Congratulations 2016 DART Summer Fellows!

The DART Summer Fellowship Program completed another successful training program this year on July 29, 2016, when the fellows presented at the Annual DART Summer Research Day. This year’s fellowship was comprised of five medical students and nine undergraduates students, bringing a diverse set of experiences and interests to the program. The participating students came from the Medical University of South Carolina and local universities such as Clemson University and University of South Carolina. They also came from institutions across the country such as the University of California at Berkeley, Case Western Reserve University and Yale University. While some fellows worked in basic science on animal models, most worked on clinical research projects.

The Summer Fellowship is a 10-week, full-time NIH-sponsored program designed for students interested in gaining research experience in addictions. The program is competitive with over 140 applications received for approximately 12-13 slots each year. Each week, the fellows meet for 1-2 hours in seminars designed to provide information about conducting research and careers in research. Students are matched with a faculty mentor and work as a part of their research team for 10 weeks. The program concludes with each student giving a scientific presentation at the annual DART Summer Research Day.

If you are interested or know a student who may be, please go to www.musc.edu/DART or contact Nicky Thornley (DART Program Coordinator) at nicolat@musc.edu for more information.

(Below, from left: Drs. Sudie Back and Sarah Book congratulate the 2016 Summer Fellows)
Meet the Faculty

Dr. Sudie Back, PhD
Dr. Back is a Professor in the Department of Psychiatry. She is PI and Director of the DART Program. She specializes in post-traumatic stress disorder (PTSD) and substance use disorders. Dr. Back has been involved with DART since it began in 2005.

Dr. Kathleen Brady, MD, PhD
Dr. Brady is a Distinguished University Professor at MUSC. She is Co-PI of DART and was the original PI of the program. Her specialties include substance use disorders, PTSD, bipolar disorders, and gender differences.

Dr. Sarah Book, MD
Dr. Book is a Professor at MUSC, board-certified psychiatrist and Co-Director of the DART program. Her areas of expertise include alcoholism, addiction medicine, narcotic replacement therapy, and anxiety.

Newest Faculty Member

Welcome Dr. Kelly Barth!

Dr. Kelly Barth, DO
Dr. Barth is an Associate Professor in the Department of Psychiatry. She is an alumni from the first DART Resident year of 2006 and the newest member of the DART leadership team! Dr. Barth currently works as the attending for the inpatient addiction unit at MUSC and within the Division of Bio-Behavioral Medicine. Her clinical and academic interests are in the area of chronic pain and opioid use disorders.

DART Coordinator

Ms. Nicky Thornley
Ms. Nicky Thornley began working with DART in June of 2011, took two-years off to work on her Master’s in Public Health at Emory University. She returned to the DART program in March, 2016. She is excited to be part of the MUSC community again and to continue learning about addiction sciences. In the coming year, Nicky is looking forward to facilitating the DART Program’s continued growth and success at MUSC.
New 2016 DART Third-Year Residents

Dr. Lynneice Bowen, MD

Dr. Bowen graduated from Florida A&M University in 1998 with a Bachelor of Science in Chemistry. She taught high school science for many years before choosing to pursue a career in Medicine. She completed her undergraduate medical education at Morehouse School of Medicine before beginning her general psychiatry residency at MUSC. Dr. Bowen is interested in women’s mental health, social determinants of health, and studying the implications of the changing social, medical and legal climates regarding marijuana use. She is mentored by Dr. Aimee McRae-Clark.

Dr. Joseph Cheng, MD, PhD

Dr. Cheng concurrently received his M.D. from the College of Medicine and his Ph.D. from the College of Graduate Studies for dissertation research in the laboratory of James Norris, Ph.D. in the Department of Microbiology and Immunology. Prior to medical school, he earned an A.B. in Chemistry and A.B. in Chinese Language and Literature from Dartmouth College in 2001. He joined the psychiatry residency training program in 2014 after graduating from the MUSC Medical Scientist Training Program. Dr. Cheng's clinical and research interests broadly include forensic psychiatry, geriatric psychiatry, trauma, brain stimulation, and psychopharmacology. Drs. Gregg Dwyer and Mark Hamner are his DART mentors.

Dr. Leah Fryml, MD

Dr. Fryml earned her B.S. in Biology from Bob Jones University in 2009 and her M.D. in 2014 from MUSC. She began to cultivate her interest in the brain stimulation technologies during her medical undergraduate training at MUSC. She began her psychiatry residency at MUSC in 2014. Cognizant of the existing gaps in available treatments that leave many patients symptomatic and unable to lead fulfilling lives in society. She sought out the mentorship of Drs. Mark George and Baron Short and worked on several projects with the Brain Stimulation Lab research group during medical school. Dr. Fryml hopes to pursue an academic medical career with a specific interest in brain stimulation for trauma-related disorders. She will conduct her DART research proposal, which involves the use of Transcranial Magnetic Stimulation in PTSD, under the mentorship of Drs. Lisa McTeague, Mark George, and Baron Short.
Current DART Residents

Jennifer Jones, MD
Dr. Jones earned a Bachelor of Arts in Biochemistry in 2005 and her MD in 2012 from the University of Kansas. She started her residency at MUSC in 2012 in Internal Medicine and Psychiatry. Dr. Jones' area of research interest is in TMS treatment of addictions. She is mentored by Dr. Colleen Hanlon.

Christina Tolbert, MD
Dr. Tolbert came to MUSC from Ross University School of Medicine where she earned her MD in 2012. Prior to medical school, she earned her Bachelor of Arts from Middlebury College in 2005. She has been a Psychiatry Resident at MUSC since 2012 working at the VA and using the time prior to DART to explore her research interest in trauma exposure, PTSD, and economic and racial diversity. Dr. Tolbert is also interested in working with adolescents and will be a Child and Adolescent Fellow in addition to DART. She is mentored by Drs. Michael de Arellano and Colleen Halliday-Boykins.

James Walker, MD
Dr. Walker graduated from Auburn University in 2005 with a Bachelor of Civil Engineering. Prior to coming to MUSC for medical school and residency, he spent several years in the Navy. Dr. Walker is studying alcohol use disorder treatment and medication adherence. He is mentored by Dr. Karen Hartwell.

Eric Brueckner, DO
Dr. Brueckner graduated with a Bachelor of Science in 2006 in Molecular/Cellular Biology and Chemistry from University of Illinois Urbana-Champaign. He then went on to Western University of Health Sciences where he earned his Doctorate in Osteopathic Medicine. Dr. Brueckner’s research interests involve mental disorders and medications used to treat those disorders. He is mentored by Drs. Bryan Tolliver and Jim Prisciandaro.
Presentations

2016 DART Summer Fellowship Program
May 23-July 29, 2016 Medical University of South Carolina, Charleston, SC
http://academicdepartments.musc.edu/psychiatry/addiction-sciences/research/DART/dart-summer

Congratulations to the 2016 DART Summer Research Students! And many thanks to their mentors. Well done!
Presentations

2016 Residents

The DART program's 2016 graduate Dr. Thomas Lewis presented both a poster and an oral presentation at the South Carolina Psychiatric Association (SCPA) annual meeting in Columbia, SC and American Psychiatric Association in Atlanta, Ga. After receiving an AAAP travel award to attend last year's meeting. He was also appointed co-chair of the American Academy of Addiction Psychiatry (AAAP) research committee (DART Summer Mentor Dr. Kevin Gray was the other co-chair). Dr. Jennifer Jones did a poster presentation in May at the Biological Psychiatry Conference. She also received an award for APA Early Career Investigator Award and was invited to present in the APA Junior Research Colloquium at the APA Conference in May. Dr. Christina Tolbert recently received the American Academy of Child and Adolescent Psychiatry (AACAP) Pilot Research Award for General Psychiatry Residents, supported by Pfizer and PhRMA, for 2016-2017. Congratulations!
Along with graduating from MUSC in June 2016, Dr. Benjamin Kalivas published two articles this year! One journal article was published in the Dialogues of Clinical Neuroscience and the other is in press in the Chest Journal.


Abstract:
Intrusive thinking triggers clinical symptoms in many neuropsychiatric disorders. Using drug addiction as an exemplar disorder sustained in part by intrusive thinking, we explore studies demonstrating that impairments in corticostriatal circuitry strongly contribute to intrusive thinking. Neuroimaging studies have long implicated this projection in cue-induced craving to use drugs, and preclinical models show that marked changes are produced at corticostriatal synapses in the nucleus accumbens during a relapse episode. We delineate an accumbens microcircuit that mediates cue-induced drug seeking becoming an intrusive event. This microcircuit harbors many potential therapeutic targets. We focus on preclinical and clinical studies, showing that administering N-acetylcysteine restores uptake of synaptic glutamate by astroglial glutamate transporters and thereby inhibits intrusive thinking. We posit that because intrusive thinking is a shared endophenotype in many disorders, N-acetylcysteine has positive effects in clinical trials for a variety of neuropsychiatric disorders, including drug addiction, gambling, trichotillomania, and depression.

Keep an eye out for this future publication by Dr. Benjamin Kalivas:

Kalivas BC, Goodwin AJ. A Woman in her 60s with Fever and Altered Mental Status in Psychiatric Hospital. *Chest*. (in press)
Upcoming Conferences and Meetings

The 51st Perry V. Halushka 2016 Research Day
November 3-4, 2016  Medical University of South Carolina, Charleston, SC
http://academicdepartments.musc.edu/grad/students/curr_students/research_day/

American Academy of Addiction Psychiatry
27th Annual AAAP Meeting
December 8-11, 2016  Bonita Springs, FL
http://www.aaap.org/annual-meeting

American Association for the Advancement of Science
2017 Annual Meeting
February 16-20, 2017  Boston, MA
http://meetings.aaas.org/

Society for Research on Nicotine and Tobacco
23rd Annual Meeting
March 8-11, 2017  Florence, Italy
http://www.srnt.org/page/2017meeting

American Society of Addiction Medicine
48th Annual Conference-Innovations in Addiction Medicine and Science
April 6-9, 2017  New Orleans, LA
http://www.asam.org/education/live-online-cme/the-asam-annual-conference

Society of Biology Psychiatry
2017 Annual Meeting
May 18-20, 2017  San Diego, CA
http://www.sobp.org/i4a/pages/index.cfm?pageid=1

American Psychiatric Association
170th Annual Meeting
May 20-24, 2017  San Diego, CA
https://www.psychiatry.org

The College on Problems of Drug Dependence
79th Annual Meeting
June 17-22, 2017  Montreal, Canada
http://cpdd.org/meetings/2017-meeting-information

39th Annual RSA Scientific Meeting
June 24-28, 2017  Denver, CO
http://rsoa.org/meet-Futures.htm
Mark your Calendars!

DART Research Day
July 28, 2017
Medical University of South Carolina
Charleston, SC
Fall 2016 Weekly Resident Seminar Series

Tuesdays 9-10am

Psychiatry Resident Education Center Conference Room—102 Doughty Street

August 30, 2016 “Orientation” (Charleston Center Suite 151 Conference Room)

September 6, 2016 “Working with the IRB” - Ms. Stephanie Gentilin

September 13, 2016 “Sleep Studies” - Dr. Gregory Sahlem

September 20, 2016 “Balancing Research” – Dr. Kevin Gray

September 27, 2016 “Good Clinical Practices and Research Ethics” - Dr. Susan Sonne

October 4, 2016 “Adverse Events vs Serious Adverse Events” - Ms. Royce Sampson

October 11, 2016 “Success Center and Budget Planning” - Mr. Stephen Skelton

October 18, 2016 “Statistics” - Dr. Jeffrey Korte

October 25, 2016 “Women’s Research” - Dr. Constance Guille

November 1, 2016 “Endnote” - Ms. Teri Lynn Herbert (Library 4th Floor Tech Room)

November 8, 2016 “Gender & Ethnic Factors in Adolescent Vulnerability to Substance Use” - Dr. Halliday-Boykins

November 15, 2016 “Clinical Trials Research” - Dr. Jonathan Halford

November 29, 2016 “Journal Articles” - Dr. Thomas Lewis

December 6, 2016 “DART Resident Research” - Drs. Walker & Brueckner

December 13, 2016 “Dart Resident Research” - Drs. Jones & Tolbert

December 20, 2016 “Pain Research” - Dr. Jeffrey Borckardt

Interested in learning more about DART?

Do you want to apply to be a DART Resident or Summer Fellow?

Check out the website for information!

www.musc.edu/dart

Or scan the code