# APRIL 2023 NEWSLETTER

## **APRIL EVENTS**

# April 4

**Dr. Trudy Mackay & Dr. Robert Anholt**: Visiting Scientists

# **April 21**

Autism's Got Talent! Virtual talent show 4-7pm

# **April 25**

Research Roundup 8am-12pm IMB Room 125



## **SAVE THE DATE!**

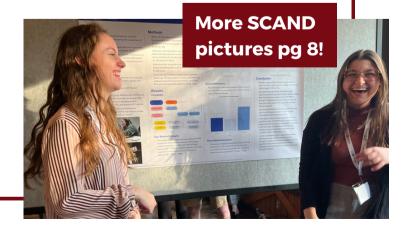
# May

Publishing Panel

**CAN Trainee** 

10

10-11:30AM | IMB 125









## Happy April!

Last month was busy for CAN -- we hosted the state-wide symposium for SCAND with visiting scholars from MUSC, Clemson, Furman, Greenwood Genetics, and other institutions! Dr. Jory Fleming's talk on his experiences was a highlight, as well as hearing about new directions in precision medicine from Dr. Wendy Chung (Columbia University). Check out some pictures on Page 8. We are excited to end the academic calendar with some really great events (see next page).

It was also time for us to submit our final report of the CAN USC Provost Excellence Initiative to Dr. Arnett. Thank you to everyone that responded to our flurry of emails. It was truly <a href="mailto:awe-some">awe-some</a> to see the productivity of CAN members. Congratulations to all!

### **CAN Research Center Highlights from June 2019 to present:**



179 manuscripts & book chapters



>200 Neuroscience majors in first year



>134 invited talks on work



9 tenure-line faculty hires

~\$41.7 M in extramural grant funds

~\$16.8 M in anticipated funding



### **Highlights from the Executive committee**



- (1) At the Research Roundup 4/25 we will be soliciting feedback about a few important upcoming strategic planning meetings for CAN, including options for a smaller, intensive summer retreat and our larger Fall CAN Retreat.
- (2) We continued discussing pursuing Center grants (e.g., NIH P50) and the need to write a consensus paper / white paper. Please reach out if you have specific ideas and/or to be involved!

Interested in serving on the Executive Committee for Fall 2023-Summer 2024? Let us know!



# **UPCOMING EVENTS**

# **April 4**



# Dr. Trudy Mackay and Dr. Robert Anholt visiting

We will host a lunch for trainees, Dr.
Mackay will give a talk in the afternoon
on her groundbreaking work using
Drosophila as a model for complex
traits, and there are plenty of
opportunities for small group
meetings. Let us know if you would
like to be added to the schedule!

# **April 21**

### **Autism's Got Talent!**

Join us in welcoming the talented all-stars within our local community for the second annual AGT, cosponsored and spearheaded by Dr. Jessica Bradshaw's Early Social Development lab. Read more about it on Page ##.



# April 25 CAN Research Roundup | 8AM - 12PM

This is an opportunity to hear about this year's accomplishments and where CAN will be headed next. More details and an "RSVP" will be sent soon to get a head count, but all are welcome. Breakfast and coffee/tea provided!

<u>Updates from CAN leadership</u>
"Final report", small group & open discussion about future goals

PI 2-slide flash talks:

- (1) Overall program
- (2) 1 recent finding or grant

<u>Updates from workgroups</u> (Trainees, Community, Registry)







# May 10 Trainee Publishing Panel | 10-11:30AM

Come ask questions about publishing science! Open to all CAN members but geared to trainees. Our panel will include: Dr. Fabienne Poulain (Associate Professor, Biology), Dr. Laura Friedman (Postdoc COMD with Dr. Jessica Klusek), and graduate students Miranda Foster & Alexis Federico (Psychology with Dr. Jessica Bradshaw).

Download the **CAN Calendar here!** 

The Carolina Autism & Neurodevelopment Research Center

VISITING RESEARCH SCIENTIST SEMINAR SERIES

Epistasis and the Genetics
Architecture of Quantitative Traits:
Lessons From Drosophila

**APRIL 4** 

2-3 PM

**RUSSELL HOUSE 305** 

DR. TRUDY MACKAY

Director of Clemson University Center for Human Genetics

**Professor of Genetics and Biochemistry** 

Refreshments & coffee/tea provided!









# **CALLING ALL TALENT ON THE SPECTRUM**

Join us for a virtual talent show for kids and teens with autism, where we showcase your unique gifts and talents!

Send your talent video by **April 7** 

Watch the talent show on Zoom

April 21

### A call for new and returning performers

Last year, Autism's Got Talent featured performances from more than 30 children and teenagers with autism throughout South Carolina.

Now, we're looking for more people to showcase their talents in our 2023 virtual talent show. Send us your talent videos by April 7, and tune in on April 21 to see the complete talent show broadcast on Zoom.

Call or text 803-766-6309 for more information.





THE
EARLY
SOCIAL
DEVELOPMENT
LAB AT UGISC





## **Carolina Autism and Neurodevelopment Research Center**

# CAN Research Roundup

April 25



• IMB 125 1800 Gervais St.

Breakfast: 8 am

Lunch: 12 pm



Updates from CAN leadership



Updates from CAN workgroups

Flash talks from CAN research labs

Small group/open conversation about CAN's future objectives/goals

## **Posters**

Have you presented at a conference this year? Bring your posters!

If you cannot attend by 8 am 4/25, you can drop off your poster to be hung by CAN Research Staff





## **FACULTY SPOTLIGHT**

## Dr. Katie Wolfe



#### **Associate Professor**

Educational Studies - Special Education, College of Education

President of the South Carolina Association for Behavior Analysis

Faculty page

### **PRIMARY RESEARCH GOALS:**

Support practitioners in using data to inform instructional decision making and optimize client outcomes

Improve the reliability and validity of analytic methods for single-case experimental designs

### DR. WOLFE'S CURRENT WORK

Right now, Dr. Wolfe's work focuses on practitioner progress monitoring and data-based instructional decision making. She is currently...

Conducting survey of special educators' data-based decision making practices to inform future research on how to best support educators in using data to make decisions.

Preparing to pilot a decision-making model that we developed with an ABA company to test whether it improves the timeliness and accuracy of BCBAs' instructional decisions.

FUN FACT Dr. Wolfe has a huge family! Each of her parents have nine siblings, and she has about 30 cousins on one side of the family and 50 on the other.

# SCAND Research Symposium Highlights



















### **SPOTLIGHT ON DIVERSITY & INCLUSION**

#### **Dr. Caitlin Hudac**

University of South Carolina | Psychology

Dr. Hudac gave an incredible international webinar that provided concrete ideas about how to improve inclusion in (cognitive) neuroscience. She highlighted work in her lab that uses mobile EEG testing to improve inclusion of non-speaking and non-ambulatory ultra-rare genetic populations linked to autism and NDDs. You can watch the recording here: https://www.youtube.com/watch?v=vG3y0mwA3\_g



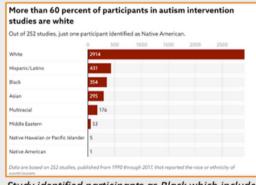
Spotted on Twitter!

## **AUTISM RESEARCH EQUITY TRAINING**

Early March, Family Voices led an **Autism Research Equity Training** program funded through the **Eugene Washington Patient-CenteredmOutcomes Research Institute** (**PCORI) Engagement Award** (EASC-IDD\_00251). Dr. Hudac was able to attend and can share the slides from the workshop.

Here are some important takaways:

- 1 in 45 Black/African-American children as autism in United States (CDC, 2021)
- Large <u>disparities</u> in timing of diagnosis, access to care, referrals, and unmet needs (Constantino et al., 2020; Maenner et al., 2020)
- ~50% of autism studies do not specify race. Of the 15 studies that specified race, 8% were Black/African-America (Watkins et al., 2019)



Study identified participants as Black which includes African Americans.

### Why does involvement matter?

- Developing culturally appropriate materials
- Increasing engagement in research
- Reducing long-standing health disparities among children with autism and their families

### How to Increase Participation

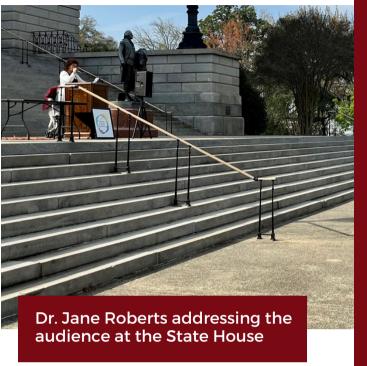
- Cultural matches
- Cultural liaisons in the community to recruit and engage families
- Literacy-friendly materials
- Train advocates in the community
- Warm, friendly, and supportive interactions
- Reduce time burden
- Form strong relationships with community-based organizations

Murry & Brody, 2004; Shaia et al., 2020

Interested in improving diversity, equity, and inclusion here in CAN studies? Consider joining our Community Workgroup. We will be developing community relationships through programming and listening sessions starting Summer 2023.







# CAN in the Community

CAN helped plan
Disability Advocacy Day
at the State Capitol!
Thanks to Dr. Jane
Roberts for speaking to
our community about
research at USC.



# UPCOMING COMMUNITY EVENTS

South Carolina State Museum (SCSM) Accessibility Morning

Sat, April 8 9-11 AM

**EdVenture Sensory Night** 

Fri, April 21 5-7 PM

Soda City coming soon!

April Date TBD

When tabling, you will inform individuals about CAN, direct parents to relevant studies, and encourage registry sign-up. Contact <u>Audrey</u> for more info!



Audrey Weaver, CAN Program Coordinator, tabling at the State House

# Grant Updates



## **Relevant upcoming RFAs**

# SFARI #1: Human Cognitive and Behavioral Science

https://www.sfari.org/grant/human-cognitiveand-behavioral-science-request-for-applications/

### **Due 5/4; Multiple tracks:**

- Explorer Track: \$500,000 up to 2 yrs
- Expansion Track: \$900,000 up to 3 yrs
- Collaboration Track: \$750,000 per lab up to 3 years (up to 4 labs)

# SFAR SIMONS FOUNDATION AUTISM RESEARCH INITIATIVE

## SFARI #2: Undergraduate Research Fellowship in Neuroscience (SURFiN)

https://www.simonsfoundation.org/grant/simons-foundation-undergraduate-research-fellowship-neuroscience-surfin/

### Webinar 4/5; Due 5/4;

Mentor/Fellow interviews 6/23; Would start after 9/1 through May 2024

### **SFARI #3: Cross-Species Studies of ASD**

https://www.sfari.org/grant/cross-species-studies-of-asd/

Due 6/15; \$400,000 annually for 2-3 years

# DEPSCoR: Defense Established Programs to Stimulate Competitive Research Link: https://www.grants.gov/web/grants/view-opportunity.html?oppld=346651

- **DoD grant** (3 years \$600k). To be eligible, you should not have served as a PI in any DoD grants before and you must have a senior collaborator who has gotten funding from DoD as PI before.
- DEPSCoR program has two tracks:
  - Research collaboration (link, currently open)
  - Capacity building.
- Relevant topic: Topic 6: Neurophysiology of Cognition

Thanks for the tip, Dr. Vignesh Narayanan!

Interested in having your grant aims reviewed by other CAN researchers? We have a new centralized process to facilitate scheduling a grant review. https://redcap.healthsciencessc.org/surveys/?s=N93FYKPAF7MXFNJN



# **CAN** studies currently recruiting human subjects

# Brain Research Across Development (B-RAD) Lab

Dr. Caitlin Hudac is recruiting children aged 10-14 years of age without a known neurodevelopmental or psychiatric disorder. Investigating social attention, the study involves parent and child surveys and questionnaires, as well as a lab visit in which the child will participate in an EEG eye tracking experiment.

**Contact**: (803) 470-5776

b-rad-laboratory@gmail.com

# Community-Oriented Lab for Autism and Behavioral Interventions (COLAB)

Dr. Sarah Edmunds is recruiting families with toddlers (ages 2-5) for a study about emotional regulation that either have an ASD diagnosis, some development concerns with no current diagnosis, or no development concerns. Families may receive a free diagnostic evaluation for their toddler and \$20 per visit.

Contact: (803) 386-1130 | COLAB@mailbox.sc.edu

### <u>Early Social Development</u> (<u>ESD</u>) <u>Lab</u>

Dr. Jessie Bradshaw is recruiting babies between the ages of 0-36 months to participate in multiple studies.
Participation includes a variety of developmental assessments and participants can receive between \$120 and \$200, dependent upon the study.

Contact: (803) 993 - 8356 esdilab@mailbox.sc.edu

### **Autism and Family Lab**

Dr. 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. Participation eligibility includes a child diagnosed with ASD within the last 12 months, the child is between 18-mos and 8 yrs, and parenting responsibilities are shared by another adult who lives in the same home Contact: (803) 386-9451 | hbehr@email.sc.edu

### Family Experiences Lab

Dr. Jessie Klusek is recruiting mothers with a child with autism and women who are 45-78 years old, with biological children, for a variety of studies related to the FMR1 gene. Check out their website for details about each study!

Contact: (803) 576-7359 scfamilystudy@gmail.com

## <u>Developmental</u> <u>Dynamics Lab</u>

Dr. Liz Will is recruiting infants with Down syndrome 12-months and younger to participate in a longitudinal study on early development and communication. Assessments involve play-based activities, once every 3-6 months, for ~2 years.

Contact: willea@mailbox.sc.edu