February Events

Sips & Science: Quantifying Behavior
- Wed. February 8, 3pm
- Hickory Tavern 141 Pelham Rd
- Social to follow

South Carolina State Museum (SCSM)

Accessibility Morning
- Sat. February 11, 9-11am
- SCSM

EdVenture Sensory Night
- Sat. February 18, 5:30-7:30pm
- EdVenture, Columbia

SC Philharmonic Sensory Friendly Concert
- Sun. February 19, 3pm
- Koger Center for the Arts

Community Working group
- February 21, 1:30pm (virtual)

SCAND Consortium
Research Symposium
Friday, March 3rd, 2023
9am-5pm
Riverbanks Zoo & Garden

RSVP by 2/24/23!
Happy February! I hope the new semester and new year has settled in nicely for everyone. CAN is starting to look ahead to some light "spring cleaning" - we will be continuing to streamline and spruce up our online and digital presence, and welcome any ideas that you may have! Are you enjoying the newsletters? Do you want us to email more often? ...or less often? Any website feature ideas? Thanks to everyone who submitted Valentines (Pages 7 & 8). What a fun treat to read!

We are excited to host our ASD/NDD research colleagues state-wide on March 3 for the SCAND Consortium symposium. Read about it on Page 5.

Cheers,
Caitlin

---

**1 Highlights from the Executive committee**

The executive committee is open to CAN researcher volunteers. We aim to have representation from across USC - in particular we would love to have representation from:

- Faculty outside of CAS (School of Medicine? Public Health? Computer Science?)
- A trainee representative.

Virtual meetings are held on the 3rd Wed of each month at 12:30 pm. Please contact Audrey if you would like to join the EC this semester.

---

**Meeting topics:**

- **Future of CAN** -- how do we build a sustainable community beyond the USC COE initiative? We are considering a variety of different funding sources. Be on the look-out for emails and spontaneous conversations/coffee dates as we gauge needs from CAN members.
- Organization of upcoming events. Find details on Page 3, including a date for this year's Research Roundup
- Updates from workgroups, including Community Outreach (Page 11) & Trainee Committee (Page 12)
- Registry revamping (below)

---

**CAN Research Database**

We are revisiting how best to optimize the CAN Research Database for prospective research participants. We encourage all researchers that use or are interested in using the registry to share feedback with us this month (contact Audrey)

We cannot talk about the registry without acknowledging the hard work of Dr. Jessie Bradshaw and Elizabeth Dixon! ALL-STAR MVPs!

---

**Currently in the database:**

- **1,112** Total families
- **488** Families with a child with an ASD or NDD diagnosis
Research Roundup

Our annual research roundup will help us celebrate the end of the semester by sharing CAN research accomplishments. All CAN research labs are invited to sign up to give brief "flash" talks.

---

**Sips & Science: Quantifying Behavior**

In an "open mic" framework, we invite researchers to share their thoughts on how their team quantifies behaviors (animal or human) in unique ways.

- **February 08**
  - Hickory Tavern - Woodhill (141 Pelham Drive)
  - Talks @ 3-4:30 pm Social @ 4:30 pm +

**SCAND Research Symposium**

Join CAN for this all-day event with researchers across South Carolina. There will be scientific talks, updates, and poster presentations.

- **March 03**
  - Riverbanks Zoo & Garden
  - Symposium: 9am-5pm. Cocktail Hour: 5-6pm

**External Speaker Series**

Joining us from Seattle Children’s & University of Washington, Dr. Sara Jane Webb will be giving a talk at the IMB conference on Social and Emotional Brain (3/17: [Link]). She will be available for CAN small group meetings and activities on 3/16.

**External Speaker Series**

Joining us from Clemson University Department of Genetics and Biochemistry, Dr. Trudy Mackay & Dr. Robert Anholt will present their work exploring the genetic basis of variation.

- **April 04**
  - Russell 305
  - Time TBD

**Autism’s Got Talent!**

This virtual talent show will feature videos of children with autism sharing their talents! Join us on the virtual Zoom platform to support autistic individuals and experience the many talents of our community members.

- **April 21**
  - Time TBD

**Research Roundup**

Our annual research roundup will help us celebrate the end of the semester by sharing CAN research accomplishments. All CAN research labs are invited to sign up to give brief "flash" talks.

- **April 25**
  - Time TBD
In an "open mic" framework, we invite researchers to share their thoughts on how their team quantifies behaviors (animal or human) in unique ways.

February 8th
Talks: 3 - 4:30pm
Social: 4:30pm
Hickory Tavern
Woodhill
141 Pelham Dr.

CAN faculty, trainees (staff, graduate, and undergraduate students), & anyone interested in neurodevelopment welcome!

Sign up here!
SCAND Research Symposium

Are you interested in sharing your research at SCAND?

February 10th: Abstract submission(s) to be considered for talks/awards due by 5pm ET

February 24th: All abstract submissions due

February 24th: RSVP deadline

MARK YOUR CALENDARS!

2023 SCAND Symposium
March 3, 2023
Riverbanks Zoo & Garden
Columbia, SC
Starting at 9 am

South Carolina Autism & Neurodevelopmental Disorders Consortium

Talks
Discussions
Community
Posters

Poster submissions considered for awards/talks due by 2/10/23

https://www.scandconsortium.org/symposium.html

RSVP by 2/24/23!

Abstracts due 2/24/23

SCAN ME
FACULTY SPOTLIGHT

Dr. Ana Pocivavsek
Assistant Professor
Dept. of Pharmacology, Physiology, and Neuroscience
School of Medicine Columbia
Faculty Page | Lab Website

Bring attention to the relationship between sleep, mental health, and cognition
Investigate translationally-relevant research questions in preclinical research models
Foster curiosity and passion for research in trainees

DR. POCIVAVSEK IS CURRENTLY...

- Testing the hypothesis that kynurenic acid (KYNA), an astrocyte-derived metabolite of the kynurenine pathway of tryptophan metabolism, represents a key molecular link between sleep disturbances & cognitive dysfunction in rats.

- Targeting the manipulation of brain KYNA by genetic and pharmacological means, making use of a genetically modified mouse model wherein KYNA metabolism is disrupted due to ablation of a pivotal enzyme in the kynurenine pathway.

- Manipulating sleep in animals, and also manipulating the levels of KYNA, a molecule that is elevated in the brains of individuals with NDDs such as schizophrenia.

ACCOMPLISHMENTS

- Trained as a K12 “Building Interdisciplinary Research Careers in Women’s Health” (BIRCWH) Scholar at University of Maryland School of Medicine.

- Awarded the H. McKee Jarboe Award for Mental Health Research as a postdoctoral fellow at the University of Maryland School of Medicine in 2013.

FUN FACT

Dr. Pocivavsek moved to South Carolina from Slovenia when she was 7 years old, and grew up in the upstate speaking Slovene and Croatian at home with her family and integrating into American culture. She continues to speak Slovene or Croatian daily to her own kids with hopes to both challenge their language development and foster appreciation for different cultures.
Thank you for offering me the gift of outstanding mentorship! You are an inspiring social scientist, colleague, and human being. I appreciate you.

Tamara Grimm

Welcome back! You are so good at making meaningful connections with our community service providers and families, and such an asset to CAN!

Elizabeth Dixon

I am so impressed by your eagerness to get engaged in something new! CAN is so lucky to have you as a member.

Tamara Grimm

You always have such a positive attitude and I admire your dedication to community engagement. It is easy to see your passion for all you do!

Sarah Edmunds

Thank you for all your contributions to our community! You consistently inspire scientists across disciplines and are such an asset to our center.

Audrey Weaver

Neuronal rosettes can look yellow, iPSCs are a great tool, in the world of neuroscience, You are so cool!

Welshhans Lab

Thank you for all your contributions to our community! You consistently inspire scientists across disciplines and are such an asset to our center.

Dan Foster

You always have such a positive attitude and I admire your dedication to community engagement. It is easy to see your passion for all you do!

Audrey Weaver

Neuronal rosettes can look yellow, iPSCs are a great tool, in the world of neuroscience, You are so cool!

Caitlin Hudac
You put the "Special" in "Special Education"!
Thanks for all of your contributions to SC & our kiddos.

Audrey
You hit the ground running
And brought energy to CAN
We appreciate your cunning
And are eager for our new plans!

Jessica Bradshaw & ESD Lab
You welcomed me on my first day with a sign hung on my door.
I appreciate you for all you’ve done and really, for so much more!

Caitlin Hudac
Brains may be small
and tell us "flight or fight"
I really value you all
You make our work quite bright

Trainee Committee
You study at night,
You work all day,
Thank you for bringing your voice and things to say!

Jeff & Jane
You founded CAN
and so much across USC
Can’t wait to see the span
Of what else we will be!

CAN Research Center
Brains may be small and tell us "flight or fight"
I really value you all
You make our work quite bright

Katie Wolfe
You hit the ground running
And brought energy to CAN
We appreciate your cunning
And are eager for our new plans!

CAN Research Center

B-RAD Lab
Brains may be small and tell us "flight or fight"
I really value you all
You make our work quite bright

Caitlin Hudac

CAN VALENTINES
Read Valentines written by CAN members, for CAN members!
WHAT IS THE CAN RESEARCH REGISTRY?

Created by Dr. Jessica Bradshaw and Elizabeth Dixon, the CAN Research Registry is a database that includes the contact information of families who are interested in participating in current and future research studies associated with CA. The goal of this registry is to support recruitment efforts for individual, IRB-approved research studies at USC and encourage community engagement in this research.

How many families are in the CAN database?

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,112</td>
<td>total families</td>
</tr>
<tr>
<td>624</td>
<td>families with neurotypical children</td>
</tr>
<tr>
<td>488</td>
<td>families with children with autism and other NDDs</td>
</tr>
</tbody>
</table>

HOW ARE FAMILIES RECRUITED?

Families sign up via a REDCap survey link either at a community event, through the CAN website, or other online sources (e.g., social media platforms). We encourage CAN members to list the survey on your individual lab websites!

PI Registry Use

Are you a PI interested in recruiting human subjects for a study? Please fill out the PI Request Form and email Audrey for your study to be shared with the registry!
CAN MEMBER SHOUT-OUTS

Celebrate our members' recent publications!

Google Scholar Link

The Early Social Development (ESD) Lab

ESD Lab members Alexis Federico, Emma Platt, Tess Djiko, and Amy Vinyard will present posters at the Meeting on Language in Autism conference (MoLA) in North Carolina

Welshhan's Lab of Developmental Neurobiology

Nikita Kirkise, Katelyn Rygel, and Manasi Agrawal's paper, Dscam1: Is It a Ubiquitous Code for Dendritic Arborization?, was published in the journal, eNeuro. Read it here!

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

Dr. Jessica Bradshaw was awarded the McCausland Fellowship! The three-year fellowship supports early-career faculty with a salary supplement and funds for research.

Dr. Sarah Edmund's paper, Resting frontal alpha asymmetry as a predictor of executive and affective functioning in children with neurodevelopmental differences, was published in the journal, Frontiers. Read it here!

Interested in sharing a new paper?
Would you like to showcase a student?
Let us know!
Community Outreach

Working Group Leaders
- Rob Hock
- Sarah Edmunds
- Ana Pocivavsek

Other Members
- Caitlin Hudac
- Tessa Djiko
- Axie Acosta

PRIMARY GOALS

- Spring 2023: Obtain feedback from community stakeholders/parents/community members regarding CAN research, using qualitative interviews.
- Summer 2023: Host an Autism Community Research Forum event.

SPRING 2023

- Three “buckets” or topic areas for feedback
  - Research priorities
  - Community outreach
  - Involvement with CAN Research Center
- Use a semi-structured, qualitative interview to assess stakeholders’ thoughts about research. This may be achieved in listening sessions in which community members attend as a group, and/or during one-on-one settings.

Interested in joining the Community Working Group? Contact Audrey!
The CAN Trainee Committee is a group of students who organize academic events for CAN. Last semester, they hosted a Research Speed Dating event!

**Members**

**Rachel Hantman**
- Doctoral Student, Clinical-Community Psychology

**Nikita Kirkise**
- Doctoral Student, Neurobiology

**Chandler Knott**
- Doctoral Student, School Psychology

**Tessa Djiko**
- Doctoral Student, Clinical-Community Psychology

**SPRING 2023 EVENTS**

**Publishing Panel**
- This event will feature a panel including a faculty member, postdoc, and well-published grad students from various disciplines to discuss topics/questions such as:
  - The revision process
  - Initial publication process/pitfalls
  - When can you ask for an extension or reach out to the editor?
  - Journal selection process - importance of impact factor?

**Lunch/Discussion with visiting scientist Dr. Sara Jane Webb**

Interested in being featured on our publishing panel? Contact Audrey!
Grants

Let us know if you want to be a reviewer!

Recent RFA's

**2023 CDKL5 Program of Excellence Pilot Grant Program**

- **Details:** 150K (total) for 1 year; LOI due Friday February 24, 2023; [Link](https://redcap.healthscienceessc.org/surveys/?s=N93FYKPAF7MXFNJN)
- **Priority for either:**
  - Novel therapeutic approaches including RNA-based mechanisms, small molecule repurposing, and genome editing
  - Linking molecular function of CDKL5 and disease pathophysiology
  - Systems biology and computational modeling approaches
  - Discovery and validation of CDKL5 biomarkers.

**New system**

**GRANT AIMS REVIEW**

**Mock Grant Review**

Interested in having your grant aims reviewed by other CAN researchers? We have a new centralized process to facilitate scheduling a grant review.

**Recap: NIDCD’s webinar** on *Minimally Verbal/Non-speaking Individuals with Autism: Research Directions for Interventions to Promote Language and Communication*

Link to agenda & Highlights from Dr. Hudac (invited attendee):

- Excellent engagement between community self-advocates, stakeholders and researchers
- Inspired creative solutions to encourage funding and research in big data & next-generation technologies (e.g., AI)
- Themes of stress/trauma introduced by self-advocates, underscoring the need to emphasize and promote wellness via interventions

*It will be available to watch in early February*

More information can be found on our website: [Engage](https://redcap.healthscienceessc.org/surveys/?s=N93FYKPAF7MXFNJN)
Interested in tabling? Contact Audrey!

When tabling, you will interact with families by informing them about CAN, directing parents to relevant studies, encouraging registry sign-up, and meeting lots of children!

In partnership with CAN and other organizations promoting neurodiversity inclusion, this concert is designed for sensory-sensitive individuals to experience orchestral music in a unique way! During this 60-minute program, audience members are free to move about, dance, speak, sing, or vocalize.

CAN will table in the lobby prior to the concert!

Purchase tickets here!
If you would like CAN to recruit for your study, fill out this brief form to provide information about your sample.
We want everyone within our CAN community to feel involved!

Ways you can get involved in CAN

Community Outreach & Recruitment
Join us at one of our tabling events. Or 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 idea that could help?

Website & 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!

Send all submissions and inquiries to Audrey

Executive Committee
Volunteer for the virtual Executive Committee meetings. These meetings are 3rd Wednesday @ 12:30 pm for the Spring 2023 semester.

Workgroups
- Trainee Committee
  - 1-2 per semester Peer grant review
  - 3rd Tuesdays Community/outreach