

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel in the order listed on Form Page 2.  
Follow the sample format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Craig L. Hanis		POSITION TITLE	
eRA COMMONS USER NAME CHANIS		Professor	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Brigham Young University, Provo, Utah	B.S.	1974	Zoology
Brigham Young University, Provo, Utah	M.S.	1977	Zoology
University of Michigan, Ann Arbor, Michigan	M.A.	1981	Statistics
University of Michigan, Ann Arbor, Michigan	Ph.D.	1981	Human Genetics

**A. Positions and Honors.**

Research Instructor, Graduate School of Biomedical Sciences, The University of Texas Health Science Center at Houston, 9/1/81 – 8/31/83  
 Assistant Professor, Graduate School of Biomedical Sciences and School of Public Health, The University of Texas Health Science Center at Houston, 9/1/83 – 8/31/87  
 Associate Professor, Graduate School of Biomedical Sciences and School of Public Health, The University of Texas Health Science Center at Houston, 9/1/87 – 8/31/90  
 Acting Director, Center for Demographic and Population Genetics and Medical Genetics Center, The University of Texas Health Science Center at Houston, 11/1/90 – 12/31/91  
 Professor, Genetics and Epidemiology, Human Genetics Center, School of Public Health, The University of Texas Health Science Center at Houston, 9/1/91 – present

John P. McGovern Outstanding Teacher, Graduate School of Biomedical Sciences – 1992  
 NIH – Research Career Development Award – 1987-1992  
 NIH – Member, Epidemiology and Disease Control 1 Study Section – 1998 - 2002

**B. Selected peer-reviewed publications (in chronological order).**

Hanis CL, Sing CF, Clarke WR, and Schrott HG (1983). Multivariate models for human genetic analysis: Aggregation, coaggregation and tracking for systolic blood pressure and weight. *Am J Hum Genet* 35:1196-1210.

Hanis CL, Ferrell RE, Barton SA, Aguilar L, Garza-Ibarra A, Tulloch BR, Garcia CA, Schull WJ (1983). Diabetes among Mexican-Americans in Starr County, Texas. *Am J Epidemiol* 118:659-672.

Weiss KW, Ferrell RE, and Hanis CL (1984). A new world syndrome of metabolic diseases with a genetic and evolutionary basis. *Yearbook of Physical Anthropology* 27:153-178.

Stunkard A, Sorensen TIA, Hanis CL, Teasdale TW, Chakraborty R, Schull WJ, and Schulsinger F (1986). An adoption study of human obesity. *New Engl J Med*. 314:193-198.

Hanis CL, Chakraborty RC, Ferrell RE, Schull WJ (1986). Individual admixture estimates: Disease associations and individual risk of diabetes & gallbladder disease. *Am J Phys Anthro* 70:433-441.

Schull WJ, Hanis CL (1990). Genetics and public health in the 1990's. *Ann Rev Publ Health* 11:105-25.

Hanis CL, Hewett-Emmett D, Bertin TK, Schull WJ (1991). The origins of U.S. Hispanics: Implications for diabetes. *Diabetes Care* 14:618.

Hanis CL, Chu HH, Lawson K, Hewett-Emmett D, Barton SA, Schull WJ, Garcia CA (1993). Mortality of Mexican-Americans with NIDDM: retinopathy and other predictors in Starr County, Texas. *Diab Care* 16:82-89.

Hanis CL, Boerwinkle E, ..., Concannon P, ..., Spielman RS, ..., Bell GI (1996). A genome-wide search for human non-insulin-dependent (type 2) diabetes genes reveals a major susceptibility locus on chromosome 2. *Nature Genetics* 13:161-167.

- Brown S, Hanis CL (1994). Effects of a culturally sensitive diabetes education program among Hispanics with NIDDM from Starr County Texas. *Diabetes Educator* 21(3):203-210.
- Hanis CL (1997). Power considerations in the genetics of diabetes. *Diabetes Reviews* 5:270-276.
- Brown SA, Hanis CL (1999). Culturally Competent Diabetes Education for Mexican Americans: The Starr County Study. *Diab Educator* 25(2):226-236.
- Cox NJ, Frigge M, Nicolae DL, Concannon P, Hanis CL, Bell GI, Kong A (1999). Loci on chromosomes 2 (NIDDM1) and 15 interact to increase susceptibility to Type 2 diabetes in Mexican Americans. *Nature Genet* 21:213-215.
- Horikawa Y, Oda N, Cox NJ, ..., Oda Y, Polonsky KS, Wei S, Concannon P, Iwasaki N, Boerwinkle E, Hanis CL, Bell GI (2000). Identification of a novel calpain-like cysteine protease as the major type 2 diabetes mellitus susceptibility gene in Mexican Americans. *Nature Genetics* 26:163-175
- Sreenen SK, Zhou YP, Otani K, Hansen PA, Currie KPM, Pan CY, Lee JP, Ostrega DM, Pugh W, Horikawa Y, Cox NJ, Hanis CL, Burant CF, Fox AP, Bell GI, Polonsky KS (2001). Calpains play a role in insulin secretion and action. *Diabetes* 50:2013-2020.
- Cuasay L, Lee ES, Oroander PP, Steffen-Batey L, Hanis CL (2001). Prevalence and determinants of type 2 diabetes among Filipino Americans in the Houston Metropolitan Statistical Area, Texas. *Diabetes Care* 24:2054-2058.
- Elbein SC, Chu W, ..., Hemphill C, Schay J, Cox NJ, Hanis CL, Hasstedt SJ (2002). Role of calpain-10 gene variants in familial type 2 diabetes in Caucasians. *J Clin Endocrin Metab* 87:650-4, 2002.
- The FBPP Investigators (2002). Multi-center genetic study of hypertension: The Family Blood Pressure Program (FBPP). *Hypertension* 39:3-9.
- Poston WS, Haddock CK, Spertus J, Catanese DM, Pavlik VN, Hyman DJ, Hanis CL, Foreyt JP (2002). Physical activity does not mitigate G-protein-related genetic risk for obesity in individuals of African descent. *Eating & Weight Disorders* 7(1):68-71.
- Wu X, Cooper RS, Borecki I, Hanis C, Bray M, Lewis CE, Zhu X, Kan D, Luke A, Curb D (2002). A combined analysis of genomewide linkage scans for body mass index from the NHLBI Family Blood Pressure Program. *American Journal of Human Genetics* 70(5):1247-56
- Barkley RA, Brown AC, Hanis CL, Kardia SL, Turner ST, Boerwinkle E (2003). Lack of genetic linkage evidence for a trans-acting factor having a large effect on plasma lipoprotein[a] levels in African Americans. *J Lipid Research* 44(7):1301-5. Barkley, RA, Chakravarti A, Cooper RS, Ellison RC, Hunt SC, Province MA, Turner ST, Weder AB, Boerwinkle E, on behalf of the Family Blood Pressure Program (2004). Positional identification of hypertension susceptibility genes on chromosome 2. *Hypertension* 43(part 2):477-482.
- Daniels PR, Kardia SL, Hanis CL, Brown CA, Hutchinson R, Boerwinkle E, Turner ST (2004). Genetic Epidemiology Network of Arteriopathy study. Familial aggregation of hypertension treatment and control in the Genetic Epidemiology Network of Arteriopathy (GENOA) study. *Am J Med* 116:676-681.
- Bosque-Plata L, Aguilar-Salinas CA, Tusié-Luna MT, Ramírez-Jimenez S, Rodriguez-Torres M, Aurón-Gómez M, Ramírez E, Velasco-Pérez ML, Ramírez-Silva A, Gómez-Pérez F, Hanis CL, Tsuchiya T, Yoshiuchi I, Cox NJ, Bell GI (2004). Association of variation in calpain-10 with type 2 diabetes mellitus in a Mexican population. *Mol Gene & Metab* 81:122-126.
- An P, Freedman BI, Hanis CL, Chen Yi, Weder AB, Schork Nj, Boerwinkle E, Province MA, Hsiung CA, Wu X, Quertermous T, Rao DC (2005). Genome-wide linkage scans for fasting glucose, insulin, and insulin resistance in the NHLBI Family Blood Pressure Program. *Diabetes* 54:909-914.
- Zhu X, Luke A, Cooper RS, Quertermous T, Hanis C, Mosley T, Gu CG, Tang H, Rao DC, Risch N, Weder A (2005). Admixture mapping for hypertension loci with genome-scan markers. *Nature Genetics* 37:177-188.
- Hallman DM, Huber JC, Gonzalez VH, Klein BEK, Klein R, Hanis CL (2005). Familial aggregation of severity of diabetic retinopathy in Mexican Americans from Starr County. *Diab Care* 28:1163-68.
- Brown SA, Blozis SA, Kousekanani K, Garcia AA, Winchell M, Hanis CL (2005). Dosage effects of diabetes self-management education for Mexican Americans: The Starr County Border Health Initiative. *Diab Care* 28:527-532.

- Cooper SP, Burau KE, Frankowski R, Shipp EM, del Junco DJ, Whitworth RE, Sweeney AM, MacNaughton N, Weller NF, Hanis CL (2005). A Cohort Study of Injuries in Migrant Farmworker Families in South Texas. *Annals of Epidemiology* (in press)
- Hayes MG, del Bosque-Plata L, Tsuchiya T, Hanis CL, Bell GI, Cox NJ (2005). Patterns of linkage disequilibrium in the type 2 diabetes gene capain-10. *Diabetes* 54:3573-3576.
- Klos KL, Kardia SL, Hixson JE, Turner ST, Hanis C, Boerwinkle E, Sing CF (2005). Linkage analysis of plasma ApoE in three ethnic groups: multiple genes with context-dependent effects. *Ann Hum Genet* 69:157-167.
- Clark VJ, Cox NJ, Hammond M, Hanis CL, Di Rienzo A (2005). Haplotype structure and phylogenetic shadowing of a hypervariable region in the CAPN10 gene. *Human Genetics* 117:258-266.
- Kraja AT, Rao DC, Weder AB, Cooper R, Curb JD, Hanis CL, Turner ST, de Andrade M, Hsiung CA, Quertermous T, Zhu X, Province MA (2005). Two major QTLs and several others relate to factors of metabolic syndrome in the family blood pressure program. *Hypertension*. 46:751-757.
- Hanis CL, Hallman D (2006). Genetics of diabetic retinopathy. *Current Diabetes Reports*. 6(2):155-161.
- Tang H, Jorgenson E, Gadde M, Kardia SLR, Rao DC, Zhu X, Schork NJ, Hanis CL, Risch N (2006). Racial Admixture and its Impact on BMI and Blood Pressure in African and Mexican Americans. *Human Genetics* (in press).
- Tsuchiya T, Schwartz PEH, del Bosque-Plata L, Hayes MG, Dina C, Froguel P, Towers GW, Fisher S, Temelkova-Kurktschiev T, Rietzsch H, Graessler J, Vcelak J, Palyzova D, Selisko T, Benlova B, Schulze J, Julius U, Hanefeld M, Weedon MN, Evans JC, Frayling TM, Hattersley AT, Orholm-Melander M, Groop L, Malecki MT, Hansen T, Pedersen O, Fingerlin TE, Boehnke M, Hanis CL, Cox NJ, Bell GI (2006). Association of the calpain-10 gene with type 2 diabetes in Europeans: Results of pooled and meta-analyses. *Molecular Genetics and Metabolism* (in press).
- Hallman DM, Boerwinkle E, Gonzalez VH, Klein BEK, Klein R, Hanis CL (2007). A genome-wide linkage scan for diabetic retinopathy susceptibility genes in Mexican Americans with type 2 diabetes from Starr County, Texas. *Diabetes* (in press).

### C. Research Support.

#### ONGOING

University of Texas (PI) 09/01/89 - 08/31/07 State of Texas  
 Starr County Diabetes Related Service Activities  
 The purpose of this project is to provide chronic disease screening in the Texas/Mexico Border area; specifically Starr County.

EY12386 (PI) 01/01/99 – 08/31/09 NIH/NEI  
 Genetics of Diabetic Retinopathy  
 The purpose of this project is to identify the genes involved in the complications of diabetes with special focus on diabetic retinopathy.

U01HL084715 (Subcontract PI) 06/15/06 – 05/31/09 NIH/NHLBI  
 Genome-Wide Association Mapping of Metabolic, Lung and Cardiovascular Phenotypes  
 This is one of 11 projects funded under the NHLBI's RFA titled "Design and Analysis of Genome-wide Association Studies" (RFA HL-05-011) now referred to as ENDGAME ("Enhancing Development of Genome-wide Association Methods"). Its purpose is to develop and disseminate methods for analyzing genome-wide association level data. The purpose of this subcontract to the University of Chicago (where the PI is Dr. Nancy J. Cox) is to participate in the development of methods related to biological pathways and also in the analysis genome wide data obtained on cases and cohort members from Starr County, Texas.

DK071100 (Subcontract PI) 04/01/06 – 03/31/11 NIH/NIDDK  
 Mapping T2DM Genes in GENNID Families  
 The purpose of this project is to perform a genome-wide linkage scan using approximately 7,000 SNPs using the multi-centered data resource collected by the American Diabetes Association involving more than 6,000 individuals. This is a collaborative effort between Dr. Hanis and Dr. Steven Elbein from the University of Arkansas.

NIH/NHGRI CEGS (Co-investigator) 07/01/01 – 06/30/07 NIH  
 Genomic Approaches to Common Chronic Disease  
 Develop evolutionary-population genetic methods for identifying subsets of sites to be used in genotyping-phenotyping studies and apply these strategies for predicting metabolic and physiologic measures of health in African-American and non-Hispanic European-American populations.

JDRF (Subcontract PI) 09/01/04 – 03/31/07 JDRF  
 Genetics of Retinopathy in Type 1 Diabetic African Americans  
 The purpose of this project is to examine the impact of variation in diabetic retinopathy candidate genes on risk and progression of retinopathy. The principal investigator of this project is Dr. Monique Roy at the University of Medicine and Dentistry of New Jersey.

HL054481 (Co-investigator) 09/01/05 – 08/31/08 NIH/NHLBI  
 The Family Blood Pressure Program  
 This project is for the continued follow-up of the Family Blood Pressure program data resources.

NCMHD (Core PI) 02/01/03 - 01/31/08 NIH  
 Creation of a Hispanic Health Research Center in the Lower Rio Grande Valley: Diabetes Core. This project is to develop a research core related to type 2 diabetes in the Lower Rio Grande Valley of Texas.

DK073286 (Subcontract PI) 09/15/06 – 08/31/08 NIH/NIDDK  
 Integrating Education, Group Support and Case Management for Diabetic Hispanics  
 The purpose of this project is to develop culturally and community sensitive methods for integrating diabetes case management as a strategy for improving blood glucose control among Mexican Americans in Starr County, Texas.

### COMPLETED

DK47487 (PI) 09/30/93 - 08/31/06 NIH/NIDDK  
 NIDDM Genes in Hispanics, Blacks and Non-Hispanic Whites  
 The purpose of this project is to locate the genes responsible for susceptibility to NIDDM

HL54504 (PI) 06/01/95 - 08/31/06 NIH/NHLBI  
 Genes and High BP: Mexican American Field Center  
 This is one of 3 field centers to generate data for identifying genes contributing to blood pressure.