# Center for Autism Related Disorder

at Kennedy Krieger Institute

#### 3901 Greenspring Avenue, Baltimore, Maryland 21211

April 2016 • VOL. 9, ISSUE 2

## card.kennedykrieger.org

To register or create an online fundraising page, visit

ROARforKids.KennedyKrieger.org or call 443-923-7300.

ew

## **Events**

## **ROAR for Autism on April 30, 2016, at Oregon Ridge Park**

Join us on Saturday, April 30, 2016, for ROAR for Kids—a family run, walk, and festival to support kids, research, and programs at Kennedy Krieger Institute.

Don't miss the resource fair, live entertainment, and a wonderful enclosed playground that make ROAR for Kids a great event for the entire family.

#### **Advance Registration**

Adults -- \$35 (Festival only -- \$15) Children 5 to 12 -- \$15 (Festival only -- \$5) Children 4 & under -- FREE

Can't make the event? You can participate virtually by registering to "Snore for ROAR."

## CareFirst 💩 🕅

Support the Center for Autism and Related Disorders (CARD) by joining the CARD Dream Team or forming your own fundraising team. Be sure to select "CARD" when making your donation or completing your registration.



## What Our Family LOVES About ROAR

By Brenna Friedmann, CARD Parent

For our family, ROAR for Kids is our annual celebration! It's the time we commemorate our son Louis's progress and give back to the wonderful people at CARD, without whom this progress wouldn't be possible. We choose the Family Fun walk every year to enable us to stay together. Last year, the laugh was on mom and dad when the boys (Louis and his older brother, Sammy) sped past us within minutes! We love the myriad of games that are offered; all carefully selected to create a feeling of success for the participants. The Mascot Challenge is a blast, and the balloon man is a definite highlight! Each year, the playground is a must, as are the make-your-own-flavor snow cones. Yummy food is everywhere you look! We

Inside this issue	
IMFAR Speakers	2
Star Trainings and STAR on t Shore	he 3
CARD Summer Programs	4
A Day in the Life of the Pre-K Classroom	5

especially enjoy getting new snacks from the event sponsors. Seeing any of our teachers and friends from CARD is an added bonus. Every year, we leave ROAR tired, but with a feeling of fulfillment, gratitude, and reflection. We feel a sense of camaraderie: everyone at the event is a warrior, silently understanding each other's struggles and joys. ROAR brings us together for this unique opportunity of acceptance, celebration, and fun!



# IMFAR Pre-conference Day Speaker Highlights May 11th, 2016 at Towson University

#### Susan Hyman, MD



Dr. Susan Hyman is a professor of Neurodevelopmental & Behavioral Pediatrics at the University of Rochester Medical Center. Dr. Hyman was the chair of the American Academy of Pediatrics committee on autism, and has been treating and researching autism spectrum disorders for three decades. Her studies have included how autism spectrum disorders (ASD) are similar to and different from other developmental conditions, how diet and nutrition affect children with autism, and effective behavioral treatments.

#### Lisa Crabtree, PhD, OTR/L



Dr. Lisa Crabtree has practiced for 40 years as an occupational therapist in school systems and community settings. Research, teaching, and practice work have focused on supports and barriers related to community participation of children, youth, and adults on the autism spectrum. She was the inaugural director of the Towson University Hussman Center for Adults with Autism, a center for educational and outreach programs to meet the needs of transitioning youth and young adults on the autism spectrum. From 2009-2012, she was a commissioner for the Maryland Commission on Autism, an advisory

group designed to develop autism policy and program initiatives for the state.

#### Dan Mruzek, PhD, BCBA-D



Dr. Mruzek received his doctorate in Psychology at the Ohio State University and is a former program director at the Groden Center in Providence, R.I. Currently, he supports school teams and families of children with autism spectrum disorder and other developmental disabilities. He teaches in the UR Warner School ProABA program and coordinates his division's psychology postdoctoral fellowship program.

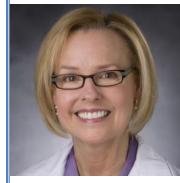
#### Laura Klinger, PhD



Dr. Laura Grofer Klinger is a clinical child psychologist whose research and clinical work has focused on ASD for the past 30 years. Dr. Klinger received her BA in Human Biology from Stanford University and her PhD in Clinical Psychology from the University of Washington, and completed her clinical internship at the University of North Carolina. She is a licensed psychologist in the state of North Carolina. Dr. Klinger's research focuses on lifespan learning differences that underlie, and social and language symptoms of, ASD. She is currently conducting a longitudinal study examining

outcomes in 25- to 50-year-old adults with ASD who were served by TEACCH during childhood, with the goals of both describing autism in mid-adulthood and identifying predictors of long-term outcome. She is also conducting a school-based pilot study focused on teaching employment skills to adolescents to support the transition from school to the employment setting.

#### Geraldine Dawson, PhD



Geraldine Dawson is a professor in the Departments of Psychiatry and Behavioral Sciences, Pediatrics, and Psychology and Neuroscience, and Director of the Duke Center for Autism and Brain Development at Duke University, North Carolina. Dawson is president of the International Society for Autism Research. She serves as a member of the NIH Interagency Autism Coordinating Committee (IACC), which develops the federal strategic plan for autism research, services, and policy. Dawson is a licensed practicing clinical psychologist and scientist, having published extensively on early detection and treatment of autism and brain development. Dawson is a fellow of the American Psychological Society and

American Psychological Association, and is associate editor or on editorial boards of four scientific journals. Dawson's awards include a Lifetime Achievement Award from the Association for Psychological Science for outstanding contributions to the area of applied psychological research that addresses a critical problem in society at large.

# For more information and to register, go to: KennedyKrieger.org/IMFAR

## **Free Upcoming STAR Trainings**

Weight Management and Autism Spectrum Disorders— Wednesday, April 6, 11:30 a.m. to 12:30 p.m., (Andrea Heyman, MS, RD, LDN)

Anxiety in Autism Spectrum Disorder: Clinical Perspectives— Wednesday, April 13, 11:30 a.m. to 12:30 p.m., (Nicole Kreiser, PhD)

Social Communication Challenges in School-age Children with ASD— Wednesday, April 20, 11:30 a.m. to 12:30 p.m., (Kathryn Greenslade, PhD, CCC-SLP)

Getting an Autism Spectrum Disorder Diagnosis: Where Do I Go From Here?— Monday, April 25, 11:30 a.m. to 12:30 p.m., (Cathy Groschan, LCSW-C)

What is Transition Planning for a Teen with an ASD Diagnosis?— Monday, April 25, 1:00 p.m. to 3:00 p.m., (Cathy Groschan, LCSW-C)

Mindful Parenting: Strategies for Parents of Children with Special Needs— Wednesday, May 25, 11:30 a.m. to 12:30 p.m., (Laura Solomon, PsyD)

For more information or to register, visit **KennedyKriegerCARD.EventBrite.com** 

## **STAR on the Shore**

Targeting the Core Deficits of Autism in Toddlers: It <u>is</u> Rocket Science! Presented by Jennifer Sharpless, MS, CCC-SLP



Wednesday, April 20, 2016, 8:00 a.m.to 4:00 p.m., Community Foundation Eastern Shore

CARD has been working to improve autism services on the Eastern Shore. Two existing services include a Maryland State Department of Education-funded program to support teachers in autism-related instruction. Another includes a telehealth program wherein CARD physicians conduct assessments with children through a hospital on the Eastern Shore. We also have co-hosted autism conferences there. Now, we announce a new program designed to bring the latest information about autism diagnosis, intervention, and family-related matters to professionals and families on the Eastern Shore. We will provide an inaugural symposium to kick off the extension of our STAR trainings to the Eastern Shore. Here is the information about this symposium!

In this one-day conference, early intervention providers and parents will learn evidence-based treatment strategies to address communication, social interaction, and play development in toddlers with autism and other developmental delays. Through hands-on activities, video examples, and small group discussion, participants will learn strategies they can directly apply with their clients or children. *Cost: \$35* 

## A Word from Our Director

#### Dear Friends,

The long awaited spring has come! I hope that you will come out to Oregon Ridge on April 30 to support autism research. In order to ensure that your support does come to CARD, please choose Center for Autism and Related Disorders from the dropdown menu. If you are unable to attend the event, you can still give you support through the Snore for Roar option. Help us help others through the high-impact autism research that happens at CARD. We have made major discoveries about how children with autism learn, how to detect autism early in life, how best to deliver intervention to improve outcomes, what causes autism, and much more. Every dollar counts!

The 9-minute tutorial that we developed for pediatricians to help them recognize the early signs of autism risk has had 999,222 hits as of right now. The information in that free tutorial, accessible at PUT LINK, was made possible by our research involving infant siblings of children

with autism and infants with no family history of autism. All of the one-year-olds in that video whom we identified as 'at risk' for autism were indeed diagnosed with autism at age 3 years by experts within our Center and by outside experts. This tutorial is an example of how research helps the broader community help children.

Before I close, I want to remind you all of the unique opportunity you have on May 11 to attend the special autism conference we are hosting at Towson University. Internationally renowned autism experts will share the latest findings with you while they are in town for the International Meeting for Autism Research. See page 3 for how to get information about the event and how to register.

#### Warm regards,

Reberra Landa



#### Programs

## CARD Programs accepting new participants for Summer 2016 CIRCLE OF SECURITY

We are excited to announce recruitment for Circle of Security® Parenting within CARD. The aim of the Circle of Security Parenting Group is to create a warm, supportive environment for parents to come together and develop parenting strategies that promote their child's successful management of challenging emotions while socially connecting with caregivers, building problem-solving skills, and enhancing self-esteem. We focus on helping parents build strategies that will assist the child with self-regulation, cope with emotions in an appropriate way, and enhance engagement with their caregivers. If interested, please contact Deanna Aazami at 443-923-7637 or Aazami@KennedyKrieger.org.

#### PLAY WITH ME

Play With Me is a short-term therapeutic program that focuses on caregiver-child interactions. It will be running all summer at both Greenspring and Odenton locations. This program is for children under the age of three who demonstrate limited purposeful play skills due to delays in motor performance or inhibiting sensory behaviors. Facilitated by an occupational therapist (OT), the program is designed to assist you in enhancing your child's play skills, gross and fine motor skills, self-care skills, and sensory regulation. The program consists of six occupational therapy sessions (one 75-minute session each week for six consecutive weeks) for you and your child. During each session, the OT will model and train you on play strategies, motor development strategies, self-care strategies, and sensory-based strategies for your child that can be used at home or in the community. If interested, please contact Teresa Anderson at AndersonT@KennedyKrieger.org.

#### PALS

Odenton is excited to offer PALS, a social skills group, during the summer. PALS, short for Peer Application of Language and Sensory skills, is a social skills group that meets twice per week over 8 weeks for children ages 6-8 who have both occupational therapy and speech-language therapy needs. This group uses a co-treatment model to support social skill development while addressing underlying language and sensory skills required to be successful in a group setting. If interested, please contact Erin Shultz at Shultz@KennedyKrieger.org or 410-874-1853 or Martha Davis at DavisMa@KennedyKrieger.org or 410-874-1855.

#### LIFE SKILLS GROUP

This summer, Greenspring is excited to run the Life Skills Group. The Life Skills Group at CARD is a 12-week short-term treatment program, which is co-facilitated by an occupational therapist and speech-language pathologist. The group is designed for children between the ages of 8-18 years old. This group will focus on increasing your child's independence with functional everyday activities as well as address underlying motor and sensory components that might impact your child's self-care performance. Specific areas of your child's communication will also be targeted in the context of everyday activities. If interested, please contact Stephanie Alban at 443-923-7541 or email Alban@KennedyKrieger.org.

#### MILO

Learn social skills through a new technology program! Researchers at Kennedy Krieger's Center for Autism and Related Disorders (CARD) are investigating the effectiveness of an interactive robotics program, Milo, aimed at improving social skills. Families of children with ASD between the ages of 4-8 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

## Day in the Life of CARD's Pre-K Classroom

By Alyssa Altman, Early Intervention Assistant

The new pre-kindergarten expansion program hosted at Kennedy Krieger Institute, funded by the Maryland State Department of Education, is a bustling classroom of 4and 5-year-old children, with no requirement for having ASD. The classroom is a place for learning, exploration, making new friends, and developing a spirit of sharing so that the children will be prepared to be successful in kindergarten. All day long, children are expanding their math, science, literacy, communication, social, and play skills. However, during certain activities, we give extra opportunities to dive deeper into one or two of these areas.

Meals and Snacks: Everyone sits together at one table for meals and snacks.

Circle Time: After breakfast, we all come together to talk about the calendar and the weather. Everyone gets to practice being a leader during calendar and weather activities where children expand their math, language, and science knowledge. Children also develop an increased sense of responsibility as they learn to take on new jobs. They are proud to do a good job for their classmates and teachers!



Story Time: The lead teacher helps children to expand their imagination, communication, and literacy skills during our interactive book sharing activity. Exciting books are selected to relate to our weekly themes. After each book is shared, children gain additional experience with the concepts revealed in the books. This is accomplished through book-related social play activities

Centers: Centers gives us the opportunity to explore the room independently, with our teachers acting as facilitators. Twice a day, we get to pick from Literacy, Math, Art, Puzzles and Games, House, and Blocks. At each of these centers, there are many different activities from which to choose. The children especially enjoy playing Candy Land in Puzzles and Games!

Rest Time: The children take a nap after lunch to prepare for the fun afternoon.

Math: After rest time, we have fun activities to experience math concepts in greater depth. The specific concepts change from day to day, but during this time, children learn to think about applying math concepts in their daily experiences. Right now, the children are becoming superstars at writing numbers 1-5, and are using this skill to inform others about quantities."

## Research

## New Intrinsic Visual-Motor Synchrony Research

## By Alex Travis, Research Assistant

Research indicates that the brains of children with autism spectrum disorder (ASD) tend to show wiring that is more conducive to tactile learning, as opposed to learning through social cues. It appears that children with ASD show a specific bias against using visual feedback during motor learning activities such as imitation. Imitation is an activity that is fundamental for the acquirement of many social skills.

One hundred (50 with high-functioning ASD and 50 typically developing) children ages 8 to 12 participated in a study at Kennedy Krieger to test whether or not these differences in motor learning are due to differences in brain wiring. The children completed testing over two visits to the Institute. Using functional magnetic resonance imaging (fMRI), researchers investigated the relationship between visual-motor development and social deficits, imitation ability, and two sections of the Praxis exam (a general measure of gesturing ability). This is significant because the part of the brain where many of these general visual-motor skills originate also features the mirror-neurons, which compose a crucial part of the ability to imitate.

### (Continued from Page 5)

Results indicated that activity in some of the upper limb motor regions and in some of the higher-order visual processing areas tended to be more out of sync in children with ASD. Children who displayed these deficits in their upper limb and higher-order visual processing regions also showed more severe social deficits. Typically developing children with more coordinated activity in their upper limb motor regions and higher-order visual processing areas were better at performing more skilled gestures, as tested through the Praxis exam.

A connection was found between visual-motor functional connectivity and the ability to imitate gestures in typically developing children but not children with ASD; however children with ASD still showed deficits in this area. Children with ASD were also shown to potentially have less integration between their visual and motor networks, which is consistent with findings that children with ASD struggle with hand-eye coordination. Children who showed decreased responsiveness to visual feedback during motor learning tended to also display more severe symptoms of ASD. There appears to be a neural link between motor and social deficits in ASD, and further research needs to be done to track the development of these skills, and to better understand this link.

Nebel M.B., Eloyan A., Nettles C.A., Sweeney K., Ament K., Ward R., Choe A.S., Barber A.D., Pekar J.J., Mostofsky S.H. (in press.) Intrinsic visual -motor synchrony correlates with social deficits in autism. Biological Psychiatry.

## Staff Spotlights

**Spotlight on Carly Solle** 

Carly Solle is the early intervention coordinator and preschool teacher in the new expansion pre-kindergarten classroom at CARD. Through this program, Carly prepares children who have missed the age cutoff for entrance into kindergarten. Carly provides the children with an academically structured environment, with emphasis on content instruction in reading, math, and social skills to ensure kindergarten readiness for the upcoming school year. Carly worked with at-risk young children as a kindergarten and preschool teacher in Harford County Public Schools for over 10 years. She holds a Bachelor of Science in Early Childhood Education from Towson University and is pursuing a master's degree. Outside of work, Carly enjoys spending time with her husband, Rod, and children, Morgan and Noah.



## **Spotlight on Karen Chavez**

Karen Chavez is a therapeutic aide in the new expansion pre-kindergarten classroom at CARD. Karen has eight years of experience in early childhood settings, including the implementation of Common Core and Montessori style education. Karen has been a preschool teacher and after-school program coordinator, and has taught in Spanish. She has worked with children ages 2 to 14. Karen is excited to be a part of the CARD team. Karen loves the summertime, and her favorite activities are going to festivals and the beach. She also enjoys funny movies, listening to music, and spending time with friends and family.

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