

CART Connection

News from the UCLA Center for Autism Research and Treatment

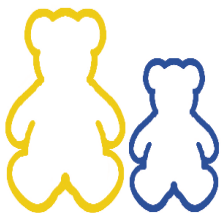
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In This Issue

- 3** Inaugural Autism Conference: "Autism It's A Spectrum"
- 6** Updates at PEERS
- 7** CART Partner: ACEing Autism
- 7** In the News: Dr. Geschwind on NOVA
- 8** Research at CART
- 9** Spotlight on Research: Brain Development
- 10** Treatment Services at CART
- 12** Upcoming Events at CART

Did you know?

Autism spectrum disorder (ASD) now affects 1 in 68 children in the United States.



UCLA Center for Autism Research and Treatment

A leading edge center for multidisciplinary ASD research, treatment, and education.

The UCLA Center for Autism Research and Treatment integrates basic clinical research and treatment programs at UCLA to provide a true multidisciplinary approach towards autism spectrum disorders and related neurodevelopmental conditions.

CART's goal is to play a leading role in developing an improved understanding of the biological and psychosocial basis of autism.

Co-founded by Dr. Daniel Geschwind and

the late Dr. Mariam Sigman, the UCLA Center for Autism Research and Treatment was established in 2003 as one of the eight national centers in the National Institute of Health (NIH) funded research initiatives, Studies to Advance Autism Research and Treatment (STAART). In 2007, the Center was awarded two NIH Autism Centers of Excellence (ACE) grants. Most recently, CART became the only ACE Center in the country to be awarded renewed funding to 2017.

Updates in Autism Genetics

By: Jason Stein, PhD



The DNA code contains some of the secrets to autism, and we're just beginning to reveal them. As with almost any characteristic we can measure about a person like height or weight, risk for autism is influenced by the

genetic variation an individual inherits from his or her parents, new genetic changes not inherited, as well as the environment surrounding that individual. We've known that there is a significant genetic component to the disease for almost twenty years, and our goal recently has been to identify those specific genetic variants that create risk

Continued on page 2

Mission Statement

The mission of the UCLA Center for Autism Research and Treatment is to continue to play a leading role, both nationally and internationally, in efforts to develop an improved understanding of the biological basis of autism, so as to improve diagnosis and to develop and disseminate new, more effective treatments for autism spectrum disorders across the lifespan. We hope to achieve these goals by fostering a strong collaborative environment for basic and applied research, as well as a challenging, but supportive environment for trainees.

GENETICS continued from page 1

for autism. Genetic discovery is difficult though because everyone has differences in their DNA code, most of which have no negative effects. Because of this, we need to find DNA changes that multiple patients with autism carry more often than people without autism. Recent success in autism genetics can be attributed to two factors: (1) very large groups of patients with autism and controls contributing to studies and (2) technology that can quickly measure a lot of genetic variation.

What we have identified in the past few years are many rare mutations that clearly create risk for autism and altogether account for 20-30% of ASD cases. This means that we can find causes in about a quarter of clinical cases now and has made genetic testing an important clinical test in all children with ASD. Most of these mutations are not found in the parents and occurred newly in the child's DNA. We have not yet been able to identify specific genetic variants that are commonly found in the

Continued on page 11



Inaugural Autism Conference: “Autism Is Not Black and White – It’s a Spectrum”

By Kathy Wyer

In a first-of-its-kind, public service event attended by more than 300 participants, an alliance of UCLA researchers, community service providers, educators, nurses and other health care workers, as well as concerned parents and family members came together to contribute to and participate in the Inaugural Autism Conference held at the Holman United Methodist Church in South Los Angeles on October 23, 2014.

“Building Bridges to Optimum Health: Autism is Not Black & White, It’s a Spectrum,” a free, daylong conference funded in part by the Autism Speaks Foundation and Health Resources Service Administration, provided a platform for the African American community in South Los Angeles to have a voice and an opportunity to actively engage in dialogue with researchers, educators, and health care professionals about the growing public health issue of Autism Spectrum Disorder (ASD). The conference launched an alliance that will undertake a three year long on-the-ground outreach effort to support the African American community’s critical need for ASD services in South Los Angeles and work towards establishing a

long-term coalition of committed partners offering resources and services for ASD evaluation and treatment. A Public Service Announcement to raise awareness about ASD is planned for television and radio, and will highlight how to get help for kids who may have the neurodevelopmental disorder.

Speaking on behalf of the South Los Angeles community was Loretta Jones, M.A., founder and C.E.O. of Healthy African American Families, Phase II (HAAF) and Assistant Professor at Charles R. Drew University of Medicine and Science. A longtime civil rights activist, health policy advocate, and social architect, Professor Jones acknowledged that there is fear within the community around ASD but underscored that the partnership’s work would resolve that: “What we are doing is ethical, it is beneficial to the community, and in no way hurts the participant. Our community should not be viewed or framed from a deficit model perspective. We shouldn’t be afraid to dispel the stigma around Autism. We should use the word as often as is appropriate, so people won’t be afraid of it.” Because of the efforts of parents and local communities, educators, and health care workers, public awareness of

Autism Spectrum Disorder has gained momentum over the last several years and brought greater demand for assessment services and treatment.

“We made a commitment in passion and time to be here today,” offered Connie Kasari, Ph.D., Professor of Human Development and Psychology and a founding member of the Center for Autism Research and Treatment (CART) at UCLA. “Our work has long been community-centered and although we’ve had a number of scientific breakthroughs and provided access to services for kids, it’s still hard to sustain these interventions after we leave. It is our hope that we can create a very real participatory and community-partnered effort to help carry this work forward for years to come.”

The event provided discussions around what ASD is and how to recognize its symptoms, where parents can go to get their child evaluated and treated, if necessary, and some of the myriad issues involved for communities and schools in dealing with ASD. Information booths, manned by volunteers from CART, AutismSpeaks, Crystal Stairs, and CoveredCA.com were set

Continued on page 4

SPECTRUM Continued from page 3

up outside the conference hall to offer information and materials about resources available to the public. Several Public Service Announcement videos were also screened for conferences.

No two cases of Autism are alike. While ASD afflicts 1 in 68 children, boys are 5 times more likely to be diagnosed with the neurodevelopmental disorder; children as young as 12 months may show signs of ASD, with most children receiving a diagnosis by 3 to 4 years of age. Early intervention is critical, and leads to better outcomes. Because of a lack of resources and information, however, African American children generally go without assessment

or diagnosis until they're 6 to 8 years of age, hampering their ability to get intervention at an early age. The community initiative launched by the Inaugural Autism Conference will work to establish viable access for early diagnosis and treatment for ASD.

As Andy Shih, Ph.D., Vice President of Scientific Affairs for Autism Speaks, suggested: "It's not a simple matter of providing resources to a community; people need to be able to access those resources in ways that's easy for them. Many people don't have ready access to transportation and medical resources, and there are often challenges in dealing with city officials and city services. Only by

understanding the barriers that communities face will we as partners be able to implement real and effective long-term change."

In addition to Professor Kasari and Amanda Gulsrud, Ph.D., Assistant Professor and Clinical Director of the Child and Adult Neurodevelopmental Clinic at UCLA, other UCLA prominent researchers and practitioners headlining the conference included Dan Geshwind M.D., Ph.D., Professor of Neurology and Psychiatry at UCLA's School of Medicine; Themba Carr, Ph.D., a Clinical Psychologist at CART; Jolan Smith, M.A., a graduate student in the Joint Doctoral program in Special Education with

Continued on page 5



From L to R: Andy Shih, Ph.D.; Liz Lizaola, M.P.H.; Connie Kasari, Ph.D.; Jill Locke, Ph.D.; Nancy Huynh, Ph.D.; Suzannah Ladarola, Ph.D.; Amanda Gulsrud, Ph.D.; Belinda Williams, M.A.; and Tristram Smith, Ph.D.

SPECTRUM Continued from page 4

California State University, Los Angeles, and UCLA; Belinda Williams, M.A., a doctoral student at UCLA; and Anna “Aziza” Lucas-Wright, M.Ed., Academic/Community Liaison for both the Clinical and Translational Science Institute at UCLA and Charles R. Drew University of Medicine and Science.

Making the trip all the way from the east coast to attend the South Los Angeles conference were Tristram Smith, Ph.D., Professor of Pediatrics and Suzannah Iadarola, PhD, Assistant Professor at the University of Rochester Medical Center and Jill Locke, Ph.D., Assistant Professor at the Center for Mental Health Policy and Services Research at the University of Pennsylvania, all featured speakers at the conference.

Minister Shavon Moore, Assistant Pastor of New Vision Church of Jesus Christ, moderated the event. Other distinguished participants included Loretta Jones, C.E.O. of Healthy African American Families, Charles R. Drew University of Medicine and Science; Andy Shih, Ph.D., Vice President for Scientific Affairs for Autism Speaks; Michael Regalado, M.D., Associate Professor of Clinical Pediatrics at

the Keck School of Medicine at USC; I. Jean Davis, Ph.D., Medical Services Director at CurtisCARE; Tamara Willard, Special Education Teacher at Cienega Elementary School in South Los Angeles; Keesha Hollier-Gates, R.N. and mother of two sons with Autism and founder of LADA LOVE; Pamela Marx, J.D. and Supervising Attorney at Mental Health Advocacy Services, Inc.; Mary Lee, parent advocate, Special Needs Network; Sylvia Drew, J.D., Executive Liaison to LA County Commission for Children and Families; and JeNae Waterfield, B.S. Clinical Coordinator, Pediatric Minds.

Spearheaded largely by Professor Kasari of UCLA’s Center for Autism Research and Treatment and Loretta Jones of Healthy African American Families II (HAAFii), the initiative is comprised of a partnership of several high profile service groups and pro-bono entities, including the Charles R. Drew University of Medicine and Science’s Project EXPORT, Accelerating Excellence in Translational Medicine (AXIS), The Centers for Translational Science Institute (CTSI), and The School of Nursing (SON), Pediatric Minds, the Mankind Project, Crystal Stairs, and the L.A. County Department of Children and Family Services.



A parent asking a question at the conference



Loretta Jones, M.A. and Connie Kasari, Ph.D.



A conference attendee and Minister Shavon Moore



Daniel Geschwind, M.D., Ph.D.; Connie Kasari, Ph.D.; and Andy Shih, Ph.D.

Updates at PEERS

The UCLA PEERS Clinic is an evidence-based, parent-assisted social skills program for youth with Autism Spectrum Disorder (ASD) from preschool to adulthood. One of the only empirically supported social skills interventions for youth with ASD, PEERS has been translated into seven languages and is used in over a dozen counties.

Founded and directed by CART scientist and Assistant Clinical Professor, Dr. Elizabeth Laugeson, the UCLA PEERS Clinic provides social skills training to over 120 families each year through parent-assisted, group-based instruction. Preschooler groups for children 4-6 years of age are held every Tuesday from

3:30– 5:00 pm. Adolescent groups for middle and high school aged youth are held every Wednesday from 4:30 – 6:00 pm and 6:30 – 8:00 pm. Young adults groups for individuals 18-30 years of age are held Mondays from 6:00 – 7:30 pm. All groups meet at the UCLA Semel Institute for Neuroscience and Human Behavior.

Dedicated to the dissemination of PEERS to mental health professionals and educators, the PEERS team has conducted over 15 certified trainings across the globe in the past year alone. Recently, Dr. Laugeson was awarded a generous training grant from the Shapell and Guerin Family Foundation to support the further dissemination of PEERS in the school setting. This

grant will not only fund a large certified training seminar at UCLA for school-based professionals, but will lead to the development and distribution of training videos for PEERS certified providers.

The PEERS team is also currently investigating the efficacy of using virtual coaching to improve social skills in teens with ASD using a mobile app known as FriendMaker. This innovative research is supported through a generous grant from the Organization for Autism Research.

Additionally, in an exciting follow-up to research using the PEERS for Preschoolers program, post-doctoral fellow Dr. Mina Park is investigating the efficacy of parent-assisted social skills training for children 4-6 years of age with ASD through a randomized controlled trial. Preliminary findings with PEERS for Preschoolers was presented by Dr. Park at the 2014 American Psychological Association in Washington, DC.

For more information, please contact:

[UCLA PEERS Clinic](#)
 tel: (310) 26-PEERS
 email: peersclinic@ucla.edu
www.semel.ucla.edu/peers/
 Facebook: [UCLAPEERS](#)



CART Partner: ACEing Autism

ACEing Autism, a nonprofit organization founded by CART faculty Dr. Shafali Jeste and her husband, Richard Spurling, provides weekly tennis programs for children with ASD. Since its inception in 2007, ACEing Autism has grown to a nationwide program, serving more than 500 children in 30 programs across the country. 2014 has been a particularly productive year! This year, ACEing Autism started 10 new programs in Pittsburgh, PA; Worcester, MA; New Orleans, LA; Boynton Beach, FL; Columbus, IN; Dallas, TX; Washington, DC; Encino, CA; Encinitas, CA; and Torrance, CA. In September, ACEing Autism was highlighted at the US Open tournament in Flushing Meadows, New York. Finally, this month ACEing Autism received the United States Tennis Association's National Community Service Award. The program has benefited tremendously from its partnership with both CART and UCLA, with volunteer efforts from students, staff and faculty both on and off the court.

For more information about ACEing Autism please visit our website www.aceingautism.com

Please enjoy this short video from our recent event during The US Open!

<https://www.youtube.com/watch?v=9DPN9tKJ3GI>



In the News: Dr. Geschwind on NOVA



Check out Daniel Geschwind, M.D., Ph.D., Director of the Center for Autism Research and Treatment, who was featured in the PBS Nova episode, "Vaccines - Calling the Shots," which aired on September 10, 2014 and is available to view on NOVA's website. The NOVA special examined the science behind vaccinations, the return of preventable diseases, and the risks of opting out due to the belief that vaccinations cause autism. Dr. Geschwind discussed the importance of identifying the genetic causes of autism and the role of genes and genetic mutations in brain development.

To watch the episode, go to: www.pbs.org/wgbh/nova/body/vaccines-calling-shots.html

Research at CART

Are you interested in participating in a research study?

Research studies advance our knowledge of autism spectrum disorders (ASD), leading to earlier diagnosis and better treatment. Research at CART focuses on a variety of topics surrounding ASD, including early identification of brain and behavioral signs underlying autism and effective treatment and intervention practices for people with ASD.

Participation in research studies is free. When you participate, you will be assisting our researchers develop a better understanding and determine better treatment for ASD.

To learn more about our research projects, including how to enroll, please visit the CART website: www.autism.ucla.edu or call (310) 825-9041 or contact the study coordinator directly.



Studies currently at CART:

AGE RANGE	STUDY NAME	CONTACT
Infants under 6-weeks	Identifying Early Signs of Autism in High-Risk Infants	(310) 825-3478
12 - 21 months	Joint Engagement in Infants at Risk for ASD: Integrating Treatment with Biomarkers	(310) 206-1268
33 - 39 months	Identifying Children With Autism Spectrum Disorders And Developmental Delays	(310) 825 5797
3 - 21 years	Autism Genetics and Human Diversity Study	(310) 794-4090
5 - 8 years	Adaptive Intervention for minimally verbal children with ASD in the Community	(310) 825-0445
5 - 11 years	Treatment with Aripiprazole and Behavior Intervention for Children with Autism who have Low Language Ability	(310) 825-6170
8 - 13 years	Treatment with Therapy for Study for Children with Autism	(310) 206-2586
7 - 17 years	Brain Imaging in Children with Autism	(310) 206-4482
8 - 16 years	Treatment with Risperidone for Repetitive Behaviors in Children with Autism	(310) 825-6170
11 - 18 years	PEERS Social Skills Training for Children/Teens with Autism	(310) 267-3377



“Participation in research is an opportunity to engage in the scientific process. You are involved at the forefront of discovery.”

- Amanda Gulsrud, Ph.D., Principal Investigator, CART



“With your participation in research, we can make a better treatment for tomorrow.”

- Scott Huberty, Staff Research Associate, Jeste Lab, CART

Spotlight on Research: Brain Development

The Infant-Sibling Study

Researchers at CART are studying social communication, behaviorally and neurologically in infants at high and low risk for ASD. The study is actively recruiting infants with a) one or more siblings with an ASD diagnosis OR b) no family history of ASD.

This study seeks to decrease the age at which autism can be diagnosed by studying early brain development and learning processes. The study is expected to help identify children who will benefit from intervention very early in development when treatment is known to have the greatest impact.

Infants will be evaluated at UCLA at 6 weeks, 3, 6, 9, 12, 18 and 36 months. Visits will include MRI, EEG, eye-tracking, cognitive and behavioral assessments, and genetic testing.

Families will receive valuable feedback on their infant's developmental progress, pictures of their baby's brain, as well as \$30-\$50 for each study visit. For more information, please contact us at (310) 825-3478 or siblings@autism.ucla.edu.



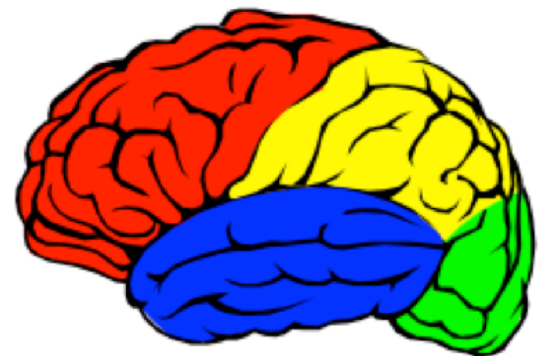
What are the differences between boys and girls with autism?

ASD affects more boys than girls. Moreover, ASD affects females in ways that are different from males and there may be different causes of ASD for boys and girls. We are currently enrolling children with and without ASD ages 8-17 to participate in a neuroscience and genetic study to gain a better understanding of different causes and effects of ASD in boys and girls.

Parents of participating children will complete standardized questionnaires and/or interviews about their children's behavior, development, medical history, and daily interactions. Children will complete standardized assessments to measure verbal, nonverbal, and social-communication skills. They will also participate in an MRI scan and an EEG recording to study brain activity. Family members will participate in a blood draw to help us discover genetic differences between girls and boys with ASD.

Parents will receive feedback about their child's questionnaires and interviews and a picture of their child's brain. Children will receive up to \$190 for their participation. Each family member that participates in the genetic portion of the study will receive \$40.

Please call (310) 206-4482 or email autism.ucla@gmail.com for additional information.



Treatment Services at CART

Read more about research and treatment programs at CART on the CART website: www.autism.ucla.edu.

Currently UCLA offers the following treatment programs and services:

All Ages

Child and Adult Neurodevelopmental Clinic (CAN Clinic)

The UCLA Child and Adults Neurodevelopmental Clinic (CAN Clinic) is our outpatient clinic located at UCLA's Westwood Medical Campus. The CAN Clinic provides a multidisciplinary evaluation and treatment for individuals with suspected disorders of social, cognitive, language, and motor development, including ASD.

The services provided at the CAN Clinic include:

- Evaluation
- Treatments
- Long-term medical and psychiatric care
- Referrals for genetic testing

Contact: 310-794-4008

Young Children

Early Childhood Partial Hospitalization Program

The ECPHP is a short-term integrated day treatment program for young children who have been diagnosed with, or may have, autism, developmental disabilities, and behavior disorders. ECPHP is a five-day a week, six-hour a day program. All aspects of the program are fully integrated and coordinated to create an individualized, comprehensive, consistent, interdisciplinary, and therapeutic environment.

Contact: (310) 206-2695

Elementary School & Early Adolescents

Parenting and Children's Friendship Program

The program offers parent-assisted social skills group programs for children in elementary school (beginning at end of 1st grade) who are having problems making and/or keeping friends. We also offer parent training/behavior modification programs for parents with children (starting at age 2) and early adolescents (age 12½-15½).

Contact: (310) 825.0142

Ages 6 - 12

ABC Partial Program

The Achievement, Behavior, Cognition (ABC) Child Programs in the Neuropsychiatric Hospital at UCLA provides psychiatric services through the Partial Hospitalization Program and the Intensive Outpatient Program. ABC Child Programs are time-limited, integrated programs dedicated to assisting children ages 6-12 and their families to promote positive emotional and behavioral health.

Contact: (310) 825-0415

Ages 8- 12

Secret Agent Society (SAS)

The Secret Agent Society (SAS) is evidence based social skills intervention program for children ages 8-12. This 10-week program has been validated as an effective program to teach social skills to children who have a variety of social challenges in a school setting.

Contact: (310) 206-2210

Teens & Young Adults

Program for the Education and Enrichment of Relationship Skills (PEERS)

PEERS is a manualized, social skills training intervention for adolescents and young adults. It has a strong evidence-base for use with teens and young adults with autism spectrum disorders, but is also appropriate for teens and young adults with ADHD, anxiety, depression, and other socioemotional problems.

Contact: (310) 267-3377



Models used for illustrative purposes only.

GENETICS continued from page 2

population that create risk for autism, but statistical models have been used to show that they must be there. We await larger studies with more families to find these more common genetic causes in the near future.

Most often, the variants create a risk for disease, but are not in themselves able to be used as diagnostic criteria. Instead, we use them to guide us to understand the biological mechanisms of the disease, which provides a foundation for developing

new therapies. As a postdoctoral fellow in the lab of Dan Geschwind, M.D., Ph.D., we are working with neural stem cells in which we introduce the ASD risk mutations to be similar to those of patients with autism.

In this way we can create a model of the disease in a dish. We can watch that model grow, develop connections, and function and determine how it is different from cells without that genetic modification. And we may be able to use these as screening tools for drugs to treat autism. Overall,

the current research in genetics will surely lead us to new mechanisms of the disease that will undoubtedly help provide rational and effective therapeutics.

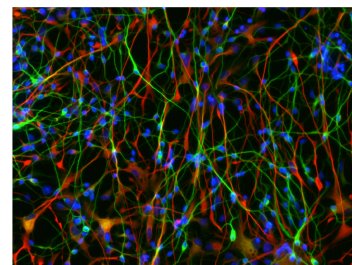


Image of neurons

Giving to CART



CART depends greatly on philanthropy to sustain its cutting-edge research, treatment, and education programs now and into the future.

The establishment of CART in 2003 marked an exciting advancement, particularly for the new and upcoming generation of autism researchers. Since then, CART has concentrated its efforts on developing strong collaborations across disciplines and making major scientific breakthroughs to clarify the mechanisms underlying autism and related disorders. CART has also led the field in designing evidence-based treatment interventions. Your support will help CART continue as well as expand its research, treatment, and community outreach activities to improve the lives of countless children and young adults and their families affected by autism spectrum disorders

Please make your donation by check payable to The UCLA Foundation and specify CART Fund #618040 in the memo line. Mail the check to Alan Han, Director of Development for Neuroscience: UCLA Health Sciences Development, 10945 Le Conte Avenue, Suite 3132, Los Angeles, California 90095-1784.

You may also donate to CART online at <https://giving.ucla.edu/CART>.

If you have more questions about making a gift to CART, please contact: Alan Han, Director of Development for Neuroscience at (310) 825-1546.

Upcoming Events at CART

Autism Affinity Distinguished Lecture Series

UCLA CART offers the distinguished scientific lecture series on the first Friday of each month from October through June. This lecture series brings scientific experts from around the country and internationally to present and discuss multidisciplinary topics of autism spectrum disorders (ASD). The lectures are free and open to the public.

All lectures will be held at:

UCLA Gonda (Goldschmied)
Neuroscience & Genetics
Research Center
1st Floor Conference Room
695 Charles E. Young Drive South
Los Angeles, CA 90095

Time:

Coffee Served: 8:30AM
Lecture: 9:00AM-10:00AM
Questions & Discussion:
10:00AM-10:30AM

RSVP: (310) 825-9041

December 5, 2014

Speaker: Elizabeth McGhee
Hassrick, PhD

Research Scientist, NORC at the
University of Chicago

Title: "Visualizing Inequality: Mapping
the Unequal Infrastructures of Autism
Interventions in Schools"

January 9, 2015

Speaker: Sara Jane Webb, PhD
Associate Prof, University of
Washington, Seattle

Title: "Early Autism & the Neural
Trajectory of Social Processing"

February 6, 2015

Speaker: Leonard Abbeduto, PhD
Director, Mind Institute; Prof, Dept of
Psychiatry and Behavioral Sciences,
UC Davis

Title: "Autism as a Comorbid Condition
in Fragile X Syndrome: What Do We
Really Know"

March 6, 2015

Speaker: Helen Tager-Flushberg,
PhD

Professor, Department of
Psychological and Brain Sciences;
Director,
Center for Autism Research
Excellence

Title: "Identifying risk markers for
ASD in the first years of life"

April 3, 2015

Speaker: Robert Schultz, PhD
Prof of Pediatrics & Psychiatry;
Director of Center for Autism
Research, University of Pennsylvania

Title: "Neuroimaging of the social
brain: What have we learned and
what is on the horizon?"

May 1, 2015

Speaker: Daniel Messinger, PhD
Prof of Psychology (Developmental
Area Head, Pediatrics, Music
Engineering, & Electrical and
Computer Engineering, University of
Miami

Title: "Emotions, Interaction, and
Autism: Timing and Development
in the community"

June 5, 2015

Speaker: David Mandell, ScD
Director, Center for Mental Health
Policy and Services Research;
University of Pennsylvania
Perelman School of Medicine

Title: "Storming the Ivory Tower:
What we need to do to improve
autism intervention"

CART Symposium

This full-day symposium offering CME credits is for physicians, psychiatrists, psychologists, other health professionals, teachers, autism service providers, and any others interested in learning about the latest breakthroughs in research and treatment in autism spectrum disorders (ASD).

Topics: early identification; brain imaging; treatment; genetics; Q&A session.

When: TBD

Where: TBD

Check the CART website for more information: www.autism.ucla.edu

CART in the Community



CART students, coordinators, volunteers, and faculty at community events.