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CAREER HISTORY:

3/2008 – Present: Sr. Research Fellow, CRGGH/NHGRI/NIH

7/2002 – 2/2008: Assistant professor, Division of Genetic Epidemiology. Dept. of community medicine, Medical school, Howard University

2/2001 – 6/2002: Research Associate in Division of Genetic Epidemiology. Dept. of community medicine, medical School, Howard University

10/2000 – 2/2001: Research Instructor, Dept. of Preventive Medicine & Epidemiology, Loyola University Chicago.

4/2000 – 9/2000: Biostatistician, Dept. of Preventive Medicine & Epidemiology, Loyola University Chicago.

9/1999 – 4/2000: Analyst & Programmer, Dept. of Preventive Medicine & Epidemiology, Loyola University Chicago.

3/1998 – 9/1999: Research assistant, Bureau of Business & Economics research, The University of Memphis

1/1997 – 2/1998: Teaching Assistant, Dept. of Math. & Computer science, The University of Memphis

EDUCATION:

MD 1980 – 1985, Medical college, Wuhan University, Wuhan, China

Master Science in Statistics, 1997 - 1999, University of Memphis, Memphis, TN.

Principles of Pharmacokinetic Data Analysis: Modeling and Simulation, Oct. 27 and 28, 2008, NIH

SAS & C PROFESSIONAL PROJECTS:

1. Use SAS/Base, Macro, IML, SQL etc to implement Genetic statistical methodology for article “Possible Sole Causal Gene in A Set of Trait-Linked Genes Using Genotype Data” (*Genetics* 2004 167:1445-1459)
2. Use SAS/Base, Macro, IML, SQL Stat etc to implement Genetic statistical methodology for article “A Statistical Framework for Haplotype Block Inference” (*Journal of Bioinformatics and Computational Biology (JBCB)* 2005 V3, No.5:1021-1038)
3. Use SAS/Base, Macro, IML SQL, Stat etc to implement Genetic Statistical methodology for article “Variance components model with disequilibria” (*European Journal of Human Genetic* May 2006)
4. Use SAS language to implement generic genetic statistical methods, such as, Estimating frequencies (multinomial genotype counts, numerical resampling, maximum likelihood estimation, method of moments, Bayesian estimation), Disequilibrium (Hardy-Weinberg Disequilibrium, Linkage Disequilibrium), population structure, Linkage (Distance, mapping) etc.
5. Use SAS to generate quarterly and annual reports for Tennessee State Government disability survey projects.

6. Use C language to implement Genetic statistical methodology for article "Gene Copy Number Analysis for Family data using semi parametric Copula Model" (Bioinformatics and Biology Insights 2008;2 349 – 361)
7. Use C language to implement Genetic statistical methodology for article "Genetic Network Analysis by Quasi-Bayesian Method" (Journal of Bioinformatics & Computational Biology, 2009:Vol.7; 175-192).

Publications:

Loyola University:

1. Xiaofeng Zhu, Richard S. Cooper, Amy Luke, **Guanjie Chen**, Xiaodong Wu, Donghui Kan, Aravinda Chakravarti, and Alan Weder. A Genome-Wide Scan for Obesity in African-Americans: *DIABETES*, VOL. 51, FEB. 2002
2. Xianfeng Zhu, Richard Cooper, **Guanjie Chen**, Amy Luke, Robert C. Elston. Localization of Q1 mutation by measured haplotype and analysis: *Genetic Analysis workshop 12*, Oct.2000, 589 - 593
3. Xiaofeng Zhu, NourWine Bouzekri, Lorraine Southam, Richard S. Cooper, Adebawale Adeyemo, Colin A. Mckenzie, Amy Luke, **Guanjie Chen**, Robert C. Elston and Ryk Ward: Linkage and association Analysis of Angiotensin I-Converting Enzyme (ACE) – Gene Polymorphisms with ACE Concentration and Blood Pressure: *Am.J.Genet.* 68:1139 – 1148 2001 (American Journal of Human Genetics)
4. Xiaofeng Zhu, Richard S. Cooper, **Guanjie Chen**, Amy Luke, and Robert C. Elston. Localization of the Q1 Mutation by Cladistic Analysis: *Genetic Epidemiology*, 21 (Suppl 1):S594 – 599. 2001

Howard University:

1. **Guanjie Chen**, A.Adeyemo, T. Johnson, J. zhou, D. Panish-Gause, P. Furbert-Harris, A. Amoah, J. Acheampong, D. Rotimi, J. Oli, B. Osotimehin, T. Johson, Y. Chen. H. Daniel, G. Dunston, F. Collins, C. Rotimi. A Genome Wide Scan for quantitative trait loci linked to obesity phenotypes among West Africans. *International Journal of Obesity*, 2005 (March) (29):255-259
2. C. Rotimi, **G. Chen**, A. Adeyemo, P. Furbert-Harris, J. zhou, et al. A Genome wide search for type-2 diabetes Susceptibility Genes in West Africans: *Diabetes* 2004;53:838-841
3. C.Rotimi, H. Daniel, J. Zhou, A. Obisesan, **G. Chen**. Y. Chen, et all. Prevalence and Determinants of Diabetic retinopathy and Cataracts in West African Type 2 Diabetes Patients: *Ethnicity & Disease*. 2003;40:87-94
4. Ao Yuan, **Guanjie Chen**, Yuanxiu Chen, Charele Rotimi, George Bonney. Identify Possible Sole Causal Gene in A Set of Trait-Linked Genes Using Genotype Data: *Genetics* 2004 167:1445-1459
5. Ao Yuan, **Guanjie Chen**, Charles Rotimi, George Bonney: A Statistical Framework for Haplotype Block Inference: *Journal of Bioinfomatics and Computational Biology (JBCB)* 2005 V3, No.5:1021-1038
6. Y.Chen, R. Kitchens, J. Zhou, **G. Chen** etc. Calpain-10 Cene Polymorphisms and Type 2 Diabetes in West Africans: The Africa America Diabetes Mellitus (AADM) Study: *Ann Epidemiol*. 2005 Feb: 15(2)153-159
7. J. Oli, A. Adeyemo, G. Okafor, E. Ofoegbu, B. Onyenikewe, C. Chukwuka, **G. Chen**, Y. Chen, A. Doumately, T. Aje, C. Rotimi. Beta Cell Function and Response to treatment in Nigerians with type 2 diabetes mellitus: *Diabetes Res Clin Pract*. 2005.
8. Adebawale Adeyemo, Johnnie Oli, Godfrey Okafor, Albert Amoah, Joseph Acheampong, Kofi Agyenim-I Boateng, Benjamin A. Eghan Jr., Fayeofori Abbiyesuku Thomas Johnson, Ayo Doumately, **Guanjie Chen**, Jie Zhou, Yuanxiu Chen, Georgia Dunston, Francis Collins Charles Rotimi. A genome wide quantitative trait linkage analysis for serum lipids in type 2 diabetes in an African population: *J. of Atherosclerosis*, 181(2005) 389-397
9. Adeyemo A., **Chen G.**, Chen Y, Rotimi C. Genetic Structure in four west African population groups *BMC Genetic* 2005 6:38
10. **Guanjie Chen**, Adebawale Adeyemo, Jie Zhou, Ao Yuan, Yuanxiu Chen and Charles Rotimi. Genome scan linkage analysis comparing microsatellites and single nucleotide polymorphisms markers for two measures of alcoholism in chromosomes 1, 4, and 7: *BMC Genetics* 2005, 6(Suppl 1):S4
11. Ao Yuan, **Guanjie Chen**, Qi Yang, Charles Rotimi, and George Bonney. Variance components model with disequilibria: *European Journal of Human Genetic* May 2006

12. C. Rotimi, **G. Chen**, A. Adeyemo, L. Jones, J Zhou etc. Genome wide scan and fine mapping of quantitative trait loci for intraocular pressure on 5q and 14q in West Africans. *Invest Ophthalmol Vis Sci.* 2006;47(8):3262-7
13. **Guanjie Chen**, Adebawale A. Adeyemo, Jie Zhou, Yuanxiu Chen, Ayo Doumatey, Kerrie Lashley, Hanxia Huang, Albert Amoah, Kofi Agyenim-Boateng, Benjamin A. Eghan Jr, Godfrey Okafor, Joseph Acheampong, Johnnie Oli, Olufemi Fasanmade, Thomas Johnson, and Charles Rotimi. A genome-wide search for linkage to renal function phenotypes in West Africans with type 2 diabetes. (*Am J. Kidney Dis.* 2007 Mar; 49(3)394-400)
14. Agnar Helgason, Snebjorn P, Gudmar Thorleifsson, Struan F A Grant, Valur Emisson, Steinunn Gunnarsdottir, Adebawale Adeyemo, Yuanxiu Chen, **Guanjie Chen**, Inga Reynisdottir, Fafn Benediktsson, Anke Hinney, Tobben Hansen, Gitte Andersen, Hunt Borch-Hohnsen, Toben Jorgensen, helmut Schafer, Mezbah Faruque, Ayo Doumatey, Jie Zhou, et al: Refining the impact of TCF7L2 gene variants on type 2 diabetes and adaptive evolution. (*Nat. Genet.* 2007 Feb;39(2)218-215.)
15. **Guanjie Chen**, Adebawale Adeyemo, Jie Zhou, Yuanxiu Chen, Hanxia Huang, Ayo Doumatey, Kerrie Lashley, Kofi Agyenim-Boateng, Benjamin A. Eghan Jr, Joseph Acheampong, Olufemi Fasanmade, Thomas Johnson, Godfrey Okafor, Johnnie Oli, Albert Amoah, and Charles Rotimi. Genome-wide search for susceptibility genes to type 2 diabetes in West Africans: Potential role of C-Peptide. (*Diab. Res. Clin. Pract.* 2007)
16. Steinhorsdottir V, Thorleifsson G, Reynisdottir I, Benediktsson R, Jonsdottir T, Walters GB, Styrkarsdottir U, Gretarsdottir S, Emilsson V, Ghosh S, Baker A, Snorradsdottir S, Bjarnason H, Ng MC, Hansen T, Bagger Y, Wilensky RL, Reilly MP, Adeyemo A, Chen Y, Zhou J, Gudnason V, **Chen G**, Huang H, Lashley K, Doumatey A, So WY, Ma RC, Andersen G, Borch-Johnsen K, Jorgensen T, van Vliet-Ostaptchouk JV, Hofker MH, Wijmenga C, Christiansen C, Rader DJ, Rotimi C, Gurney M, Chan JC, Pedersen O, Sigurdsson G, Gulcher JR, Thorsteinsdottir U, Kong A, Stefansson K. A variant in CDKAL1 influences insulin response and risk of type 2 diabetes. (*Net Genet.* 2007 Jun;39(6):770-775)
17. Fox, ER, Benjamin EJ, Sparpong DF, Rotimi, CR, Wilson JG, Steffer MW, **Chen G**, Adeyemo A, etc Epidemiology, Heritability, and Genetic linkage of C-Reactive Protein in African Americans (from the Jackson Heart Study). *Am. J. Cardiology* , 2008;836-841

NIH:

1. Ao Yuan, **Guanjie Chen**, Zhong cheng Zhou, George Bonney, and Charles Rotimi. Gene Copy Number Analysis For Family data Using Semiparametric Copula Model: Bioinformatics and Biology Insights 2008;2 349-361
2. Ao Yuan, **Guanjie Chen**, Charles Rotimi. Genetic Network Analysis by Quasi-Bayesian Method: journal of Bioinformatics and Computational Biology, 2009;Vol.7,175-192

Abstracts:

- 1) Fine mapping on chromosome 20 shows evidence of linkage for BMI and fat mass in Type-II Diabetes effected sib-pair from West African: Charles Rotimi, R.Kittles, D.Parish-Gause, **Guanjie Chen** (51st American Human Genetics conference 2001) (Poster)
- 2) Meta analysis for Type – 2 Diabetes in West African Population: **Guanjie Chen**, Charles Rotmi, Jie Zhou et al. 62nd American Diabetes Association's Scientific Sessions conference, 2002 (poster)
- 3) A Genome Search for Genes Underlying Susceptibility to Insulin Resistance Syndrome in a cohort of type 2 diabetes patients from West Africa. **Guanjie Chen**, Jie Zhou, D. Panish-Gause, P. Furbert-Harris, A. Amoah, J. Acheampong, D. Rotimi, J. Oli, B. Osotimehin, T. Johnson, Y. Chen. H. Daniel, A. Yuan, G. Dunston, F. Collins, C. Rotimi. 52nd Annual conference of the American Society of Human Genetics (poster)
- 4) Calpain-10 Gene Polymorphisms and Type 2 Diabetes in West Africans: Y. Chen, Kittles R., J. Zhou, **G. Chen**, P. Furbert-Harris, A. Amoah, J. Acheampong, J. Oli, B. Osotimehin, T. Johnson, H. Daniel, G. Dunston, F. Collins, C. Rotimi. 52nd Annual conference of the American Society of Human Genetics (poster)
- 5) A Genome-Wide Scan for Obesity in West-Africans: **Guanjie Chen**, J. Zhou, D. Panish-Gause, P. Furbert-Harris, A. Amoah, J. Acheampong, D. Rotimi, J. Oli, B. Osotimehin, T. Johnson, Y. Chen. H.

- Daniel, D. Rotimi, G. Dunston, F. Collins, C. Rotimi. 52nd Annual conference of the American Society of Human Genetics (**Oral Presentation**)
- 6) A Genome-Wide Scan for Diabetes in West-Africans C. Rotimi, **G. Chen**, J. Zhou, D. Panish-Gause, P. Furber-Harris, A. Amoah, J. Acheampong, D. Rotimi, J. Oli, B. Osotimehin, T. Johnson, Y. Chen. H. Daniel, D. Rotimi, G. Dunston, F. Collins. 52nd Annual conference of the American Society of Human Genetics (poster)
 - 7) Genome wide search hypertension genes in Framingham study: **G. Chen**, J. Zhou, C. Rotimi. 13th Genetic Analysis workshop (poster)
 - 8) Search obesity gene in West African: C. Rotimi, **G. Chen**, J. Zhou. International Genetic Epidemiology Society 2002 conference (poster)
 - 9) Search hypertension gene in Type 2 diabetes of West Africa: **G.Chen**, J.zhou, Y.Chen, C.Rotimi. 2003 American College of Epidemiology conference. (poster)
 - 10) Genome wide scan for Obesity gene in Type 2 diabetes in West Africa: **G.Chen**, J.Zhou, Y.Chen, C.Rotimi. 2003 American Obesity associtaion meeting (poster)
 - 11) Genome wide scan for C-peptide phenotype in Type 2 diabetes in West Africa: **G.Chen**, J.Zhou, Y. Chen, C.Rotimi: 2003 53rd Annual conference of the American Society of Human Genetics (poster)
 - 12) Genome Wide Scan for Height phenotype in West Africa: J. Zhou, **G. Chen**, Y. Chen, C. Rotimi 2003 53rd Annual Confetence of the American Society of Human Genetics (poster)
 - 13) Genome Wide Search for Obesity gene in West Africa: **G. Chen**, J. Zhou, Y. Chen, C. Rotimi 63rd American Diabetes Association's Scientific Sessions conference, 2003 (poster)
 - 14) A Statistical Framework for Haplotype Block Inference: Ao Yuan, **Guanjie Chen**, George Bonney International haplotype meeting in Baltimore, Apr, 2004 (poster)
 - 15) A genome wide search for creatinine clearance QTLs in West Africans with type 2 Diabetes: **G.Chen**, J, zhou, C. Rotimi, etc 54th American Human Genetics conference 2004 (poster)
 - 16) Fine mapping of Obesity QTL on 5q14 in a Cohort of Type 2 Diabetes patients: **G. Chen**, A. Adeyemo, J. Zhou, Y. Chen, C. Rotimi. 55th American Human Genetics Conference 2005 (poster)
 - 17) Bivariate linkage analysis of TNF-alpha and Obesity in Type 2 diabetes patients. J. Zhou, **G. Chen**, A. Adeyemo, J. Zhou, Y. Chen, C. Rotimi. 55th American Human Genetics Conference 2005 (poster)
 - 18) Simple F-ratio test reveals Gene-Gene interaction. **G. Chen**, A.Yuan, J. Zhou, A. Adeyemo, Y. Chen, C. Rotimi. 56th American Human Genetics Conference 2006 (poster)
 - 19) The P2 promoter of Hepatocyte Nuclear Factor-4 alpha gene is associated with type 2 diabetes in West Africans, the AADM study. Y. Chen, **G. Chen**, J. Zhou, A. Doumatey, H. Hyang, A. Adeyemo, G. Dunston, F. Collins, C. Rotimi. . 56th American Human Genetics Conference 2006 (poster)
 - 20) A common variant in the ALDH7A1 gene is significantly associated with obesity in west Africans. **G. Chen**, Y. Chen, J. Zhou, A. Doumatry, etc. 68th American Diabetes Conference 2008. San Francisco, CA. (poster)
 - 21) A common FTO gene variant is associated with Type 2 diabetes in West Africans. A. Deyemo, L. Bonnycastle, A. Swift, Y. Chen, **G. Chen**, etc. 68th American Diabetes Conference 2008. San Francisco, CA. (poster)
 - 22) Novel Candidate Genes for Type 2 diabetes Identified on Chromosome 5 in West Africans. A. Adeyemo, **G. Chen**, Y. Chen, J, Zhou, etc 68th American Diabetes Conference 2008. San Francisco, CA.(poster)