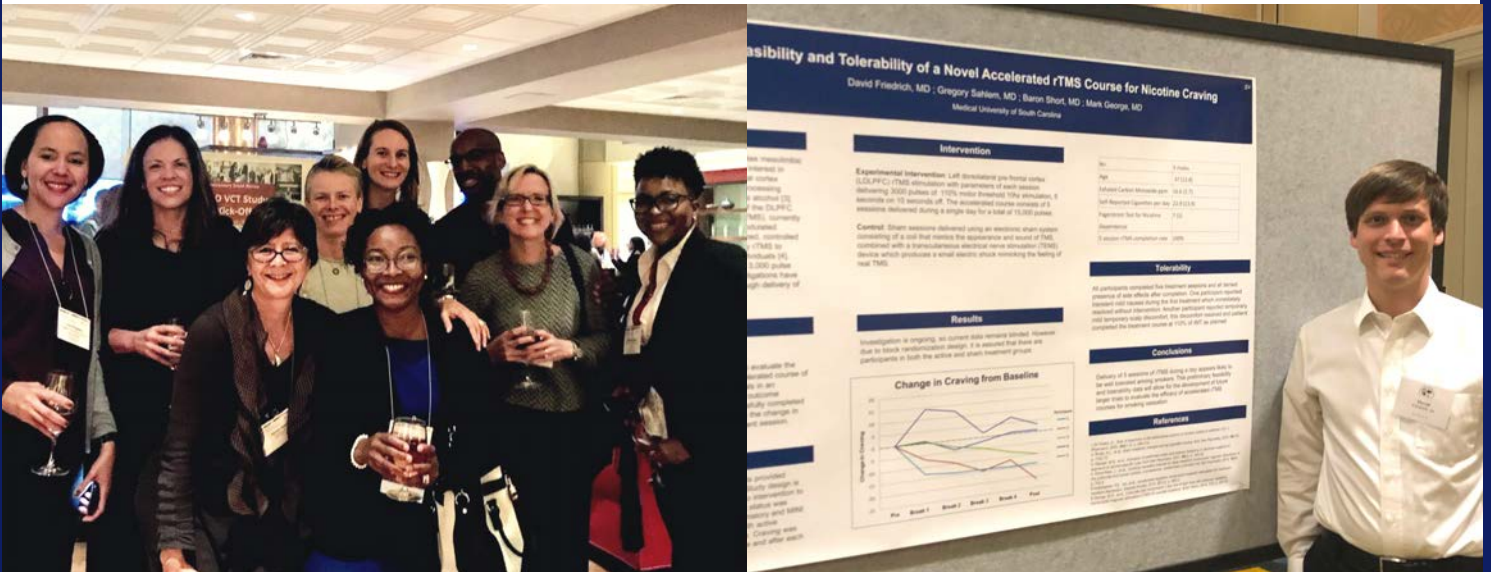


SUMMER 2019

THE DART NEWSLETTER

Updates from the Drug Abuse Research Training Program at
the Medical University of South Carolina (DA050237)



RESIDENT
RESEARCH
TRACK

SUMMER
FELLOWSHIP

ALUMNI

For more information, visit
education.musc.edu/DART

Graduates, New Trainees & Alumni Updates

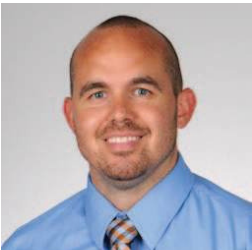
Shaping future researchers & clinicians

The Drug Abuse Research Training Program at the Medical University of South Carolina (MUSC) is sponsored by the National Institute on Drug Abuse (R25 DA050237).

The mission of this program is to increase the number of physician-scientists with the necessary skills to conduct patient-oriented research and to promote research training. The program accomplishes its goals through a 2-year resident research track, a 10-week summer research fellowship for undergraduate, graduate, and medical students, pilot project funding, didactic seminars, and individual mentorship.

The DART Program was founded in 2006 by Kathleen Brady, MD, PhD and is directed by Sudie Back, PhD, Sarah Book, MD, and Kelly Barth, DO.

Resident Research Track



Joshua C. Brown, MD, PhD



Michael Capata, MD



Matthew Fadus, MD

Current Residents

DART current resident trainees are Joshua Brown, MD, PhD, Michael Capata, MD, & Matthew Fadus, MD.

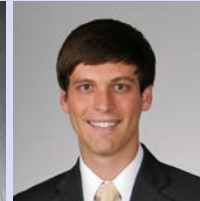
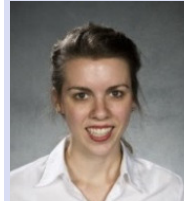
Dr. Brown is mentored by **Mark George, MD** and secondarily mentored by **Gregory Sahlem, MD, Baron Short, MD, and Leonardo Bonhila, MD, PhD**. He is investigating the role of NMDA receptor-dependent synaptic plasticity in repetitive transcranial magnetic stimulation (rTMS) after-effects using pharmacologic augmentation and antagonism. He is currently recruiting and enrolling patients for his study. This year, Dr. Brown attended the 3rd Annual International Brain Stimulation Conference, the Clinical TMS Society 2019 annual meeting, and the 2nd annual Carolina Neurostimulation Conference. He is applying for the DP5 Early Independence Award through the NIH and is awaiting a final response from the NIH Loan Repayment Program (LRP). He has an accepted publication on brain stimulation training in the Residents's Journal of the American Journal of Psychiatry.

Dr. Capata has continued to work with mentor **Karen Hartwell, MD**, to survey physician attitudes toward opioid use disorder, suboxone, naloxone, and barriers to adequate treatment. He has also been working with Dr. Hartwell to understand fentanyl exposure among patients in the veteran's clinic. Dr. Capata attended this year's APA conference in San Francisco and is working with his mentor to submit an abstract for the next College on Problems of Drug Dependence.

Dr. Fadus has been working with **Lindsay Squeglia, PhD** on the national Adolescent Brain Cognitive Development Study (ABCD) and plans to evaluate racial disparities among mental health. He is also interested in the relationship between screen time and mental health. Dr. Fadus submitted several publications to Academic Psychiatry and has been featured in the APA Residents' Forum this year. He was awarded the Group for Advancement of Psychiatry Fellowship.

Graduates

Congratulations to DART Resident Graduates (below) Sarah Oros, MD, David Friedrich, MD, & Ebele Compean, MD.



Dr. Oros focused on evaluating the attitudes, beliefs, and intentions about utilizing Medication Assisted Treatment (MAT) for Opioid Use Disorder among primary care providers. Under the mentorship of **Kelly Barth, D.O.**, she evaluated themes from focus group discussions. She presented at the North American Primary Care Research Group Conference in November 2018, and her publication of primary outcomes is under review. Dr. Oros accepted a faculty position as an Assistant Professor at the University of Kentucky.

Dr. Compean worked with mentors **Mark Hamner, MD** and **Zhewu Wang, MD** to investigate the role of neuropeptide-Y and genetics in patients with PTSD and comorbid alcohol use disorder treated with N-acetylcysteine for her primary DART project. She presented at several conferences during her training, including the American Psychiatric Association annual meeting. She also published a review of diagnostic and treatment challenges for patients with PTSD with secondary psychotic features in *Neuropsychopharmacology*. After graduation, Dr. Compean will be working in outpatient psychiatry.

Dr. Friedrich completed the DART Program as an undergraduate student in 2010 and as a medical student in 2012 with Karen Hartwell, MD, and in 2019, he graduates the Resident Research Track. With the mentorship of **Baron Short, MD, and Gregory Sahlem, MD**, his most recent DART project piloted the use of accelerated rTMS for nicotine craving. Dr. Friedrich presented a poster of his preliminary findings at South Carolina Psychiatric Association annual meeting and won second place in the poster competition. The publication of his study outcomes was recently accepted in Brain Stimulation. Dr. Friedrich will be working for Charleston Mental Health after graduation.

New Trainees

Welcome, 2019-2021 DART Resident Trainees:

Sean Christensen, MD, Lauren Das, MD, Michael Norred, MD & Patrick Robbins, MD



Dr. Christensen is interested in digital health and patient-centered technologies. He will be working with Mark George, MD.



Dr. Das is interested in surveying burnout and substance use in residents nationwide. She will be working with Karen Hartwell, MD.



Dr. Norred will be working with a team of mentors in Brain Stimulation and primary mentor Mark George, MD, to investigate rTMS for insomnia patients with comorbid disorders.



Dr. Robbins will be working with DART alumni and mentor Ben Kalivas, MD to assess patient knowledge of benzodiazepine side effects.

Select Trainee Publications & Presentations

Bold denotes DART Trainee, Resident Research Track or Summer Fellowship

Badran, B.W., **Brown, J.C., Dowdle, L.T.**, Mithoefer, O.J., LaBate, N.T., Coatsworth, J., et al. (2018) Tragus or cymba conchae? Investigating the anatomical foundation of transcutaneous auricular vagus nerve stimulation (taVNS). *Brain Stimul*, 11(4), 947-948.

Fadus, M. (2019) Mental Health Disparities and Medical Student Education: Teaching in Psychiatry for LGBTQ Care, Communication, and Advocacy. *Acad Psychiatry*, 43(3), 306-310.

Fadus, M.C. & Harrison, J.D. (2019) A Missed Opportunity: Universal School-Based Mental Health Literacy Programs. *Acad Psychiatry*. Available online.

Compean, E. & Hamner, M. (2018) Posttraumatic stress disorder with secondary psychotic features (PTSD-SP): Diagnostic and treatment challenges. *Progress in Neuropsychopharmacology & Biological Psychiatry*, 88.

Fadus, M.C., Odunsi, O.T., & Squegilia, L.M. (2019) Race, Ethnicity and Culture in the Medical Record: Implicit Bias or Patient-Advocacy? *Acad Psychiatry*. Available online.

Peterson, A., **Brown, J.C.**, & Gerges, N.Z. (2018) BRAG1/IQSEC2 as a regulator of small GTPase-dependent trafficking. *Small GTPases*. Available online.

Wulsin, L., Pinkhasov, A., Cunningham, C., Miller, L., Smith, A., & **Oros, S.** (2019) Innovations for Integrated Care: The Association of Medicine and Psychiatry Recognizes New Models. *General Hospital Psychiatry*. Available online.

Squegilia, L.M., **Fadus, M.C.**, McClure, E.A., Tomko, R.L., & Gray, K.M. (2019) Pharmacological treatment of Youth Substance Use Disorders. *Journal of Child and Adolescent Psychopharmacology*. Available online.

Compean, E., Hamner, M., Wang, Z., & Back, S. (2018, May) An Integrative Review of Human Studies on Neuropeptide Y in PTSD and Substance Use Disorders. Presented at the 73rd Annual Society of Biological Psychiatry Meeting. New York City, NY.

Fadus, M., Valadez, E.A., & Squegilia, L. (2018, November) Implicit Bias in Elementary Education Disciplinary Practices. Presented at the Perry Halushka 2018 MUSC Research Day. Charleston, SC.

Friedrich, D., Sahlem, G., Short, B., & George, M. (2019, January) Feasibility and Tolerability of a Novel Accelerated rTMS Course for Nicotine Craving. Presented at the South Carolina Psychiatric Association Annual Meeting. Columbia, SC.

Compean, E., Jones, J., Logan, A., Kirby, C., Taimina, L. & Hamner, M. (2018, November) PTSD with Comorbid Psychosis in Asylum Seekers, Refugees and Immigrants. Presented at the International Society for Traumatic Stress Studies Annual Conference. Washington, DC.

Oros, S., Christon, L., **Barth, K.**, Berini, C., **Padgett, B.**, & Diaz, V. (2018, November) Evaluating Attitudes, Beliefs and Intentions About Utilizing Medication Assisted Treatment for the Treatment of Opioid Use Disorder Among Primary Care Providers. Presented at the North American Primary Care Research Group Annual Meeting. Chicago, IL.

Compean, E., Hamner, M., Wang, Z., & Back, S.E. (2018, December) Dopamine Transporter (DAT1) Gene in Combat Veterans with PTSD. Presented at the American College of Neuropsychopharmacology Annual Meeting. Hollywood, FL.

Summer Fellowship



Students accepted for the 10th DART Summer Fellowship Program

Deborah Adeyemi, undergraduate student from University of Miami, mentored by Virginia Fonner, PhD, MPH

Christopher Baltimore, undergraduate student from Clemson University, mentored by Howard Becker, PhD

Raquelle Bourgeois, undergraduate student from University of South Carolina, mentored by Brian Sherman, PhD

Stewart Cox, current MD, PhD student at MUSC, mentored by Carmela Reichel, MD

Cindy Dike, graduate student from Howard University, mentored by Colleen Halliday-Boykins, PhD & Sudie Back, PhD

Jenna Frawley medical student from Eastern Virginia Medical School, mentored by Patrick O'Neil, PhD

Kyla Gibney, graduate student from University of Texas Health Science Center, MD Anderson Cancer Center Graduate School, mentored by Lisa McTeague, PhD

Madeline Hohmeister undergraduate student from College of Charleston, mentored by Jane Joseph, PhD

Andrew Rowley, incoming medical student at MUSC, mentored by Joseph Schacht, PhD

Anna Russel, undergraduate student from College of Charleston, mentored by Anna Wilkerson, PhD

Mika Sakamoto, undergraduate student from University of South Carolina, mentored by Jennifer Dahne, PhD & Erin McClure, PhD

Kayla Shine, undergraduate student from Clemson University, mentored by Lindsay Squeglia, PhD

Marinna Smith, undergraduate student from University of South Carolina Honors College, mentored by Constance Guille, MD

Stanley Wang, undergraduate student from University of Maryland Baltimore County, mentored by James Prisciandaro, PhD



Alumni Updates



Delisa Brown, PhD

Summer Fellowship, 2014

DART Mentor: Bryan K. Tolliver, MD, PhD

A Charleston native, Dr. Brown returned to MUSC in 2017 for her Psychology Internship. She is currently working with Sudie Back, PhD. Her work focused on co-occurring trauma and substance use disorders. She graduated from Howard University in 2018 with a PhD in Counseling Psychology. Dr. Brown was awarded an NIAAA Diversity Supplement Post-Doctoral Fellowship, where she is working with Dr. Back at MUSC to better understand ethnoracial disparities in treatment outcomes for individuals with posttraumatic stress disorder and substance use disorder. She recently presented at the Power-Filled Women's Conference and is the 2019 Research Society on Alcoholism (RSA) Annual Meeting's Junior Investigator's Award and Travel Award.

Gregory L. Sahlem, MD

Resident Research Track, 2014

DART Mentor: Mark George, MD

Dr. Sahlem has continued the work he began with the support of DART and his mentorship team (including Aimee McRae-Clark, PharmD, Robert Malcolm, MD, and others) transitioning from residency to a faculty position at MUSC. He is currently involved in several studies that are exploring the potential efficacy of rTMS as a treatment for substance use disorders. Dr. Sahlem will be presenting this year's keynote speech at the DART Summer Research Day.



Erin Gandelman

Summer Fellowship, 2018

DART Mentor: Sudie E. Back, PhD

During the DART Program, Erin researched linguistic traits in Prolonged Exposure (PE) therapy for patients with posttraumatic stress disorder and substance use disorder. Following the summer, she started her PhD at Rosalind Franklin University of Medicine and Science, working with Steven A. Miller, PhD continuing the work she started in the DART Program. She presented exploratory linguistic analyses on descriptions from adolescents with psychopathic traits at the 8th biennial meeting of the Society for the Study of Psychopathy.

Upcoming Conferences

The College on Problems of Drug Dependence 81st Annual Meeting

June 15-20, 2019
San Antonio, TX

Research Society on Alcoholism 42nd Annual RSA Scientific Meeting

June 22-26, 2019
Minneapolis, Minnesota

The 54th Perry V. Halushka 2019 Research Day

November, 2019
Medical University of South Carolina
Charleston, South Carolina

American Academy of Addiction Psychiatry 30th Annual AAP Meeting

December 5-8, 2019
San Diego, California

American College of Neuropsychopharmacology 58th Annual Meeting

December 8-11, 2019
Orlando, Florida

American Association for the Advancement of Science

2019 Annual Meeting
February 13-16, 2020
Austin, Texas

Society for Research on Nicotine & Tobacco 25th Annual Meeting

March 11-14, 2020
New Orleans, Louisiana

American Society of Addiction Medicine Annual Conference-Innovations in Addiction Medicine and Science

April 2-5, 2020
Denver, CO

Society of Biological Psychiatry 75th Annual Meeting

April 30-May 2, 2020
New York, NY

American Psychiatric Association 173rd Annual Meeting

April 25, 2020
Philadelphia, PA

Loan Repayment Program (LRP)



National Institute
of Mental Health

The Clinical Research Loan Repayment Program is a vital component of our nation's efforts to attract health professionals to careers in clinical research. In exchange for a two-year commitment to clinical research, NIH will repay up to \$35,000 per year of qualified educational debt, pay an additional 39% of the repayments to cover Federal taxes, and may reimburse state taxes that result from these payments. To participate, you must conduct clinical research for 50% or more of your total effort (average at least 20 hours per week) during each quarterly service period. Examples of DART alumni who completed the LRP are Drs. Kelly Barth, Bryan Tolliver, & Jennifer Jones.

For more information, please visit <http://www.lrp.nih.gov>

DART

DRUG ABUSE RESEARCH TRAINING

The DART Program at the Medical University of South Carolina is directed by Drs. Sudie Back, Sarah Book, Kelly Barth, & Kathleen Brady. For more information, please contact DART Program Coordinators Emily Bristol (bristole@musc.edu) or Nicola Thornley (nicolat@musc.edu).

For additional information or to apply, please visit our website:
education.musc.edu/DART