85.8%) overdose deaths were opioid-related in Jefferson County (Alabama) alone, a 44.7% increase in opioid-related deaths from 2020 (237 out of 302; 78.5%) and a clear indication of the continued impact of opioids in our county.

We have a lot of work to do to ensure that the people of Alabama and nationally/internationally are able to live lives free from the diseases of substance use disorders and chronic pain. But I am confident that the researchers, clinicians and educators at UAB and our center are working hard to improve the lives of people of Alabama every day.



Happy Spring!

Karen Cropsey, PsyD
Burel Goodin, PhD



CAPPI Events

March 12: End Addiction Bham Walk

March 16: Gas Station Drugs

April 6: Pain and Addiction Special Interest Group (PASIG)

May 4: Pain and Addiction Special Interest Group (PASIG)

July 22: Hope & Healing Weekend Grief Workshop



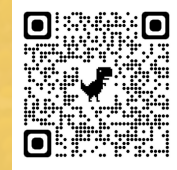
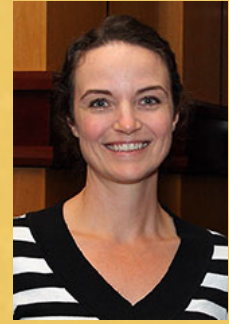
For more information on upcoming CAPPI events, scan QR code:



CAPPI in the News

CAPPI Pilot Grant Awardees : Angela Carter, Ph.D.

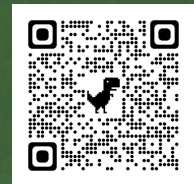
Angela Carter, PhD, instructor of general surgery has been awarded \$25,000 to uncover new potential therapeutic targets for the treatment of psychostimulant abuse. She will investigate the molecular mechanisms by which the microbiome alters AMPH-induced responses, focusing on regulation of central dopamine neurotransmission and reward processes. Dr. Carter will use the molecular discoveries generated with the support of this pilot award as preliminary data for an NIH R01 application.



Scan to read more:

CAPPI Graduate Student Trainees

CAPPI is committed to informative and constructive co-learning directed towards an improved understanding of substance use, pain and their intersection throughout the translational science spectrum. We celebrate the pursuit of lifelong learning and are committed to creating an infrastructure for the appropriate training of both new trainees and seasoned professionals. The Center for Addiction and Pain Prevention and Intervention welcomes their new trainees. This is an excellent opportunity for CAPPI members, faculty, staff and current students to meet the incoming new trainees.



Scan to read more:

\$100 million in contributions - UAB School of Medicine

\$95 million lead gift from longtime University of Alabama at Birmingham supporter Marnix E. Heersink, M.D., the UAB School of Medicine will now be named the UAB Marnix E. Heersink School of Medicine.

The record gift is the single largest philanthropic commitment in university history and will name the UAB Marnix E. Heersink School of Medicine, as well as establish and name the Marnix E. Heersink Institute of Biomedical Innovation and the Mary Heersink Institute for Global Health. The gift will provide support with both endowed and outright funds for key initiatives of the School of Medicine.



Scan to read more:

CAPPI Member Spotlight

UAB researcher granted federal funding for psilocybin and smoking study: PI: Peter Hendricks, Ph.D.



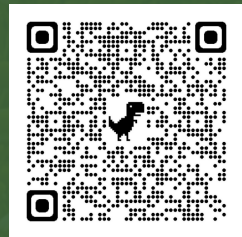
A resurgence in research of classic psychedelics over the past two decades has shown the benefits of the compounds in the mental health and addiction fields, says Hendricks. The studies, funded mostly by philanthropy efforts, have led to impressive clinical findings, specifically with end-of-life distress, major depressive disorder and substance use disorder. While compounds such as psilocybin have risks, previous studies have shown these risks can be controlled and mitigated through screening, preparation, monitoring and follow-up care.

The grant from the National Institute on Drug Abuse is the first federally funded study of a classic psychedelic as a therapeutic in approximately 50 years.

ZAMBAMA grant leverages ‘reverse innovation’

Zambia and rural Alabama two regions are both dealing with longstanding HIV epidemics, widespread poverty and significant barriers to accessing medical care and public health services. Another similarity is the prevalence of alcohol use disorders, substance use disorders and mental health conditions, all of which can contribute to the spread of HIV.

ZAMBAMA contains two separate but related projects. Both rely on CETA (Common Elements Treatment Approach), combines elements common to effective treatments for problems such as depression and trauma into a single treatment model that can be delivered by trained laypeople.



UAB researcher earn grant to study underpinnings of addiction PI: Dr. Jeremy Day



Jeremy Day, Ph.D., associate professor in the Department of Neurobiology in concert with Ian Maze, Ph.D., director of the Center for Neural Epigenome Engineering, Icahn School of Medicine at Mount Sinai has received a 2022 Neurobiology of Brain Disorders Award from the McKnight Endowment Fund for Neuroscience.

While there has been significant research into understanding and treating addiction, 60 percent of those treated will suffer a relapse.

Day and Maze suggest that drugs can hijack genetic regulatory elements known as enhancers, which when activated cause certain genes to be expressed in brain cells that motivate the subject to seek out these drugs. They have designed a project to identify these enhancers in a cell-type-specific fashion that are activated by cocaine — a well understood and researched stimulant — and then create and insert viral vectors into cells that will become active only in the presence of that enhancer.



CAPPI Manuscripts

- Abnormal Pap Follow-Up among Criminal-Legal Involved Women in Three U.S. Cities. Salyer, C., Lipnicky A., Bagwell-Gray M., Lorvick, J., Cropsey, K.L., Ramaswamy, M.
- Health and Health Service Needs: Comparison of Older and Younger Women with Criminal-Legal Involvement in Three Cities. Emerson, A., Lipnicky, A., Comfort M., Lorvick, J., Cropsey, K.L., Smith, S., Ramaswamy, M.
- Sleep and neighborhood socioeconomic status: a micro longitudinal study of chronic low-back pain and pain-free individuals. Rumble D.D., O'Neal, K., Overstreet, D.S., Penn, T.M., Jackson, P., Aroke, E.N., Sims, A.M., King, A.L., Hasan, F.N., Quinn, T.L., Long, D.L., Sorge, R.E., Goodin, B.R.
- It Takes Two to Tango: Patients' and Providers' Perspectives in Tobacco Cessation and Head/Neck Cancer. Khodadadi, A.B., Carroll, W., Lee, E.L., Hansen, B., Scarinci, I.C.
- Exemptions to state laws regulating opioid prescribing for patient with cancer with related pain: A summary. Bulls, H.W., Bell, L.F., Orris, S.R., Goodin, B.R., Liebschutz, J.M., Wozniak, A., Merlin, J.S., Schenker, Y.
- A Mediation Appraisal of Catastrophizing, Pain-Related Outcomes, and Race in Adults with Knee Osteoarthritis. Fullwood, D., Gomez, R.N., Huo, Z., Cardoso, J.S., Bartley, E.J., Booker, S.Q., Powell-Roach, K.L., Johnson, A.J., Sibille, K.T., Addison, A.S., Goodin, B.R., Staud, R., Redden, D.T., Fillingim, R.B., Terry, E.L.
- A Pilot Randomized Clinical Trial of Remote Varenicline Sampling to Promote Treatment Engagement and Smoking Cessation. Carpenter, M.J., Gray, K.M., Wahlquist, A.E., Cropsey, K.L., Saladin, M.E., Froeliger, B., Smith, T.T., Toll, B.A., Dahne, J.
- Decreased Alcohol Consumption in an Implementation Study of Computerized Brief Intervention among HIV Patients in Clinical Care. McCaul, M.E., Hutton, H.E., Cropsey, K.L., Crane, H.M., Lesko, C.R., Chander G., Mugavero, M.J., Kirahata, M.M., Lau, B., Saag, M.S.
- Self-reported reductions in tobacco and nicotine use following medical cannabis initiation: Results from a cross-sectional survey of authorized medical cannabis patients in Canada. Lucas, P., Walsh, Z., Hendricks, P.S., Boyd, S., Milloy, M.J.
- Framework for opioid stigma in cancer pain. Bulls, H.W., Chu, E., Goodin, B.R., Liebschutz, J.M., Wozniak, A., Schenker, Y., Merlin, J.S.
- Temporal summation of mechanical pain prospectively predicts movement-evoked pain severity in adults with chronic low back pain. Overstreet, D.S., Michl, A.N., Penn, T.M., Rumble, D.D., Aroke, E.N., Sims, A.M., King, A.L., Hasan, F.N., Quinn, T.L., Long, D.L., Sorge, R.E., Goodin, B.R.

