

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

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

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, PhD; Kei Omata, PhD; Kaori Matsumoto, MA; Kenji J. Tsuchiya, MD, PhD; Yasuhide Iwata, MD, PhD; Masatsugu Tsujii, MA; Toshirou 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 Brown^{1,2}, A Sourander^{1,3,4}, S Hinkka-Yli-Saloma^{3,4}, IW McKeague⁵, J Sundvall⁶ and H-M Surcel⁷

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

PEDIATRICS

AMERICAN ACADEMY OF PEDIATRICS

Rare Complete Knockouts in Humans: Population Distribution and Significant Role in Autism Spectrum Disorders

Elaine T. Lim,^{1,4,5,6,7} Soumya Raychaudhuri,^{4,6,9} Stephan J. Sanders,¹⁰ Christine Stevens,⁴ Aniko Sabo,¹¹ Daniel G. MacArthur,^{1,4,6} Benjamin M. Neale,^{1,4,5,6} Andrew Kirby,^{1,4,6} Douglas M. Ruderfer,^{1,3,4,5,6,8,12,14,15} Menachem Fromer,^{1,3,4,5,6,8,12,14,15} Monkol Lek,^{1,4,6} Li Liu,¹⁸ Jason Flannick,^{1,2,4,6} Stephan Ripke,^{1,4,5} Uma Nagaswamy,¹¹ Donna Muzny,¹¹ Jeffrey G. Reid,¹¹ Alicia Hawes,¹¹ Irene Newsham,¹¹ Yuanqing Wu,¹¹ Lora Lewis,¹¹ Huyen Dinh,¹¹ Shannon Gross,¹¹ Li-San Wang,¹⁹ Chiao-Feng Lin,¹⁹ Otto Valladares,¹⁹ Stacey B. Gabriel,⁴ Mark dePristo,⁴ David M. Altshuler,^{1,2,4,6} Shaun M. Purcell,^{1,3,4,5,6,8,12,14,15} NHLBI Exome Sequencing Project, Matthew W. State,¹⁰ Eric Boerwinkle,^{11,21} Joseph D. Buxbaum,^{13,14,15,16,17} Edwin H. Cook,²² Richard A. Gibbs,¹¹ Gerard D. Schellenberg,²⁰ James S. Sutcliffe,²³ Bernie Devlin,²⁴ Kathryn Roeder,¹⁸ and Mark J. Daly^{1,4,5,6,7}

Jan 23, 2013

JAMA Psychiatry

Original Article | Jan 2013

Traffic-Related Air Pollution, Particulate Matter, and Autism

Heather E. Volk, PhD, MPH; Fred Lurmann; Bryan Penfold; Irva Hertz-Picciotto, PhD; Rob McConnell, MD

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 Hessler,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

Q5. Where can I turn for services?



November 2012

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

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

J Am Acad Child Adolesc Psychiatry. 2012 Jun

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.

PEDIATRICS
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

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

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