

NEWS & UPDATES FROM THE Center for Autism & Related Disorders

AT KENNEDY KRIEGER INSTITUTE



Center for Autism and Related Disorders
at Kennedy Krieger Institute

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3901 Greenspring Avenue, Baltimore, MD 21211 • CARD.KennedyKrieger.org

Events

Autism: A World of Opportunities

On October 13 and 14, the Center for Autism and Related Disorders (CARD) will host its 16th annual conference, "Autism: A World of Opportunities." CARD's conference is the premier educational autism event in the area for educators, clinicians, families, researchers, and other healthcare professionals hoping to increase their understanding of autism spectrum disorders (ASD). Nationally recognized thought leaders representing a variety of disciplines and approaches will focus on strategies to improve learning and social success, and promote best outcomes across the lifespan.

Opening Keynote Address

The Environment and Autism

Presented by Irva Hertz-Picciotto, PhD, MPH



Ten years ago little was known about the intersection of environmental impacts and autism risk. Since then, the field has generated dozens of clues and, for some factors, a substantial literature has emerged. This lecture will present the history of this etiologic research and the literature on potential targets for intervention to prevent or reduce the severity of autism. Distinguishing causes of autism from causes of the rise in autism provides an integrative framework for advancing the field.

**Registration is open at :
AutismConference.KennedyKrieger.org**

Closing Keynote Address

Autism Begins in Prenatal Life: Prenatal Defects Underlie the Progression of the Disorder

Presented by Eric Courchesne, PhD



There is considerable biological evidence that autism is a prenatal neural disorder. This lecture will present this evidence and discuss how early neural biological abnormalities may underlie the emergence and progression of different developmental behavioral trajectories and clinical outcomes in individuals with ASD. Key examples come from studies of language development in ASD.

Breakout Sessions

Occupational Therapy Using a Sensory Integration Approach: An Evidence-Based Intervention for Children with Autism

Presented by Zoe Mailloux, OTD, OTR/L



Occupational therapy using a sensory integration approach aims to improve the underlying sensory motor factors that impact a child's ability to participate fully at home, in play, at school, and in other childhood occupations. This presentation will outline the core components of this approach and review the research that demonstrates the effectiveness of this intervention.

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Merging Positive Behavior Programs with Inclusive Classrooms: What is Necessary for Success for Middle/High School Students with ASD?

Presented by Sheila Wagner, MEd



Students with ASD present unique and often problematic situations in middle and high school that challenge teachers and administrators. This session will discuss practical, real-world strategies and solutions that can defuse these situations and improve overall educational programs for students with ASD and their peers.

Social Communication Assessment in School-Aged Children with ASD

Presented by Kathryn Greenslade, PhD, CCC-SLP



School-age children with ASD often have difficulty with initiating and maintaining conversations and considering others' perspectives. This presentation will present a framework for deciding what to measure and how to collect information that reveals children's social communication strengths and weaknesses. Specific assessment strategies that may help identify social communication difficulties and potential treatment targets will also be discussed.

What Lies Beyond: The Unaddressed Issues Facing Late Teens and Young Adults on the Autism Spectrum

Presented by Chase Johnson



Drawing from his experiences as an individual with autism, the speaker will discuss common issues facing late teens and young adults on the autism spectrum. Participants will leave better prepared to equip their children and young teens to deal with problems beyond school and in the workplace.

Visual Supports to Promote Positive Behavior

Presented by Tisha Gonzalez, MA, SLP, ATC, BCBA, and Cissy Carter, MEd, BCBA



This presentation aims to help participants understand the role of visual supports in changing behavior. Individuals with ASD frequently have difficulty processing auditory information and language, yet many people with ASD have strong visual processing capabilities. Adding visual supports to behavioral interventions provides instruction in a way that is easier for our students to understand. Participants will come away with ideas and materials that will have a positive impact on behavior change in their practices.

Incorporating Critical Skills Throughout the School Day

Presented by Cissy Carter, MEd, BCBA, and Tisha Gonzalez, MA, SLP, ATC, BCBA

This presentation will provide ideas that incorporate reading, math, communication, social, and other skills throughout the school day, given that skills are rarely mastered in isolation. Teachers will take away strategies and ideas to help amplify their students' learning by considering how specific skills naturally fit into the daily schedule of activities.

Strengthening Togetherness: Enhancing Connection and Engagement with Children with ASD

Presented by Laurie Chaikind, MSW



The unique characteristics of ASD can make creating a sense of engagement with our children challenging, both when they are calmly exploring their world through play and when they have difficulties regulating their feelings. This presentation will explore strategies for caregivers, loved ones, and professionals to enhance connection and engagement with children who have ASD. These strategies help children learn new ways to cope with their feelings by increasing the adult's capacity for thoughtful and compassionate management of the child's emotional needs.

How ASD Emerges in the First Three Years: Implications for Early Detection and Intervention

Presented by Rebecca Landa, PhD, CCC-SLP



ASD emerges in early development, usually gradually. The early signs of developmental disruption are subtle and not ASD-specific. As a result, early signs are often missed or misinterpreted. This presentation will explain the early risk indicators for ASD and social and communication delay, and present recent scientific findings about the developmental abilities of infants at high familial risk for ASD. Information on developmental trajectories of infants who do and do not develop ASD by age 3 will be discussed, as well as the implications for diagnosing ASD early in life and determining early intervention goals.

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Positive Strategies for Toilet Training Individuals with Autism Spectrum Disorder: What's New & What Works

Presented by Dan Mruzek, PhD, BCBA-D



Urinary and bowel incontinence is a significant threat to quality of life for many people with developmental disabilities, compromising personal autonomy, community inclusion, physical comfort, hygiene, and acceptance by peers. This workshop will systematically address best practices in toilet training, as implemented by family members and teachers. Special emphasis will be placed on new technologies and recent innovations.

Fact vs. Fiction: Clarifying Nutrition's Impact on Autism Spectrum Disorders

Presented by Andrea Heyman, MS, RD, LDN



The internet offers plenty of anecdotal stories supporting the use of restrictive diets or supplementation in treating autism and related disorders, but it can be difficult to separate fact from fiction. This session will summarize the evidence available and provide guidelines for evidence-supported nutrition practices for children with autism and related disorders.

Technology Innovations for All Learners

Presented by Sean Smith, PhD



This presentation will focus on innovations that are altering the way we can support the learning needs of students with disabilities and others who struggle with learning, by providing meaningful access to learning, social-emotional, and behavioral interventions critical for their overall growth and development. Participants will explore technology and design frameworks that are needed to select innovations that can and should be integrated into the learning experience. This session will cover apps, how to find the right app/tech solution, and ways to connect with the demands of the classroom, home, and community.

A Word from Our Director

Dear Friends of CARD,

Happy fall! October is a special time of year. It is the time of year when colleagues gather to learn the latest and greatest at the CARD conference. The speakers who will convene at the conference this year are not easy to access. They are the stars in the field of autism, neuroscience, epidemiology, applied behavior analysis, communication sciences, mental health, education, sensory and motor sciences, and intervention. On top of all of that, we are honored to have Chase Johnson, a self-advocate, returning to share his perspectives and update us on his life. Where else can we find all of this in one place that is easy to get to?! Come and learn and share and grow at our conference October 13 and 14.

October is also a favorite month for many people because of Halloween. Halloween can be a treat or a scare for some with autism spectrum disorders. If you plan to 'do Halloween' with your child or youth with ASD, start getting ready now. Talk about the event, what will be done, and allow your child to help you create a visual about the event you will be doing (whether that is a party or a trick-or-treat event). The more your child participates in the planning and doing, the more meaning the event will have for your child and the more your child will be prepared to enjoy it. Help your child know that this is a time of year when we do a lot of pretending. We can get dressed up and look different than we usually do. We can do this with costume materials (like hats, shirts, capes) and with face paint or masks. Let your child experiment with these things and take pictures and videos with your phone or iPad. Adapt the treats to be safe and fun things for your child (sensory toys, bubbles, healthy snacks) so that they really are 'treats' for your child to enjoy. Remember to plan the main vocabulary words that you can help your child hear and use meaningfully this month as you build communication routines and conversation on the exciting topic of Halloween-related activities.

In closing, I hope that you enjoy getting a quick overview of some of the exciting things happening at CARD right now. Stay tuned for the next newsletter where we will share more. Meantime, see you soon at the conference!

Sincerely,

Rebecca Landa



CARD's research has a substantial impact on the lives of individuals with ASD, their families and teachers, and on the work of other researchers. Below are some of the publications from CARD researchers. We thank the families and children who helped us make the discoveries reported in these manuscripts.

PUBLISHED ARTICLES

Keefer, A., Kreiser, N.L., Singh, V., Blakeley-Smith, A., Duncan, A., Johnson, C., Klinger, L., Meyer, A., Reaven, J., & Vasa, R. (2016). Intolerance of uncertainty predicts anxiety outcomes following CBT in youth with ASD. *Journal of Autism and Developmental Disorders*. DOI: 10.1007/s10803-016-2852-z

Wodka, E.L., Puts, N.A.J., Mahone, E.M., Edden, R.A.E., Tommerdahl, M., & Mostofsky, S.H. (2016). The role of attention in somatosensory processing: A multi-trait, multi-method analysis. *Journal of Autism and Developmental Disorders*. DOI: 10.1007/s10803-016-2866-6

Landa, R.J., Haworth, J.L., & Nebel, M.B. (2016). Ready, Set, Go! Low anticipatory response during a dyadic task in infants at high familial risk for autism. *Frontiers in Psychology*. DOI: 10.3389/fpsyg.2016.00721

NEW TRAINEES

Nicole Kreiser, PhD, Jeung Eun Yoon, PhD, Lizabeth Jordan, PhD, Mary Iampietro, PhD, Baruch Williams, PhD, Christina Salama, PhD, Angela Turner Dougherty, Jennifer Brophy Canterbury, MS, CCC-SLP, Kathryn J. Greenslade, PhD, CCC-SLP, Julie Feuerstein, PhD, CCC-SLP

ACTIVELY RECRUITING RESEARCH STUDIES

SPARK

The goal of SPARK is to recruit, engage, and retain a community of 50,000 individuals with ASD, along with their family members, in the United States to identify the causes of ASD through establishing a genotyped research cohort of individuals and families with ASD. Kennedy Krieger Institute is one of 21 clinical sites engaged in this project. Anyone interested in learning more about SPARK or in participating can visit www.SPARKforAutism.org/KKI, or call us at 443-923-7598.

Early Learning and Early Detection of ASD and other delays

Kennedy Krieger researchers are recruiting infants ages 6-10 months for a longitudinal Early Development Study. We are recruiting three groups: siblings of children with ASD, preterm infants, and infants with no family history of ASD. We study how children learn in order to find ways to identify which children need extra help. If interested, please contact us at 443-923-7892 or Reach@KennedyKrieger.org.

Principal Investigator: Rebecca Landa, PhD

Protocol Number: NA_00038069

Milo (Humanoid Robot)

Learn social skills through a new technology program! Researchers at Kennedy Krieger's CARD are investigating the effectiveness of an interactive robotics program, known as Milo, aimed at improving social skills. Families of children with ASD between the ages of 4 and 8 years are invited to participate in this research study. If interested, please contact us at 877-850-3372 or Reach@KennedyKrieger.org.

Principal Investigator: Rebecca Landa, PhD

Protocol Number: IRB00067744

Questions or Comments? Please email: CARDnewsletter@kennedykrieger.org

CARD employees follow a wide variety of paths before landing at our center, and also go on to do impressive work with other organizations after their time with us. This feature follows the paths of a current CARD employee, as well as a former employee, to illustrate the diversity of possibilities generated by CARD employment.

Jason Neely's Journey to CARD



In grade school, Jason spent many hours talking on the phone with friends at a time when you not only had to actually remember a person's phone number, but needed an extra-long phone cord to walk around the room while talking. These conversations with friends helped plant the seed that Jason could help people. Fast forward to today and that seed has turned into a career.

But that career path took a few years to get started. When Jason went off to college, helping people was barely a distant thought. He wanted to make money, plain and simple. So, like many folks, he started down the business path (accounting, to be more specific). As he quickly came to realize (via poor grades), working with numbers all day, every day, was just not his thing. It was around this time that he met an acquaintance who suggested he look into child psychology. Reluctantly, he did. He enrolled in a course and the rest, as they say, is history.

The real "aha" moment of that introductory course came one random day during lecture when he was actually paying attention. The professor was making the point that, "no matter how much therapy is done with an individual, if that person's family doesn't support the change, progress is difficult." This is when the light bulb clicked on, and he really started to think about doing something different. Unexpectedly, Jason had to transfer schools, but when he did, he made the leap to fully change his educational path to helping people improve their lives, more specifically in the realm of family therapy.

There is not enough space in this article to write about all the exciting details of his journey, so the abbreviated version will have to do for now. Jason graduated from the University of Georgia with a bachelor's degree in Child and Family Development. From there, he worked at the Marcus Autism Center providing applied behavior analysis-based intervention to children. It was at Marcus where he gained a deep appreciation not only for the clinical aspects of working with children and their families, but also doing research. It was the first time that Jason saw research informing clinical practice in real time.

Jason ultimately graduated with a master's degree in Marriage and Family Therapy from Syracuse University, and moved on to a doctoral program at the University of Florida. There, he not only expanded his clinical skills working with families of all types, but began to develop his own research agenda. Currently, he's preparing to defend his dissertation: "Couples therapy to improve the marriage of parents with a child with autism."

For the future, he plans to continue the trifecta of clinical work, research, and teaching. And at CARD, he is doing just that. Jason continues to work directly with families who are impacted by autism. He also wants to continue research in bringing technology into the therapy room to improve outcomes. And finally, this fall he will get back into teaching and supervising to help train the next generation of clinicians.

Where Are They Now? Emily Tyson Studebaker, MS, CCC-SLP



I first participated in training at CARD in the summer of 1997. I then returned to CARD in the summer of 1999. I worked at CARD as a speech-language pathologist in the outpatient clinic from 1999 to 2000. I then worked with Achievements from 2000 to 2007, and was the Achievements supervisor from 2003 to 2007.

I started as a clinical assistant professor in the Department of Speech, Language, and Hearing Sciences at Purdue University in January of 2008.

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My work at Purdue is focused on clinical training of graduate students in speech-language pathology. I supervise graduate student clinicians as they work with children and adults in the M.D. Steer Speech and Language Clinic. Additionally, I am involved with giving lectures within a clinical course and providing guest lectures about autism, as requested, to a variety of classes.

The experiences I had at CARD shaped my learning and ability to work with individuals and families impacted by ASD. My experiences with professionals across disciplines prepared me to approach individuals with increased understanding of behavior, sensory challenges and strategies, and medical challenges. CARD's integration of research and clinical practice prepared me to implement evidence-based practices. I hope that in my continued work at Purdue University, I have been able to share my knowledge and experiences to prepare future professionals to work successfully with individuals with ASD or other communication challenges. Additionally, I continue to work with and learn from individuals with ASD within the clinic, and through opportunities to collaborate with researchers.

Free Upcoming STAR Trainings

Bullying, Harassment, and Intimidation of Students with Disabilities in Maryland Public Schools

**Wednesday, November 9th, 11:30 a.m. to 12:30 p.m.,
presented by Maureen van Stone, Esq., MS, Mary Coster, LCSW-C, C-ASWCM, and Mallory Finn, Esq.**

Creating a Language-Rich Home for Toddlers and Preschoolers with ASD

Wednesday, December 14th, 11:30 a.m. to 12:30 p.m. Presented by Megan Myatt, MS, CCC-SLP, and Zaneta Liu, MS, CCC-SLP

For more information or to register, visit KennedyKriegerCARD.eventbrite.com.

Research

Early Achievements - New Horizons

By Kathryn Greenslade, PhD, CCC-SLP

School readiness is a primary goal for families and teachers of young children. Improving school readiness in preschoolers with ASD has long been a goal at CARD. Our research has shown that Early Achievements (EA) increases engagement, participation, and learning in preschoolers, all of which improve school readiness. CARD recently adapted the EA model for use by preschool teachers in public schools. In two pilot studies in Maryland and Delaware we found that:

1. Our training and coaching helped teachers learn to implement the adapted EA model successfully.
2. Preschoolers with ASD who had teachers trained in the adapted EA model showed more social communication and cognitive gains than those with untrained teachers. These gains should improve school readiness.

So what's next? We're ready to take on new horizons! With new funding from the Institute of Educational Sciences, we're taking the next big step to test the adapted EA model's effectiveness in public preschool classrooms. We are partnering with new schools in Delaware, Maryland, and Pennsylvania. We will work closely with nearly 70 teachers and as many as 150 children with ASD over the next three years. Half of the teachers will receive training in the adapted EA model, while the other half will receive workshops on various professional development topics. The knowledge gained by this important project will help teachers, parents, administrators, and, most importantly, children.

We want to thank all of the families that have participated in Early Achievements and Achievements over the years. You have helped make EA what it is today. We can't wait to share the EA model with new teachers who touch the lives of children with ASD each and every day!

Connecting in the Community with SPARK

By Bonnie van Metre, MEd, BCBA

In April, CARD helped launch SPARK, an online research initiative designed to speed up research and advance our understanding of ASD to help improve lives. SPARK aims to accelerate ASD research by inviting participation from a large and diverse community. The goal is to include individuals with a professional diagnosis of autism of both sexes and all ages, backgrounds, races, geographic locations, and socioeconomic status, and their parents. CARD is one of a select group of 21 leading national research institutions chosen by the Simons Foundation Autism Research Initiative (SFARI) to assist with recruitment for this groundbreaking study.

In order to reach all of our Maryland families impacted by ASD, CARD has been working with our community partners at events, trainings, and social gatherings to spread the word about participating in this amazing study. It has been both fun and inspiring to connect with other professionals and groups who serve the autism community. So far, 445 participants have registered for this wonderful opportunity, including 161 individuals with autism. Together we can SPARK a movement!

Anyone interested in learning more about SPARK or in participating can visit sparkforautism.org/KKI, or contact Bonnie Van Metre by phone 443-923-7598 or email SPARKstudy@kennedykrieger.org.

HRSA Childcare Study

By Rebecca Landa, PhD, CCC-SLP, Julie Feuerstein, PhD, CCC-SLP, Emily Baker, MS, and Natasha Lawson, research assistant

In August of 2013, CARD received a grant from the U.S. Department of Health and Human Services Health Resources and Services Administration (HRSA). This grant has supported a randomized control trial designed to teach child care providers strategies to support children's learning and engagement in the context of routine activities within the child care curriculum. Providers allocated to the treatment condition receive two professional development workshops *plus* weekly coaching for a 5-6 month period, with a focus on using specific instructional strategies in their classrooms. Providers allocated to the "business as usual" condition were followed for 5-6 months, and then received the two professional development workshops only (no coaching in their classrooms).



Child care providers at a training at CARD

In spring 2016, six child care providers from Baltimore County and Baltimore City participated in the two-day workshop training. Providers were taught specific instructional strategies from the evidence-based Early Achievements model, adapted for child care settings. The workshops provided time for the child care providers to practice using the strategies, to learn from one another, and to reflect on their experience in the training. During the workshops, providers expressed that they felt like "a true community of learners." They openly shared ideas and filled the room with smiles, laughter, and even a few tears, while reflecting on their individual growth throughout the training. Most importantly, teachers concluded the training feeling a deeper connection and greater sense of purpose during book share time..

Real testimonials from child care providers on how the training has impacted them:

"Instead of just reading a book, now we're living and breathing and making the book come alive, and that's something we never did before."

"This should be taught to all teachers who are going [into] early child care. It should be a prerequisite. It's really great, we are learning so much...so much! It's really needed."

Spotlight on Julie Feuerstein



Julie Feuerstein, PhD, CCC-SLP, is a post-doctoral fellow in Dr. Landa's lab, funded by the Vincent and Ellen Forlenza Autism Postdoc Program. Julie joined the team at CARD in 2016. In her current position Julie is working on the HRSA-funded child care study and mentoring an undergraduate psychology student intern from Morgan State University's Building Infrastructure Leading to Diversity/A Student-Centered-Entrepreneurship Development (BUILD/ASCEND) program. She's also developing her own line of research focused on closing the research-to-practice gap.

Julie has worked with young children with ASD as a speech-language pathologist and has a special interest in the intersection between motor and social communication development in the first years of life. She has experience and expertise in working with young children who require augmentative and alternative communication supports. This past December, Julie completed her doctoral studies at the University of Washington. Her dissertation was an implementation science research study entitled, "Training speech-language pathologists

to recognize early signals of communication in young children with severe physical disabilities." Julie traveled to Toronto in August to present her research at the International Society for Augmentative and Alternative Communication's biennial conference.

Outside of work, Julie enjoys hiking, swimming, exploring Baltimore, and trying to keep up with her energetic two-year-old! We are excited she has joined the CARD community.

A Final Word

Graduation Thoughts

By Cathy Walton, MEd, SLP-A

This month, my daughter Lucy graduated from preschool. Her preschool was the Model Inclusive Child Care (MICC) program at CARD. The MICC is a reverse inclusion program where for most of her day she was included as a peer model in two different groups where the rest of the children had ASD. I don't know what if any sort of effect being in this sort of program will have on Lucy in the long run, but here is my hope: In a world where there is so much hate and fear of the unknown, I hope that Lucy will remember that everyone wants and deserves love and friendship. I hope that Lucy will continue to seek knowledge as opposed to turning away from things and people that she doesn't understand. I hope that Lucy will continue to celebrate differences and see that we all have great strengths and challenges and that is what makes the world such a wonderful and interesting place. During the year and a half that Lucy was in this program, she never once talked about any of the children in her groups as anything other than her friends...her best friends. They gave her life, made her more outgoing and patient, taught her to work hard to better herself ("I want to run as fast as Jenny;" "I wish that I could play lacrosse like Alex"), and showed her that there are things in all of us that make us special. I feel so fortunate that Lucy got to participate in this type of program and spend time with this diverse group of kids. Sure, she learned how to write her name and do a little math, but this program has taught her much more important lessons in acceptance. I can't think of a better preparation for the rest of her years of schooling.



Lucy on her graduation day.