McPartland Lab FALL NEWSLETTER



DIRECTOR'S WELCOME

Dear McP Lab community,

The leaves are falling, but our spirits are soaring. It's been a busy and exciting few months. One of our most important jobs is to create understanding through our scientific partnership with you all. And it has been a productive partnership lately! We are so grateful that so many of you have made time to visit the lab and participate in research studies. As highlighted in our Recent Discovery section, you are helping us learn new things to better support autistic people. In this issue of the newsletter, Dr. Cukar-Capizzi provides practical advice about helping autistic children navigate the complex landscape of social media. In ongoing research in the lab, we are actually studying how social media feedback affects the brain! In this newsletter, we also highlight a new study to learn about treating depression in autistic adults, and we provide some information about our colleagues at Project Ready. Finally, we include some ideas for fun family autumn activities. Enjoy!

Be in touch! We love hearing from you!

Sincerely, Jamie McPartland

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MEET THE LAB! SARA EBERLE

Introduce yourself! What is your role at Yale?

My name is Sara, and I am a first-year Sparrow Fellow. I grew up in Los Altos, California, and graduated from Loyola Marymount University with a B.A. in Psychology and minors in Statistics and Data Science and Health and Society. My favorite part of this job is working with a collaborative group of clinicians and scientists who share the same goal of supporting autistic individuals. Outside work, I enjoy spending time with my cat, Mochi, and exploring Connecticut with friends!

What did you do before you joined the McPartland Lab?

During college, I was a member of the Sturm Lab studying lifespan development and factors that impact autistic adults' quality of life. I completed an honors thesis that examined the distinction between pain caused by sensory stimuli versus physical injury in autistic women. I also interned at the University of Washington Autism Center, where I worked with autistic children to support the development of their social skills, self-esteem, and self-efficacy. Later, I worked at UCLA on a study of the neurological differences in aging among autistic adults. I also worked with a researcher at the Ohio State University, focusing on how autistic adults emotionally process and cope with pain. What made you interested in working in this field?

I became interested in this field because I grew up around neurodivergent friends and family. This made me curious about how autistic people experience the world, and what I can do to best support their quality of life. As an undergrad, I explored this interest through research and clinical training. These experiences motivated me to pursue a career in clinical psychology!

ISABEL RODDEN

Introduce yourself! What's your role at Yale?

Hi everyone! My name is Isabel, and I am a first-year Sparrow Fellow. I grew up in Seattle, Washington and graduated from Williams College with a B.A. in Psychology. My favorite part of my job is getting to know the kids, families, and adults with whom we work! Outside of work, I enjoy reading, trying new restaurants, and spending time with friends and family!

What did you do before you joined the McPartland Lab?

During college, I worked as a research assistant in a developmental psychology lab that investigated the role of gestures in children's cognition during learning. Later, I completed a senior thesis about why people with math anxiety tend to do worse on math tasks. Outside of college, I interned at the University of Washington Autism Center where I assisted a longitudinal infant study designed to understand the way autism affects early brain and behavior development. I also spent a summer in Dr. Helena Rutherford's lab at the Yale Child Study Center.

What made you interested in working in this field?

I was originally interested in this field because I have always loved working with kids. Volunteering at an overnight summer camp for patients at Seattle Children's Hospital and an ABA-based summer camp for kids with autism or ADHD made me realize that I was passionate about working with children that had behavioral or developmental differences. This work exposed me to the unique challenges these kids face, motivating me to pursue a career in child psychiatry or developmental behavioral pediatrics to better support them and their families.







SUPPORTING SOCIAL MEDIA USE IN AUTISTIC CHILDREN

BY DR. CHRISTINE CUKAR-CAPIZZI

In today's digitally connected world, social media is an integral part of many children's lives. Social media can offer several benefits for autistic children. It allows them to connect with groups that share their interests, helping them make friends and build communities around common hobbies and passions. Additionally, some of the challenges of face-to-face interaction are removed. making it easier for autistic children to interact with others. Online interactions can also proceed at a slower pace if needed, giving children the time to process and respond, which is often appreciated.

However, children with autism spectrum disorder (ASD) can be particularly vulnerable to the negative impacts of social media. Social media platforms are often unstructured and have unwritten social rules, making them challenging for autistic children to understand and use. Here are some reasons why children with ASD are particularly vulnerable:

• Difficulty Understanding Social Cues: Given their challenges with nonverbal communication and understanding social interactions, autistic children may misinterpret online interactions. They might not understand sarcasm, irony, or indirect communication, leading to misunderstandings and sometimes even conflict.

- **Risk of Cyberbullying:** Because of their social interaction difficulties, children with ASD are at a higher risk of being targeted by bullies. They might not recognize when they are being mocked or manipulated, making them more susceptible to online bullies.
- Preference for Repetition and Routine: Social media platforms are designed to feed users content that matches their interests. For autistic children, this can reinforce repetitive viewing and interaction patterns, creating a loop that might be difficult to break. Their need for sameness and routine can show up in their social media use, where they might repeatedly engage with the same types of content or online groups, leading to unhealthy screen time habits.



• Sensory Overload: The vibrant and dynamic nature of social media, with its constant updates, notifications, and multimedia content, can be overwhelming for children with sensory sensitivities.

SUPPORTING SOCIAL MEDIA USE IN AUTISTIC CHILDREN

BY DR. CHRISTINE CUKAR-CAPIZZI

To support their autistic children in navigating social media safely, parents can consider the following tips:

- Education and Training: Talk with your child about the basics of social media, including safety rules and the importance of privacy. Teaching them about recognizing and responding to social cues online can also be very helpful.
- Supervised Usage: Keep an eye on social media use. Set up rules for when and how these platforms can be used and keep open communication with your child about their online interactions.
- Use of Parental Controls: Use parental control tools to limit exposure to inappropriate content and to manage screen time. These controls can help reduce the risk of sensory overload and unhealthy screen time habits.



• Encourage Safe Platforms: Guide your child towards platforms and online communities that are known for being supportive and inclusive. Some platforms cater specifically to individuals with autism and can provide a safer environment.

- Model Appropriate Use: Show healthy social media habits yourself. Children often copy the behavior of their parents, so showing balanced and responsible usage can be highly influential.
- Therapeutic Support: Include a therapist or counselor who specializes in ASD to help your child develop skills and coping mechanisms for dealing with online interactions.



Social media presents a complex world for autistic children, full of both opportunities and challenges. By actively implementing supportive strategies, parents can help their children navigate this digital world more safely and confidently.

For further guidance and support, parents should consider consulting with professionals specializing in ASD and social media safety. This team effort can ensure that autistic children are not only protected but also empowered in their online interactions.

RECENT DISCOVERY

<u>"Autistic Individuals Do Not Alter Visual Processing Strategy During Encoding</u> <u>Versus Recognition of Faces: A Hidden Markov Modeling Approach</u>"

<u>Click here</u> to read the full article!

Recognizing faces can be difficult for autistic individuals. This study aimed to understand whether differences in the ways that autistic and non-autistic adolescents look at faces could explain why recognizing faces is sometimes more challenging for autistic adolescents. We did this by having participants first look at faces and then try to remember which faces they saw. We collected eye-tracking data during both stages. Autistic adolescents were able to recognize faces that they were previously shown as well as non-autistic adolescents. We found that non-autistic adolescents used different visual strategies, or ways of moving their eyes, while looking at faces for the first time versus when they were asked to recognize a face. However, autistic adolescents tended to use the same strategy regardless of whether they were seeing a face for the first time or recognizing a face. Despite the differences in looking patterns, autistic adolescents and non-autistic adolescents demonstrated similar face recognition abilities. This study is important because it gives us new information about the ways autistic people recognize faces that may help us develop new support strategies.

> Read more summaries of recent discoveries on <u>our</u> <u>website</u> under Publications, Article Summaries!

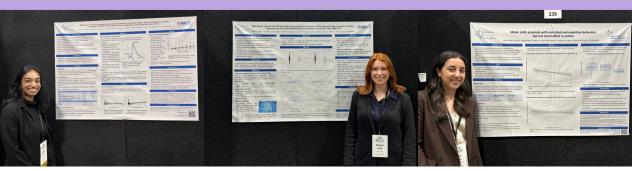
THE MCPARTLAND LAB AT INSAR 2024

The International Society for Autism Research (INSAR) is an annual conference where scientists, doctors, students, and autistic people and their families come together to talk about the autism field! The event lasts three days and includes research presentations, talks, panel sessions, and poster sessions. Members of the McPartland Lab traveled to Melbourne, Australia in May to present posters and give talks at the conference. We are grateful for the opportunity to share our work with the research community and to benefit from input and discussion with other scientists.

Check out some of our research fellows presenting their work!

Scan the QR code or <u>click here</u>to see our posters!





STUDY SPOTLIGHT BRAIN STIMULATION FOR DEPRESSION IN AUTISM

BY DR. SHERAB TSHERINGLA

What is the NMDA study?

In this study, we use a magnet to stimulate a portion of the brain involved in depression. This process is called transcranial magnetic stimulation (TMS). We then measure whether this changes clinical symptoms and brain function associated with depression.

What will a typical study visit look like?

A typical study visit involves meeting with members of our staff and clinicians to complete assessments related to both autism and depression along with other clinical measures. This is followed by recordings of your brain waves and looking at patterns while watching a series of pictures and videos. The administration of TMS involves using a magnetic coil placed against the scalp. TMS is brief, lasting around 3 minutes. After this, research staff will complete a few additional questionnaires before wrapping up the study visit. A study visit day usually lasts around 4-5 hours, and participants are asked to come for two visits around one week apart.

> Check out members of our research staff receiving TMS!

Interested in participating? Contact us at 203-785-6108 or autism@yale.edu

What is the goal of this study?

Autistic individuals are four times more likely to have depression than non-autistic individuals. The typical treatments for depression are less effective in autistic people, and there is an urgent need to develop better interventions. TMS has been found to be effective in treatment-resistant depression in non-autistic people. Using TMS to target some of the key symptoms in autistic depression, while measuring brain responses in both neurotypical and neurodivergent people, provides much needed insight. Our ultimate goal is to help develop more effective treatments for the depression that many autistic people experience.

Who is eligible to participate?

We are recruiting both autistic and neurotypical adults with or without depression between 18-40 years old to participate. Participants will be compensated up to \$250.



IN THE COMMUNITY PROJECT READY

Individuals with developmental disabilities and their families are the ultimate beneficiaries of research and social services. Community-based organizations play an essential role in amplifying voices, identifying unmet needs, and providing support to these communities.



Project READY is a grass root community organization and has been successfully supporting hundreds of families with developmental disabilities in the New York Metro area. They work primarily with pre-teens, teenagers, and young adults with developmental disabilities and their families. For teenagers and young adults, after spending over a decade within the familiar K-12 education system, they are now facing significant changes accompanying their transition into adult life. One of our main goals is to provide support in surmounting challenges at the transition phase.

Before becoming a nonprofit organization officially, Project READY functioned as a parent-helpingparent group for an extended period. During these years, the group accumulated a wealth of knowledge and first hand experiences in providing support at the transition phase, such as parent education, self-determination, self-advocacy, independent living skills training, and vocational skill development. These specialties have now evolved into the many programs offered by Project Ready that address the practical needs of individuals and families undergoing the transition process, to eventually help them to achieve integrated community living.

Programs and services are in both English and Chinese, including Mandarin and Cantonese. Providing support in multiple languages is crucial as they serve many immigrant families in the New York Metro area. Their commitment is to break down language and cultural barriers, assisting individuals and families in transitioning into adulthood through education, independent living skills and vocational skills training.

Project READY serves first-generation Asian immigrant families, many of whom have limited English fluency. These families face challenges like language barriers, cultural stigma, and financial hardships, particularly as one parent often has to leave work to care for their child's needs. Their culturally sensitive programs address these obstacles, offering parent education, self-determination and selfadvocacy training, independent living skills, vocational development, and community inclusion initiatives. They also run civic engagement programs focusing on cultural competency, disability voting and rights.



Project READY is a non-profit organization in New York to provide guidance, support, and services to individuals with developmental disabilities and their families in the Asian American community. Both founders, Adella Lin-Kravitz and Bin Feng, are Chinese immigrant parents with children with autism. More information about the organization is available online at <u>https://www.projectready.org</u>.



To get involved, email: <u>contact@projectready.org</u> Follow them on Instagram @projectreadyny MCPARTLAND LAB

FUN FALL ACTIVITIES IN CONNECTICUT

Embark on a Foliage Drive

Check out one of the many fall events at the <u>New Canaan Nature Center</u>!

Visit a **Corn Maze** near you in Connecticut!

Learn about the <u>Oldest Steam-powered</u> <u>Cider Mill</u> in the country!

See the barnyard animals at <u>Silverman's Farm</u> in Easton or <u>Flamig Farm</u> in West Simsbury!

Fall Family Fun at <u>Bishop's Orchards Little Red</u> <u>Barn</u> in Guilford, CT: There is a pumpkin patch, food and beverages! You can also pick your own apples, raspberries, and pumpkins and get ice cream from the creamery!

Visit **Pumpkintown, USA** in East Hampton, CT

Take a walk through <u>Connecticut's Beardsley</u> <u>Zoo</u> GLOW Wild Lantern Festival!

Explore the fall scenery by taking a family-friendly **nature hike**!

Ring in the holiday season with the <u>Mystic Lighted Boat Parade</u> on November 30th!









MCPARTLAND LAB

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INTERESTED IN PARTICIPATING? FILL OUT THIS FORM!







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