Genomics Weekly News Digest

August 24, 2006

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GENERAL INTEREST

“NHGRI Awards $54 Million to Three Centers of Excellence in Genomic Science”
(Aug 22) NIH News reports, “The National Human Genome Research Institute (NHGRI), part of the National Institutes of Health (NIH), today announced grants totaling $54 million over five years to establish one new Center of Excellence in Genomic Science (CEGS) and continue support for two existing centers.”

“Oakland: Genetics pioneer to visit”
(Aug 22) post-gazette.com reports, “Genetics pioneer Gerald R. Fink will lecture at noon Sept. 7 on the influence of repeated DNA sequences for the third installment of the 2006 Senior Vice Chancellor's Laureate Lecture Series at the University of Pittsburgh.”

ETHICAL, LEGAL AND SOCIAL ISSUES (ELSI)

“Genetics for the DIY set”
(Aug 21) latimes.com reports, “Will I get cancer? Should I take zinc? At-home gene tests say they'll tell you—but their advice is often suspect.”

DNA testing, banking, and genetic privacy

“Genetic testing links to EMRs”
(Aug 18) Healthcare IT News reports, “Hospitals will now be able to complete on-site genetic testing and integrate that data with their own information systems as a result of a new technology partnership between Cerner Corp, Protedyne and Correlagen Diagnostics, Inc.”

“Most Americans Strongly Support Using Genetic Data for Some Uses”
(Aug 18) The Wall Street Journal Online reports, “A large majority of Americans strongly support using genetic information gleaned from DNA tests for medical, law enforcement and personal use, but many also strongly oppose the data's use by insurers and employers, a Wall Street Journal Online/Harris Interactive poll shows.”

Genes on the Web--direct-to-consumer marketing of genetic testing
Wolfberg AJ
CHRONIC DISEASE

Cancer

“Signature' of chromosome instability predicts cancer outcomes”
(Aug 20) EurekAlert! reports, “Microscopic examination of tumor specimens cannot always predict a cancer's aggressiveness, leading to increased interest in molecular approaches to diagnosis.”

Usefulness of EGFR mutation screening in pleural fluid to predict the clinical outcome of gefitinib treated patients with lung cancer

“Geneticists Make Progress Against Ovarian Cancer”
(Aug 21) Medline Plus reports, “Canadian researchers say they've created a new model to identify ovarian cancer genes, a big step toward improving treatment for the disease.”

“Core needle biopsy gives an accurate picture of gene expression in whole tumor”
(Aug 17) EurekAlert! reports, “The gene expression profile detected in the core needle biopsy of a breast tumour is representative of gene expression in the whole tumour.”

Risk-reducing surgery, screening and chemoprevention practices of BRCA1 and BRCA2 mutation carriers: a prospective cohort study

“Major Genetic Risk Factor for Prostate Cancer”
(Aug 21) Health Scout reports, “Scientists may be one step closer to understanding why prostate cancer is more common in African Americans.”

“Common Genetic Prostate Cancer Variant Is Identified”
(Aug 21) mediLexicon reports, “Prostate cancer (CaP) is a presumed result of both genetic and environmental events.”

Familial study of chronic lymphocytic leukemia: aggregation of different malignant processes in families with individuals affected with chronic lymphocytic leukemia

Family and personal history in colorectal cancer patients: what are we missing?
Alberto VO, et al. Colorectal Dis 2006 Sep;8(7):612-4

Cardiovascular Disease (including Hypertension and Stroke)

Arterial thrombosis resulting in amputation in a child with poorly controlled type 1 diabetes and heterozygous Factor V Leiden mutation

Familial aggregation of fainting in a case-control study of neurally mediated hypotension patients who present with unexplained chronic fatigue

Osteoporosis
“Major new osteoporosis study to recruit people in Orkney”
(Aug 23) EurekAlert! Reports, “Up to 2,000 people from the remote Isles of Orkney, Scotland are to be recruited onto a major new study, which aims to identify the genes that cause the common bone-thinning condition, osteoporosis.”

Autoimmune Disorders

Use of Tag single nucleotide polymorphisms (SNPs) to screen PTPN21: no association with Graves’ disease

Mutations in the genes encoding the transcription factors hepatocyte nuclear factor 1 alpha (HNF1A) and 4 alpha (HNF4A) in maturity-onset diabetes of the young
Ellard S & Colclough K Hum Mutat 2006 Aug;27(9):854-69

INFECTIONOUS DISEASE

“CDC Releasing Gene Blueprints”
(Aug 23) latimes.com reports, “U.S. health officials have placed the genetic blueprints of more than 650 flu viruses into a public database, in an attempt to increase flu research and set an example for other nations.”

“Genetic Study To Determine Why Small Group Of HIV Patients Doesn’t Get Sick”
(Aug 17) 365gay reports, “They are medical mysteries, medical marvels -positive people who, long after being infected with the virus that causes AIDS, do not progress to illness.”

MATERNAL AND CHILD HEALTH / CHILDREN WITH SPECIAL HEALTH NEEDS

Congenital Conditions

“Largest review of Loeys-Dietz Syndrome to date”

“Scripps research team reverses Friedreich's ataxia defect in cell culture”
(Aug 21) EurekAlert! reports, “Newly developed compounds activate silenced gene responsible for debilitating disease.”

Maternal and Child Health

“Genes 'responsible for cot death”
(Aug 24) netdoctor.co.uk reports, “Cot death could be the result of genetic faults causing mild lung abnormalities, researchers have claimed.”
“Gene tied to high preemie rate among black women”
(Aug 21) Reuters Health reports, “A gene variant appears to be one reason why African American women are two to three times more likely than white women to have a premature baby.”

MENTAL and NEUROLOGICAL CONDITIONS

Mental Health and Behavioral Conditions

“Mental health, genetic links dividing experts”
(Aug 20) Fort Wayne.com reports, “One percent of all Americans – about 2.4 million people – have schizophrenia.”

Genetics in eating disorders: extending the boundaries of research

Neurological Disorders

“A Massive Search for Autism Genes Begins”
(Aug 19) Technology Review reports, “The hunt for the genetic basis of autism may soon be closing in on its elusive target.”

Early Alzheimer’s disease genetics

Familial Occurrence of Dementia and Parkinsonism. A Systematic Review

PHARMACOGENOMICS

“Under Certain Genetic Circumstances, Naltrexone May Increase the Urge to Drink”
(Aug 23) The Westminster News reports, “Naltrexone (NTX) is able to reduce drinking and craving among many alcoholics and heavy drinkers, but not all of them.”

Relevance of the Deletion Polymorphisms of the Glutathione S-Transferases GSTT1 and GSTM1 in Pharmacology and Toxicology
Bolt HM & Thier R Curr Drug Metab 2006 Aug;7(6):613-28

GENOMIC EPIDEMIOLOGY AND TOOLS FOR POPULATION HEALTH

“Half a million Britons set for DNA disease quest”
(Aug 21) Yahoo News reports, “A project to collect DNA samples from half a million Britons
to unpick the genetic basis of killer diseases including cancer got the go-ahead on Tuesday, marking the start of the world's biggest medical experiment."

**Acute health events in adult patients with genetic disorders: The Marshfield Epidemiologic Study Area**

**Familial Relative Risk Estimates for Use in Epidemiologic Analyses**

**Simultaneous estimation of gene-gene and gene-environment interactions for numerous loci using double penalized log-likelihood**

**Making sense of puzzling genetic association studies: a team approach**

**Candidate Single Nucleotide Polymorphism Selection using Publicly Available Tools: A Guide for Epidemiologists**