

ASHG PRESS BRIEFINGS
Salt Lake City, Utah
October 26 - October 29, 2005
EMBARGOED UNTIL WEDNESDAY, OCTOBER 26 AT 4:00 am

Wednesday, October 26, 4:00 PM. *Pre-conference press briefing* with Drs. Tony Wynshaw-Boris, chair, 2005 Program Committee, and William Gahl, 2006 Chair, to discuss meeting content and scientific highlights. Also a preview of the **Genetics and Genomics in the Public Eye** – a special symposium – to be held Friday night from 8-10:00 PM, will be given by Dr. Peter Byers, ASHG president.

Thursday, October 27, 9:00 AM. *An Inherited Longevity Factor*. It seems that everyone is searching for the fountain of youth. Some families seem to have found it, harboring genes that confer exceptional longevity that extends beyond age 95. Drs. Alan Shuldiner and Nir Barzilai from the University of Maryland, School of Medicine, Baltimore, will describe how the *ADINOPECTIN* gene (*ADIPOQ*), which encodes a serum protein expressed by adipose tissue, is associated with high HDL-cholesterol levels and protects against insulin resistance and atherosclerosis. In so doing, it also influences longevity.

Thursday, October 27, 10:00 AM. *The Genetics of Response to Pain*. Pain is a complex trait, the result of both genetic and environmental components. Of late, heightened awareness of the detrimental effects of pain on the healing process has led to enhanced efforts to treat pain more aggressively. Dr. David Goldman, National Institute of Alcohol Abuse and Alcoholism, Rockville, Maryland will present the latest information on the association between chronic pain levels and genetic variants in the immune genes, the genetic determinants of inter-individual variability in pain perception, and two distinct pain loci, one of which confers risk for chronic pain and another that modulates vulnerability to pain.

Thursday, October 27, 11:00 PM. *The HapMap project and other highlights*. The International HapMap Project is a multi-country effort to identify and catalog genetic similarities and differences in human beings. **Dr. Francis Collins**, Director, National Human Genome Research Institute, NIH will be on hand to discuss the project and will be available to answer any questions on other subjects as well.

Thursday, October 27, 4:00 PM. *Ethical Issues in Genetic Counseling*. Alongside the obvious benefits provided by genetic screening exist several ethical issues that require due consideration. The ramifications of these issues will be addressed at a **roundtable discussion**. Prime among these is the threat of genetic discrimination toward asymptomatic individuals who have predictive testing, the focus of the Genetic Discrimination Project in Australia, presented by Dr. Kristine Barlow-Stewart, Royal North Shore Hospital. Other issues pertain to contacting potentially at-risk family members of individuals who tested positive for a heritable cancer or disease syndrome, presented by Dr. Helena Kaariainen, University of Turku, Finland, and the possibility of re-contacting clinical research participants in an IRB-approved gene bank if medically significant results are uncovered by the research, presented by Maureen Smith, Northwestern University, Chicago.

Friday, October 28, 9:00 AM. *Genetic Determinants of Dyslexia*. With an incidence as high as 5-10 percent in school age children, dyslexia is primarily genetically determined. Recently, several genes have been independently identified as causative for the disorder. One of these, located in the *DYX5* locus on chromosome 3, has been shown by Dr. Kere and colleagues from Karolinska Institute, Sweden to be the *axon guidance receptor gene ROBO1*. Another haplotype, on chromosome 6p22, has been shown by Dr. Silvia Paracchini, University of Oxford, to be associated with a biological mechanism for the development of dyslexia. Drs. Haiying Meng and Jeff Gruen, Yale University, also will describe a reading disability locus on chromosome 6p22, located within the *DCDC2* gene, which is preferentially expressed in brain regions known to participate in the reading process. Drs. Bruce Pennington, University of Denver, and Dr. Anthony Monaco, Wellcome Trust, Oxford, will present information on dyslexia and the genetics of language and reading disorders, respectively.

Friday, October 28, 12:00 Noon. *Predicting Preterm Birth.* Preterm labor remains a pervasive problem. Despite advances in obstetric and neonatal care, the womb is still a far more nurturing environment than an incubator. Yet, because many of the factors that trigger preterm birth remain an enigma, it has been difficult to predict which pregnancies will end prematurely. There is a genetic component to preterm birth, determined in part by the genes for *TNF- α* and *IL-6*. Dr. Scott Williams, Center for Human Genetics, Vanderbilt University Medical Center, will explain the comparative genetics, based on single nucleotide polymorphisms (SNPs), between a group of mothers who had preterm births and another group who delivered at term. Specific SNPs in the genes for *TNA- α* , *IL-6*, and their receptors are predictive for preterm birth and can be used to screen for high-risk pregnancy status.