Genomics Weekly News Digest

August 31, 2006

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GENERAL INTEREST

“Family medical history can help avoid diseases”
(Aug 28) Richmond Times Dispatch reports, “If Daddy died of a heart attack and Mommy had a stroke, you ought to keep yourself fit and lean.”

ETHICAL, LEGAL AND SOCIAL ISSUES (ELSI)

Obtaining Informed Consent for Genetic Studies

Diagnostic testing of genetic disorders: limiting the scope of patent claims through disclosure requirements

“Covert DNA analysis to be illegal in UK”
(Aug 30) English Peoples Daily Online reports, “Covertly analyzing someone's DNA will be illegal from Friday next week in the United Kingdom on the recommendation of the Human Genetics Commission (HGC) to the UK government, New Scientist reported on its website on Tuesday.”

CHRONIC DISEASE

Cancer

On attitudes about colorectal cancer screening among gastrointestinal specialists and general practitioners in the Netherlands

“Genetic testing for colon cancer: Should you consider it?”
(Aug 29) Mayo Clinic.com reports, “Find out if your family’s history of colon cancer indicates you might have a genetic link and what to consider when it comes to genetic testing.”

Localized depletion: the key to colorectal cancer risk mediated by MTHFR genotype and folate?
Brockton NT Cancer Causes Control 2006 Oct;17(8):1005-16
Breast cancer susceptibility testing: past, present and future

Identification of a common polymorphism in the TopBP1 gene associated with hereditary susceptibility to breast and ovarian cancer

Childhood Cancer in Families with and without BRCA1 or BRCA2 Mutations Ascertained at a High-Risk Breast Cancer Clinic

Influence of familial cancer history on lymphoid neoplasms risk validated in the large European case-control study epilymph

Cardiovascular Disease (including Hypertension and Stroke)

Unraveling the complex genetics of familial combined hyperlipidemia

“Gene variants reveal susceptibility to cardiovascular disease”
(Aug 24) EurekAlert! reports, “Variations in a gene that acts as a switch to turn on other genes may predispose individuals to heart disease, an international team of researchers led by Duke University Medical Center scientists has discovered.”

“Gene Variations May Increase Stroke Risk For Younger Women”
(Aug 28) Science Daily reports, “University of Maryland researchers have shown a strong association between specific genetic variations and an increased risk of stroke in younger women, adding to the growing evidence of possible genetic influences in stroke.”

Diabetes

Gestational diabetes mellitus increases the risk of cardiovascular disease in women with a family history of type 2 diabetes
Carr DB, et al. Diabetes Care 2006 Sep;29(9):2078-83

Defining the genetic aetiology of monogenic diabetes can improve treatment
Gloyn AL & Ellard S Expert Opin Pharmacother 2006 Sep;7(13):1759-67

Immune System Conditions

Idiopathic thrombocytopenic purpura (ITP): Is there a genetic predisposition?

Mechanisms of Disease: genetic susceptibility and environmental triggers in the development of rheumatoid arthritis

Aging
“Gene for age-related hearing loss”  
(Aug 28) tehrantimes.com reports, “Hearing loss in the elderly has been linked to flaws in a specific gene in a study by Dutch researchers.”

“Age-Linked Vision Loss May Depend on Genes”  
(Aug 28) CBC News reports, “Genetics plays a big role in age-related macular degeneration (AMD), the leading cause of vision loss in older adults, two new studies show.”

“Older twins to shed light on ageing”  
(Aug 29) ninemsn reports, “An Australian study involving 300 sets of older twins is expected to reveal new genes which control how humans age.”

“Live long? Die young? Answer isn't just in genes”  
(Aug 31) International Herald Tribune reports, “Josephine Tesauro never thought she would live so long.”

INFECTIOUS DISEASE

“Breakthrough flu test speeds up diagnosis, pinpoints strain”  
(Aug 29) Seattlepi.com reports, “In an advance that speeds up diagnosis of the most dangerous avian flu, scientists have developed a detailed influenza test that takes less than 12 hours, federal health officials said Monday.”

Host susceptibility to persistent hepatitis B virus infection  

MATERNAL AND CHILD HEALTH / CHILDREN WITH SPECIAL HEALTH NEEDS

Congenital Disorders

“Researchers look at genetic, environmental factors behind cleft lips”  
(Aug 30) Jewish World Review reports, “Most people think the jagged white line on Michaela Skiles’ upper lip is a scar from an accident. They never suspect that Skiles, 34, was born with a cleft lip.”

“Kids’ fracture risk may have a genetic link”  
(Aug 25) Macleans.ca reports, “Some children may have a genetic predisposition toward breaking their bones, according to a Canadian study that compared the family histories of young fracture patients and healthy kids.”

“Understanding Genetic Disorders”  
(Aug 25) Health Scout reports, “You may not have ever heard of Marfan syndrome, Ehlers-Danlos or Loeys-Dietz syndrome. Not many physicians have the chance to regularly work with these extremely rare genetic conditions.”

“Hopkins Develops Online Tool To Aid Research On Certain 'Orphan Diseases’”  
(Aug 29) Bioresearch Online reports, “Many people are afflicted with rare illnesses of unknown cause, and finding a common link to such under-studied or ‘orphaned’ diseases as Bardet-Biedl, Alstrom and Meckel-Gruber syndromes can significantly advance the search for causes and treatment.”
Maternal and Child Health

Newborn screening for metabolic disorders

Parental attitudes to the identification of their infants as carriers of cystic fibrosis by newborn screening
Lewis S, et al. J Paediatr Child Health 2006 Sep;42(9):533-7

“Ohio adds two genetic-disorder screenings at birth”
(Aug 29) The Plain Dealer reports, “Starting Wednesday, having a baby in Ohio will cost more. But for a few families, the increased cost may be worth it.”

“Prenatal diagnostic tests have low risk of miscarriage”
(Aug 31) News-Medical.Net reports, “Pregnant women who seek prenatal diagnostic testing to identify genetic or chromosomal abnormalities have a lower risk of miscarriage than previously believed, according to a UCSF study.”

MENTAL and NEUROLOGICAL CONDITIONS

Mental Health and Behavioral Conditions

“NIH unprecedented genetic study may help identify people most at risk for alcoholism”
(Aug 25) EurekAlert! reports, “Scan of human genome may provide important new tools for prevention and treatment.”

“Gene-on-gene interactions may influence risk for developing alcoholism”

Neurological Disorders

“University of Pittsburgh named Parkinson Disease Center for Advanced Research”
(Aug 28) EurekAlert! reports, “The University of Pittsburgh has been named an American Parkinson Disease Association (APDA) Advanced Center for Parkinson's Disease Research, a designation that places it in an elite group with eight other leading institutions in the United States.”

PHARMACOGENOMICS

The impact of host pharmacogenetics on antiretroviral drug disposition
Owen A Curr Infect Dis Rep 2006 Sep;8(5):401-8

“NUH team discovers how gene affects drug dosage”
(Aug 28) Channel News Asia reports, “Singapore doctors have solved the puzzle of why Indian, Chinese and Malay patients need different dosages of the commonly-used anti-
clotting drug - warfarin - to achieve the same effect, raising the possibility that medicine, in the future, could be prescribed based on ethnicity.

GENOMIC EPIDEMIOLOGY AND TOOLS FOR POPULATION HEALTH

“Genome Institute Turns To Sun’s Opteron Servers To Get Gene-Sequencing Done”
(Aug 28) Yahoo News reports, “Sun Microsystems has succeeded in displacing aging H-P Alpha servers with its Opteron-based line of servers in what is an acknowledged, compute-intensive environment—The Institute for Genomic Research.”

“Brave New World of Genes and Bytes”
(Aug 29) OhmyNews reports, “We all know Craig Venter: 50-something 24-carat genius who after years of extraordinary research and teaching at the prestigious National Institutes of Health founded The Institute for Genomic Research (TIGR) in 1992 and with the talent he assembled there became the first to decode the genome of a free-living organism -- a disease-causing bacterium.”

“China builds biggest gene bank of all 54 ethnic minorities”
(Aug 31) Zeenews.com reports, “Chinese scientists have ended a four-year-long effort to set up the biggest gene bank of over 8,000 DNA samples of the nation’s 54 ethnic minorities, the state media reported today.”