

# Meeting of the IACC

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## Science Update

**Thomas R. Insel, M.D.**

Director, National Institute of Mental Health and Chair, IACC  
IACC Full Committee Meeting – July 8, 2014

# Q1. When should I be concerned?

## CHILD DEVELOPMENT

June 30, 2014

### **Limited fine motor and grasping skills in 6-month-old infants at high risk for autism**

Libertus K, Sheperd KA, Ross SW, Landa RJ

## Autism Research and Treatment

June 22, 2014

### **Computer vision tools for low-cost and non-invasive measurement of autism-related behaviors in infants**

Hasehmi J, Tepper M, Spina TV, Esler A, Morellas V, Papanikolopoulos N, Egger H, Dawson G, Sapiro G

## *Journal of Autism and Developmental Disorders*

Jun 27, 2014

### **Brief Report: Assessment of Early Sensory Processing in Infants at High-Risk of Autism Spectrum Disorder**

Germani T, Zwaigenbaum L, Bryson S, Brian J, Smith I, Roberts W, Szatmari P, Roncadin C, Sacrey LA, Garon N, Vaillancourt T

# Q2. How can I understand what is happening?

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## Translational Psychiatry

May 6, 2014

### **Network inefficiencies in autism spectrum disorder at 24 months**

Lewis JD, Evans AC, Pruett JR, Botteron K, Zwaigenbaum L, Estes A, Gerig G, Collins L, Kostopoulos P, McKinstry R, Dager S, Paterson S, Schultz RT, Styner M, Hazlett H, Piven J

## Molecular Psychiatry

June 3, 2014

### **Elevated fetal steroidogenic activity in autism**

Baron-Cohen S, Auyeung B, Nørgaard-Pedersen B, Hougaard DM, Abdallah MW, Melgaard L, Cohen AS, Chakrabarti B, Ruta L, Lombardo MV.

## PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

June 23, 2014

### **Autism spectrum disorders and race, ethnicity, and nativity: a population-based study**

Becerra TA, von Ehrenstein OS, Heck JE, Olsen J, Arah OA, Jeste SS, Rodriguez M, Ritz B

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



**ehp** ENVIRONMENTAL  
HEALTH  
PERSPECTIVES

A peer-reviewed open access journal published by the National Institute of Environmental Health Sciences

June 23, 2014

## Neurodevelopmental disorders and prenatal residential proximity to agricultural pesticides: The CHARGE study

Shelton JF, Geraghty EM, Tancredi DJ, Delwiche LD, Schmidt RJ, Ritz B, Hansen RL, Hertz-Picciotto I



**JAMA**<sup>®</sup>

The Journal of the American Medical Association

May 7, 2014

## The familial risk of autism

Sandin S, Lichtenstein P, Kuja-Halkola R, Larsson H, Hultman CM, Reichenberg A



nature  
genetics

May 25, 2014

## Brain-expressed exons under purifying selection are enriched for de novo mutations in autism spectrum disorder

Uddin M, Tammimies K, Pellecchia G, Alipanahi B, Hu P, Wang Z, Pinto D, Lau L, Nalpathamkalam T, Marshall CR, Blencowe BJ, Frey BJ, Merico D, Yuen RK, Scherer SW

These slides do not reflect decisions of the IACC and are for discussion purposes only.

# Q4. Which treatments and interventions will help?

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**BMC**  
Neurology

May 15, 2014

## **Corticosteroid therapy in regressive autism: a retrospective study of effects on the Frequency Modulated Auditory Evoked Response (FMAER), language, and behavior**

Duffy FH, Shankardass A, McAnulty GB, Eksioglu YZ, Coulter D, Rotenberg A, Als H

*Journal of the American Academy of*  
**CHILD & ADOLESCENT**  
**PSYCHIATRY**

June 2014

## **Communication interventions for minimally verbal children with autism: a sequential multiple assignment randomized trial**

Kasari C, Kaiser A, Goods K, Nietfeld J, Mathy P, Landa R, Murphy S, Almirall D

**PEDIATRICS**<sup>®</sup>

June 23, 2014

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

## **Caregiver-Mediated Intervention for Low-Resourced Preschoolers With Autism: An RCT**

Kasari C, Lawton K, Shih W, Barker TV, Landa R, Lord C, Orlich F, King B, Wetherby A, Senturk D

# Q5. Where can I turn for services?

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**PEDIATRICS**<sup>®</sup>

May 26, 2014

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

## **Care Coordination and Unmet Specialty Care Among Children With Special Health Care Needs**

Arauz Boudreau A, Goodman E, Kurowski D, Perrin JM, Cooley WC, Kuhlthau K

**JAMA Pediatrics**

Formerly *Archives of Pediatrics & Adolescent Medicine*

June 9, 2014

## **Costs of Autism Spectrum Disorders in the United Kingdom and the United States**

Buescher AV, Cidav Z, Knapp M, Mandell DS

The International Journal of Research and Practice • Volume 18 Number 1 January 2014

**autism**

June 9, 2014

## **Comparing service use and costs among adolescents with autism spectrum disorders, special needs and typical development**

Barrett B, Mosweu I, Jones CR, Charman T, Baird G, Simonoff E, Pickles A, Happé F, Byford S

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

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The International Journal of Research and Practice • Volume 18 Number 1 January 2014

**autism**

April 29, 2014

## **The cost-effectiveness of supported employment for adults with autism in the United Kingdom**

Mavranezouli I, Megnin-Viggars O, Cheema N, Howlin P, Baron-Cohen S, Pilling S

June 10, 2014

## **Depression and its measurement in verbal adolescents and adults with autism spectrum disorder**

Gotham K, Unruh K, Lord C

*Journal of Autism  
and Developmental Disorders*

June 11, 2014

## **Adult Outcomes in Autism: Community Inclusion and Living Skills**

Gray KM, Keating CM, Taffe JR, Brereton AV, Einfeld SL, Reardon TC, Tonge BJ

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

**JAMA Psychiatry**

*Formerly Archives of General Psychiatry*

June 18, 2014

## **Evidence of Reproductive Stoppage in Families With Autism Spectrum Disorder: A Large, Population-Based Cohort Study**

Hoffmann TJ, Windham GC, Anderson M, Croen LA, Grether JK, Risch N

**Molecular  
Psychiatry**

June 19, 2014

## **The autism brain imaging data exchange: towards a large-scale evaluation of the intrinsic brain architecture in autism**

Di Martino A, Yan CG, Li Q, Denio E, Castellanos FX, Alaerts K, Anderson JS, Assaf M, Bookheimer SY, Dapretto M, Deen B, Delmonte S, Dinstein I, Ertl-Wagner B, Fair DA, Gallagher L, Kennedy DP, Keown CL, Keyzers C, Lainhart JE, Lord C, Luna B, Menon V, Minschew NJ, Monk CS, Mueller S, Müller RA, Nebel MB, Nigg JT, O'Hearn K, Pelphrey KA, Peltier SJ, Rudie JD, Sunaert S, Thioux M, Tyszka JM, Uddin LQ, Verhoeven JS, Wenderoth N, Wiggins JL, Mostofsky SH, Milham MPH, Hoffmann TJ, Windham GC, Anderson M, Croen LA, Grether JK, Risch N