Meeting of the IACC

Science Update

Thomas R. Insel, M.D.
Director, National Institute of Mental Health and Chair, IACC
IACC Full Committee Meeting – January 29, 2013

These slides do not reflect decisions of the IACC and are for discussion purposes only.
Q1. When should I be concerned?

**Current Biology**
Volume 22, Issue 4, 21 February 2012, Pages 338–342

Infant Neural Sensitivity to Dynamic Eye Gaze Is Associated with Later Emerging Autism

Mayada Elsabbagh, Evelyne Mercure, Kristelle Hudry, Susie Chandler, Greg Pasco, Tony Charman, Andrew Pickles, Simon Baron-Cohen, Patrick Bolton, Mark H. Johnson, the BASIS Team

2012 Dec 6;5C:10-24

**Developmental Cognitive Neuroscience**

Atypical lateralization of ERP response to native and non-native speech in infants at risk for autism spectrum disorder

Anne M. Seery, Vanessa Vogel-Farley, Helen Tager-Flusberg, Charles A. Nelson

**Molecular Psychiatry** September 11, 2012

Predicting the diagnosis of autism spectrum disorder using gene pathway analysis

E Skafidas, R Testa, D Zantomio, G Chana, IP Everall and C Pantelis

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Q2. How can I understand what is happening?

PNAS

July 31, 2012

Modeling an autism risk factor in mice leads to permanent immune dysregulation
Elaine Y. Hsiao¹, Sara W. McBride, Janet Chow, Sarkis K. Mazmanian, and Paul H. Patterson

JAMA Psychiatry

Original Article | Jan 2013

Microglial Activation in Young Adults With Autism Spectrum Disorder

Katsuaki Suzuki, MD, PhD; Genichi Sugihara, MD, PhD; Yasuomi Ouchi, MD, PhD; Kazuhiko Nakamura, MD, PhD; Masami Futatsubashi, BS; Kiyokazu Takebayashi, MD, PhD; Yujiro Yoshihara, MD, MD; Kei Omata, PhD; Kaori Matsumoto, MA; Kenji J. Tsuchiya, MD, PhD; Yasuhide Iwata, MD, PhD; Masatsugu Tsujii, MA; Toshiro Sugiyama, MD, PhD; Norio Mori, MD, PhD

Molecular Psychiatry January 22, 2013

Elevated maternal C-reactive protein and autism in a national birth cohort

AS Brown¹,², A Sourander¹,³,⁴, S Hinkka-Yli-Salonen³,⁴, I W McKeagues, J Sundvall⁶ and H-M Surcel⁷

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Q3. What caused this to happen and can it be prevented?

Autism After Infection, Febrile Episodes, and Antibiotic Use During Pregnancy: An Exploratory Study
Hjördis Ósk Atladóttir, Tine Brink Henriksen, Diana E. Schendel and Erik T. Parner
Pediatrics 2012;130;e1447; originally published online November 12, 2012

Traffic-Related Air Pollution, Particulate Matter, and Autism
Heather E. Volk, PhD, MPH; Fred Lurmann; Bryan Penfold; Irva Hertz-Picciotto, PhD; Rob McConnell, MD

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Q4. Which treatments and interventions will help?

Effects of STX209 (Arbaclofen) on Neurobehavioral Function in Children and Adults with Fragile X Syndrome: A Randomized, Controlled, Phase 2 Trial

Elizabeth M. Berry-Kravis,1 David Hessl,2 Barbara Rathmell,3 Peter Zarevics,3 Maryann Cherubini,3 Karen Walton-Bowen,3 Yi Mu,4 Danh V. Nguyen,4 Joseph Gonzalez-Heydrich,5 Paul P. Wang,3* Randall L. Carpenter,3 Mark F. Bear,6 Randi J. Hagerman7

Nonmedical Interventions for Children With ASD: Recommended Guidelines and Further Research Needs
Margaret A. Maglione, Daphna Gans, Lopamudra Das, Justin Timbie, Connie Kasari, For the Technical Expert Panel, and HRSA Autism Intervention Research Behavioral (AIR-B) Network
Pediatrics 2012;130;S169

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Q5. Where can I turn for services?

Article
Comparing cognitive outcomes among children with autism spectrum disorders receiving community-based early intervention in one of three placements
Nahmias AS, Kase C, Mandell DS.

*J Autism Dev Disord.* September 2012
Healthcare service use and costs for autism spectrum disorder: a comparison between Medicaid and private insurance.
Wang L, Mandell DS, Lawer L, Cidav Z, Leslie DL.

Occurrence and Family Impact of Elopement in Children With Autism Spectrum Disorders
Connie Anderson, J. Kiely Law, Amy Daniels, Catherine Rice, David S. Mandell, Louis Hagopian and Paul A. Law
*Pediatrics* 2012;130;870; originally published online October 8, 2012

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Q6. What does the future hold, particularly for adults?

Developmental Trajectories in Adolescents and Adults With Autism: The Case of Daily Living Skills
Leann E. Smith, Ph.D., Matthew J. Maenner, Ph.D., Marsha Mailick Seltzer, Ph.D.

A Systematic Review of Vocational Interventions for Young Adults With Autism Spectrum Disorders
Veenstra-VanderWeele and Zachary Warren
Julie Lounds Taylor, Melissa L. McPheeters, Nila A. Sathe, Dwayne Dove, Jeremy
Pediatrics 2012;130;531; originally published online August 27, 2012

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Q7. What other infrastructure and surveillance needs must be met?

*J Autism Dev Disord.* 2013 Jan

Autism Spectrum Disorder Reclassified: A Second Look at the 1980s Utah/UCLA Autism Epidemiologic Study

Judith S. Miller · Deborah Bilder · Megan Farley · Hilary Coon · Judith Pinborough-Zimmerman · William Jenson · Catherine E. Rice · Eric Fombonne · Carmen B. Pingree · Edward Ritvo · Riva-Ariella Ritvo · William M. McMahon

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