Spotlight: Influenza Public Health Genomics Workshop is being held in Atlanta on Jan 11-12, 2007. For more information: http://www.cdc.gov/genomics/activities/flu/index.htm

Birth Defects and Genomics
"Studies from Duke University, Center for Human Genetics further understanding of genetics & genomics"
(Jan 4) NewsRx reports, "New research, "Phenotypic definition of Chiari type I malformation coupled with high-density SNP genome screen shows significant evidence for linkage to regions on chromosomes 9 and 15," is the subject of a report."

"Risk Of Spina Bifida Associated With Choline Metabolism Genes, But Unrelated To Choline Intake"
(Dec 28) Medical News Today reports, "A new study finds an association between two genes involved in choline metabolism and the risk of spina bifida."

"Down syndrome screening recommended for all expectant moms"
(Jan 3) Asbury Park Press reports, "All pregnant women should be offered screening for Down syndrome, regardless of their age, according to new guidelines from the American College of Obstetricians and Gynecologists."

Newborn Screening
How Many Deaths Can Be Prevented by Newborn Screening for Congenital Adrenal Hyperplasia?
Grosse SD & Van Vliet G
Horm Res 2007 Jan;67(6):284-91

Genetics, Genomics and Cancer
"Gene doubles breast cancer risk"
(Jan 3) tehrantimes.com reports, "UK scientists have discovered a new gene linked to breast cancer."

"Five-Gene Signature Linked to Survival in NSCLC"
(Jan 3) medpage today reports, "Relapse-free and overall survival for non-small-cell lung cancer (NSCLC) can be predicted by a molecular signature with five specific genes, researchers here reported."

"The DNA damage response and tumorigenesis"
(Dec 31) EurekAlert! reports, "In the January 1 issue of G&D, Dr. Gerardo
Ferbeyre and colleagues at the University of Montreal report that the DNA damage response pathway is a necessary mediator of oncogene-induced senescence.

"New Genetic Test Predicts Risk Of Metastasis In Patients With Deadly Eye Cancer"
(Dec 28) Science Daily reports, "Imagine being diagnosed with eye cancer -- but your doctor can't tell whether you have the aggressive type that will swiftly spread, causing blindness and death in as early as a year."

"Test could gauge risk in patients with lung cancer"
(Jan 3) USA Today reports, "Scientists in Taiwan have developed a simple, five-gene test aimed at showing which lung cancer patients most need chemotherapy, as similar tests now do for people with breast cancer and lymphoma."

"Genesearch Breast Lymph Node Assay Detects Breast Cancer Metastases With Greater Sensitivity"
(Dec 28) Medical News Today reports, "Results from a prospective clinical study show that the GeneSearchT Breast Lymph Node (BLN) Assay, a gene-based diagnostic test has greater sensitivity than traditional intra-operative methods of detecting the spread of breast cancer to the lymph nodes."

Genomics and the Respiratory System (including Asthma)

Genetic predisposition to asthma and atopy
Contopoulos-Ioannidis DG, et al.
Respiration 2007;74(1):8-12

Genetic factors in pulmonary fibrotic disorders
du Bois RM
Semin Respir Crit Care Med 2006 Dec;27(6):581-8

Host-environment interactions in pulmonary fibrosis
Garantziotis S & Schwartz DA
Semin Respir Crit Care Med 2006 Dec;27(6):574-80

Genes, environments, development and asthma: a reappraisal
Martinez FD
Eur Respir J 2007 Jan;29(1):179-84
Genomics of Obesity, Diabetes, Hypertension, Cardiovascular Diseases and Related Conditions

Unraveling the Genetics of Human Obesity
Mutch DM & Clement K
PLoS Genet 2006 Dec;2(12):e188

Genotype-by-Sex Interaction on Fasting Insulin Concentration: The HyperGEN Study
North KE, et al.
Diabetes 2007 Jan;56(1):137-42

Increased risk of type 2 diabetes from a family history of coronary heart disease and type 2 diabetes
Yeung EH, et al.
Diabetes Care 2007 Jan;30(1):154-6

Risk factors and myocardial infarction in patients with obstructive sleep apnea: impact of beta-2-adrenergic receptor polymorphisms
Bartels NK, et al.

Genomics and Health Behaviors
"Exercise Response Varies With Genetics - Study Identifies Genes And Mutations Associated With Exercise Traits"
(Dec 30) Medical News Today reports, "Your parents may be to thank - or to blame - for how your body responds to exercise, and the genes responsible are slowly being identified."

Common Genetic Variations in CCK, Leptin, and Leptin Receptor Genes Are Associated With Specific Human Eating Patterns
de Krom M, et al.
Diabetes 2007 Jan;56(1):276-80

Ethical, Legal and Social Implications of Genomics
"NPR Series Examines Use, Ethics Of Preimplantation Genetic Diagnosis For Embryonic Disease Screening, Sex Selection"
(Jan 2) Medical News Today reports, "NPR's "All Things Considered" on Wednesday included three reports on the use of preimplantation genetic diagnosis to screen embryos."

"Hazy future for genetic drugs, tests"
(Jan 2) The Mercury News reports, "There may be no better example of the promise and pitfalls of so-called personalized medicine -- tailoring treatments to individual genetic traits -- than the test Genomic Health developed for breast-cancer patients like Katherine Young."

**Pharmacogenetics and Pharmacogenomics**
*"Genetic mutation alters response to heart failure drugs"

(Jan 2) EurekAlert! reports, "The group of drugs known as beta blockers help slow nerve impulses traveling through the heart in order to reduce the heart's workload."

**Let's Go Surfing!**

**The Minnesota Gene Pool Weblog:**  [www.mngenepool.umn.edu/blog](http://www.mngenepool.umn.edu/blog)
A collaboration between the Division of Environmental Health Sciences, School of Public Health and the Genomics Project, Minnesota Department of Health, the blog provides information and commentary on current developments in genomics from a public health perspective.

**Screening Embryos For Disease**
By Joe Palca
National Public Radio