MOTOR AND BRAIN DEVELOPMENT LAB

Fall 2021-Spring 2022 Newsletter

A Note from Brittany

Happy New Year from the Motor & Brain Development Lab of the Waisman Center! We hope this newsletter finds you well.

2021 has been the year of moving the research forward despite the pandemic. We published some of the exciting research we have been working on since 2014 (see Research Updates), and it was beyond delightful to begin welcoming participants back into our lab starting last April! We had missed seeing you all so much. In addition, last Fall we launched a new collaborative project that examines the overlap of autism and ADHD symptoms in 4-7 year-olds, and we are re-launching a previous project for adolescents.

Thank you for generously supporting our work. We are looking forward to tackling 2022 with you! More than ever, we are so grateful for our community. Please don't ever hesitate to reach out.



What's in this newsletter:

- **NEW LAB MEMBERS**
- **RESEARCH UPDATES**
- STUDY OPPORTUNITIES

Very best, Brittany Travers, PhD

Associate Professor Occupational Therapy Program Kinesiology Department Waisman Center

NEW LAB MEMBERS

New Lab Members

Summer 2021 we welcomed undergraduate Claire Sheedy and Research
Intern Emily Satterlund to the lab.

- Fall 2021: we welcomed 6 new occupational therapy graduate students: Kate Lautenbach,
 Elizabeth Dennis, Celina Huerta, Andrez
 Jones, Ryan Donnelly, and Kelly Barry!
 - Kate and Elizabeth are actually familiar faces to us! Previously, Kate was a volunteer in our lab and Elizabeth was an undergraduate student lab member. We're excited to welcome them back to the team!





In addition, our fantastic Research Specialist, **Laura Bradley**, and her husband, Will, welcomed baby Franklin (Frankie) in September 2021!





RESEARCH UPDATES

Recent Findings

Our research was featured in the <u>Cap Times</u>, <u>Madison's NBC 15</u>, and <u>WPR</u>, in addition to being published in a 2021 paper in the journal *Brain Communications* by our very own Olivia Surgent!

Findings from our lab's **Effects of Video Game Learning on the Brain in Adolescents with Autism**, which took place between 2014 and 2019, have gotten some recent attention. Our Nintendo Wii balance board video game, Ninja Poses, was played by teenage study participants three times a week for six weeks.





One group of adolescents spent an hour each visit holding various Tai Chi and yoga poses as long as they could, ranging between five seconds and four minutes, while the control group of adolescents would spend the same amount of time playing video games while sitting. Balance skills improved in adolescents with autism playing Ninja Poses, along with some pretty profound brain changes. The changes appeared to be quite distinct in the autism group compared to the non-autism group.

Our study team plans to follow up by exploring that difference in future research.

Community Advisory Board

In summer 2021, we launched our Community Advisory Board!

- This board is made up of about 70% autistic self-advocates and 30% other stakeholders.
- Currently, the board meets in fall, spring, and summer to discuss past, current, and upcoming projects and how we can best align these projects with the desires of the community.
- We're excited to continuing meeting and our valuable discussions into 2022!

STUDY OPPORTUNITIES

Brainy Movement Study for Kids

We continue to recruit participants for Brainy Movement, specifically autistic participants/children with an autism diagnosis ages 6-10.



- The child will complete 4-5 hours of behavioral testing and 1 hour magnetic resonance imaging (MRI) scan.
- Parents will complete questionnaires during this time.
- Families will receive \$10/hour and \$50 for the MRI scan for participation.

Interested? Contact us at brainymovtstudy@waisman.wisc.edu!

Computer Learning Game Study

Our lab is relaunching a project from 2019 and looking for autistic adolescents to participate who have not participated previously!



- We are recruiting autistic adolescents (i.e., diagnosed with an Autism Spectrum Disorder) ages 13-17 years old.
- Adolescents complete a 30-90 minute intake session (standardized IQ and behavioral assessments) at the Waisman Center.
- Then, adolescents will come to the Wisconsin Institute for Medical Research (WIMR) for 9 study visits (1 hour each) to play learning-based computer games.
- Participants will be compensated up to \$105 (\$10 for each hour of study activities)

Interested? Contact us at computergames@waisman.wisc.edu!