

GEMS Alumni

	Student Name	Final Research Report	Mentors
		Graduated August 2009	
1	Chou, Yi-Ling	Evaluation of Multiple Imputation and LASSO to identify SNPS in a Genome-Wide Association Study	Gina D'Angelo
2	Kume, Rezart	An Investigation of Candidate Genes for Metabolic Syndrome through Protein-Protein Interactions: The HyperGEN Study	Aldi Kraja, Mike Province, & D.C. Rao
3	Liu, Hsien-Ning (Nine-Ning)	Analysis of genotyped and imputed variants in the nicotinic receptor subunit genes outside CHRNA5-CHRNA3-CHRNA4 for association with nicotine dependence	Nancy L. Saccone
4	Ross, Jerlinda G.C.	Enhanced Association Analysis of Candidate Genes and LVH Traits by Modeling Population Admixture in the HyperGEN Study	C. Charles Gu and D.C. Rao
5	Sikka, Namrata	Investigation of the genetic architecture underlying the cardiovascular risk factors in a novel and relatively homogeneous sample from rural China	Treva Rice
6	Su, Yu-Chen (Ray)	Non-alcoholic Fatty Liver Disease (NAFLD)	Ingrid Borecki
		Graduated December 2008	
1	Breed, Mason	A Validation Study of Mutation Detection Software for Next-Generation Sequencing Analysis of Complex Diseases	C. Charles Gu & Rakesh Nagarajan
2	de Erasquin, Gabriel	Hypodopaminergic state as a quantitative trait in schizophrenia: Identification of SNP clusters by decision tree machine learning and QTLs by association	Anson Coate, C. Robert Cloninger, Treva Rice, & Yuh-Jyh Sung
3	Park, Yong-Moon	Contribution of Important Candidate Gene Networks and Inflammatory Markers to Metabolic Syndrome	Aldi Kraja, Mike Province, & D.C. Rao
		Graduated Summer 2008	
1	An, Tae-Hwei (Linus)	Exploratory CART analysis of BMI: Mining gene-gene interactions and generating hypotheses	Ingrid Boreck & Michael Province
2	Duan, Yanan	Enhanced association analysis of a candidate region for fitness response to exercise in the HERITAGE Family Study by incorporating HapMap data and genotype imputation	C. Charles Gu & Treva Rice
3	Juang, Jyh-Ming	Association and Interaction of PPAR-complex Gene Variants with latent Traits of Left Ventricular Diastolic Dysfunction	Victor Davila-Roman, C. Charles Gu, & Lisa de las Fuentes
4	Schrage, Andrew Jonathan (JA)	Combining imputation and cross-population analysis to refine and localize a cocaine dependence association signal on Chromosome 15	Nancy L. Saccone
		Graduated Spring 2008	
1	Barve, Ruteja A.	Mining Interactions in Candidate Genes for Hypertension	C. Charles Gu
2	de las Fuentes, Lisa	Dissecting the Role of CD36 in Metabolic Genetic Pathways to Hypertensive Heart Disease	Victor Davila-Roman and C. Charles Gu

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1	Huang, PinChia	Linkage Analysis of Metabolic Syndrome and Echocardiographic Factors in the HyperGEN Study	Aldi Kraja, Treva Rice, and D.C. Rao
2	Shao, Jin	Bivariate Linkage Analysis of Fitness Responses to Exercise Training in the HERITAGE Family Study	Treva Rice
3	Zhou, Jia	Genome-wide Assessment of Imprinting Effects on the Genetic Linkage of Obesity in the HyperGEN Study	C. Charles Gu and D.C. Rao
Graduated December 2006			
1	Kothari, Parul	Evaluation of PGC1 α Gene Variants in Modulating Hypertensive Heart Disease Phenotypes	Victor Davila-Roman and C. Charles Gu
2	Pincus, Elisa	Association Studies of VAV Gene SNOs with Crohn's Disease	Anne Bowcock
Graduated August 2006			
1	Bergmann, Kelly	Race-specific association analysis of genetic variants and flanking haplotypes in the surfactant protein B gene with neonatal respiratory distress syndrome: a case-control study from a Missouri cohort	F. Sessions Cole, Aaron Hamvas, and Ping An
2	Crosswhite, Michael	Theory and Applications of Index Selection to Identify Responder vs. Non-Responders to Chemotherapy Drugs	Aldi Kraja and Michael Province
3	Flores, Hubert	Latent Factors in High-dimensional Hypertensive Heart Disease Related Phenotypes	C. Charles Gu and Victor Davila-Roman
4	Jacobsen, Petra	Filtered Association Techniques to Detect Genes Influencing CEPH Cell Line Response to Docetaxel Chemotherapy Drug in Chromosome 5	Aldi Kraja and Michael Province
5	Liu, Kuang-Yao	Association Analyses of the Dopamine Receptor Genes with Alcohol Use and Related Phenotypes in a Longitudinal Finnish Study	Danielle M. Dick
6	Phillips, Keydra	Major Gene Effect and Additive Familial Pattern of Inheritance of Asthma Exist among Families of Proband with Sickle Cell Anemia and Asthma	Michael R. DeBaun and Ping An
7	Schierding, William	The role of dopamine receptor genes in drinking patterns, alcohol dependence, and related psychiatric phenotypes: Data from the longitudinal Finnish twin studies	Danielle M. Dick
8	Van Brunt, George Andrew	Using Growth Curves to Model Triglyceride Responses to Fenofibrate Therapy: Associations of Response with Candidate Genes	Ingrid Borecki
9	Ziyab, Ali	A Comparative Analysis of Avian and Mammalian Inner Ear Development and Regeneration	Michael Lovett
Graduated December 2005			
1	Budde, Laura	Methods to Detect SNP Associations with Family Data: A Comparative Analysis	Michael Province
Graduated May 2005			
1	Howell, Shannon	An Improved Algorithm for Finding Linked Subsets in the Presence of Heterogeneity or Interactions	Mike Province
2	Liu, Ying	Linkage and Association Studies of Alcoholism Phenotypes in the COGA Study	Nancy Saccone

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3	Markus, Matthew	Graphical Modeling of Genetic Associations and Viability in CEPH Cell Lines under Chemotherapeutic Selection Pressure	Aldi Kraja and Michael Province
4	Robarge, Jason	Family-based association mapping for the identification of PSORS4, a psoriasis susceptibility gene mapping to the Epidermal Differentiation Complex on human chromosome 1q21	Anne Bowcock
5	Rochat, Ryan	A Novel Method Combining Linkage Disequilibrium Information and Imputed Functional Knowledge for tag SNP Selection	C. Charles Gu and Victor Davila-Roman
6	Shi, Jinguo	A meta-analysis of genome-wide linkage scans for Body Mass Index	Treva Rice
7	Wang, Jian	Tree Linkage Analysis of Lipids in the HyperGEN Study: Covariate Interactions and Linkage Heterogeneity	Ingrid Borecki
		Graduated December 2004	
1	Shi, Jinguo	A Meta-analysis of Genome-wide Linkage Scans for Body Mass Index	Treva Rice
		Graduated May 2004	
1	Bhonagiri, Veena	Microarray analysis of gene expression profiles in regenerating avian sensory epithelia	Michael Lovett
2	Ketkar, Shamika	Genetic Association Analysis of Secondary Traits of Hypertension and a Functional Candidate Gene in the HyperGEN Study	C. Charles Gu
3	Ma, Duanduan	The Peroxisome Proliferator-Activated Receptor Gamma2 Gene is Linked to and Associated with Fasting Blood Glucose Level in the FHS Study	Ingrid Borecki
4	Patki, Amit	Bivariate Linkage Analysis of Obesity and Diabetes in the HERITAGE Family Study	Treva Rice
5	Peters, Michael	Genetic Study: Coronary Artery Calcification in the FHS-SCAN Study	Michael Province
6	Pierce, Brandon	Localization of Psoriasis susceptibility variants with family based association methods	Anne Bowcock
7	Winston, Julia	Analysis of Microarray Data to Characterize Genes Underlying Cleft Lip and Palate	Michael Lovett
8	Wu, Jun	Genome-Wide Linkage Analysis of Lipids in the HyperGEN Study: An Investigation of the Effects of Lipid-Lowering Medications	D.C. Rao and Aldi Kraja