



FRIENDS OF NICHD COALITION NEWS

The Eunice Kennedy Shriver National Institute of Child Health and Human Development
National Institutes of Health

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The *Friends of NICHD News* is a quarterly report from the Friends of NICHD highlighting some of the research advances and programs funded by the NICHD, one of the institutes at the National Institutes of Health. The Friends of NICHD is an independent coalition of more than 100 organizations representing scientists, physicians, health care providers, patients and parents concerned with the health and welfare of women, children, families and people with disabilities. The NICHD sponsors research on human development, before and after birth; maternal, child, and family health; reproductive biology and population issues; and medical rehabilitation. For more information, visit the Institute's Web site at <http://www.nichd.nih.gov>.

You're Invited!

On May 22, the Friends of NICHD is sponsoring a congressional briefing entitled, "**Celebrating 45 Years of NICHD Research Progress on Intellectual and Developmental Disabilities.**" NICHD Director Duane Alexander will be joined by scientists from across the country who will share the latest biomedical and behavioral research discoveries that will lead to better diagnosis, treatment, and prevention of a range of intellectual and developmental disabilities, including: autism, Fragile X Syndrome, Down Syndrome and Rett Syndrome. The briefing will take place in 902 Hart Senate Office Building from 12:00 p.m. to 2:00 p.m. and will be a widely attended event. To attend, Please RSVP to Anne Bettsworth at: abettesworth@apa.org.

NICHD Expands Autism Centers of Excellence

In April, the National Institutes of Health awarded grants for a sixth Autism Center of Excellence (ACE) Research Center and an additional three autism networks to its coordinated research efforts. The ACE grants will support studies covering a broad range of autism research areas, including early brain development and functioning, social interactions in infants, rare genetic variants and mutations, associations between autism-related genes and physical traits, possible environmental risk factors and biomarkers, and a potential new medication treatment. Genetics researchers at one of the sites propose to add to their earlier collaborative efforts, which produced the Autism Genetic Resource Exchange (AGRE). Specifically, they aim to recruit 400 more families that have one child affected by autism to expand the existing data on the relationship between autism-related genes and physical traits (phenotype). Two hundred of the additional families will be of African American descent to determine whether African Americans share the same genetic risk factors as identified in the primarily white European AGRE sample. The researchers also intend to identify rare genetic variants, mutations and abnormalities that affect a person's risk for autism. Studying a large population lends greater reliability to the genetic findings from this research and may be more applicable to a wider range of children who have ASD. General information about autism and ASD is available from the NICHD's Web site at: <http://www.nichd.nih.gov/publications/pubs/autism/overview/index.cfm>.

Treatment for ADHD Does Not Lead to Increased Substance Abuse

In two NIH studies, researchers have found that treating children as early as age six or seven with stimulants for Attention Deficit Hyperactivity Disorder (ADHD) is not likely to increase risk of substance abuse as adults. There are at least two reasons for concern about drug abuse in children treated with stimulants for ADHD. First -- stimulants are widely prescribed and like drugs of abuse, they increase dopamine concentrations in the brain, and can themselves be abused. In addition, studies

have shown that the earlier an individual is exposed to some substances with abuse potential, the greater the risk of substance abuse as an adult. However, there is also evidence of impaired dopamine activity in the brains of individuals with ADHD, which could explain both their high risk for drug abuse, and why stimulant drugs in this population can relieve ADHD symptoms without the added risk for later substance abuse. In other words, the risk of substance abuse in patients with ADHD most likely has nothing to do with the use of stimulant medications; however, more research is needed. The studies also showed treatment with stimulants did not prevent substance abuse later in adulthood.

http://www.nichd.nih.gov/news/releases/adhd_040108.cfm

Elevated Blood Sugar Poses Risks for Pregnant Women

Results from the NICHD-supported Hyperglycemia and Adverse Pregnancy Outcomes (HAPO) study indicate that pregnant women with blood sugar levels in the higher range of normal—but not high enough to be considered diabetes—are more likely than women with lower blood sugar levels to give birth to babies with abnormally large body size and to deliver via Cesarean, which are more common for mothers with diabetes. The seven-year study, which involved more than 23,000 pregnant women at 15 centers in 9 countries, is the first to document the increased risks of higher blood sugar levels, not high enough to be considered diabetes, while also adjusting for the other potential causes of these increased risks—such as older maternal age, obesity, and high blood pressure. In addition, the higher the mother's blood sugar levels, the more likely the women were to develop preeclampsia, the more likely their infants were to be born prematurely, and to experience shoulder dystocia, a condition occurring during birth, in which an infant's shoulder becomes lodged inside the mother's body, effectively halting the birth process.

<http://www.nichd.nih.gov/news/releases/may072008-highBloodSugar.cfm>

NICHD Leads Surgeon General's Conference on Preventing Preterm Birth

In June, NICHD will host a two-day conference in Bethesda on preterm birth to increase awareness of preterm birth in the United States, review key findings and expert reports, and establish an agenda for activities in the both the public and private sector. The Office of the Surgeon General and the NICHD have invited experts from the nation's scientific, medical, public health, public policy, and community sectors to collaborate on developing a national agenda and action plan aimed at preventing preterm birth. The second day of the conference is open to interested members of the public and will focus on gathering input and suggestions on the draft agenda and plan. The conference will end with a formal presentation of the final national agenda and action plan to Rear Admiral Steven K. Galston, M.D., M.P.H., Acting Surgeon General of the United States. For more information and to register to attend the public session, please see:

http://www.nichd.nih.gov/news/resources/spotlight/040908_preterm_prevention.cfm

Celebrating 45 years of research on all stages of human development to better understand and improve the health of children, adults, families and communities. 2

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<http://www.apa.org/ppo/friendsofnichd.html>