March 27, 2007

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Spotlight: Mid-West Community Genetics Forum
The Center for Public Health and Community Genomics (CPHCG) at the University of Michigan is launching a new forum to engage and educate Midwest communities on genomics and encourage feedback on issues of genomic research and practice. Read more.

Autism

“Autism's roots: mix of chance and genetics” 🌵
(Mar 16) Baltimore Sun reports, “Researchers probing the roots of autism say they've found fresh evidence that the disorder, like cancer, could be a tough one to conquer.”

“Tiny, spontaneous gene mutations may boost autism risk” 🌵
(Mar 15) EurekAlert! Health reports, “Tiny gene mutations, each individually rare, pose more risk for autism than had been previously thought, suggests a study funded in part by the National Institute of Mental Health, a component of the National Institutes of Health.”

Behavior

“Genes plus parenting may promote shyness, anxiety” 🌵
(Mar 15) Reuters Health reports, “A mother whose child has a naturally fearful temperament may act less nurturing toward the child, triggering a vicious cycle of behavior that reinforces the child's fearfulness and shyness, researchers propose.”

Genetics of sleep and sleep disorders
Kimura M & Winkelmann J
Cell Mol Life Sci 2007 Mar

Cancer

“Center for research on early detection, cure of ovarian cancer launches” 🌵
(Mar 19) newswise reports, “The Abramson Cancer Center of the University of Pennsylvania, the University of Pennsylvania Health System and School of Medicine, and Penn’s Department of Obstetrics and Gynecology have announced today the establishment of the Center for Research on Early Detection and Cure of Ovarian Cancer.”
“Notorious cancer gene may work by destroying messenger”
(Mar 19) Research News reports, “A new study suggests how a notorious cancer gene may contribute to tumor growth.”

PKDB: Polycystic Kidney Disease Mutation Database-a gene variant database for autosomal dominant polycystic kidney disease
Gout AM, et al.
Hum Mutat 2007 Mar

Medical radiation exposure and breast cancer risk: Findings from the Breast Cancer Family Registry
John EM, et al.
Int J Cancer 2007 Mar

Missed opportunities: family history and behavioral risk factors in breast cancer risk assessment among a multiethnic group of women
Karliner LS, et al.
J Gen Intern Med 2007 Mar;22(3):308-14

Differences in risk factors for breast cancer molecular subtypes in a population-based study
Yang XR, et al.
Cancer Epidemiol Biomarkers Prev 2007 Mar;16(3):439-43

Screening patients with a family history of colorectal cancer
Fletcher RH, et al.
J Gen Intern Med 2007 Apr;22(4):508-13

“Genetics of breast cancer”
(Mar 15) abc7chicago.com reports, “An experimental test is offering women the chance to find out if their genetic make-up puts them at an increase risk of developing breast cancer.”

Cardiovascular, Diabetes, Hypertension, Stroke, and Related Conditions

“Unilab probes genes’ link to high cholesterol”
(Mar 21) Philstar.com reports, “Filipino scientists at leading pharmaceutical company United Laboratories Inc. are now looking at genes associated with cardiovascular diseases to determine more responsive treatment methods for Filipinos with high cholesterol.”

“Video: The difference between fat and thin genes”
(Mar 18) Yahoo News reports, “Researchers have used a new technique to hunt for rare genetic quirks that explain why some people are extremely fat or very thin.”
The V103I polymorphism of the MC4R gene and obesity: population based studies and meta-analysis of 29,563 individuals
Young EH, et al.
Int J Obes (Lond) 2007 Mar

Addressing the obesity epidemic: a genomics perspective
Newell A, et al.
Prev Chronic Dis 2007 Apr;4(2):A31

The Third Generation Cohort of the National Heart, Lung, and Blood Institute's Framingham Heart Study: Design, Recruitment, and Initial Examination
Splansky GL, et al.
Am J Epidemiol 2007 Mar

Genetics of Salt-sensitive Hypertension
Strazzullo P & Galletti F

Using a genetic algorithm to predict evaluation of acute coronary syndromes
Arslanian-Engoren C & Engoren M
Nurs Res 2007 Mar-2007 Apr;56(2):82-8

“Screening catches young athletes’ heart trouble”
(Mar 15) MSNBC reports, “The number of cases of young athletes suddenly dying while playing their sport could be reduced with a 12-point screening process, the American Heart Association wants parents, coaches, and school administrators to know.”

Ethical, Legal, and Social Issues

“Congress moves to ban genetic discrimination”
(Mar 21) NPR reports, “On Capitol Hill, Congress is on the verge of breaking a 12-year impasse over legislation that would ban the use of genetic information by employers and health insurers.”

“Lawmakers seek regulations, standards for home DNA kits”
(Mar 21) The Sun-Sentinel reports, “With the click of a mouse, consumers can buy DNA tests that claim to do everything from pinpointing risks for life-threatening diseases like cancer to steering them to a healthier lifestyle through dietary supplements -- all in the comfort and privacy of their homes.”

“Parsi genes bottled for Rs 125-cr experiment”
(Mar 20) Hindustan Times reports, “A Rs 125-crore genetic research will be done on Parsis in India.”
“Gene therapy for foetuses' hope”
(Mar 19) BBC News reports, “UK scientists believe in the future they will be curing babies in the womb of serious diseases with the use of gene therapy.”

“Facing life with a lethal gene”
(Mar 18) The New York Times reports, “The test, the counselor said, had come back positive.”

Diffusion of genetic testing in oncology: what criteria for regulation?
Eisinger F & Moatti JP

Genetic screening for cystic fibrosis: An overview of the science and the economics
Brice P, et al.
J Cyst Fibros 2007 Mar

Genomic Tools

“The genome's quirky genius”
(Mar 21) The Australian reports, “The meaning of "gene" is as shifting and elusive as anything dreamed of in literary theory. The gene has come a long way in recent years.”

“Parsi genes bottled for Rs 125-cr experiment”
(Mar 20) Hindustan Times reports, “A Rs 125-crore genetic research will be done on Parsis in India.”

“Triplex assay used to assay duplex genomic DNA”
(Mar 20) EurekAlert! reports, “Direct detection of base sequence in duplex nucleic acid has long been an unfulfilled objective.”

“Gene therapy for foetuses' hope”
(Mar 19) BBC News reports, “UK scientists believe in the future they will be curing babies in the womb of serious diseases with the use of gene therapy.”

“Scientist Develops New Mathematical Model To Study Disease Genetics And Evolution”
(Mar 19) Science Daily reports, “USC College computational biologist Peter Calabrese has developed a new model to simulate the evolution of so-called recombination hotspots in the genome.”

China genetic counseling network (CGCN): a website on genetic counseling and genetic education
He M & Li W
Yi Chuan 2007 Mar;29(3):381-4
A Two-stage approach to the correction of ascertainment bias in complex genetic studies involving variance components
Bowden J, et al.

Most rare missense alleles are deleterious in humans: implications for complex disease and association studies
Kryukov GV, et al.

Ascertainment Through Family History of Disease Often Decreases the Power of Family-based Association Studies
Ferreira MA, et al.
Behav Genet 2007 Mar

Screening and genetic diagnosis of haemoglobinopathies
Old JM

Mental Health (including Addiction)

“Genetic link to heavy substance abuse in teenagers”
(Mar 19) Science Daily reports, “Family and community experiences play an important role in whether teenagers experiment with alcohol, cigarettes and marijuana, but genetic influences become more important for progression to heavy substance use, a team led by Cardiff University researchers has found.”

Neonatal and Perinatal Health

“In hispanic women, genetic variations linked to spontaneous preterm birth”
(Mar 16) Medical News Today reports, “In Hispanic women, four gene variants are linked to spontaneous preterm birth, according to abstracts presented by researchers at Yale School of Medicine and Washington University at the Society for Gynecologic Investigation Conference in Reno, Nevada on March 16.”

“Dr. Kenneth Lyons Jones receives lifetime achievement award in genetics from March of Dimes”
(Mar 15) Yahoo reports, “Kenneth Lyons Jones, M.D., the renowned pediatrician and birth defects researcher who was one of two doctors who identified fetal alcohol syndrome (FAS), will receive the 2007 March of Dimes/Colonel Harland Sanders Award for lifetime achievement in genetic sciences.”
The role of gene-environment interaction in predicting adverse pregnancy outcome
Genc MR & Schantz-Dunn J

Nervous System and Movement Disorders

“DNA nanoparticles hold promise in gene therapy for Parkinson's disease”
(Mar 20) Science Daily reports, “University of Kentucky researcher David Yurek was recently awarded $66,000 by The Michael J. Fox Foundation for Parkinson's Research (MJFF) under the foundation's Rapid Response Innovation Awards program.”

“Severe mental retardation gene mutation identified”
(Mar 20) EurekAlert! reports, “Researchers have identified a novel gene mutation that causes X-linked mental retardation for which there was no previously known molecular diagnosis, according to an article to be published electronically on Tuesday, March 20, 2007 in The American Journal of Human Genetics.”

Pharmacogenomics

“Small molecule derived from Rb2/p130 could act as cancer therapeutic”
(Mar 20) EurekAlert! reports, “A small molecule derived from the spacer domain of the tumor-suppressor gene Rb2/p130 has demonstrated the ability to inhibit tumor growth in vivo and could be developed into an anti-cancer therapeutic, according to researchers at Temple University's Sbarro Institute for Cancer Research and Molecular Medicine.”

Pharmacogenetic studies of antidepressant response: how far from the clinic?
Perlis RH

Let’s Go Surfing