

Annual Conference Highlights

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The Seaver Autism Center at Icahn School of Medicine at Mount Sinai (ISMMS) hosted the 17th Annual Advances in Autism Conference on October 6, 2013. The conference included several scientific presentations,



2013 Annual Advances in Autism Conference speakers

two of which were given by Principal Investigators of the prestigious Autism Center of Excellence (ACE) Network grants awarded recently by the National Institutes of Health (NIH). The other scientific presentations were given by Seaver Center researchers on the cutting edge of the field. As in past years, the audience included psychiatrists and several other health care profession-

als, educators, family members, and advocates. The overall goals of the conference were to educate participants about model systems of autism, advances in understanding the genetics of autism, risk factors associated with autism, and evaluation of current treatments.

“The conference gave me renewed hope and a path toward treatment, thank you,” said one participant. Another participant remarked that she would use what she learned at the conference to “[inform] families with whom I work about current studies and research participation opportunities.”

Dr. Joseph Buxbaum, Director of the Seaver Autism Center, said, “Year after year, we look forward to bringing together many groups involved in autism research and treatment. We believe that by educating healthcare professionals, researchers, family members and advocates together in one group, we can more effectively discuss and solve the challenges that are ahead.”

Seaver Relay Team in the NYC Triathlon

Earlier this year, the Seaver Relay Team participated in the New York City Triathlon as part of Team Drive4Rebecca. Our Seaver athletes were Teresa Tavassoli, PhD, Seaver Foundation Postdoctoral Fellow, and Nikolaos Daskalakis, MD, PhD, Postdoctoral Fellow in Psychiatry, and they did a great job! The

Drive4Rebecca donated all funds raised by the Seaver Center back to the Center to support active research being conducted on Phelan-McDermid Syndrome. We are profoundly grateful to the Drive4Rebecca for their continued generosity and to our Seaver athletes for their participation.



Scientific Presentations

►“NOVEL THERAPEUTIC APPROACHES IN AUTISM SPECTRUM DISORDERS,”

JOSEPH BUXBAUM, PHD
SEAVER AUTISM CENTER, ISMMS



After giving a brief overview of autism spectrum disorders (ASD), Dr. Buxbaum discussed autism genetics and heritability, and he noted that over 100 autism genes have been discovered to date.

He discussed the work of the Autism Sequencing Consortium (ASC), an international group of researchers involved in high-throughput sequencing in autism, and he proposed a path forward toward gene discovery and new medicines. Lastly, he discussed clinical trials being conducted here at the Seaver Center, including trials of Insulin-like Growth Factor-1 in Phelan McDermid Syndrome and in ASD more broadly.

►“BRAIN AND BEHAVIORAL EFFECTS OF SOCIAL SKILLS TREATMENT IN ASD”

TING WANG, PHD
SEAVER AUTISM CENTER, ISMMS

Dr. Wang began with a description of

social impairments in autism, and she explained the impact of social competence on children’s overall development.

She provided a thorough overview of the social skills treatment protocol that was developed and tested here at the Seaver Center, and she shared unpublished results with the audience. This study tested both the neural and behavioral effects of Nonverbal communication,



Emotion recognition, and Theory of mind Training (“Seaver NETT”) in children with autism, compared to a child-directed, non-cognitive behavioral

treatment. Dr. Wang provided examples of Seaver NETT activities, and she discussed future directions for Seaver NETT. She also discussed the first study to examine changes in brain activity following treatment in ASD in the context of a randomized controlled trial. Described as “interesting and very informational,” Dr. Wang’s talk was enjoyed by parents and professionals alike.

►“ENVIRONMENTAL FACTORS AND AUTISM RISK”

AVI REICHENBERG, PHD
SEAVER AUTISM CENTER, ISMMS

Dr. Reichenberg began his presentation with a background on the genetics of autism and its heritability, and he focused on the study of environmental risk factors for autism. He explained the importance of population-based registry research, and he discussed the International Collaboration for Autism



Registry Epidemiology (ICARE), a registry that combines data from six population-based registries of people with ASD from Sweden, Norway, Denmark,

Finland, Israel, and Western Australia. Dr. Reichenberg also explained the complexity of studying environmental risk for autism. To this end, he described his work on the NIH ACE Network grant of which he is the Principal Investigator (PI): Multigenerational Familial and Environmental Risk for Autism. The goal of this study is to demonstrate how risk for autism unfolds across generations and investigate pregnancy-related environmental factors in autism.

One of the conference participants said, “This was a very strong presentation. Dr. Reichenberg was clear, and did a very nice job synthesizing an extensive body of research.”

Keynote Presentation

►“STUDYING OXYTOCIN IN AUTISM SPECTRUM DISORDERS: GREAT PROMISE OR GREAT HYPE?”

LINMARIE SIKICH, MD
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

After an overview of oxytocin’s effects and a description of mainstream interest in oxytocin as a treatment for autism, Dr. Sikich provided evidence of potential

links between oxytocin and autism, and she described data from various current clinical trials of oxytocin. She also described the NIH ACE Network of which she is the PI: Study of Oxytocin in ASD to improve Reciprocal Social Behaviors (SOARS-B). Importantly, SOARS-B will definitely test oxytocin, an extremely promising biological treatment for the core social symptoms of ASD.

Dr. Sikich provided a “comprehensive and expert review,” said a conference participant.



Afternoon Workshops

► **“PSYCHOSOCIAL INTERVENTIONS IN AUTISM SPECTRUM DISORDERS: FROM RESEARCH TO THE COMMUNITY”**

TING WANG, PHD, SEAVER AUTISM CENTER, ISMMS

DEENA SPINDLER, MS, PD, YOUNG MEN’S AND YOUNG WOMEN’S HEBREW ASSOCIATION OF WASHINGTON HEIGHTS AND INWOOD

MICHELLE GORENSTEIN-HOLTZMAN, PSYD, SEAVER AUTISM CENTER, ISMMS

DANIELLE HALPERN, PSYD, SEAVER AUTISM CENTER, ISMMS

Moderated by Dr. Wang, the workshop presenters discussed social impairments in autism, and the evidence-based social skills intervention research that was conducted in a groundbreaking study at the Seaver Center using Seaver NETT. They also discussed how this curriculum can be adapted for toddlers and teens, and how to bring this research into the community.



► **“CURRENT TRENDS IN THE PHARMACOLOGICAL TREATMENT OF AUTISM: A PANEL OF EXPERTS”**

DAVID GRODBERG, MD, SEAVER AUTISM CENTER, ISMMS

PETER DELLA BELLA, MD, YAI/PREMIER HEALTHCARE

ALEX KOLEVZON, MD, SEAVER AUTISM CENTER, ISMMS

CHARLES CARTWRIGHT, MD, YAI

This workshop covered the genetics of ASD; the inflammation process in autism; repetitive behaviors in autism; and attention deficit, hyperactivity, and impulsivity in ASD. More importantly, they showed how attention to each of these domains can lead to novel, targeted treatments for autism. The panel also offered an extensive amount of time for questions from both parents and health care providers. One workshop participant remarked that the workshop was, “[a] chance to hear some of the greats in the field,” and it “was worth every moment.



► **“TRANSITIONING ACROSS THE SPECTRUM: A FOCUS ON EDUCATION, RESIDENTIAL OPPORTUNITIES, AND DAY PROGRAMMING”**

JENNIFER SHAOUL, MPA, YAI/NATIONAL INSTITUTE FOR PEOPLE WITH DISABILITIES

TOM OTT, LCSW, YAI

SAMANTHA FEINMAN, MSED, TSHH, NEW FRONTIERS IN LEARNING

HARRY NUSSBAUM, FECS HEALTH AND HUMAN SERVICES SYSTEM

These workshop presenters discussed available services for young people with autism during the transitional period from adolescence to adulthood, focusing on three main areas. Moderated by Jennifer Shaoul, this panel offered an extensive question-and-answer session that was much appreciated by all those in attendance.



If you could not attend the conference and are interested in obtaining the materials, please email annualconference@seaverautismcenter.org.

Mount Sinai Medical Center
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- **THE SEAVER AUTISM CENTER NEWSLETTER** brings you timely updates about new developments related to research and treatment of autism spectrum disorders, as well as activities at the Seaver Autism Center. To be placed on our mailing list, please contact SeaverCenterEditor@mssm.edu or The Seaver Autism Center, Icahn School of Medicine at Mount Sinai, One Gustave L. Levy Place, Box 1668, New York, NY 10029. Our phone number is 212.241.0961 and our website is www.SeaverAutismCenter.org.
- **SEAVER IS CONTINUING TO GO GREEN!** Please send your email address to seavercentereditor@mssm.edu to receive this newsletter electronically.

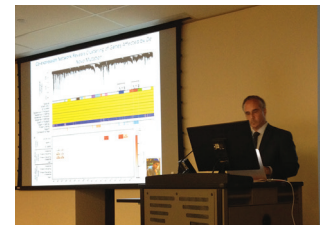


Distinguished Lecturer Series

The most recent Distinguished Lecturer Series took place in September 2013, and Dr. Daniel Geschwind (UCLA) presented on “Autism – A Model for Integrative Intervention of Neuropsychiatric & Neurodevelopmental Disorders.” Immediately following the lecture, which was open to professionals and the public, was a reception with attendees, families, and Seaver researchers. If you would like to be receive notifications for upcoming lectures and seminars, please email seavercentereditor@mssm.edu.



Dr. Daniel Geschwind (left) and Dr. Joseph Buxbaum, Director of the Seaver Autism Center



Dr. Geschwind during his presentation

Conference Happenings



Meredith Gilmer and Casey Gold of the Autism Science Foundation participated in the Exhibitor Session, along with many other community partners such as YAI, FECS Health and Human Services System, and the Jewish Community Center of Manhattan.



The Co-Trustees of the Seaver Foundation, Mr. Hirschell Levine and Mr. John Cohen, each presented welcoming remarks during the morning and afternoon sessions. Participants enjoyed hearing about the history of the Seaver Autism Center, and how the Center has grown since its founding in 1993.



Jamie Rosenblum gave a moving presentation, about her experiences growing up with a brother who has autism, entitled “My Brother, My Friend”. Ms. Rosenblum’s talk was described by one participant as “very touching and real.”

New Study

EARLY-STAGE VISUAL PROCESSING IN ASD: NEUROPHYSIOLOGICAL BIOMARKERS USING VISUAL EVOKED POTENTIALS

Hyper- and hypo-reactivity to sensory input is now included in the DSM-5 as a core deficit of autism spectrum disorder. The purpose of this study is to examine visual processing in children with autism spectrum disorder and to identify biological markers using brainwave measurement. This involves placing three non-invasive electrodes on a child’s head, while the child looks at patterns on a computer monitor. Children may be eligible to participate if they or a sibling are affected by ASD, or if they are typically developing.

If you would like to learn more about this and other studies, call (212) 241-0961 or visit www.seaverautismcenter.org.