

ADDICTION SCIENCES DIVISION



A LETTER FROM THE DIRECTOR



WELCOME!

New staff, faculty, and trainees this year

FACULTY

Patrick Duffy, PhD
Delisa Brown, PhD
Jasara Hogan, PhD
Tanya Saraiya, PhD
Will Mellick, PhD

TRAINEES

Rejoyce Green, PhD candidate, Intern
Alex Miller, PhD candidate, Intern
Kyle Walters, PhD candidate, Intern
Alex Rothbaum, PhD, Postdoc fellow
Andrea Massa, PhD, Postdoc fellow

STAFF

Townsend Langley, MBA
Michaela Buckhannon, LISW
Isabella Raieta
Hanna Vander Wall
Kevin Branson
Alexandra Herron
Abby de Arellano
Zack Markiewicz
Alicia Parson
Olivia Sweatt
Essence Jennings
Brenda Brunner-Jackson
Kimberly Waters
Alexandra Kerrison
Sophie Bella
Andrea Sanna
Daniel Lecker

Dear ASD Faculty and Staff,

We are pleased to present the new ASD Newsletter! The newsletter provides a forum to share relevant announcements and helpful information with members of ASD, and showcase our outstanding research, clinical, education/training, and community outreach efforts. In each issue, we will highlight various research teams, faculty, and opportunities for engagement. Please send information for upcoming newsletters to Ms. Emily Bristol (bristole@musc.edu). As we continue to engage in hybrid work (a blend of in-person and remote work), we hope the newsletter will help enhance our connection and collaborations.

The work that is taking place in ASD is truly inspiring. During the challenging times of 2020-2021, ASD demonstrated innovation, resiliency, and dedication, resulting in increased research support and effective use of telemedicine to provide clinical services to those in need. As we know, substance use increased substantially during the pandemic. In SC, opioid overdose deaths rose 52% (higher than the national average of 45%). Individuals with alcohol and drug use disorders are at increased risk for COVID-19 infection and hospitalization and remain more vulnerable even after vaccination. ASD's work to better understand, treat, and increase awareness of addiction is more relevant now than ever. In addition, new NIH-funded R25 programs were added to the ASD portfolio in 2021 and will help address the critical need for a more diverse research community in the field of addictions.

ASD shines within the MUSC Department of Psychiatry & Behavioral Sciences and the larger MUSC College of Medicine with regard to research awards. In FY20, ASD faculty obtained more than \$26M in research funding and FY21 has also been very successful. Our division is large with ~40 faculty members, and I will be looking for ways we can synergize and build upon our collective efforts. The values of innovation, collaboration, scientific excellence, clinical care, diversity and inclusion, and community engagement will guide these efforts.

I appreciate your outstanding contributions to ASD and the field of addiction sciences and I am grateful for the opportunity to serve as Division Director. I hope you all have a safe and healthy Fall!

Sudie E. Back, PhD

MEET TOWNSEND LANGLEY

Addiction Sciences welcomes its new Division Administrator, Townsend Langley!

A South Carolina native, Townsend graduated from UNC-Wilmington with a BS in Decision Sciences & Programming, received her MBA from the Citadel, and spent her early career as a database administrator, analyst, and programmer. Prior to coming to MUSC, she worked for over 10 years as the Director of Instructional Services in higher education administration while also serving as an adjunct programming instructor. She first joined the MUSC family as a systems analyst in OCIO and continued her journey as the Administrative Manager/Grants Administrator in the Anesthesia department. Since joining ASD in January, Townsend has enjoyed meeting and working with all of the faculty and research teams. Townsend lives in Ravenel with her fiancé, Mark, a retired NYPD highway patrol officer, and their rescue dachshund, Lexi. Her son, Thomas, is currently a freshman at Wofford. Go Terriers! When she is not working, Townsend enjoys fishing, camping, and re-learning how to play the piano.



Townsend Langley (middle) with her fiancé (right) and her son (left)

RESEARCH STAFF FEATURE

Nominated by Dr. Gray and Dr. Squeglia



Ren Rountree

Community Outreach Coordinator for MUSC's Youth Collaborative

Ren has been a **Community Outreach Coordinator** on our team for almost 4 years and has made important connections with schools and community organizations, helping disseminate science to kids, parents, and educators. She recently took on the role of Program Coordinator for our newly funded MUSC High School Teen Science Ambassador Program, which teaches high school students about clinical substance use research and provides hands-on research internships, career preparation, college readiness, and mentorship to high school students in the Charleston area.

Cori Herring awarded Employee of the Quarter by the Department of Psychiatry



Cori Herring

Program Manager for MUSC's Youth Collaborative

Cori is the Program Manager for MUSC's Youth Collaborative group and works tirelessly to support the research, outreach and educational programs within the group. She brightens up the workplace and makes everyone feel welcome. Cori continues to go above and beyond to support her team and the department. She was recently awarded **Employee of the Quarter** by the Department of Psychiatry.

KUDOS & WINS

Dominique Black received a Scholarship from the Society for Research in Psychopathology (SRP).

John Redhead was accepted into MUSC's College of Medicine.

Dr. Matt Carpenter served among several hosts for a recent visit from Congresswoman Nancy Mace to the Hollings Cancer Center.

Rodrick Bellamy was recognized by the Avery Research Center as a Teacher of the Year while completing his M.Ed in Educational Leadership at Columbia College.



Dr. Tracy Smith recently won a High Impact Publication Award from the Hollings Cancer Center for her work focusing on vaping cessation among adolescents. [See here for full article in JAMA Pediatrics.](#)

Special thank you to **Dr. Kathleen Brady** for her services as Vice President for Research (VPR) at MUSC for 7 years!

2021 Research Society On Alcoholism (RSA) Junior Investigator Award Recipients



Dr. Brittany Bryant



Dr. Alexis Garcia



Dr. Anna Kirkland

If you get a pop-up on your screen telling you to call a 1-800 number because your computer has been compromised, immediately shut down your computer and contact Tan

- Submit an IT request at COMITHelp.musc.edu
- Call 843-693-6765



**TECH
TIP**

RESEARCH UPDATES

Select Grants Awarded This Year

- **Preparing Trainees from Diverse Backgrounds for Alcohol Research Careers;** Julianne Flanagan, PhD; NIAAA R25; \$242,783
- **MUSC High School Teen Science Ambassador Program;** Lindsay Squeglia, PhD; NIGMS R25; \$270,000 (photo below).

The **MUSC Teen Science Ambassador program** is an internship offered by the Youth Collaborative for individuals from groups that are underrepresented in STEM who have a passion for science. Dr. Lindsay Squeglia and Ren Rountree are happy to announce that the program is now funded by the National Institute of General Medical Sciences R25 Science Education Partnership Award. With this funding, MUSC's Youth Collaborative will start recruiting the first cohort this November, with an anticipated start date of February 2022. They will welcome 6 students next Spring.



2020 TSAP Pilot Alumni touring Dr. Feghali-Bostwick's Lab (ARROWS collaboration)

Select Grants - Title and Contact PI are listed below.

- **Identifying the Neurobehavioral Signature of Individuals with AUD and comorbid PTSD;** Amber Jarnecke, PhD; NIAAA K23 (Yr3); \$203,472
- **Role of Oxytocin in a Mouse Model of PTSD-AUD Comorbidity;** Howard Becker, PhD; NIAAA R01; \$373,750
- **A Proof-of-Concept Trial of N-Acetylcysteine for Adolescent Alcohol Use Disorder;** Kevin Gray, MD; NIAAA R01 (Yr4); \$724,982
- **Preclinical Medications Screening in Dependence Models of Alcohol Use Disorder;** Howard Becker, PhD; NIAAA (Mod 5); \$617,276
- **Oxytocin to Enhance Integrated Exposure-Based Treatment of Co-occurring Alcohol Use Disorder and PTSD;** Sudie Back, PhD; NIAAA R01 (Yr2); \$681,733
- **Meta-Analysis of Individual Patient Data for PTSD/AODs;** Sudie Back, PhD; RTI International (Yr4 Award); \$58,501
- **Alcohol Research Center - Treatment and Implications;** Howard Becker, PhD; NIAAA P50 (Yr26); \$1,549,267
- **Gabapentin for Restoring GABA/glutamate Homeostasis in Co-occurring Bipolar and Cannabis Use Disorders: A Randomized, Double-blind, Placebo-controlled, Parallel-group, Clinical MRI Study;** James Prisciandaro, PhD; NIDA R01; \$622,551
- **Gender and Sex Hormones Influences on Cannabis Use Disorder Remission;** Rachel Tomko, PhD; NIDA R01; \$436,286.
- **Approach Bias Modification for the Treatment of Cannabis Use Disorder;** Brian Sherman, PhD; NIDA K23 (Yr4); \$185,259
- **Determining the Impact of Cannabis Use and Severity on Tobacco Cessation Outcomes;** Erin McClure, PhD; CA R37 (Yr3); \$605,001
- **Development and Testing of a Behavioral Activation Mobile Therapy for Elevated Depression Symptoms;** Jennifer Dahne, PhD; NIMH R42 (Yr3); \$739,540
- **Clinical Scientists Training in Addictions at MUSC;** Aimee McRae-Clark, PharmD; NIDA K12 (Yr9); \$531,467
- **Rural Community Enhanced Access to Clinical Trials in Health Systems in South Carolina (REACH-SC);** Kathleen Brady, MD, PhD; Duke Endowment; \$226,000
- **Exploring the Ethanol Engram: From Initiation to Excessive Ethanol Drinking;** Patrick Mulholland, PhD; NIAAA R21 (Yr2); \$140,156
- **ABCD Consortium - Research Project Site;** Lindsay Squeglia, PhD; NIDA U01 (Yr5); \$1,170,835
- **Southern Consortium Node of the Clinical Trials Network;** Kathleen Brady, MD, PhD; NIDA UG1 (Yr22); \$2,018,570
- **South Carolina Clinical & Translational Research Institute;** Kathleen Brady, MD, PhD; NCATS UL1 (Yr7); \$3,796,637

TEAM FEATURES



The Recharge Team meet on Zoom to discuss lab updates.



The Back -Flanagan Lab gather in person (outdoors) together.

ASD COMMUNITY CONNECTION

PASOs Training

During Hispanic and Latino Heritage month, the **Recharge Center** (trainees, faculty, and staff working under Drs. Kevin Gray, Lindsay Squeglia, and Rachel Tomko) came together to celebrate the extensive histories, diverse cultures, and many contributions of the Hispanic and Latino community. We had a training with PASOs Director of Equity, Diversity and Inclusion (Mike Young) and a social hosted by Dr. Alexis Garcia and Abby de Arellano. PASOs stands for Perinatal Awareness for Successful Outcomes. To learn more please see <https://www.scpasos.org>.



Out of the Darkness Community Walk

Members from the Addiction Sciences Division joined with community partners for the **Out of the Darkness Community Walk for Suicide Prevention**. Pictured to the left are Mrs. Michaela Buckhannon, Mrs. Nancy Mason and her husband, Dr. Darlene Moak, Dr. Sarah Book, Dr. Sudie Back & Dr. Kevin Gray. Dr. Josh Smith attended the walk as well. Dr. Brian Sherman also attended and was the top fundraiser! Thanks to all who came out to support this important mission.

COMING UP

Thanks GIVING Food Drive - November



Food insecurity is an ongoing problem in the Lowcountry. **Neighbors Together** is a local organization that helps curb this problem. ASD is hosting a food drive to raise consumables for Neighbors Together. If you wish to donate, **all goods can be brought to the collection bin in IOP 460-N.** Items needed include non-perishable Thanksgiving food items (e.g., cornbread mix, boxed mac and cheese, cranberry sauce, canned vegetables) and bags (paper, plastic, reusable, drawstring backpacks). Deadline for donations: **November 12.** Contact [Kristen Mummert at mummertk@musc.edu](mailto:mummertk@musc.edu) for more information.

Remote Trials Seminar - November 9

Dr. Jen Dahne is co-leading a national seminar: **Remote Trials: Future or Fiasco** (November 9th). [Click Here to Register \(it's free!\)](#)

Holiday Drive for My Sister's House - December



My Sister's House is a local organization that works tirelessly to provide resources and education to end domestic violence in the Lowcountry. This holiday season, we will be raising funds (\$900 goal - deadline is **Dec 15**), wrapping gifts (**Dec 17**), and writing holiday cards to the women in the shelter (pick up/return cards from room IOP 460-N). [Contact Kristen Mummert at mummertk@musc.edu](mailto:mummertk@musc.edu) for more information.

National Cancer Institute Seminar - December 3

Dr. Paul Jacobsen, Associate Director in the National Cancer Institute's Division of Cancer Control and Population Science's (DCCPS) will be presenting a virtual seminar on December 3rd, 3pm. [Contact Dr. Matt Carpenter for more information.](#)

Just Say "Know" Presentations

The **Just Say "Know"** program is a presentation and hands-on learning experience designed to teach students the science behind drug and alcohol addiction. The **Youth Collaborative** has continued to bring this to local schools over the past few years, and the Addiction Sciences Division has offered the program for over 10 years!

- Charleston Day School
- Fort Dorchester High School

Red Ribbon Week



Red Ribbon Week is a substance prevention awareness campaign observed annually in October in the United States. This year, the **Youth Collaborative** participated in multiple school events across our community, including presenting the **Just Say Know** Presentation.

Tobacco Research Interest Group

Upcoming speakers to the **Tobacco Research Interest Group** include Dr. Kristie Foley from Wake Forest University and Dr. Tom Brandon (University of South Florida). [Contact Dr. Jen Dahne or Dr. Tracy Smith for more information.](#)

BUSINESS OFFICE TIP



Non-consumable research supplies are often eligible to be purchased as tax-exempt and doing so can save money on direct cost expenditures on research awards. Examples include blood pressure monitors, thermometers, scales, computers, laptops, and freezers for storing samples. The process is straightforward when purchasing in Marketplace and can be done for P-card purchases as well but requires set-up with the vendor. Contact your business office grants administrator for more information or if you are unsure if an item would be considered tax-exempt.

Special thanks to Dr. Zahraa Atoui (left, DART summer program alumna and current psychiatry resident at MUSC) & Ms. Emily Bristol (right, DART program coordinator) for compiling this newsletter.

To submit content for future ASD Newsletters, please email bristole@musc.edu



Featured Publications

- Crum, K. I., **Flanagan, J. C.**, Vaughan, B., Aloji, J., Moran-Santa Maria, M. M., **Back, S. E.**, **Brady, K. T.**, & Joseph, J. E. (2021). Oxytocin, PTSD, and sexual abuse are associated with attention network intrinsic functional connectivity. *Psychiatry research. Neuroimaging*, 316, 111345.
- **Hahn, A. M.**, Hahn, C. K., Simons, R. M., & Simons, J. S. (2021). History of rape moderates the pathways from emotion dysregulation to alcohol and risky sex outcomes among college women. *Psychological trauma : theory, research, practice and policy*, 10.1037/tra0001101. Advance online publication.
- Henschel, A. V., **Flanagan, J. C.**, Augur, I. F., Jeffirs, S. M., & **Back, S. E.** (2021). Motives for prescription opioid use: The role of alexithymia and distress tolerance. *The American journal on addictions*, 10.1111/ajad.13230. Advance online publication.
- Jennings, L. K., **Lane, S.**, **McCauley, J.**, Moreland, A., **Hartwell, K.**, **Haynes, L.**, **Barth, K. S.**, **Gainey, S. S.**, & **Brady, K. T.** (2021). Retention in Treatment after Emergency Department-Initiated Buprenorphine. *The Journal of emergency medicine*, S0736-4679(21)00381-4. Advance online publication.
- **King, C. E.**, **Griffin, W. C.**, **Lopez, M. F.**, & **Becker, H. C.** (2021). Activation of hypothalamic oxytocin neurons reduces binge-like alcohol drinking through signaling at central oxytocin receptors. *Neuropsychopharmacology : official publication of the American College of Neuropsychopharmacology*, 46(11), 1950–1957.
- Leavens, E., **Carpenter, M. J.**, **Smith, T. T.**, & Nollen, N. L. (2021). Exploratory evaluation of online brief education for JUUL pod-mod use and prevention. *Addictive behaviors*, 119, 106942.
- Lees, B., Debenham, J., & **Squeglia, L. M.** (2021). Alcohol and Cannabis Use and the Developing Brain. *Alcohol research : current reviews*, 41(1), 11.
- Martin, E. L., Doncheck, E. M., Reichel, C. M., & **McRae-Clark, A. L.** (2021). Consideration of sex as a biological variable in the translation of pharmacotherapy for stress-associated drug seeking. *Neurobiology of stress*, 15, 100364.
- **McClure, E. A.**, Wahlquist, A. E., **Tomko, R. L.**, Baker, N. L., **Carpenter, M. J.**, Bradley, E. D., Cato, P. A., Gipson, C. D., & **Gray, K. M.** (2021). Evaluating N-acetylcysteine for early and end-of-treatment abstinence in adult cigarette smokers. *Drug and alcohol dependence*, 225, 108815.
- Melkonian, A. J., **Flanagan, J. C.**, Calhoun, C. D., **Hogan, J. N.**, & **Back, S. E.** (2021). Craving Moderates the Effects of Intranasal Oxytocin on Anger in Response to Social Stress Among Veterans With Co-Occurring Posttraumatic Stress Disorder and Alcohol Use Disorder. *Journal of clinical psychopharmacology*, 41(4), 465–469.
- Oesterle, D. W., **Jarnecke, A. M.**, & Gilmore, A. K. (2021). Sexual Re-Assault among College Women Differs Based on Sexual Refusal Assertiveness and Assertive Resistance Strategy Intentions. *Journal of interpersonal violence*, 8862605211028656. Advance online publication.
- Palmer, A. M., Toll, B. A., **Carpenter, M. J.**, Donny, E. C., Hatsukami, D. K., Rojewski, A. M., **Smith, T. T.**, Sofuoglu, M., Thrul, J., & Benowitz, N. L. (2021). Reappraising Choice in Addiction: Novel Conceptualizations and Treatments for Tobacco Use Disorder. *Nicotine & tobacco research : official journal of the Society for Research on Nicotine and Tobacco*, ntab148. Advance online publication.
- **Prisciandaro, J. J.**, **Hoffman, M.**, Brown, T. R., **Voronin, K.**, **Book, S.**, Bristol, E., & **Anton, R. F.** (2021). Effects of Gabapentin on Dorsal Anterior Cingulate Cortex GABA and Glutamate Levels and Their Associations With Abstinence in Alcohol Use Disorder: A Randomized Clinical Trial. *The American journal of psychiatry*, 178(9), 829–837.
- **Prisciandaro, J. J.**, **Mellick, W.**, **Squeglia, L. M.**, Hix, S., Arnold, L., & **Tolliver, B. K.** (2021). Results from a randomized, double-blind, placebo-controlled, crossover, multimodal-MRI pilot study of gabapentin for co-occurring bipolar and cannabis use disorders. *Addiction biology*, e13085. Advance online publication.
- **Saraiya, T. C.**, **Jarnecke, A. M.**, **Jones, J.**, **Brown, D. G.**, **Brady, K. T.**, & **Back, S. E.** (2021). Laboratory-induced stress and craving predict opioid use during follow-up among individuals with prescription opioid use disorder. *Drug and alcohol dependence*, 225, 108755.
- **Santa Ana, E. J.**, LaRowe, S. D., Gebregziabher, M., Morgan-Lopez, A. A., Lamb, K., Beavis, K. A., Bishu, K., & Martino, S. (2021). Randomized controlled trial of group motivational interviewing for veterans with substance use disorders. *Drug and alcohol dependence*, 223, 108716.
- Schacht, J. P., **Hoffman, M.**, Chen, B. H., & **Anton, R. F.** (2021). Epigenetic moderators of naltrexone efficacy in reducing heavy drinking in Alcohol Use Disorder: a randomized trial. *The pharmacogenomics journal*, 10.1038/s41397-021-00250-8. Advance online publication.
- **Sherman, B. J.**, Sofis, M. J., Borodovsky, J. T., **Gray, K. M.**, **McRae-Clark, A. L.**, & Budney, A. J. (2021). Evaluating cannabis use risk reduction as an alternative clinical outcome for cannabis use disorder. *Psychology of addictive behaviors : journal of the Society of Psychologists in Addictive Behaviors*, 10.1037/adb0000760. Advance online publication.
- Wilkerson, A. K., Simmons, R. O., Sahlem, G. L., Taylor, D. J., **Smith, J. P.**, **Book, S. W.**, & **McRae-Clark, A. L.** (2021). Sleep and substance use disorder treatment: A preliminary study of subjective and objective assessment of sleep during an intensive outpatient program. *The American journal on addictions*, 30(5), 477–484.