

For Immediate Release Tuesday, April 9, 2013 Contact: Office of Autism Research Coordination/NIH E-mail: <u>IACCPublicInquiries@mail.nih.gov</u> Phone: (301) 443-6040

## IACC Releases its 2012 Summary of Advances in Autism Spectrum Disorder Research During National Autism Awareness Month

The Interagency Autism Coordinating Committee (IACC) has published its selections for the twenty most significant studies in the field of autism spectrum disorder (ASD) research in 2012. These studies, summarized in the *2012 IACC Summary of Advances in Autism Spectrum Disorder Research* which was released today, represent major advances in the understanding of the complex causes of autism, the need for early identification and effective treatments, and the importance of effective services and supports for individuals with autism and their families. These twenty studies represent only a small fraction of the results reported in 2012 addressing the objectives of the *IACC Strategic Plan for Autism Spectrum Disorder Research*.

The *IACC Summary of Advances* is released during National Autism Awareness Month, a time when, according to IACC Chair, Dr. Thomas Insel, "The IACC, along with the rest of the nation, recognizes the urgent needs of the autism community, and presses on toward the goal of transformative scientific discoveries and enhanced services and supports that will make a difference in the lives of individuals and families living with ASD."

In the area of autism risk, the IACC highlighted a study from Denmark suggesting that influenza infection and fever during pregnancy may increase the risk of having a child with ASD. The IACC also selected several papers that examined the role of *de novo* genetic mutations—mutations arising spontaneously in the parents' reproductive cells—that occur over time due to events such as random errors in DNA replication or environmental exposures that alter DNA. These studies found that *de novo* mutations contribute to risk for ASD, though these mutations are rarely the singular cause of ASD in a given individual. In addition, evidence continues to accumulate supporting parental age as a significant risk factor for having a child with ASD.

In terms of interventions, the IACC publication highlighted a recent study in which investigators found that early behavioral intervention (12 to 48 months) for children with

ASD can result in improved or "normalized" brain activity patterns that are similar to those found in children without autism while viewing social stimuli, such as faces.

The Committee also called attention to progress in understanding factors that impact health and safety for people on the autism spectrum. These include studies documenting parental experience with wandering behavior in children and risks to their safety as well as a retrospective study that showed that co-occurring conditions such as epilepsy and intellectual disability may correlate with risk of premature death in people with ASD, indicating the need for coordinated healthcare for people on the spectrum. In addition, in 2012, researchers published important studies highlighting several significant areas of need, including the sudden drop in services use and access after high school as well as the need for improved transition strategies, the need for research to help adults with ASD to develop improved daily living skills, and the need for better data on vocational interventions to help with transition to employment.

Overall, the *2012 IACC Summary Advances in ASD Research* provides a snapshot of research progress encompassing both increasing knowledge about ASD and increasing understanding of the challenges faced by people on the spectrum across the lifespan. The IACC provides this document with the goal of helping the community understand key advances and opportunities for research that can improve the lives of people on the spectrum and their families.

The 2012 IACC Summary of Advances in Autism Spectrum Disorder Research and other IACC publications are available at: www.iacc.hhs.gov.

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The IACC is a Federal advisory committee that was created by Congress in an effort to accelerate progress in ASD research and services. The IACC works to improve coordination and communication across the Federal government and work in partnership with the autism community. The Committee is composed of officials from many different Federal agencies involved in autism research and services, as well as people with ASD, parents, advocates, and other members of the autism community. The documents and recommendations produced by the IACC reflect the views of the Committee as an independent advisory body and the expertise of the members of the Committee, but do not represent the views, official statements, policies or positions of the Federal government. For more information on the IACC, please visit: <u>www.iacc.hhs.gov</u>.