Greetings!

In this second edition of the Clinical Division Research Newsletter, we proudly highlight many notable research accomplishments of our graduate students. From November 2015 through November 2016, our students have been awarded eight research grants, published 18 academic papers, and presented over 35 posters and papers at conferences, all while continuing to conduct new projects and successfully defend milestone research projects. Congratulations, everyone!

We are also excited to introduce our first Lab Highlight in this edition. Many thanks to all of the Burke lab members for agreeing to be our feature and for their enthusiastic participation! We hope you will all enjoy learning more about this lab’s research foci and current projects, as well as their self-proclaimed lab superlatives and the classic jams that get their data analysis parties started.

If you have any suggestions for future newsletter editions, please contact us.

Research on!

Catherine Stewart & Lauren Moss-Racusin
Lab Highlight

Meet the Burke Lab AKA BADCO!

**Jeff Burke**: faculty advisor, “Best On-Screen Personality”

**Oliver Johnston**: 2nd year, “Most Likely to Be Found on the Floor of the Lab”

**Olivia Derella**: 2nd year, “Most Likely to Get You into Kale”

**Ari Romano-Verthelyi**: 1st year, “Most Likely to Doggedly Try and Befriend You”

**Undergraduates**: Claudia, Emily, Justin, and Sabrina
“What does your lab study?”

BADCO broadly focuses on the developmental aspects of behavioral disorders, as well as on the features and factors associated with them. The study of behavioral disorders is the backbone of the lab’s work, and everyone takes it in different directions. The BADCO members share several scientific values, including a desire to standardize terminology and measures in their field, an emphasis on theory-driven research, and an eagerness to answer the many unanswered questions in their area of study.

“What are some specific projects you’re working on?”

At the moment, the BADCO members are primarily focusing their attention on irritability, but in several different ways.

One way is by looking at the impairments and disorders associated with irritability. The team is hot on the idea that there is an irritability dimension of Oppositional Defiant Disorder (ODD), which could explain the risk for its links to internalizing disorders. They are currently running a feasibility study for the treatment of irritability. The core of this intervention comes from a larger treatment designed for kids at risk for serious violence and delinquency; there is evidence to suggest that this treatment also influences irritability and emotion regulation, and that these mediate outcomes. The plan is to move from this initial feasibility study into a larger evaluation study for the irritability intervention.

BADCO is also examining irritability through brain function. The team is running a pilot project to try and demonstrate co-registration of fMRI and EEG measures of irritability, with the hope that it will lead to future studies.
A third irritability-related interest of the BADCO members is how parenting practices (e.g., maltreatment, school involvement) relate to and predict irritability and other symptoms of ODD and Conduct Disorder (CD).

“What is mentorship like in the lab?”

Jeff is actually one of our faculty members who graduated from the program (yay!), so coming back has felt homey. He has used his own experience as a student to inform his mentoring, which he approaches as a scientific process, paying close attention to what works well and tweaking his practices accordingly. It should come as no surprise then that Jeff self-identifies as very keen on research and statistics, and does whatever he can to get his students excited about both of these areas. One way he seeks to do this is by bringing attention to controversies and questions in the field, which he hopes encourages his students to charge ahead to help make improvements and find answers.

Jeff is interested in providing support for his students to the degree that they want. He can appreciate that some students feel ready for independent research and are eager to craft their own studies, which may or may not be directly related to his own interests. He also knows that students can be daunted by the idea of research, and is happy to more or less hand them a project if that helps diminish those worries. Overall, Jeff tries to provide lots of opportunities to his students (but makes it clear that they are allowed to say no!) and to tailor his working relationship with each student to their unique needs.
“What does the Burke team do for fun?”
BADCO can be found jetting off to Toronto to present their research; sharing lunch on Fridays; decompressing with trivia, Name That Tune!, and dance parties (any other Gloria Estefan fans out there?); and hosting the Glastonburger Festival, which highlights Jeff’s sensational cookery!

Poster Presentations


Gettens, K., & Gorin, A. A. (2016, October). Executive function is associated with weight status and exercise habits in emerging adults. Poster presented at Obesity Week, New Orleans, LA.


**Paper Presentations**


Publications


**Defenses**

Kate Bradbury, Dissertation Proposal, 07/2016: M-CHAT-R/F performance in a high-risk infant sibling population

Katelyn Gettens, Dissertation Proposal, 10/2016

Lauren Miller, Thesis: 04/2016: Preschool predictors of school-age academic achievement in Autism Spectrum Disorder

Lauren Moss-Racusin, Thesis, 09/2016: The role of faith in health outcomes for victims of physical intimate partner violence

Emily Moulton, Dissertation Proposal, 05/2016: A comparison of the cognitive, social, language, and adaptive functioning of toddlers who demonstrate highly positive outcomes from an early ASD diagnosis, peers with high functioning Autism, and typically developing peers

Faith Steffen-Allen, Dissertation Proposal: Examination of whether changes in white matter integrity in healthy aging can predict change in performance on measures of executive functioning and processing speed

Catherine Stewart, Thesis: Effects of worry conversations on anxiety and affect: An observational study of dyadic worry using the Actor Partner Interdependence Model

Projects

Julia Chen is a research assistant on the “Early Detection of Autism Spectrum Disorders” project, which aims to 1) compare the accuracy of age-appropriate Autism screening initiated at 12, 15, or 18 months, 2) test whether a brief physician training on ASD surveillance and screening improves ASD detection, and 3) investigate factors that influence screening and surveillance, including child/family, physician, and practice characteristics. Julia is also a clinical fellow on the grant “TSC2 variant without clinical findings of Tuberous Sclerosis: A risk factor for idiopathic Autism Spectrum Disorder” (PI: Inge-Marie Eigsti; Project Period: 07/01/2016 – 06/30/2019). The grant aims to evaluate genetic processes in children with ASD aged 18 months to 18 years.
**Terence Ching** is the lead investigator on two projects. The first examines the effects of the association splitting technique on biased semantic networks in SO-OCD, as well as SO-OCD symptoms themselves, sexual obsessions, and thought suppression. The second examines whether different emotionally valenced gestures and facial expressions can be manipulated to influence behavioral approach towards contaminants in high-contamination fear participants, as well as what the clinical implications are of keeping clients in Ex/RP therapy.

**Andrea DePetris** participates in data collection for a longitudinal study examining a cohort of students at UConn. The study is aimed at better understanding underrepresented minority student success in biomedical careers in college. The role of self-regulation as a predictor of student success (performance and persistence in science, technology, engineering, and math (STEM) fields) is examined.

**Lucy Finkelstein-Fox** is collecting data for her thesis study, which is a survey-based daily diary project looking at the relationships between sexual assault, trauma history, coping with daily stressors, and physical and mental health.

**Katelyn Gettens** is the project coordinator and an interventionist with the Gorin lab’s Project TEAMS.
Emily Moulton and Kate Bradbury, with the support of Marianne and Deb, have been working on a project investigating the factor structure of a commonly used ASD symptom severity measure, the Childhood Autism Rating Scale (CARS). They conducted a factor analysis of the CARS in a group of two-year-old children with ASD, which yielded three meaning factors. They hope that the use of factor scores derived from this analysis will help to extend the utility of the CARS, particularly in two-year-old children.

Linda Oshin is collecting data for a study with Monnica Williams that is validating a measure for likelihood to commit microaggressions.

Faith Steffen-Allen is involved in data collection for a study that investigates the cortical connectivity mechanisms underlying auditory verbal hallucinations in Schizophrenia by using EEG combined with TMS, as well as diffusion tensor imaging and neuropsychological assessment.

Research Awards, Fellowships, and Grants

Brian Castelluccio, UConn Neurobiology of Language Program Innovation Incentive Award – Neural mechanisms of linguistic and visuospatial generalization reasoning in Autism Spectrum Disorder

Lucy Finkelstein-Fox, APAGS Nancy B. Forest and L. Michael Honaker Master’s Grant for Research in Psychology
Katelyn Gettens, IBACS Graduate Fellowship; Christine N. Witzel CLAS Award for innovative research in women’s health; Zeaman Fellowship for promising research relevant to the study of intelligence and cognitive processes

Ian Gutierrez, Student Research Award, APA Division 36 (Society for the Psychology of Religion and Spirituality)

Tim Michaels, IBACS 2016 Summer Grant Writing Fellowship

Lauren Miller, Maurice J. Farber Graduate Fellowship for dissertation support over the next two years

Funding Opportunities

ERP Summer Boot Camp at UC Davis (http://erpinfo.org/the-erp-bootcamp)