November 2022 Newsletter



CAROLINA AUTISM & NEURODEVELOPMENT CENTER

IN THIS NEWSLETTER...

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- Science Meeting
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- Recruiting Study/Recruitment Form
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- Call to Action



★ NEW EVENT! ★



Research Speed Dating

Details page 2

NOVEMBER EVENTS

- Science Meeting: November 3, 3:30PM @ IMB Conference Room
- First Thursday Social: November 3, ~4:30PM @ the Graduate Hotel
- CAN Trainee Research Speed Dating: November 8, 4:30-6pm @ IMB 101
- Third Thursday Work in Progress: November 17, 3:30 PM @IMB Conference Room

A NOTE FROM THE CAN STEERING DIRECTOR



Welcome to mid-semester! We are so thrilled to get into the "groove" of CAN events, including a fantastic pair of Down Syndrome themed talks for First Thursday Science last month. Our "work in progress" meetings have inspired great conversations and advice related to dissemination approach strategies, how (and when) to apply for NIH supplements to grants, and larger discussions about how to continue to grow "CAN".

Few recent updates I'd like to highlight:

- Scholarship! We made a Google Scholar page that features articles written by our CAN members! Don't see yourself? Let me know and I'll work to add your profile.
- We are working on the next set of external speakers. Please let me know if you have interest in a particular speaker!
- Here in this newsletter we talk about some upcoming grant opportunities (Page 4). We also have new chairs for our Grant Workgroup: Dr. Abby Hogan and Christian O'Reilly! If you'd like your grant reviewed by CAN, please get in touch with them at least 1 month before you'd like it reviewed.
- Call to action: Are you unsure how YOU can contribute to CAN? Check out different ways to engage with CAN on Page 8.

Dr. Caitlin Hudac Psychology Dept. Office: IMB 114 chudac@mailbox.sc.edu

CAN Trainee Committee's

RESEARCH SPEED DATING

Light refreshments and drinks provided!

Tuesday, 11/8, 4:30-6pm

IMB Room 101 1800 Gervais St.

Rotate through casual conversations with CAN faculty, trainees (staff, graduate, and undergraduate students), and **anyone** interested in autism and neurodevelopment research!

Register here!

https://forms.gle/hCLmjdRafMSreF4t6



First Thursday

SCIENCE MEETING



Dr. Robert Hock

Dr. Rob Hock will discuss his randomized controlled trial of Autism Parent Navigators, a prevention program for co-caregivers that targets parent mental health, parenting quality, ASD service engagement, child challenging behaviors, and child adaptive functioning.

Dr. Daniel Foster

Dr. Dan Foster will discuss his study of brain circuits and behaviors in mice with the goal of informing drug discovery efforts in autism spectrum disorder.



Join us after for Happy Hour! ~4:30pm Graduate Hotel



UPCOMING RFA'S

Simons Foundation (link)

Contact <u>Whitney Evans</u> if you would like support from UofSC Development office

- 2023 Winter Pilot Award Jan 12, 2023
 - Not for human participants
- 2023 Cross-Species Studies of ASD June 25.
- 2023 Human Cognitive and Behavioral Science previously due ~ April

National Institutes of Health

- <u>RFA-DA-23-039</u>: BRAIN Initiative: Theories, Models and Methods for Analysis of Complex Data from the Brain (R01 Clinical Trial Not Allowed)
- <u>RFA-EG-22-001</u>: BRAIN Initiative: Transformative Brain Non-invasive Imaging Technology Development (UG3/UH3 Clinical Trial Not Allowed)

Department of Defense

No active calls currently, but talk to Caitlin if you are interested in learning more about the <u>CDMRP area on autism</u>.

Good Luck. Grant Submissions



Dr. Sarah Edmunds Foundation for Child Dev. Young Scholars Program



Dr. Caitlin Hudac

Congrats!

Recent Awards



Dr. Pabi Sahoo received a 2-year grant to continue his work on axonal protein synthesis!

Dr. Pabi Sahoo

CAN GRANT RESOURCES

- Internal review: The Grant
 Workgroup will help coordinate and
 schedule an internal review by senior
 researchers. Email the leaders Drs.
 Hogan and O'Reilly at LEAST 1 month
 ahead of when you'd like to schedule
 the review (sooner the better).
- Facilities & Resources section: We are working on developing NIH templates describing CAN resources and facilities, including a description of our multidisciplinary mission and the intellectual rapport of our group. If you have an example you would like to share, please email to <u>Caitlin</u>.
- Stuck on a direction? Use the Work-In-Progress meetings (3rd Thursdays) to bounce ideas off CAN members!

Let us know when you submit a grant or receive an award! Ideas for resources or grant-related workshops? Let <u>Caitlin</u> know!

RESEARCH STUDY ALERT!

Dr. Rob Hock is recruiting!

Rob Hock is recruiting for his randomized controlled trial of Autism Parent Navigators, a prevention program for co-caregivers that targets parent mental health, parenting quality, ASD service engagement, child challenging behaviors, and child adaptive functioning.

Contact: Hannah Behr, Research Coordinator (803) 386-9451 -- hbehr@email.sc.edu



Are you recruiting human subjects for a study?

If you would like CAN to recruit for your study, fill out this brief form to provide information about your sample.



NAVIGATING AUTISM SPECTRUM DISORDER RESEARCH STUDY

Receive autism information, support, & guidance from a parent who has been there.

Visit our website for more information



Your family can earn up to \$450 for participating



PARTICIPATION ELIGIBILITY

- Child diagnosed with ASD within the last 12 months
- Child between the ages of 18 months - 8 years
- Share Parenting responsibilities with another adult who lives in the same home



Has your child been diagnosed with autism spectrum disorder?

We are inviting parents & caregivers of a child recently diagnosed with autism to participate in a parent support research study. All families who participate will receive support & guidance from an experienced parent of a child with autism & can earn up to \$450!

Requirements:

- Child must be diagnosed with autism in past 12 months
- · First child diagnosed with ASD
- Child between the ages of 18months & 8 years old
- Share parenting responsibilities with another adult living in the same home







RESEARCHER SPOTLIGHT

Dr. Christian O'Reilly

Assistant Professor

Dept. of Computer Science and Engineering

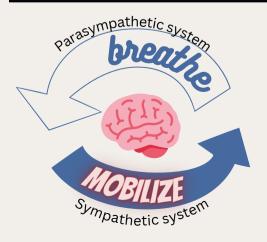
College of Engineering and Computing



Check out his <u>faculty page</u> that is full of great resources!

Primary research questions related to autism:

- Do autistic symptoms relate to how the brain is wired?
- Could brain differences be due to an imbalance between two opposing processes:
 - [1] parasympathetic that helps you relax and restore versus
 - [2] sympathetic that helps you mobilize your resources to face challenges?



"My research aims to provide more insightful approaches to studying the brain and neurodevelopmental disorders by developing model-driven analyses of physiological experimental recordings such as EEG, ECG, and fMRI. I see this direction as an evolution of the classical hypothesisdriven approach where our hypotheses and, more generally, our prior knowledge about a problem, are operationalized in the form of a mathematical model. Our 'generative' models reproduce in a computer simulation the hidden biological mechanisms that generate the physiological activity we can record during an experiment, e.g., using EEG. In this way, we can go beyond simple correlations between observations and symptoms and start unveiling relationships involving latent (hidden) variables that may have a causal influence on such observations. In my view, this is the only way we can solve the many illposed problems we face when studying the mind and the brain. Only by using our pre-existing knowledge to constrain our understanding of the experimental data can we successfully understand the impressive complexity of biology and psychology from the relatively scarce observations available to us. This process works the same way we constantly use, without even noticing it, our prior knowledge to understand what our eyes are seeing and rule out implausible interpretations (i.e., this car is probably not the size of this building, it is probably just closer to me). My main research objective is to better equip ourselves to do this kind of knowledge-guided inference."

Thank you to Dr. O'Reilly for agreeing to be featured! Do you want to nominate a researcher for us to spotlight? Email us at weaverae@mailbox.sc.edu.

COMMUNITY ENGAGEMENT

CAN has a new Twitter account!

Follow us @canresearch.sc https://twitter.com/canresearchSC







Interested in tabling?

Contact Audrey or just stop by to say hello!

UPCOMING COMMUNITY EVENTS

Buddy Walk

- Support individuals with Down Syndrome!
- Saluda Shoals Park Athletic Fields
- 6071 St. Andrews Road. Columbia SC 29210
- Sunday 11/6 @ 12-2:30PM
- Register here!

South Carolina State Museum (SCSM) Accessibility Mornings

- Every second Saturday!
- 11/12, 12/10
- 9-11AM

EdVenture Sensory Nights

- 12/8, 12/9
- 5:30-7:30PM

Meet CAN's new **Program**

Coordinator! Audrey Weaver is CAN's new Program Coordinator.

She is responsible for community engagement and outreach efforts, CAN administrative tasks, and management of the registry. In her free time, she enjoys weightlifting, running, painting,

and hiking with her dog, Moose!

If you have questions regarding CAN, please contact Audrey at weaverae@mailbox.sc.edu.

What should I expect when tabling?

When tabling, you will interact with families by informing them about CAN, directing parents to relevant studies, encouraging registry sign-up, and assisting children in completing crafts!

CALL TO ACTION

We want everyone within our **CAN community** to feel involved!

Ways you can get involved...

Website and Newsletters

- **Spotlights**: Submit a picture of yourself and a blurb about your research to be featured on the CAN website and newsletter!
- **Recent publications**: Tell us about your newest publication. Bonus points for working with us to develop an infographic describing your findings.
- **Ask a question**: Do you have an autism or neurodevelopment question "itching" at the back of your mind? Ask a question in an upcoming newsletter and we'll solicit commentary from the CAN community.
- Shout-outs: Proud of your trainee or mentor? Tell us about it!



Send all submissions and inquiries to Audrey



Community Outreach & Recruitment

- Join us at one of our tabling events (see Page 7)
- Propose an idea for engagement with a particular community -- for instance, we are looking for new ways to connect with rural communities. Do you have an ideas that could help?

Workgroups

Interested in helping shape CAN's future directions? Consider joining one of our workgroups! Contact <u>Caitlin</u> who can put you in touch with the right group.

ACTIVE GROUPS

Trainee Committee Peer grant review

Community/ outreach