

# ***JEANNETTE T. BENSEN***

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## **BUSINESS ADDRESS:**

University of North Carolina at Chapel Hill  
Lineberger Comprehensive Cancer Center-North  
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## **EDUCATION AND TRAINING**

Postdoctoral  
June 2002 – June 2003

Postdoctoral Fellow  
Bowman Gray School of Medicine  
Wake Forest University  
Winston-Salem, North Carolina  
Training: Epidemiology and Genetic Analysis

Graduate  
August 1998 – May 2002

Ph.D. Molecular Medicine  
Bowman Gray School of Medicine  
Wake Forest University  
Winston-Salem, North Carolina  
Thesis: The Interleukin-1 Gene Cluster: A Candidate  
Region for End-Stage Renal Disease

Graduate  
1983-1985

Master of Science in Genetic Counseling  
University of Pittsburgh  
Pittsburgh, Pennsylvania

April 1984 - January 1985

Master Thesis, "Separation of Isoelectric Variants of Human  
Alpha Fetoprotein: A Possible Aid in the Prenatal  
Diagnosis of Congenital Malformations."

June 1984

One Month Genetic Counseling Rotation  
Supervisor: Mark W. Steele, MD  
Children's Hospital of Pittsburgh  
Pittsburgh, Pennsylvania

Undergraduate  
1977-1981

Bachelor of Science  
Major: Biology  
SUNY College at Fredonia  
Fredonia, New York

## **APPOINTMENTS AND POSITIONS**

February 2008 – present

Assistant Professor, Epidemiology

Director, Carolina Well: UNC Health Registry and  
Cancer Survivorship Cohort  
Lineberger Comprehensive Cancer Center  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina

January 2004 – present

Assistant Professor, Epidemiology  
Co-Director, Prostate Cancer Consortium  
Lineberger Comprehensive Cancer Center  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina

August 2003 – December 2003

Research Associate  
Co-Director, Prostate Cancer Consortium  
Lineberger Comprehensive Cancer Center  
University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina

June 2002 – June 2003

Postdoctoral Fellow  
Mentor: Deborah Meyers, Ph.D.  
Mentor: Jianfeng Xu, M.D., Dr.PH.  
Center for Human Genomics  
Bowman Gray School of Medicine  
Wake Forest University  
Winston-Salem, North Carolina

August 1998 - May 2002

Graduate Student  
Advisor: Donald Bowden, Ph.D.  
Department of Biochemistry  
Section Molecular Genetics  
Bowman Gray School of Medicine  
Wake Forest University  
Winston-Salem, North Carolina

August 1996 -1998

Research Associate/Project Manager  
HyperGEN - Family Blood Pressure Study  
Supervisor: Gerardo Heiss, M.D., Ph.D.  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

August 1992 -1998

Research Associate/Co-Investigator  
Atherosclerosis Risk in Communities and Family  
Heart Studies  
Supervisor: Gerardo Heiss, M.D., Ph.D.  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

August 1990 -1998

Project Manager

Atherosclerosis Risk in Communities Study  
Supervisor: Gerardo Heiss, M.D., Ph.D.  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

December 1988 - May 1990      Principal Investigator  
Fetal Alcohol and Drug Prevention Program  
Supervisor: Jimmy Simon, M.D.  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

December 1988 - May 1990      Senior Genetic Counselor  
Supervisor: I.T. Thomas, M.D.  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

May 1989      Invited Reviewer of the *American Journal of Medical Genetics*

May 1985 - December 1989      Genetic Counselor  
Supervisor: Barbara K. Burton, M.D.  
Bowman Gray School of Medicine  
Winston-Salem, North Carolina

Fall 1988      Assistant Editor of the *North Carolina Medical Genetics Association Newsletter*

September 1984 - April 1985      Research Assistant  
Supervisor: Kenneth Garver, M.D., Ph.D.  
Magee-Women's Hospital  
Pittsburgh, Pennsylvania

September 1983 - April 1984      Research Assistant  
Supervisor: David Finegold, M.D.  
Children's Hospital of Pittsburgh  
Pittsburgh, Pennsylvania

1981 - 1983      Research Assistant  
Supervisor: Michael Garrick, Ph.D.  
State University of New York at Buffalo  
Buffalo, New York

### **HONORS/CERTIFICATIONS/AWARDS**

April 2001      Graduate Student Poster Award  
Wake Forest University

|                 |   |
|-----------------|---|
| 1998-1999       | Graduate Fellowship<br>Wake Forest University<br>Graduate School of Arts and Sciences     |
| June 1989       | <i>America's Who's Who-<br/>America's Outstanding Women of the Eighties.</i><br>Biography |
| June 1987       | Board Certified Genetic Counselor<br>Member American Board of Medical Genetics            |
| 1979 - 1981     | Tri Beta National Honor Society,<br>Officer Upsilon Chi Chapter                           |
| Fall 1977 -1980 | Dean's List   |

### **MEMBERSHIPS**

|                |   |
|----------------|---|
| 1985 – present | American Society of Human Genetics          |
| 1985 – 1998    | National Society of Genetic Counselors      |
| 1985 – 1990    | North Carolina Medical Genetics Association |

### **PUBLICATIONS**

Su JL, Arab L, Steck SE, Schroeder J, Fontham ETH, **Bensen JT**, Mohler JL. Obesity and Prostate Cancer Aggressiveness among African and Caucasian Americans. *Cancer* (submitted 5/27/2009).

Carpenter WR, Godley PA, Clark JA, Talcott JA, Finnegan T, Mishel M, **Bensen J**, Rayford W, Su LJ, Fontham ETH, Mohler J. Racial Differences in Trust and Regular Source of Patient Care, and Implications for Prostate Cancer Screening Utilization. *Cancer* (accepted 3/2009).

Basta PV, **Bensen JT**, Tse C-K, Perou CM, Sullivan PF, Olshan AF. Genetic variation in Transaldolase1 and risk of squamous cell carcinoma of the head and neck . *Cancer Detection and Prevention*. 2008;32(3):200-8.

Golembesky AK, Gammon MD, North KE, **Bensen JT**, Schroeder JC, Teitelbaum SL, Neugut AI, Santella RM. Peroxisome proliferator-activated receptor-alpha (PPARA) genetic polymorphisms and breast cancer incidence: a Long Island ancillary study. *Carcinogenesis*. 2008 Oct;29(10):1944-9

Millikan RC, Newman B, Tse C-K, Moorman P, Smith LV, Labbok M, Geradts J, **Bensen JT**, Jackson S, Nyante S, Livasy C, Carey L, Perou CM Epidemiology of basal-like breast cancer. *Breast Cancer Res Treat*. 2008 May;109(1):123-39.

Gaudet MM, Gammon MD, **Bensen JT**, Sagiv SK, Shantakumar S, Teitelbaum SL, Eng SM, Neugut AI, Santella RM, Weston A. Genetic variation of TP53, polycyclic aromatic hydrocarbon-related exposures, and breast cancer risk among women on Long Island, New York. *Breast Cancer Res Treat* 2008 Mar;108(1):93-9.

Schroeder JC\*, **Bensen JT\***, Su J, Mishel M, Ivanova A, Godley P, Smith G, Fonham E, Mohler J. (2006). The North Carolina – Louisiana Prostate Cancer Project (PCaP): Methods and design of a multidisciplinary population-based cohort study of racial differences in prostate cancer outcomes. *Prostate*. 66(11):1162-76. [\*First authorship shared by Schroeder and Bensen]

Gaudet MM, **Bensen JT**, Olshan AF, Schroeder J, Terry MB, Eng SM, Teitelbaum SL, Britton JA, Lehman TA, Neugut AI, Ambrosone CB, Santella RM, Gammon MD. (2006). Catechol-O-methyltransferase haplotypes and breast cancer among women on Long Island, New York. *Breast Cancer Res Treat*. 99(2):235-40.

Gaudet MM, Gammon MD, Santella RM, Britton JA, Teitelbaum SL, Eng SM, Terry MB, **Bensen JT**, Schroeder J, Olshan AF, Neugut AI, Ambrosone CB. (2005). MnSOD Val-9Ala Genotype, pro- and anti-oxidant environmental modifiers, and breast cancer among women on Long Island, New York. *Cancer Causes Control*. 16:1225-1234.

Sun J., Hedelin M., Zheng S.L., Adami H. O., **Bensen J.**, Augustsson-Balter K., Chang B., Adolfsson J., Adams T., Turner A., Meyers D.A., Isaacs W.B., Xu J., Gronberg H. (2004). Interleukin-6 sequence variants are not associated with prostate cancer risk. *Cancer Epidemiol Biomarkers Prev*. 13(10): 1677-9.

Zheng, S.L., Augustsson-Balter, K., Chang, B., Hedelin, M., Li, L., Adami, H.O., **Bensen, J.T.**, Li, G., Johnsson, J.E., Turner, A.R., Adams, T.S., Meyers, D.A., Issacs, W.B., Xu, J., Gronberg, H. (2004). Sequence variants of toll-like receptor 4 are associated with prostate cancer risk: results from the CANcer Prostate in Sweden Study. *Cancer Research* 64(8):2918-22.

**Bensen, J.T.**, Hsu, F-C., Brown, W.M., Sutton, B.S., Norris, J.M., Tracy, R.P., Jenny, N.S., Saad, M.F., Haffner, S.M., Bowden D.W., and Langefeld, C.D. (2004). Association analysis of the plasminogen activator inhibitor-1 (PAI-1) gene 4G/5G polymorphism in Hispanics and African Americans: The IRAS Family Study. *Human Heredity*. 57(3):128-37.

Lindmark, F., Zheng, S., Wiklund, F., **Bensen, J.T.**, Balter, K.A., Chan, B., Hedelin, M., Clark, J., Stattin, P., Meyers, D.A., Adami, H., Issacs, W.B., Gronberg, H., and Xu, J. (2004). The H6D polymorphism in the macrophage inhibitory cytokine gene 1 is associated with prostate cancer. *J Natl Cancer Inst*. 96(16):1248-54.

Hart, P.S., Wright, J.T., Savage, M., Kang, G., **Bensen, J.T.**, Gorry, M.C., Hart, T.C. (2003). Exclusion of candidate genes in two families with autosomal dominant hypocalcified amelogenesis imperfecta. *European Journal of Oral Sciences*. 111(4):326-31.

**Bensen, J.T.**, Langefeld, C.D., Hawkins, G.A., Green L.E., Mychaleckyj, J.C., Brewer, C.S., Kiger, D.S., Binford, S.M., Colicigno, C.J., Allred, D.C., Freedman, B.I., and Bowden, D.W. (2003). Nucleotide variation, haplotype structure and association of the human interleukin-1

gene cluster with end stage renal disease. *Genomics*. 82:194-217.

**Bensen, J.T.**, Lange, L.A., Langefeld, C.D., Chang, B-L., Bleecker, E.R., Meyers, D.A., Xu, J. (2003). Exploring pleiotropy using principal components. *BMC Genet.* 2003, 4(Suppl 1):S53.

**Bensen, J.T.**, Li, L., Langefeld, C.D., McCall, C.E., Cousart, S., Dryman, B.N., Freedman, B.I., and Bowden, D.W. (2003). Association of an IL1A 3'UTR Polymorphism with end stage renal disease and IL1 $\alpha$  expression. *Kidney International* 63:1211-1219.

**Bensen, J.T.**, Dawson, P.A., Mychaleckyj, J.C. and Bowden, D.W. (2001). Identification of a novel human cytokine gene in the interleukin gene cluster on chromosome 2q12-14. *Journal of Interferon and Cytokine Research* 21:899-904.

Fossey, S.C., Mychaleckyj, J.C., Pendleton, J.K., Snyder, J.R., **Bensen, J.T.**, Hirakawa, S., Rich, S.S., Freedman, B.I. and Bowden, D.W. (2001). A high resolution 6.0 transcript map of the Type 2 diabetes susceptibility region on human chromosome 20. *Genomics* 76:45-57.

Williams R.R., Hunt S.C., Heiss, G., Province, M.A., **Bensen J.T.**, Higgins, M., Chamberlain R.M., Ware, J. and Hopkins, P.N. (2001). Usefulness of cardiovascular family history data for population-based preventive medicine and medical research (the Health Family Tree Study and the NHLBI family Heart Study). *Am J Cardiol.* 87(2): 129-35.

Li, R., **Bensen, J.T.**, Hutchinson, R.G., Province, M.A., Hertz-Picciotto, I., Sprafka, J.M. and Tyroler, A. (2000). Family risk score of coronary heart disease (CHD) as a predictor of CHD: the Atherosclerosis Risk in Communities (ARIC) Study and the NHLBI family heart study. *Genetic Epidemiology* 18(3):236-50.

**Bensen, J.T.**, Liese A.D., Rushing, J.T., Province, M., Folsom, A.R., Rich, S.S. and Higgins, M. (1999). Accuracy of proband reported family history: the NHLBI Family Heart Study (FHS). *Genetic Epidemiology*, 17(2):141-50.

**Bensen, J.T.**, Li, R., Hutchinson, R.G., Province, M.A. and Tyroler, H.A. (1999). Family history of coronary heart disease and pre-clinical carotid artery atherosclerosis in African Americans and whites: the ARIC study: Atherosclerosis Risk in Communities. *Genetic Epidemiology* 16(2): 165-178.

**Bensen, J.T.**, Nelson, L.H., Pettenati, M.J., Block, S.M., Brusilow, S.W., Livingstone, L.R, and Burton, B.K. (1991). The first report of management and outcome of pregnancies associated with hereditary orotic aciduria. *American Journal of Medical Genetics* 41: 426-31.

Burton, B.K., Pettenati, M.J., Block, S.M., **Bensen, J.T.** and Roach, E.S. (1989). Non-ketotic hyperglycinemia in a patient with the 9p-syndrome. *American Journal of Medical Genetics* 32:504-505.

**Bensen, J.T.**, Dillard, R.G., Burton, B.K. (1988). Open spina bifida: does cesarean section delivery improve prognosis? *Obstetrics and Gynecology* 71(4)532-534.

Nelson, L.H., **Bensen, J.T.**, Burton, B.K. (1987). Outcomes in patients with unusually high

maternal serum alpha-fetoprotein levels. *American Journal of Obstetrics and Gynecology* 157(3)572-75.

**Bensen, J.T.**, Steele, M.W. (1985). A mildly retarded woman with 46,XX/47,XX, + 18 mosaicism. *American Journal of Medical Genetics* 22:343-356.

### ABSTRACTS

**Bensen, J.T.**, Lange, L.A., Langefeld, C.D., Chang, B-L., Bleecker, E.R., Meyers, D.A., and Xu, J. Exploring Pleiotropy using Principal Components. Genetic Analysis Workshop 13 (GAW13), New Orleans, Louisiana, November 11-14, 2002. *BMC Genet.* 2003 Dec 31;4 Suppl 1:S53.

**Bensen, J.T.**, Langefeld, C. D., Hawkins, G. A., Green, L. E., Mychaleckyj, J. C. , Brewer, C. S., Kiger, D. S., Binford, S. M., Colicigno, C. J., Allred, D., Freedman, B.I., and Bowden, D. W. Dense SNP map of Interleukin-1 gene cluster and end stage renal disease. Accepted poster presentation, the 52<sup>nd</sup> Annual Meeting of the American Society of Human Genetics, Baltimore, Maryland, October 15-19, 2002. *Amer J Hum Genet Supplement* 71:461.

**Bensen, J.T.**, Dawson, P.A., Mychaleckyj, J.C. and Bowden, D.W. (2001) Identification of a novel human cytokine gene in the interleukin gene cluster on chromosome 2q12-14. Accepted poster presentation, the 51<sup>st</sup> Annual Meeting of the American Society of Human Genetics, San Diego, California, October 12-16, 2001. *Amer J Hum Genet Supplement* 69:358.

Liese, A., Evans, G., **Bensen, J.T.**, Province, M.A., Folsom, A., Rich, S. and Higgins, M. (1997). Validation of Family History of Coronary heart Disease: The Family Heart Study (FHS) Experience. Accepted poster presentation, the 16th Annual Education Conference at the National Society of Genetic Counselors on October 25-27, 1997 in Baltimore, Maryland. *Journal of Genetic Counseling*, 6(4).

Li, R., **Bensen, J.T.**, Hutchinson, R.G., Province, M.A., Tyroler, H.A. Family risk score of coronary heart disease (CHD) as a predictor of CHD: the Atherosclerosis Risk in Communities (ARIC) study. Poster presentation, the 4th International Conference on Preventive Cardiology Jointly with the 37th Annual Meeting of the Council on Epidemiology and Prevention, American Heart Association, Montreal, Canada, June 29-July 3, 1997. *Can J Cardiol* 13(Suppl B);323B.

**Bensen, J.T.**, Rushing, J., Province, M., Liese A., Folsom, A., Rich, S., Higgins, M.S. Accuracy of proband family history reporting: the Family Heart Study (FHS) experience. *American Journal of Epidemiology* 143(11), June 1, 1996.

Schreiner, P.J., Liao, D., **Bensen, J.T.**, Higgins, M. Comparison of abdominal height and conventional anthropometry as predictors of lipid and hemostatic levels: the ARIC study. Poster presentation, the 35th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, March 1995. *Circulation* 91(3): P8.

**Bensen, J.T.**, Tyroler, H., Province, M.A., Evans, G.W., Higgins, M., Hutchinson, R.G., Li, R., Sprafka, J.M., Heiss, G. Family history of coronary heart disease and carotid artery atherosclerosis: the ARIC and FHS studies. Poster presentation, 1994 National Society of Genetic Counselors

Annual Education Conference in Montreal, Canada. *Journal of Genetic Counseling* 3(4):296.

**Bensen, J.T.**, Nelson, L.H., Pettenati, M.J., Block, S.M., Brusilow, S.W., and Burton, B.K., Hereditary orotic aciduria: an association with 11;22 balanced translocation and familial inversion of chromosome 4. Poster presentation at 40th Annual Meeting of the American Society of Human Genetics, Baltimore, Maryland, November 1989. *Amer J Hum Genet Supplement* 45:A39.

**Bensen, J.T.**, Burton, B.K. Imperforate anus with hypospadias: evidence for X-linked recessive inheritance. Poster Presentation, 39th Annual Meeting of the American Society of Human Genetics, New Orleans, Louisiana, October 12-15, 1988. *Amer J Hum Genet Supplement* 43:A39.

**Bensen, J.T.**, Dillard, R.G., Burton, B.K. Open spina bifida: does cesarean section delivery improve prognosis? Poster presentation, 37th Annual Meeting of the American Society of Human Genetics, Philadelphia, November 2-5, 1986. *Amer J Hum Genet Supplement* 39:A250.

### **OTHER PUBLICATIONS**

**Bensen, J.T.**, Burton, B.K. Imperforate anus with hypospadias: evidence for X-linked recessive inheritance. Personal correspondence with Victor McKusick, Ninth Edition, *Mendelian Inheritance in Man*, March 1990.

**Bensen, J.T.** (June 1989). Second trimester ultrasound diagnosis of Down syndrome. *North Carolina Medical Genetics Association Newsletter* 7(2).

### **PRESENTATIONS**

**Bensen, J.T.**, Rushing, J., Province, M., Liese, A., Folsom, A., Rich, S., Higgins, M. Accuracy of proband family history reporting: the Family Heart Study (FHS) experience. Platform presentation, the 29th Annual Meeting of the Society for Epidemiological Research, Boston, Massachusetts, June 1996.

**Bensen, J.T.**, "Update on cystic fibrosis testing", Medical Grand Rounds, the Bowman Gray School of Medicine, March 20, 1990.

**Bensen, J.T.**, "Fetal alcohol syndrome", Drug Awareness Week, May 1989, Glenn High School, Kernersville, North Carolina.

**Bensen, J.T.**, "Cystic fibrosis carrier testing and prenatal diagnosis", Pediatric Grand Rounds, the Bowman Gray School of Medicine, April 6, 1988.

**Bensen, J.T.**, "Genetic implications and current advances in presymptomatic testing of Huntington disease", North Carolina Chapter Huntington's Disease Society, March 1988.

### **RESEARCH EXPERIENCE AND DIRECTIONS**

#### **Predoctoral**

**1981-1990**    Research Assistant    Primarily involved in wet-lab experience with researchers

focused on the biochemical and genetic evaluation of various diseases including thalassemia, diabetic nephropathy and adverse outcomes associated with elevated maternal serum alpha-fetoprotein (AFP) levels. In some instances animal models (mouse and rabbit) of human disease were employed and in others human case control samples were evaluated using a variety of techniques including, electrophoresis, column chromatography, enzyme assay, spectrophotometry, DNA isolation, DNA library screening and Southern blot analysis.

Genetic Counselor Research experience was focused in clinical genetics in the subspecialties of both fetal-maternal medicine and pediatrics. Case reports of the clinical management and outcome in patients with chromosomal abnormalities were described. In addition, regional hospital-based patient populations were used to investigate the predictive value of prenatal diagnostic tools (msAFP and ultrasound) and delivery methods in high-risk pregnancies.

**1990-1998** Research Associate/Project Manager While managing a Field Center in a multi-center NHLBI funded observational study focused on the identification of risk factors associated with atherosclerosis, I had the opportunity to participate in Steering Committee meetings, write and review grants, develop protocols, quality control measures, family history instruments, and provide standardized training (ECG, heart rate variability, and pulmonary functions studies). As a genetic counselor and manager of a large epidemiologic study, I understood the importance of appropriate disease classification in providing accurate risk assessment in any setting (clinical or epidemiologic) and wanted to investigate the accuracy of family history data. At this time, I had access to an extensively phenotyped population-based sample and a large number of family histories obtained from study participants and their relatives. To analyze this variable, we needed to quantify, or assign a score to each family history with respect to CHD risk, then use this score to determine its predictive value. My goal was to understand more fully the implications of this family history score and how it might vary depending on what family member provided the history. In addition, I also wanted to evaluate the validity with which individuals and their relatives reported CHD events. Could these reports actually be confirmed through medical records or death certificates? The investigations described above required a working knowledge of the family history instrument, method of collection, CHD event definition and validation, and family risk score algorithm. In addition, collaboration with statistical geneticists and genetic epidemiologists was essential in analyzing this data.

**Doctoral  
1998-2002**

Graduate Student In Dr. Donald Bowden's lab I had the opportunity to pursue my interest in inflammation and its role in complex disease by investigating the IL-1 gene cluster on chromosome 2q12-14 and its association to end-stage renal disease (ESRD). My research goals included developing a single nucleotide polymorphism (SNP) map and gene map across this 430 kb region. I assessed linkage disequilibrium between SNPs and used haplotype prediction algorithms to predict conserved haplotypes in Caucasians and African Americans. In addition, I compared haplotypes between case-control individuals within each ethnic group.

In the process of developing the SNP and gene map I became proficient in utilizing the various web-based databases and software tools to identify polymorphisms, localize genes within BAC clones to order contigs, and bioinformatically identify putative novel genes. I enjoyed generating hypotheses using bioinformatic tools and designing experimental methods for their verification. I found and experimentally verified a novel IL-1 receptor antagonist-like gene within the 2q12-14 region using BLAST searches to map known genes to BAC clones. I subsequently developed a SNP map across this gene that included several SNPs leading to non-conserved amino acid changes.

I am also very interested in gene structure as it relates to function. In my pursuit of this interest, I investigated the 3'UTR AU-rich elements found in IL-1A. Through fragment assembly software I identified a novel variant, verified it experimentally, and through collaborations demonstrated its impact on transcript stability and subsequent protein production, as well as analyzed its association with complex disease.

### **Postdoctoral 2002–2003**

*Postdoctoral Fellow* As a postdoctoral fellow with Drs. Deborah Meyers and Jianfeng Xu, I received additional training in epidemiology and genetic analysis. Specifically, I was involved in a number of genetic research projects including: (1) prostate cancer and inflammation (a candidate gene analysis), (2) linkage analysis of asthma in Hispanics, African Americans and Caucasian populations, (3) association analysis of candidate genes in the IRAS (insulin resistance and atherosclerosis study-NIH multi-centered study) Family Study, (4) principal components analysis of the Framingham Heart Study (GAW 13 data), and (5) haplotype analysis of the IL-1 gene cluster. During my training, I audited an Introduction to and Advanced Epidemiology course as well as learned a number of genetic analysis software tools such as PHASE and HT-TAG (STATA). During this postdoctoral training my goals included obtaining additional training in epidemiology, genetic analysis (focused on association and haplotype analysis), grant and manuscript writing. Along with Dr. Jianfeng Xu, I wrote and submitted an RO1 entitled “Association of inflammatory genes and prostate cancer”. In addition, I was first author on several published manuscripts including: “Association analysis of the plasminogen activator inhibitor-1 (PAI-1) gene 4G/5G polymorphism in a study of insulin resistance in Hispanics and African Americans: The IRAS Family Study” and “Nucleotide variation, haplotype structure and association of the human interleukin-1 gene cluster with end stage renal disease”.

### **Future Directions**

My main research interest is to investigate the role of inflammation in complex disease (ex. cardiovascular disease, cancer) in well-characterized clinical or population-based sample groups with the goal being identification of risk groups for targeted intervention strategies or altered treatment methods. My research will continue to focus on genetic variation in inflammatory genes, in particular single nucleotide polymorphisms (SNP) and haplotype analysis, and gene-gene and gene-

environment interaction in multiethnic epidemiologic studies. Additional interests include utilization of public genomic databases and software for genetic data analysis, as well as translational research with a focus on regulatory DNA sequence motifs and protein expression.