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Seaver Clinicians Design Museum Tour for Children with ASD

As part of the Seaver Autism Center’s ongoing effort to engage with the community and help children with autism spectrum disorders (ASD), Drs. Michelle Gorenstein-Holtzman, Director of Community Outreach at the Seaver Autism Center, and Danielle Halpern, Assistant Clinical Professor at the Seaver Center, have developed a specialized tour program for children with ASD at the American Museum of

Natural History (AMNH).

This groundbreaking program, the only one of its kind in the area, involves helping the museum develop a monthly autism program and a tour for children on the autism spectrum. The Seaver Center is educating museum volunteers about ASD and providing them with effective teaching techniques that they can use when conducting tours with children on the spectrum. To this end, staff from the Seaver Center developed materials (i.e., social stories, visual cues, prompt cards) that the museum will utilize for this program. These materials help the children, many of whom have difficulty socializing, by letting them know what they can expect on the tour and how

Going to the American Museum of Natural History

I am going with [insert name here] to the American Museum of Natural History on [insert date].

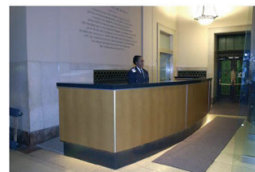


When I go the Museum I will see a lot of interesting things. I will not be able to touch all of the things I see at the museum.

The American Museum of Natural History is located in Manhattan on 79th Street and Central Park West. When we get there we will walk down a driveway to get to the entrance.



When we enter the museum there will be security guards. They will welcome us to the museum and check our bags. They are checking our bags because it is part of their job.



Excerpt from the AMNH social story for 5-9 year olds developed by Drs. Michelle Gorenstein-Holtzman and Danielle Halpern. ©

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Autism Awareness Month Recap

Continuing our tradition of honoring Autism Awareness Month here at the Seaver Autism Center, this past April we hosted and attended a number of autism-related events and shared highlights via electronic communications. We hosted a Seaver Seminar featuring Dr. Janine LaSalle, who gave an interesting and accessible

talk on “Mapping the neuronal methylohome at the epigenetic interface of genetic and environmental risk factors.” We were pleased to attend the Walk Now for Autism Speaks, as well as Autism Awareness Day at Citi Field (Please see “Recent Events” for photos and more details!). In addition, we shared research updates and event announcements in the second

annual weekly Seaver Email Series for Autism Awareness Month and launched two new web pages, including autism FAQs and an autism infographic, on www.seaverautismcenter.org. If you would like to join our email list and receive research updates and event announcements throughout the year as well, please email seavercentereditor@mssm.edu.

Recent Events

► PHELAN-MCDERMID SYNDROME MEETING

On April 30, 2013 in Madrid, Spain, the Hospital La Paz, Instituto de Genética hosted a Scientific Meeting on SHANK3 and Phelan-McDermid Syndrome/22q13 Deletion Syndrome. The meeting was organized by Juan Ramón Rodríguez, Vice President of the Spanish Association of Families with Phelan-McDermid Syndrome; Dr. Joseph Buxbaum, Director of the Seaver Autism Center; and Dr. Catalina Bencur of the French National Institute

of Health and Medical Research (INSERM). Dr. Buxbaum also participated as a speaker, as did Dr. Alex Kolevzon, Clinical Director of the Seaver Autism Center. This was a very exciting event, as research in this important area is still in its early stages and families and scientists alike were enthusiastic about the opportunity to share ideas and form collaborations to move the field forward. Translators were onsite to ensure comprehension by both English and Spanish speakers in attendance.



*Dr. Joseph Buxbaum,
"From Gene Discovery to Novel Therapeutics
in Neurodevelopmental Disorders"*



*Dr. Alex Kolevzon,
"First Clinical Trial of IGF-1 in PMS"*

► AUTISM AWARENESS DAY AT CITI FIELD

The Seaver Center was happy to attend a recent Mets game for Autism Awareness Day at Citi Field as part of Autism Awareness Month. Drs. Alex Kolevzon and Danielle Halpern (not pictured) attended with their families. Sarah Soffes (left) and Jessica Brownfeld, Communications and Marketing Associate at the Seaver Center (right), also enjoyed the game.



► WALK NOW FOR AUTISM SPEAKS

The Seaver Autism Center hosted an exhibitor table at the annual Walk Now for Autism Speaks at Citi Field. Sarah Soffes (left), Lily Schwartz (middle), and Lauren Bush (right) are the current Clinical Research Coordinators at the Seaver Center, and they enjoyed spending the day meeting families affected by autism and sharing information with them about Seaver studies, programs and events.

Museum Tour

Continued from page 1

to react if they feel anxious or uncomfortable. The AMNH will open one hour early once per month to accommodate these tours. This program is extremely exciting because it will provide a more comfortable, and therefore safer, environment, which will allow children on the autism spectrum to make the most of the museum and all it has to offer.

Drs. Gorenstein-Holtzman and Halpern have already completed one volunteer tour guide training, and another one will be held this fall. If you would like more information on this program, please email theseavercenter@mssm.edu.

Current Studies at the Seaver Autism Center

The Seaver Autism Center has many ongoing research studies that are designed to advance knowledge in the field of ASD and apply that understanding to new treatment approaches. Below are summaries of some of our current studies. Please contact the Seaver Autism Center at 212-241-0961 or theseavercenter@mssm.edu if you would like to learn more or participate in a study.

STUDY OF NEW TESTS TO SCREEN FOR AUTISM

The goal of this project, part of the National Children's Study, is to find the best way to identify young children with autism spectrum disorders (ASD). We will evaluate some new ways to ask about, or watch for, behaviors in children 33 to 39 months old that might indicate that they have an ASD. Children suspected of having either a developmental delay or autism will play and complete some activities while being observed. Parents will be asked to complete 2 brief interviews during the study visit. A comprehensive, gold-standard developmental evaluation will be provided at no cost approximately one week later.

NY LEAGUE FOR EARLY LEARNING STUDY

The NYL, part of the YAI Network, has partnered with the Seaver Autism Center

to investigate the utility of a new streamlined diagnostic assessment tool called the Autism Mental Status Exam (AMSE). Several NYL preschool evaluation sites will integrate the AMSE into their evaluations and then analyze whether scores predict how children are ultimately diagnosed. This important collaboration holds promise to develop a streamlined tool for ASD screening in community-based settings.

THE EFFECTS OF OXYTOCIN ON SOCIAL COGNITION IN AUTISM SPECTRUM DISORDERS

This is an NIH-funded study which examines the critical role that oxytocin plays in social behavior and social cognition in adults with ASD. Oxytocin is a promising candidate to target the social deficits in ASD. This study uses intranasal oxytocin during a brain scan (e.g., fMRI) to investigate the effects of oxytocin on complex social cognition, the mirror neuron system, and social reward.

SYNAPDX AUTISM SPECTRUM DISORDER GENE EXPRESSION ANALYSIS STUDY

The goal of this study is to identify a diagnostic screening tool that uses gene expression patterns to help predict an autism diagnosis. Children ages 1½ - 4 years with suspected autism spectrum disorder or developmental delay are eligible to participate.

YAI FAMILY PEER ADVOCATE STUDY

YAI and Premier HealthCare have partnered with the Seaver Autism Center on an important study that uses Family Peer Advocates to help improve the health and well-being of children with autism. Families with children ages 5-12 who are of African American or Latino descent and reside in the Bronx or Manhattan may be eligible.

THE 17TH ANNUAL

Seaver Autism Center Advances in Autism Conference

Sunday, October 6, 2013

LOCATION

STERN AUDITORIUM
ICAHN SCHOOL OF MEDICINE
AT MOUNT SINAI
1468 MADISON AVE., NY, NY 10029

FEATURING

KEYNOTE PRESENTATION BY LINMARIE SIKICH, MD
SCIENTIFIC PRESENTATIONS BY JOSEPH BUXBAUM, PHD,
ABRAHAM (AVI) REICHENBERG, PHD, AND TING WANG, PHD

SAVE THE DATE

PRESENTED BY

The Seaver Autism Center for
Research and Treatment at the
Icahn School of Medicine at Mount Sinai

COURSE DIRECTOR

JOSEPH BUXBAUM, PHD

CONFERENCE BROCHURE TO FOLLOW

FOR MORE INFORMATION
PLEASE CONTACT:
JESSICA BROWNFELD AT
JESSICA.BROWNFELD@MSSM.EDU



• **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 web site is www.SeaverAutismCenter.org.

• **SEAVER IS CONTINUING TO GO GREEN!** Please send your email address to seavercentereditor@mssm.edu to receive this newsletter electronically.



New Grant Awards from the Autism Science Foundation

The Seaver Autism Center is proud to announce two new grant awards from the Autism Science Foundation (ASF). Dr. Teresa Tavassoli, Seaver Postdoctoral Fellow, was awarded an ASF Postdoctoral Fellowship with Dr. Joseph Buxbaum as her mentor, and Dr. Alex Kolevzon was awarded ASF's first Treatment Grant. Congratulations to the grantees!

► **DEVELOPING A SENSORY REACTIVITY COMPOSITE SCORE FOR THE NEW DSM-5**

Dr. Teresa Tavassoli and Dr. Joseph Buxbaum

Sensory reactivity difficulties can be challenging for children with autism spectrum disorder and their families, making everyday activities, such as a trip to the supermarket, an impossible task. This project will look at how children with single gene and idiopathic (meaning unknown origin) forms of ASD react to sensory stimuli, e.g., touch and sound. Sensory reactivity will be measured using parent reports, observations and physiological measures, such as heart rate. Our aim is to identify the most robust ways to mea-

sure sensory reactivity in children with ASD, which can be used to guide diagnosis (sensory over-reactivity and under-reactivity as proposed for the DSM-5) and sensory-based treatments. In addition, by including children with single gene forms of ASD this research can help to identify potential biomarkers for sensory over-and-under-reactivity. This research will also help us to better understand the sensory world of children with ASD and can be used to design sensory-friendly environments.

► **HUMAN CLINICAL TRIAL OF IGF-1 IN CHILDREN WITH IDIOPATHIC ASD**

Treatment Award: Dr. Alexander Kolevzon

A double-blind, randomized, placebo controlled clinical trial of Insulin-Like Growth Factor-1 (IGF-1) in children with a genetic cause of autism (Phelan-McDermid Syndrome) is currently underway at the Seaver Autism Center. That study builds on previous work at the Seaver Autism Center using a mouse model system of Phelan-McDermid Syndrome which showed that IGF-1 treatment reversed the effects of disrupted glutamate signaling associated with impaired learning and memory.

The Autism Science Foundation Treatment Grant will expand the current study to add a cohort of children with autism but without Phelan-McDermid Syndrome. IGF-1 is a commercially available

compound that is known to promote synaptic maturation and plasticity. It has already been shown to reverse behavioral and physiological deficits associated with Rett Syndrome in mouse models, and preliminary results in children with Rett syndrome are promising. Results from this trial are expected to provide evidence that IGF-1 is safe, well-tolerated, and efficacious in targeting core symptoms of autism in children without Phelan-McDermid Syndrome because of the potential that the glutamate signaling pathway is relevant to diverse forms of autism.