

**SUMMER 2022** 

## Spectrum Spotlight

Dedicated to developing evidence-based research for children, adolescents, and adults on the autism spectrum.

### SPECTRUM SPOTLIGHT

#### Message from Helen Genova, PhD, Head of the Center for Autism Research

I am thrilled to announce the first edition of *Spectrum Spotlight*, a newsletter written to inform the community about updates on the Center for Autism Research at Kessler Foundation. Our team will share announcements, articles, links to podcasts, and additional information about our research.

I am so grateful to the amazing community of individuals on the autism spectrum, their families, our fellow researchers, and service providers for your support of our work. I look forward to our continued collaboration to help improve the lives of children and adults on the spectrum.

There are two powerful research articles I'd like to share with you that reflect our recent discoveries. One study focused on the impact of the COVID-19 pandemic on school-age children on the spectrum and their parents. We performed this study to better understand the unique experiences of families with children on the spectrum. Another study

evaluated the effectiveness of using virtual reality technology to prepare teenagers on the spectrum for job interviews.

In this newsletter, you will find an article written by Mikayala Haas, research coordinator, and me on how to help young adults on the spectrum prepare for the job interview – something that can be quite intimidating!

In this edition you will also find an article written by Jacob Gronemeyer, research assistant at the Center. He describes how our recent research on autism-related behavior focuses on the relationship between brain function and how symptoms of autism vary among children. Click here if you or someone you know may be interested in participating in this research. As with all our studies, we will compensate participants for their time.

Please reach out to learn more about what we do or to join a research study at the Center for Autism Research. I would love to hear from you.



Helen Genova, PhD, Associate Director Center for Autism Research

Our email is <u>autismresearch@kesslerfoundation.org</u>.

All the best,

Helen Genova, PhD

"I look forward to our continued collaboration to help improve the lives of children and adults on the spectrum."





#### STUDYING HOW PEOPLE WITH AUTISM MANAGE THE SOCIAL WORLD

Imagine your brain as a complex highway system where moving cars are the signals

by Jacob Gronemeyer, Research Assistant, Center for Autism Research, Kessler Foundation

Have you ever been curious about what makes you and your brain unique? Neuroscientists who study the brain dedicate their careers to answering this question. For researchers at the Center for Autism Research at Kessler Foundation, understanding the brain goes beyond simple curiosity – our mission is to create a less discriminatory, more accepting world through research-based solutions.

Scientists are changing the way they define a person's uniqueness. The dissimilarities among us may seem obvious from outside appearances; look at the infinite number of hairstyles, clothing, piercings, or even dance music we choose. But typically, we don't consider how our brains are the source of these differences.

Like a fingerprint, every brain is unique to the individual.

Individuals on the autism spectrum share distinctive, common characteristics that are not always accepted by those who are not on the spectrum. These traits often reflect challenges or differences in social communication skills, which may lead to struggles with friendships, employment, and mental health for people on the autism spectrum.

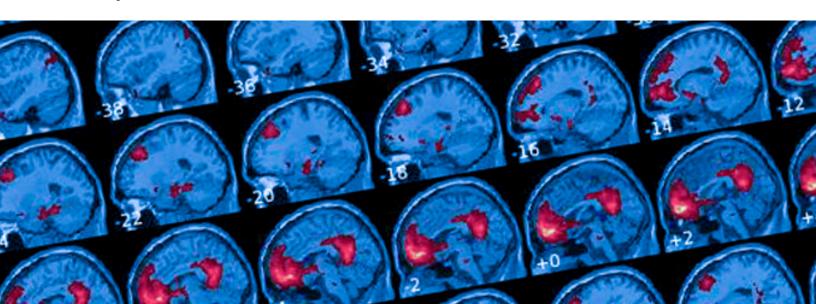
That's where our scientists come in. The latest study at the Center for Autism Research examines how children with autism (ages 5 to 18) navigate the social world around them. We are examining brain activity that occurs in individuals on the spectrum and comparing them to those who do not have a diagnosis of autism.

While we may guess why individuals on the spectrum act differently than those not on the spectrum, it is difficult to understand the reasons without looking at the brain. Researchers can monitor brain activity and blood flow in real-time with functional magnetic resonance imaging (fMRI), a safe, non-invasive way to visualize brain function. This is done while a participant is in the scanner completing a thinking task. Blood flow shows activity in the areas of the brain being used.

Our current study using fMRI focuses on brain activity using network analysis. Imagine the brain as a complex highway system where moving cars are brain signals. Analyzing a specific region of the brain is like studying an intersection (though the intersection has thousands of lanes) and the number of cars using it. Network analysis studies show how information travels in the brain during social situations, or using our highway concept, they study traffic flow from destination to destination.

Understanding how networks (the highways) between important brain areas transport large amounts of information (the traffic) could provide clues for how to develop interventions (detours or extra lanes) to help individuals on the spectrum learn new and unique ways of managing social situations.

We continue doing research that may lead to important discoveries to improve and share our understanding of individuals on the autism spectrum.



## THE DREADED JOB INTERVIEW

#### Tips for Parents or Caregivers with a Young Adult on the Autism Spectrum

By Mikayla Haas, Research Coordinator & Helen Genova, PhD, Associate Director Center for Autism Research, Kessler Foundation

As we watch our children grow into adults, obtaining and maintaining employment becomes a meaningful goal for them. Unfortunately, finding and keeping a job can be an exceedingly difficult goal for autistic youths to achieve. The job interview process is one of the main barriers young adults on the spectrum may face when trying to gain employment.

At Kessler Foundation, we are investigating ways to improve job interview skills in youth on the spectrum. We'd like to share some tips that we've found successful in helping their journey to employment:

- 1. Identify their strengths. Our research shows that young adults on the spectrum may be unaware of their positive attributes. Consequently, when asked about their strengths, individuals on the spectrum may not know what details to share, though those details are what the employer is really interested in knowing! You can help to aid young adults on the spectrum identify what makes them unique by helping them make a list of all their positive qualities and talents they would bring to a job. Not only does this help their self-esteem and confidence, but it will also help them during a job interview. They'll be prepared to answer an employer who asks them to share what makes them a good fit for the position. This is an important first step in helping your teen prepare for an interview.
- 2. Relate their strengths, talent, skills, and experiences to the job. Everyone has strengths. For example, your teen may be an amazing piano player, excel at bowling or play a mean game of scrabble. But will those strengths help when applying to work at a bakery? Individuals on the spectrum may have many amazing experiences, interests, and talents that they want to share, however, the employer is only expecting them to share things that are appropriate and relevant for the job! To help young adults understand this concept, we recommend that you ask them what skills they think might be needed for their chosen job, and how their skills would be put to good use there. Try discussing these ideas during a regular conversation before actually practicing job interview questions. Brainstorming together will help when they have to come up with answers on the spot.

- 3. Practice! Practicing is a terrific way to help your teen prepare for an interview. In fact, our research shows that repeated practice several times a week can really help someone prepare for a job interview. One way to prepare is to role-play where you are the interviewer and your teen is the applicant for a particular job. As a parent or caregiver, it may be hard to give direct feedback to your teen. Rather, envision answers you'd like to hear as an interviewer, and then explain your reasoning to your teen. Importantly, try to stay positive so they are encouraged to keep trying without getting discouraged. Practicing will help them feel more comfortable and confident when they are actually on the interview.
- **4. Flip the roles.** Try role-playing, but instead of your teen as the interviewee, have him or her interview you. This activity helps your teen see the interview from someone else's perspective, a skill that may provide needed insight to teens on the spectrum. Make the activity fun by offering unexpected answers, and then ask why your answer may not have been successful. Be sure to ask what they thought of you as an applicant (and if you got the job!).

Job interviews are a part of transitioning into adulthood and although they can be stressful, they don't have to be! Using these tips along with other basic preparations like researching the company, planning what to wear in advance, and practicing good hygiene for the appointment, can be effective ways to reduce the pressure.

Your teen or young adult may qualify to participate in one of our studies to be trained for job interviews at no cost to you. Click here for more information!



Co-author Mikayla Haas interviewing a young adult



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**The Center for Autism Research** — Our team is developing accessible and evidence-based research that provides new interventions for children, adolescents, and adults on the spectrum, with particular focus on the critical transition from adolescence to adulthood.

#### Center for Autism Research Staff

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#### **Research Opportunity**

**Where:** This is an in-person neuroimaging\* study held at Kessler Foundation located in East Hanover, NJ and West Orange, NJ



Do you know a teenager?

They may benefit from joining an important neuroimaging study at Kessler Foundation.

Scientists are researching how brain connectivity varies between neurotypical and autistic individuals. They use magnetic resonance imaging (MRI) brain scans of kids ages 11 to 18 to evaluate brain function.

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#### Who is Eligible?

Teenagers between 11 and 18 years old.

No metal implants or permanent braces (please call us for more details at 973-324-8453)

Scan me



Eligible participants will receive up to \$200 in Visa Gift cards and a CD with a copy of their MRI brain scan.

If you have any additional questions or if you think your adolescent may be a good candidate to participate in this study, email us directly at autismresearch@kesslerfoundation.org.

\*Virtual Only Studies are also Available.

\*The neuroimaging study does not include medications, contrast dyes, or injections.