

**CURRICULUM VITAE**  
**Momiao Xiong, Ph.D.**

**Office Address :** Human Genetics Center  
The University of Texas Health Science Center at Houston  
School of Public Health  
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**EDUCATION:**

- 1993-1995      **Postdoctoral Fellow** in Computational Biology  
University of Southern California
- 1990-1993      **Ph.D.** in Statistics  
University of Georgia  
Dissertation: Mathematical Theory of Neural Learning and its Applications to  
Statistics and Molecular Biology
- 1988-1990      **M.S.** in Statistics  
University of Georgia
- 1963-1968      **B. S.** in Computational Mathematics  
Fudan University, Shanghai, China

**PRESENT POSITION:**

Assistant Professor, Division of Biostatistics, School of Public Health  
Program in Human and Molecular Genetics, Graduate School of Biomedical  
Science  
The University of Texas Health Science Center at Houston

**PROFESSIONAL EXPERIENCE**

- 09/00-Present      Assistant Professor (Tenure track)  
Human Genetics Center, The University of Texas Health Science Center,  
School of Public Health, Houston
- 06/97-08/00      Assistant Professor (Non-tenure track)  
Human Genetics Center, The University of Texas Health Science Center,  
School of Public Health, Houston
- 01/97-05/97      Visiting Assistant Professor  
Division of Epidemiology, University of Minnesota
- 09/95-12/96      Visiting Assistant Research Scientist

Department of Biostatistics, University of Michigan, Ann Arbor

07/93-08/95 Postdoctoral Fellow  
Department of Mathematics, University of Southern California

01/88-06/93 Teaching Assistant  
Department of Statistics, University of Georgia

08/86-12/87 Visiting Scholar  
Department of Information Systems & Operations Management,  
University of Texas at Dallas

04/84-07/86 Head of Automation Division  
Jiangxi Provincial Power Bureau, Nanchang, China

08/76-03/84 Software Engineer, Head of Computer Section  
Jiangxi Provincial Power Bureau, Nanchang, China

07/75-07/76 Lecturer  
Department of Mathematics, Jiangxi Electric Engineering School

01/72-06/75 Acting Head of Education Section  
Panzhuhua Steel Company, China

12/68-12/71 Assistant Engineer  
Panzhuhua Steel Company, China

## **PROFESSIONAL ACTIVITIES**

2005- The International Society for Computational Biology  
1994- American Society of Human Genetics  
2004- Eastern North American Region/International Biometric Society  
1992-1997 American Statistical Association  
2005- American Statistical Association  
1993-1997 American Society of Neural Networks

## **HONORS AND AWARDS**

2006 Excellence in Research Incentive Award  
2005 Excellence in Research Incentive Award  
2004 White Magnolia Award for Promoting Academic Exchange (Bai Yulan Award),  
Shanghai Municipal Government  
2003-2004 Excellence in Research Incentive Award  
1999-2000 Excellence in Research Incentive Award  
2001- Who's Who in America

1994 Best paper award, Neural Networks with Hidden Markov Process, Artificial Neural Networks in Engineering Conference, 1994, St. Louis, Missouri  
1991 Phi Kappa Phi  
1990 Best Senior Student, University of Georgia  
1989 Best Junior Student, University of Georgia

## ACTIVE GRANTS

Principle Investigator (25%) P01 AR052915-01A1  
Genetics and Ankylosing Spondylitis (AS) Pathogenesis  
Project 4: Analysis of Genetic-Environmental Networks in Spondyloarthritis  
National Institute of Health  
Total Costs: \$7,417,127  
07/01/2006-06/30/2011

Co. Investigator (15%) NIAMS P50 AR054144-01 CORT  
National Institute of Health  
Center of Research Translation in Systems Sclerosis  
National Institute of Health  
Total Costs: \$7,382,620  
09/01/2006-08/31/2011

Co. Investigator (5%) 1 R01 HL084099-01A1  
National Institute of Health  
Genes of the CYP450-Derived Eicosanoid Pathway in Subclinical Atherosclerosis  
Total Costs: \$2,872,877  
12/01/2006 - 11/30/2010

Co. Investigator (5%) PR064803  
Department of Defense  
The Integrative Studies of Genetic and Environmental factors in Systemic Sclerosis  
Total Costs: \$928,125  
1/1/2007 to 12/31/2010.

Co. Investigator (40%): R01 HL74735-01  
National Institute of Health  
Antihypertensive Pharmacogenomics  
Total Costs: \$1,162,816  
04/01/2004-03/30/2008

Co. Investigator (10%): 5P50-AR44888-03  
Mapping Scleroderma Susceptibility Genes in the Choctaw  
National Institute of Health  
Total Costs: \$4,338,583

09/16/2001- 09/14/2006

Co. Principle Investigator: Study of Dynamics and Network Structure of Biological Systems of Complex Diseases  
Science & Technology Commission of Shanghai Municipality, China  
Total Costs: 8,000,000 Yuan  
11/30/04-10/30/07

Consultant: 1R03AR050517-01A2  
Study of SPARC in scleroderma skin fibroblasts.  
National Institute of Health  
Total Costs: \$223,062  
4/1/05 to 3/31/08

#### **PAST GRANTS**

Co. Investigator (15%): U01-HL054481  
Genetic Determinants of High BP in Three Racial Groups (Network)  
National Institute of Health  
Total Costs: \$ 437,846  
09/05/1995 – 06/30/2005

Co. Investigator (5%): 5 R01 HL069125-03  
Gene-Environment Interactions and Stroke Susceptibility.  
National Institute of Health  
Total Costs \$422,749  
09/30/2001 – 09/29/2005

Principle Investigator of subcontract to UT-SPH (50%):  
NIH R01 GM5651-03  
Statistical Models in Population and Quantitative Genetics  
National Institute of Health  
Total Cost: \$423,791  
01/01/1997- 12/31/2001

Principle Investigator of subcontract to UT-SPH (15%):  
NIH ES09912  
Linkage and Linkage disequilibrium for Quantitative Traits  
National Institute of Health  
Total Cost: \$1,267,766  
01/01/1999-12/31/2001

Co-Investigator (20%): NIH HG0 1833-02 A1  
Construction and Application of a U. S. Admixture Map  
National Institute of Health

Co-Investigator (20%)  
Total Cost: \$482,961  
09/24/1999 – 05/31/2002

**APPROVED, BUT NOT FUNDED**

Principle Investigator (20%): Statistical Methods for Genome-wide Association Studies  
National Institute of Health  
Direct Costs: \$586,756  
Total Costs: \$759,164  
04/01/06 - 03/31/09

Principle Investigator (25%): Nonlinear Tests for genome-wide association studies.  
National Institute of Health  
Direct Costs: \$600,000  
Indirect Costs: \$301,014  
Total Costs: \$901,014  
04/01/06 – 03/31/10

Principle Investigator (25%): 1 R01 HL079530-01  
Genetic Epidemiologic Study of Diseases Using Panel Data  
National Institute of Health  
Direct Costs: \$800,000  
Indirect Costs: 240560  
Total Costs: \$1,040,560  
12/01/04 – 11/30/08

Co-Investigator (5%): NIH/NIAMS RO1  
Studies of SPARC in transgenic mice and human scleroderma  
National Institute of Health  
Total Costs: \$1,396,964  
4/1/06 to 3/31/2010

Investigator: Training Grant  
Pre- and Post-Doctoral Training in the Rheumatic Diseases  
National Institute of Health  
Total Cost: \$794,079  
06/01/2006 thru 05/31/2011

Principle Investigator (25%): Modeling Genetic and Proteomic Networks  
National Institute of Health  
Total Costs \$1,822,790  
12/01/2003-11/30/2007

Principle Investigator (30%): Mathematical Models and Computational Algorithms for Analysis  
and Evolution of Genetic and Metabolic Networks  
NSF  
Total Costs \$1,200,690

06/01/2004 - 05/31/2008

Principle Investigator (20%): NSF: 0443926  
Mathematical Analysis and Optimal Control of Genetic Networks  
NSF  
Direct Costs: \$390,810  
Indirect Costs: \$179,844  
Total Costs: \$570,654  
06/01/2005 – 05/31/09

Principle Investigator (25%): R01GM58478-01  
Admixture Linkage Disequilibrium Mapping  
National Institute of Health  
Direct Cost: \$325,000  
Total Cost: 470,530  
04/01/00-03/31/03

Principle Investigator (20%): RFA  
Positional Gene Identification of Complex Traits  
National Institute of Health  
Direct Costs: \$340,998  
Total Costs: \$504,869  
07/01/02-06/30/07

Principle Investigator (30%): Statistical Genetic Dissection of Complex Diseases  
National Institute of Health  
Direct Costs: \$402,543  
Total Costs: \$596,211  
09/01/02-08/31/07

Principle Investigator (25%): Tools for Genome-wide Functional Analysis  
National Institute of Health  
Direct Costs: \$800,000  
Total Costs: \$1,169,258  
12/01-11/30/05

Principle Investigator (25%): Methods and Tools for Mining Gene Expression Data  
National Institute of Health  
Direct Costs: \$645,593  
Total Costs: \$940,701  
09/01/01-08/31/05

Principle Investigator (15%): R01 GM 59385-01  
Methodology for Mapping Complex Disease Genes  
National Institute of Health  
Direct Costs: \$470,411  
Total Costs: \$690,394  
12/01/99-11/31/03

Principle Investigator (20%): Statistical Methods for Gene Expression Tumor Classification  
National Institute of Health  
Direct Costs: \$525,000  
Total Costs: \$771,510  
12/01/00-11/30/04

Principle Investigator of subcontract to UT-SPH (10%):  
Toward a Molecular Classification of Renal Cell Carcinoma  
National Institute of Health  
Direct Costs: \$673,157  
Total Costs: \$993,005  
10/01/99-09/30/04

Principle Investigator subcontract to UT-SPH (15%):  
Candidate Gene Association for Malaria Drug Resistance  
National Institute of Health  
Direct Costs: \$284,464  
Total Costs: \$420,049  
07/01/03—6/30/08

Co-Investigator (10%): Microarray of Scleroderma Fibroblasts  
National Institute of Health  
Total costs: \$445,500  
09/01/2003 – 08/31/2006

Co-Investigator (10%): Genes and Environment Interaction in Atherosclerosis: Mouse Model  
National Institute of Health  
Total Cost: \$1,485,208  
12/01/2003-11/30/2007

Co-Investigator (5%): Genomic and Proteomic Studies of Systemic sclerosis  
Scleroderma Research Foundation  
Total Cost: \$400,000  
04/01/2004 – 03/31/2006

Co-Investigator (10%): Biomarkers of SSc Activity and Severity: A Proteomics Approach  
National Institute of Health  
Total Cost: \$668,250  
12/01/04 – 11/30/07

Co-Investigator (10%): Biomarkers of Disease Activity and Renal Damage I SLE  
National Institute of Health  
Total Cost: \$297,000  
10/01/04 0 /9/30/06

Co-Investigator (10%): Biomarkers in Systemic Sclerosis

National Institute of Health  
Direct Costs: \$450,000  
Total Costs: \$668,250  
12/1/04-11/30/07

Co-Investigator (10%): Gene Expression and the Molecular Genetics of Hypertension  
National Institute of Health  
Direct Costs: \$850,000  
Total Costs: \$1,259,950  
04/01/01-03/31/05

Co-Investigator (10%): Identification of Metastasis-related Genes in Oral Cancer  
National Institute of Health  
Direct Costs: \$48,710  
Total Costs: \$72,495  
07/01/02-06/30/04

## ACADEMIC ACTIVITIES

### COURSES TAUGHT

2006

Spring

Computational Systems Biology (Course organizer and Lecturer)  
Population Genetics (Lecturer)  
Individual Study on Biostatistics

Summer

Data Mining in Genetic Epidemiology (Lecturer)

Fall

Introduction to Genomics and Bioinformatics (Course organizer and Lecturer)  
Statistical Genetics (Lecturer)

2005 Fall

Introduction to Genomics and Bioinformatics (Course organizer and Lecturer)

2005 Spring

Population Genetics (Lecturer)  
Dissertation Research

2004 Fall

Introduction to Genomics and Bioinformatics (Course organizer and Lecturer)  
Research in Biomedical Science

Spring

Population Genetics (Lecturer)

2003

	Fall	Introduction to Genomics and Bioinformatics (Course organizer and Lecturer) Research in Biomedical Science
	Spring	Population Genetics (Lecturer)
	Summer	Microarrays and Functional Genomics (Course organizer and lecturer)
2002	Spring	Population Genetics (Lecturer) Dissertation Research
	Summer	Dissertation Research
	Fall	Introduction to Genomics and Bioinformatics (Course organizer and Lecturer, 60% responsibility) Statistical Genetics (Lecturer)
2001	Spring	Population Genetics (Lecturer)
	Summer	Methods on Genet Epidemiology and Linkage (Lecturer) Research in Biomedical Science
	Fall	Introduction to Genomics and Bioinformatics (Course organizer and Lecturer)  Microarrays and Functional Genomics (Course organizer and lecturer) Research in Biomedical Science Tutorial Research Experience
2000	Spring	Population Genetics (Lecturer)
	Summer	Research in Biomedical Science
	Fall	Introduction to Genomics and Bioinformatics (Lecturer) Microarrays and Functional Genomics (Course organizer and lecturer)
1999	Spring	Population Genetics (Lecturer) Tutorial Research Experience Tutorial Research experience
	Summer	Tutorial Research Experience Research in Biomedical Science
	Fall	Introduction to Genomics and Bioinformatics (Lecturer) Microarrays and Functional Genomics (Course organizer and lecturer)

## Tutorial Research Experience

1998

Fall

Introduction to Genomics and Bioinformatics (Lecturer)  
Tutorial Research Experience

## PUBLICATIONS

### A. PAPERS IN REFEREED JOURNALS

1. Zhao J, Jin L, **Xiong MM**. (2006) Nonlinear tests for genome-wide association studies. *Genetics*. Jul 2; [Epub ahead of print]
2. Zhou XD., **Xiong MM**, Tan FK, Guo XJ., Arnett FC. (2006) SPARC, an upstream regulator of CTGF in response to TGF- $\beta$  stimulation. *Arthritis & Rheumatism* (In Press)
3. Zhao J, Jin L, **Xiong MM**. (2006) Test for Interaction between Two Unlinked Loci. *Am J Hum Genet* 79: 831-845.
4. Zhou X, Tan FK, **Xiong MM**, Arnett FC and Feghali-Bostwick CA. (2005) Clinically Discordant Scleroderma Monozygotic Twins Show Concordance for Fibroblast Gene Expression Profiles. *Arthritis & Rheumatism* 52: 3305-3314.
5. **Xiong MM**, Feghali-Bostwick CA, Arnett FC and Zhou X. (2005) A systems biology approach to genetic studies of complex diseases. *FEBS Letters*, 579: 5325-5332.
6. Zhao J, Boerwinkle E, **Xiong MM**. (2005) An Entropy-Based Statistic for Genomewide Association Studies. *American Journal of Human Genetics* 77:27-40
7. Fan R. Knapp M., Wjst M, Zhao C and **Xiong MM**. (2005) High resolution T<sup>2</sup> association tests of Complex Diseases Based on Family Data. *Annals of Human Genetics* 69: 187-208
8. Zhao J, **Xiong MM**, Huang W, Wang H., Zuo J, Chen Z, Qiang BQ, Zhang M L, Chen J L, Ding W, Yuan WT, Xu HY, Jin L, Li YX., Sun Q, Liu QY, Boerwinkle E, and Fang FD. (2005) An autosomal genomic scan for loci linked to type diabetes in Northern Han Chinese population. *Journal of Molecular Medicine* 83: 209-215
9. Zhou XD, Dimachkie MM, **Xiong MM**, Tan FK, and Arnett FC. (2005) cDNA microarrays reveal distinct gene expression clusters in idiopathic inflammatory myopathies. *Medical Science Monitor* 10(7): BR191-197
10. Singh U, Zhong S, **Xiong MM**, Li TB, Sniderman A, Teng BB. (2004) Increased plasma nonesterified fatty acids and platelet-activating factor acetylhydrolase are associated with susceptibility to atherosclerosis in mice. *Clinical Science* 106:421-432

11. Luo A, Kong J, Hu G, Liew CC, **Xiong MM**, Wang X, Ji J, Wang T, Zhi H, Wu M, Liu Z. (2004) Discovery of Ca(2+)-relevant and differentiation-associated genes downregulated in esophageal squamous cell carcinoma using cDNA microarray. *Oncogene* 23:1291-1299
12. **Xiong MM**, Zhao JY and Xiong H. (2004) Network-based regulatory pathways analysis. *Bioinformatics* 20:2056-2066
13. **Xiong MM**, Li J, and Fang X. (2004) Identification of genetic networks. *Genetics* 166: 1037-1052
14. Chen Z, Zhang K, Zhang X, Yuan Z, Jin L, **Xiong MM**. (2003) Comparison of gene expression between metastatic derivatives and their poorly metastatic parental cells implicates crucial tumor-environment interaction in metastasis of head and neck squamous cell carcinoma. *Clinical & Experimental Metastasis* 20:335-342
15. Zhou X, Tan E, Wang N, **Xiong MM**, Maghidman S, Reveille JD, Milewicz D, Chakraborty R, Arnett FC. (2003) Genome-wide search and fine-scale mapping for genetic susceptibility to systemic sclerosis in a native American population with high disease prevalence. *Arthritis & Rheumatism* 48: 2585-2592
16. Li YF, Sun HX, Wu GD, Du WN, Zuo J, Shen Y, Qiang BQ, Yao ZJ, Wang H, Huang W, Chen Z, **Xiong MM**, Meng Y, Fang FD. (2003) Protein kinase C/zeta (PRK CZ) Gene is associated with type 2 diabetes in Han population of North China and analysis of its haplotypes. *World J Gastroenterol.* 9:2078-2082.
17. Lin T, Zhang L, Davis J, Gu J, Nishizaki M, Ji L, Roth JA, **Xiong MM**, Fang B. (2003) Combination of TRAIL gene therapy and chemotherapy enhances antitumor and antimetastasis effects in chemosensitive and chemoresistant breast cancers. *Molecular Therapy* 8: 441-448.
18. Mu J, Ferdig MT, Feng X, Joy DA, Duan J, Furuya T, Subramanian G, Aravind L, Cooper RA, Wootton JC, **Xiong MM**, Su XZ. (2003) Multiple transporters associated with malaria parasite responses to chloroquine and quinine. *Molecular Microbiology* 49: 977-989.
19. Sun M and **Xiong M M**. (2003) A mathematical programming approach for gene selection and tissue classification. *Bioinformatics* 19: 1243-1251
20. Li W, Fan M and **Xiong MM**. (2003) SamCluster: an integrated scheme for sample class discovery using gene expression profiles. *Bioinformatics* 19: 811-817
21. Zhang K, Akey JM, Wang N, **Xiong MM**, Chakraborty R, Jin L. (2003) Randomly distributed crossovers may generate block-like patterns of linkage disequilibrium: an act of genetic drift. *Human Genetics* 113: 51-59
22. Fan R and **Xiong MM**. (2003) Combined high resolution linkage and association

- mapping of quantitative trait loci. *European Journal of Human Genetics* 11:125-137
23. Fan R and **Xiong MM**. (2003) Linkage and association Studies of QTL for nuclear families by mixed Models. *Biostatistics* 4:75-95
  24. Zhou J, Zhao LQ, **Xiong MM**, Wang XQ, Yang GR, Qiu ZL, Wu M, Liu ZH. (2003) Gene expression profiles at different stages of human esophageal squamous cell carcinoma. *World Journal of Gastroenterology*. 9: 9-15
  25. Akey JM, Zhang K, **Xiong MM**, Jin L. (2003) The effect of single nucleotide polymorphism identification strategies on estimates of linkage disequilibrium. *Molecular Biology and Evolution*. 20:232-242
  26. Zhou, XD., Tan, F.K., Wang, N. **Xiong, MM**, Maghidman, A., Reveille, John D., Milewicz, D.M., Chakraborty, R. and Arnett, F.C. Genome-wide association study for regions of systemic sclerosis susceptibility in a Choctaw Indian population with high disease prevalence. *Arthritis & Rheumatism* 2003;48:2585-2592.
  27. **Xiong MM**, Zhao J and Boerwinkle E (2003) Haplotype block linkage disequilibrium mapping. *Frontiers in Bioscience*. 8: 85-93
  28. Lin T, Huang X, Gu J, Zhang L, Roth JA, **Xiong MM**, Curley SA, Yu YH, Hunt KK, and Fang BL. (2002) Long term tumor-free survival from the treatment of *GFP-TRAIL* fusion gene expressed from the hTERT promoter. *Oncogene* 21:8020-802.
  29. Gu J, Rihl M, Marker-Hermann E, Baeten D, Kuipers JG, Song YW, Maksymowych WP, Burgos-Vargas R, Veys EM, Keyser FD, Deister H, **Xiong MM**, Huang F, Tsai WC, Yu DT.(2002) Clues to pathogenesis of spondyloarthritis derived from synovial fluid mononuclear cell gene expression profiles. *Journal of Rheumatology* 29: 2159-2164
  30. Chu SL, Zhu DL, **Xiong MM**, Wang GL, Zhang WZ, Zhou HF, Shen D, Gao PJ, Zhan YM, Jin L.(2002) Linkage analysis of twelve candidate gene loci regulating water and sodium metabolism and membrane ion transport in essential hypertension. *Hypertension Research* 25:635-639
  31. Fan R, **Xiong MM**. (2002) High resolution mapping of quantitative trait loci by linkage disequilibrium analysis. *European Journal of Human Genetics* 10:607-615
  32. **Xiong MM**, Fan R and Jin L (2002) Linkage disequilibrium mapping of quantitative trait loci under truncation selection. *Human Heredity* 53:158-172
  33. Fan R, Joanna Floros, **Xiong MM**. (2002) Models and Tests of Linkage and Association Studies of Quantitative Trait Locus for Multi-Allele Marker Loci. *Human Heredity* 53:130-145
  34. Jieruo G, Elisabeth-Hermann, Dominique B, Wen C, Gladman D, **Xiong MM**, Deister H, Kuipers JG, Huang F, Song YW, Maksymowych W, Kalsi J, Bannai M, Seta N, Rihl

- M, Crofford, LJ Veys, CE de Keyser F, David TY (2002) A 588 gene microarray analysis of the peripheral blood mononuclear cells of spondyloar thropathy patients. *Rheumatology* 41: 759-766
35. **Xiong MM**, Wang P and Wang J (2002) A differential-algebraic approach to linear programming. *Journal of Optimization Theory and Applications* 114:443-470
  36. **Xiong MM**, Zhao JY and Boerwinkle E (2002) Generalized  $T^2$  test for genome association studies. *American Journal of Human Genetics* 70:1257-1268
  37. Li W and **Xiong MM**. (2002) Tclass: Tumor Classification System Based on Gene Expression Profile. *Bioinformatics* 18:325-326
  38. He X, Zhu DL, Chu SL, Jin L, **Xiong MM**, Wang GL, Zhang WZ, Zhou HF, Mao SY, Zhan YM, Zhuang QN, Liu XM, Zhao Y, Huang W. (2001) Alpha-adducin gene and essential hypertension in China. *Clinical and Experimental Hypertension*. 23:579-589
  39. Fang R, Floros J. and **Xiong MM**. (2001) Transmission disequilibrium test of two unlinked disease loci. *Advances and Application in Statistics* 1:277-308
  40. Zhou X, Tan FK, **Xiong MM**, Milewicz DM, Reveille JD and Arnett FC (2001) Systemic Sclerosis (Scleroderma) - Specific autoantigen genes are selectively over-expressed in scleroderma fibroblasts. *Journal of Immunology* 167:7126-7133
  41. **Xiong MM**, Fang X and Zhao JY (2001) Biomarker identification by feature wrappers. *Genome Research* 11:1878-1887.
  42. Zhao J, Li W and **Xiong MM**. (2001) Population based linkage disequilibrium mapping of QTL: An application to simulated data in an isolated population. *Genetic Epidemiology* 21 (S1):S655-659
  43. Jiang J, Akey JM, Shi J, **Xiong MM**, Wang Y, Shen Y, Xu X, Chen H, Wu H, Xiao J, Lu D, Huang W, and Jin L. (2001) A polymorphism in the promoter region of catalyses is associated with blood pressure levels. *Human Genetics* 109:95-98
  44. Wu H, Wang H, Li H, Xiao F, Ke Y, Xu H, Xiao J, Lu D, Parra E, Shriver M, **Xiong MM**, Barton SA, Hewett-Emmett D, Liu W, Jin L. (2001). Skin Reflectance in the Han Chinese and Tibetan Populations. *Human Biology* 73:461-466
  45. Akey JM, Wong H, **Xiong MM**, Shriver MD, and Jin L. (2001) Interaction between the melanocortin-1 receptor and P genes contributes to inter-individual variation in skin pigmentation phenotypes in a Tibetan population. *Human Genetics* 108: 516:520.
  46. Zhang H, Yu C-Y, Singer B, **Xiong MM**. (2001) Recursive partitioning for tumor classification with gene expression microarray data. *Proceedings of the National Academy of Sciences of the United States of America* 98: 6730-6735

47. Akey J, Zhang K, **Xiong MM** and Jin L (2001) The effect of genotyping errors on the robustness of common linkage disequilibrium measures. *American Journal of Human Genetics* 68: 1147-1456
48. **Xiong MM**, Li W, Zhao J, Jin L, and Boerwinkle E. (2001) Gene selection in gene expression based tumor classification. *Molecular Genetics and Metabolism*. 73:239-247
49. Akey J, Jin L, **Xiong MM**. (2001) The haplotype linkage disequilibrium test. *European Journal of Human Genetics* 9: 291-300
50. Zhu D, Wang H, **Xiong MM**, He X, Chu S, Jin, L., Wang, G., Yuang, W., Zhan, Y., Zhang, W., Dong, S., Gao, P., Zhao, G., Boerwinkle, E. and Huang, W. (2001) Linkage of hypertension to chromosome 2q14-q23 in Chinese families. *J Hypertension*. 19: 55-61
51. Lu JY, **Xiong MM**, Liu ZH, Wu M. (2001) Gene expression profiles changes in initiation and progression of squamous carcinoma of esophagus. *International Journal of Cancer*. 91:288-294
52. **Xiong MM**, Jin L, Li W, Boerwinkle E. (2000) Tumor classification using gene expression profiles. *Biotechniques* 29: 1264-1270
53. **Xiong MM**, Guo SW. (2000) Multiple regression approach to mapping of quantitative trait loci (QTL) based on sib-pair data. *Annals of Statistics* 28: 1245-1278
54. **Xiong MM**. and Jin L (2000) Combined linkage and linkage disequilibrium mapping. *Genet Epidemiology* 19: 211-234
55. **Xiong MM**. and Jin L (1999) A comparison of statistical power of biallelic and microsatellite markers in population-based gene mapping method. *American Journal of Human Genetics* 64: 629-640
56. Su B, Xiao J, Underhill P, Deka R, Zhang W, Akey J, Huang W, Shen D, Lu D, Luo J, Chu J, Tan J, Shen P, Davis R, Cavalli-Sforza L, Chakraborty R, **Xiong MM**, Du AR, Oefner P, Chen Z, Jin L. (1999) Y chromosome evidence for a northward migration of modern humans in East Asia during the last ice age. *American Journal of Human Genetics* 65: 1718-1724
57. Person AS, Koch PE, Atkinson EN, **Xiong MM**, Finberg RW, Swisher GS, Roth J A. and Fang B. (1999) Limiting factors in adenoviral mediated gene transfer to human lung and pancreatic cancer cell lines. *Clinical Cancer Research* 5: 4208-4213
58. Krushkal J, Xiong **MM**, Ferrel R, Sing CF, Turner ST and Boerwinkle E. (1998). Linkage and Association of Adrenergic and Dopamine Receptor Genes in the Distal Portion of the Long Arm of Chromosome 5 with Systolic Blood Pressure Variation. *Human Molecular Genetics* 7: 1379-1383
59. **Xiong MM**, Krushkal J, Boerwinkle, E. (1998). TDT Statistics for Mapping Quantitative

Trait Loci. *Annals of Human Genetics* 62: 431-452

60. **Xiong MM** and Guo SW (1998) The power of linkage detection by the transmission/disequilibrium tests. *Human Heredity* 48: 295-312
61. **Xiong MM** and Waterman M (1997). A phase transition for the minimum free energy of secondary structures of a random RNA. *Advances in Applied Mathematics* 18: 111-132
62. **Xiong MM.** and Guo SW. (1997) Fine-scale genetic mapping based on linkage disequilibrium : theory and applications.. *American Journal of Human Genetics.* 60: 1513-1531
63. **Xiong MM.** and Guo SW. (1997) Fine scale mapping of quantitative trait loci by linkage disequilibrium in  $F_2$  population. *Genetics* 145: 1201-1218
64. Guo SW and **Xiong MM** (1997) Genes preserved in relatives. *Human Heredity* 47: 138-154
65. Guo SW and **Xiong MM** (1997) Estimating the age of mutant disease alleles based on linkage disequilibrium. *Human Heredity* 47: 315-337
66. **Xiong MM**, Prade RA, Wang Y, Griffith J, Timberlake W and Arnold J 1996 On the consistency of physical mapping method to reconstruct a chromosome in vitro. *Genetics* 142: 267-284
67. Bau JJ, Chen HJ, and **Xiong MM** (1993) Percentage points of the studentized range test for dispersion of normal means. *Journal of Statistical Computation and Simulation* 44:149-163
68. Chen HJ, **Xiong MM** and Lam K(1993) Range tests for the dispersion of several location parameters. *Journal of Statistical Planning and Inference* 36:15-25

## **B. LETTER TO EDITOR**

69. Zhao J, Boerwinkle E, **Xiong MM.** (2006) Impact of haplotype-frequency estimation error on test statistics in association studies. *Am J Hum Genet.* 78:728-729

## **C. PAPERS IN CONFERENCE PROCEEDINGS**

70. Sun, X, Qian J, Jin L and Xiong MM (2006) State Space equations for modeling gene networks. *Proceedings of the First International Conference on Computational Systems Biology*, 205-212, July 20-23, 2006, Shanghai, China.
71. Xiong MM and Jin L. (2005) State-space approach to modeling dynamics of gene regulation in networks. *Proceedings of the 2005 International Joint Conference of InCob, AASBi and KSBI* , 191-196, September 22- 24, 2005, Busan, Korea.

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73. **Xiong MM**, Akey J, and Jin L. (2000) The haplotype linkage disequilibrium test for genome-wide screens: its power and study design. Pacific Symposium on Biocomputing 5: 672-681
74. **Xiong MM**, Wang J, Wang P (1999) Recurrent Neural Networks for Linear Programming with a Continuous Trajectory, PDSI. 30: 844-849
75. **Xiong MM**. (1997) Toward functional genomics. Proceedings of the International Symposium on Theoretical Biophysics and Biomathematics 33-38
76. **Xiong MM**. and Wang P. (1994) Weighted neural network models for nonlinear regression with fixed and random effects. World Congress on Neural Networks, V.III, 478-485
77. **Xiong MM** (1994) Neural Networks with Hidden Markov Processes. Intelligent Engineering Systems through Artificial Neural Networks. 45-50, ASME Press, New York.
78. **Xiong MM**, Arnold J. and Chen HJ. (1993) An  $O(n^3)$  neural network model for linear programming, Proceedings of World Congress on Neural Networks, V.I, 654-657, Portland, July 11-15
79. **Xiong MM**, Arnold J. and Chen HJ. (1993) A Neural Network Model Based on Differential-Algebraic Equations for Nonlinear Programming, IEEE International Conference on Neural Networks, 923-928, San Francisco, March 28-April 1
80. **Xiong MM**, Wang P. (1992) Learning Potential Functions and Differential Inclusion. Proceedings of IJCNN'92, Vol. I, 401-406 Baltimore, June 7-11
81. **Xiong MM**, Wang P, Arnold J, Stam A, Chen HJ. (1992) Hybrid Kohonen Self-organizing Neural Network and Multi-layer Neural Network Model for Pattern Recognition and Nonlinear Regression, Intelligent Engineering Systems Through Artificial Neural Networks, 439-444, ASME Press, New York.

#### **D. OTHER ARTICLES**

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85. Chu S, Zhu D, **Xiong MM** (2001) Linkage analysis of candidate genes for glucose and lipid metabolism with essential hypertension. *Zhonghua Yi Xue Za Zhi*. 81:20-22
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#### **E. BOOK CHAPTERS**

**Xiong MM** and Li Jin (2006) Association studies of complex diseases, Chapter 38. In (T.Lengauer ed.) *Bioinformatics – From Genomes to Therapies (Vol III)* pp1375-1426. Wiley-VCH.

**Xiong MM** (2006) Linkage Disequilibrium and Test for Interaction between Two Loci, Chapter 9. In (HW. Deng ed) *Human Genetics*. Pp. 229-277. World Scientific Publishing.

#### **F. MANUSCRIPTS SUBMITTED FOR PUBLICATIONS**

1. Zhao J, Boerwinkle E and **Xiong MM** (2006) An Entropy-based genomewide transmission/disequilibrium Test. Submitted to *Human Genetics*.
2. **Xiong MM** and Arnold J. (2006) Do genetic networks obey Kirchhoff's and Ohm's laws? Submitted to *Biotechniques*.
3. **Xiong MM** and Li Luo (2006) Multi-locus measure of linkage disequilibrium. Submitted to *Genetics*.
4. Zhao J, Amos C, Boerwinkle E and **Xiong MM** (2006) Nonlinear transmission/disequilibrium test. Submitted to *Annals of Human Genetics*

#### **G. MANUSCRIPTS IN PREPARATION**

1. Wang Y, Zhao J, Zhou X, Huang W, Jin L and **Xiong MM**. Are genetic interaction networks essential for complex diseases?

2. Wang YI, Wang Y, He Y, Wang HF, Xu L, Liu YF, Sun WW, Xiong XY, Ge JB, **Xiong MM**, Jin L, Huang W. A systemic SNP survey of 123 candidate genes from important pathways for genetic susceptibility of coronary atherosclerosis in Chinese populations.
3. Wu X, Jin L and Xiong MM. Test for interaction between two unlinked loci using Composite linkage disequilibrium.
4. Sun, X and Xiong MM. Extended Kalman Filter for identification of genetic networks.
5. Dong W, Jin L and Xiong MM. Bayesian networks for modeling SNPs.
6. Peng G and Xiong MM. Genetic algorithm-based genome-wide detection of gene-gene interaction.
7. Xiong MM and Luo L. Test for association of pathway with disease.

#### **H. ABSTRACT PUBLISHED IN JOURNALS**

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2. Zhou XD, Xiong MM, Tan FK, Guo XJ and Arnett FC. (2006) SPARC, an upstream regulator of CTGF in response to TGF- $\beta$  stimulation. *Arthritis & Rheuma* 54 (9) 2006.
3. Peng G, Jin L and Xiong MM (2006) Search for genetic interaction networks in genome-wide association studies. *American Journal of Human Genetics*.
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6. Wu X, Jin L and Xiong MM. Test for interaction between two unlinked loci using Composite linkage disequilibrium. *American Journal of Human Genetics*.
7. Luo L and Xiong MM (2006) Multi Information for Measuring Linkage Disequilibrium among Multiple Loci and its Applications. *American Journal of Human Genetics*.
8. Yang X, Yan P, Sun X, Jin L, Xiong MM, Zhou X and Lu D (2006) Inferring TGF-B pathway using time series data. *American Journal of Human Genetics*.
9. Zhou Q, Jin L and Xiong MM (2006) Energy Balance Analysis of Metabolic Networks. *American Journal of Human Genetics*.

10. Zhou X and Xiong MM (2006) A novel statistic to test for gene-environment interaction. *American Journal of Human Genetics*.
11. Wang X, Xiong MM and Jin L (2006) Haplotype inference error in association studies: A two-locus model. *American Journal of Human Genetics*.
12. **Xiong MM.** (2005) Statistical methods for construction of genetic interaction networks. The Sixth International Conference on Systems Biology (ICSB 2005) P. 341. Boston, October 19 - 22, 2005.
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70. Guo SW and **Xiong MM**. (1995) Modeling the population dynamics of simple sequence repeats. *American Journal of Human Genetics* 57: A165

## ACADAMIC PRESENTATIONS

### Invitational Presentations

1. State Space Equations for Modeling Gene Networks. The First International Conference on Computational Systems Biology. Shanghai, July 20-23, 2006
2. Genetic interaction networks and regulatory networks for genetic studies of complex Diseases. Computational Biology 2005 – Challenges and Visions. Shanghai, October 13-16.
3. Nonlinear approach to dissecting genetic structure of complex diseases, The International Symposium on Genomic Medicine, June 28-30, 2005. Shanghai, China.
4. A Systems Biology Approach to Genetic Studies of Complex Diseases, March 2, 2004, Yale University.

5. An example of application of bioinformatics to systems biology, Eastern Forum of Science and Technology. July 11-12, 2004, Shanghai, China.
6. Network Biology, July 18, 2004, Shanghai Second Medical University, China .
7. Differentially expressed genetic networks, the 7<sup>th</sup> World Multiconference on Systemics, Cybernetics and Informatics, July 27-30, 2003, Orlando, Florida.
8. Perspective in Systems Biology, December, 24, 2003, Fudan University, Shanghai, China.
9. Large-scale gene expression data analysis and disease diagnosis, August 26-27, 2002. International Biopharmaceutical Technology Conference, Fujian, China
10. Gene expression-based tumor classification, December 22, 2002, Department of Statistics, Beijing University, China.
11. Bioinformatics and genomic science research, December, 19, 2001, National Genomics Center at Shanghai, China.
12. Generalized  $T^2$  test for whole genome linkage disequilibrium profile analysis, May 23-26, 2001, International conference for mapping complex disease genes, Changsha, China.
13. Biomarker Identification by feature selection. May 21, 2001, Institute of System Science and Mathematics, Chinese Academy of Science, Beijing.
14. Advances in Bioinformatics, May 27, 2001, Department of Genetics, Fudan University, China.
15. Cancer functional genomic analysis, May 30, 2001, Zhejiang University, Hangzhou, China
16. Mapping complex trait loci. Feb. 3, 2000, Workshop at NIH.
17. Neural networks for gene expression based tumor classification, Feb. 21, 2000, Division of Biostatistics, Saint Louis Washington University, Saint Louis, Missouri.
18. Extent of linkage disequilibrium in the modern population and its implications in SNP mapping: How many SNPs are needed for disease gene mapping? March 7, 2000, National Genome Research Institute, Washington, DC.
19. Gene selection in gene expression based tumor classification, April 23, 2000, Department of Computer Science, University of South West Louisiana.
20. Linkage disequilibrium mapping for complex disease, May, 2000, National Institute of Dental and Craniofacial Research Genetics Work Group.
21. Microarray and tumor classification, June 29, 2000, Darlian Institute of Chemistry, Darlian,

- China.
22. Combined linkage and linkage disequilibrium, July 4, 2000, Department of Statistics, Beijing University, China.
  23. Microarray and tumor diagnosis, July 5, 2000, Beijing General Hospital, Beijing, China.
  24. Genomic circuits and cardiac diseases, July 6, 2000, Chinese Academy of Medical Science, Beijing, China.
  25. Pathway identification, July 10, 2000, Chinese Institute of Biochemistry, Shanghai, China.
  26. Statistical and computational methods for gene expression based tumor classification, Jan. 9, 2000, Department of Mathematics, University of Southern California, Los Angeles.
  27. Linkage and linkage disequilibrium analysis for genetic studies of complex diseases, April, 1999, Chinese Academy of Medical Science, Beijing, China.
  28. Advances in cancer genomics, April, 1999, Beijing Institute of Cancer, Beijing, China.
  29. Advances in plant genetics, April, 1999, Institute of Plant, Chinese Academy of Science, Beijing, China.
  30. Functional genomics in plant science, August, 1999, Shanghai Institute of Plant Physiology, Chinese Academy of Science, Shanghai, China.
  31. Linkage disequilibrium based regression methods for mapping quantitative trait loci, August, 1999, Institute of Genetics, Fudan University, China.
  32. Statistical analysis of mapping quantitative trait loci, February, 1997, Department of Statistics, Columbia University, New York..
  33. Linkage disequilibrium for fine scale mapping, March, 1997, Department of Biology, Georgia Tech, Atlanta, Georgia.
  34. Fine-scale mapping: theory and application, September, 1996, McGill University, Canada,
  35. Fine-scale mapping of quantitative trait loci, September, 1996, University of Montreal, Canada.
  36. Strategy for mapping complex trait loci, July, 1996, Sequana Therapeutics, Inc., La Jolla, California.

## **Presentations**

1. Do Genetic Networks Obey Kirchhoff's and Ohm's Laws? The IASTED International Conference on Computational Systems Biology. November 13-14, 2006, Dallas.
2. Genetic Interaction Networks in Association Studies of Complex Diseases. The 2006 Joint Statistical Meeting, August 6-10, Seattle, Washington.
8. State-space approach to modeling dynamics of gene regulation in networks. 2005 International Conference on Bioinformatics. September 22-24, Busan, Korea.
4. Nonlinear Tests for Categorical Data. ENAR, Austin Texas, March 20-23, 2005.
5. Systems Biology Approaches to Genetic Studies of Complex Diseases. Pathway analysis for Target and Compound Evaluation. San Francisco, CA, April 20-22, 2005.
6. Generalized Circuit Analysis of Biological Networks. 2004 International Conference on Complex Systems, Boston, May 16-21, 2004.
7. Statistical model for function valued traits. Genetic Analysis of Complex Diseases & Human Population, September, 19-21, 2003, Chicago, Illinois.
8. Modeling and identification of genetic networks. ASHG 52<sup>th</sup> Annual Meeting, Baltimore, 2002
9. Randomly distributed recombination may generate block-like pattern of linkage disequilibrium: An act of genetic drift. ASHG 52<sup>th</sup> Annual Meeting, Baltimore, 2002
10. Differentially regulated genetic networks. 2002 NCCR Bioinformatics Conference. September 27 – 29, 2002. Boston.
11. The effect of ascertainment bias on estimates of linkage disequilibrium. ASHG 51<sup>th</sup> Annual Meeting, San Diego, 2001.
12. Dynamic models for mapping quantitative trait with time-dependent genetic effect. ASHG 51<sup>th</sup> Annual Meeting, San Diego, 2001.
13. Structural equation models for pathway identification. Oncogenomics Conference. January 25-27, 2001, Tucson, Arizona.
14. Population genomic models and their applications to genetic studies of complex traits. 2001 Joint Statistical Meetings. August 5-9, 2001. Atlanta, Georgia.
15. Linkage and association studies of QTL for nuclear families by mixed models. 2001 Joint Statistical Meetings. August 5-9, 2001. Atlanta, Georgia.
16. Multiple trait-locus model for quantitative trait analysis, 27<sup>th</sup> Annual Meeting of the Texas Genetics Society, March 23-25, 2001, Houston

17. Linkage disequilibrium mapping of quantitative trait loci: multiple trait analysis, , 27<sup>th</sup> Annual Meeting of the Texas Genetics Society, March 23-25, 2001, Houston
18. Molecular genetic profiling of renal cell carcinoma as an alternative to current histopathologic classification systems. , 27<sup>th</sup> Annual Meeting of the Texas Genetics Society, March 23-25, 2001, Houston
19. The haplotype disequilibrium test for genome-wide screen: Its power and study design. an. 2000. Pacific Symposium of Biocomputing 2000. Maui, Hawaii.
20. Fine-Scale Mapping of Quantitative Traits Loci by Interval Mapping in Human Population. At ASHG 50th Annual Meeting, Philadelphia, Oct.3-7, 2000.
21. Linkage Disequilibrium mapping of quantitative trait loci: multiple trait analysis. ASHG 50<sup>th</sup> Annual Meeting, Philadelphia, Oct.3-7, 2000.
22. Single Nucleotide Polymorphisms (SNPs) From 38 *Plasmodium falciparum* transporters and their roles in drug resistances. ASTMH 49th Annual Meeting, Houston, TX. Oct. 29 – Nov. 2.
23. Gene expression in myositis biopsies at 64<sup>th</sup> Annual Scientific Meeting of Rheumatology, October 29 - November 2 in Philadelphia
24. Gene expression profile of muscle biopsies from patients with inflammatory myopathies. at 64<sup>th</sup> Annual Scientific Meeting of Rheumatology, October 29 - November 2 in Philadelphia
25. Expression of autoantigen genes is selectively and specifically altered in dermal fibroblasts of systemic sclerosis patients. at 64<sup>th</sup> Annual Scientific Meeting of Rheumatology, October 29 - November 2 in Philadelphia
26. Gene expression based tumor classification, IBC's 6<sup>th</sup> Annual Biochip Technologies Conference, 1999, Nov. 2-5, Berkeley, CA
27. The haplotype disequilibrium test: A nonparametric haplotype based method for the genetic mapping of complex traits. 49<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Oct. 19-23, 1999, San Francisco, CA
28. Mapping QTL by linkage disequilibrium. Joint Statistical Meetings, August 9-13, 1998, Dallas, Texas.
29. Linkage disequilibrium based regression: A method for mapping quantitative trait loci in humans. 48<sup>th</sup> Annual Meeting of the American Society of Human Genetics, Oct. 27-31, 1998 Denver, Colorado.
30. Biallelic markers in genetics studies of human diseases: their power, accuracy and density in population-based linkage analyses. at 47<sup>th</sup> Annual Meeting of the American Society of Human Genetics, 1997.

31. Modeling the population dynamics of simple sequence repeats. at 46<sup>th</sup> Annual Meeting of the American Society of Human Genetics, 1995.
32. Neural Networks with Hidden Markov Processes. Artificial Neural Networks in Engineering Conference, Nov. 13-16, 1994, St. Louis
33. Weighted neural network models for nonlinear regression with fixed and random effects. World Congress on Neural Networks, June 5-9, 1994, San Diego.
34. An  $O(n^3)$  Neural Network Model for Linear Programming. World Congress on Neural Networks, Portland, July 11-15, 1993.
35. A neural network model based on differential-algebraic equations for nonlinear programming, IEEE International Conference on Neural Networks, San Francisco, March, 28-April 1, 1993.
36. Hybrid Kohonen self-organizing neural network and multi-layer neural network model for pattern recognition and nonlinear, artificial neural networks in Engineering Conference, Nov. 15-18, 1992, St. Louis
37. Learning potential functions and differential inclusion. Proceedings of IJCNN'92, Baltimore, June 7-11, 1992.

**GRADUATE STUDENTS/POSTDOCTORAL FELLOW SUPERVISED**  
 Graduate School of Biomedical Sciences (GSBS) and School of Public Health

**Postdoctoral Fellow**

Jinying Zhao, 05/2005 – 12/2005

Jun Li, 2001-2003

Xiangzhong Fang, 2000-2001

Wuju Li, 1998-2000

**Graduate Student Committees:**

<u>Name</u>	<u>Discipline/Module</u>	<u>Degree</u>	<u>Role</u>	<u>Graduation</u>
Li Luo	Biostatistics	Ph. D.	Advisor	09/2005-Present
Lihong	Biostatistics	M. S.	Advisor	01/2006-Present
Aaya Nassar	Biological Science	Ph. D.	Advisor	09/2004-Present
Xiaojun Zhou	Biostatistics	Ph. D.	Advisor	01/2006-Present
Shiing-Tzu Fan	Biostatistics	M. S.	Member of Advisory Committee	2005-Present
Sijin Wen	Biostatistics	Ph. D.	Member of Advisory Committee	2005-Present

Yong Quan Dong	Biostatistics	M.S	Member of Advisory Committee	2005-Present
Jinying Zhao	Biological Science	Ph. D.	Advisor	05/2005
Qing Zhang	Biostatistics	Ph. D.	Member of Advisory Committee	2000-present
Hui Zhao	Biostatistics	Ph. D.	Member of Advisory Committee	2003-Present
Yiqun Zhang	Biostatistics	Ph. D	Member of Qualifying Committee	2004-Present
Liu, Xiaoming	GSBS	Ph. D.	Member of Advisor Exam and Supervisory Committees	9/2002- 08/2006
Mak, Solida	GSBS	Ph. D.	Member of Exam	09/2003-Present
Chung, Charles	GSBS	Ph. D.	Member of Exam	09/2003
Zhan F	Biometry	Ph. D.	Member of Advisory Committee	12/2003
Akey, Joshua,	GSBS	Ph. D.	Member of Advisory, Exam and Supervisory Committees	
			On-line Supervisor	12/2002
Dayna Tirpak	GSBS	Ph.D.	Member of Advisory	12/2002
Kun Zhang	GSBS	Ph. D.	Member of Advisory, Exam and Supervisory Committees	05/2003
Alanna Morrison	GSBS	Ph. D.	Member of Advisory, and Supervisory Committees	05/2001
Zhongming Zhao	GSBS	Ph. D.	Member of Advisory, Exam and Supervisory Committees	2000
Andrei Rodin	GSBS	Ph. D.	Member of Advisory, and Supervisory Committees	Fall, 1999
Grier, P. Page	GSBS	Ph. D.	Member of Advisory, and Supervisory Committees	Fall, 1998
Leslie Rogers	GSBS	M. S.	Member of Advisory Committee	2000
Hong Yan. Xu	GSBS	Ph. D.	Member of Advisory, Exam and Supervisory Committees	
Qiqing Wang	GSBS	Ph. D.	Member of Advisory, Exam and Supervisory Committees	2001-2003
Xi Zhou	GSBS	Ph. D.	Member of Advisory, Exam and Supervisory Committees	
John C. Huber J	Biological Science	Ph. D.	Member of Supervisory	

## Committee

Amit Jain	MPH	Advisor
Vivekananda Varma Datla	MPH	Advisor
Carl Daniel Tapia	MPHHSR	Member
Sayed O Abdul-kadder	MPHHPR	Member
Jennifer M Bennett	MPHHSO	Member
Andrea Katherine Moore	MPHHPR	Member
Lupita Morgan	MPHHPR	Member
Edith N Napoleon	MPHINF	Member
Jane D Nguyen	MPHHSO	Member
Susan Renee Ninan	MPHHSO	Member
Karen Stewart Stephenson	MPHHPR	Member
Deepa Vasudevan	MPHHPR	Member
Ibrahima Gning, Member	MPHHSO	Member
Robert Ryan Holmes	MPHINF	Member
Trial Punsalan	MPHINF	Member
Gulshan Ara Ralman	MPHINF	Member
Dea Michelle Taylo	MPHINF	Member
Rodrigo Erana, Member	MPHINF	Member
Robert Bruce Warburton	MPHINF	Member
Julieana Nichols	MPHCOM	Member
Mary Ann Livoti	MPHINF	Member
Ann Nicole Knox	MPHCOM	Member

## **SERVICE INFORMATION**

### **PEER REVIEW ACTIVITIES**

#### **Grant Reviewer**

The Center for Complexity Science, Jerusalem, Israel (2006)  
NSF Population and Evolutionary Processes Cluster (2005)  
NSF BIO/Division of Biological Infrastructure (2005)  
The Research Grants Council (RGC) of Hong Kong (2005)  
U. K. Genomic Medicine Grant Review (2001)  
NIH Tropical Medicine and Parasitology Study Section (2000)  
National Science Foundation, China (2001)

#### **Manuscript Reviewer**

Journals: American Journal of Human Genetics  
Lancet  
PNAS  
Biometrics  
Genetics  
Genetic Epidemiology  
Evolution  
Journal of Computational Biology  
Genome Biology  
Biotechniques  
Bioinformatics  
Journal of Theoretical Biology  
Human Heredity  
Atherosclerosis  
BMC Bioinformatics  
BMC Genetics  
Statistical Applications in Genetics and Molecular Biology  
Journal of Bioinformatics and Computational Biology  
Statistical Applications in Genetics and Molecular Biology  
Conferences: International Conference on Bioinformatics, 2005  
Pacific Symposium on Biocomputing, 2006

**Guest Editor:** Cellular and Molecular Life Sciences

**Guest Editor:** Special Issue on the First International Conference on Computational Systems  
Biology. IEE Proceedings – Systems Biology

**Editorial Advisory Board:** Recent Patents in DNA and Gene Sequences

### **CONSULTANT EXPERIENCE**

09/00- Division of Rheumatology, Medical School, University of Texas Health Science  
Center at Houston  
09/99- Institute of Molecular Medicine for the Prevention of Human Diseases,

University of Texas Health Science at Houston  
09/00-08/02 Department of Environmental Health, University of Cincinnati  
11/00- Department of Epidemiology and Public Health, School of Medicine, Yale  
University  
10/99-08/03 Department of Pathology, Medical School, University of Florida  
09/00-08/02 Member of Scientific Advisory Board, Cangen International Corporation,  
California.

## **ACTIVITIES IN PROFESSIONAL/SCIENTIFIC SOCIETIES**

Chair, Session 1-Biosystem and Structure, the IASTED International Conference on Computational Systems Biology. November 13-14, 2006, Dallas, U. S.

Chair, program Committee, The First International Conference on Computational Systems Biology, July 20-23, 2006, Shanghai, China

Co-Chair, Local Organizing Committee, the First International Conference on Computational Systems Biology, July 20-23, 2006, Shanghai, China

Program Committee Member, The Fourth International Conference on Bioinformatics (BIOINFO 2005), September 22-24, 2005, Busan, Korea.

Best Paper Award Committee Member, The Fourth International Conference on Bioinformatics (BIOINFO 2005), September 22-24, 2005, Busan, Korea.

Co-chair and organizer, Understand the Principle and Usefulness of Bioinformatics, The International Symposium on Genomic Medicine, June 28-30, 2005, Shanghai, China.

## **EDUCATIONAL OR VOLUNTARY ORGANIZATION PARTICIPATION**

Co-Organizer and Lecturer, National Workshop on Large Scale Genotyping and Linkage Analysis (July, 1997, China)

Co-Organizer and Lecturer, National Workshop on Statistical Genetics (January 3-8, 2005, China)

Lecturer, Workshop on Genome-wide association studies (July, 2006, Fudan University)

Director, the Theoretical Systems Biology Laboratory, School of Life Science, Fudan University, China (2004- )

Adjunct Professor, Department of Genetics, Fudan University, Shanghai, China (2000- )

Cai Guan Shen Lecture Professor, School of Life Science, Fudan University, Shanghai, China (2005- )

Adjunct Professor, Department of Biochemistry, Peking Union Medical College

& Chinese Academy of Medical Sciences, Beijing, China (99- )

Adjunct Professor, Institute of Cancer Research, Chinese Academy of Medical Sciences, Beijing, China (99- )

Judge, 8<sup>th</sup> Annual Mini-Symposium, Program in Molecular and Human Genetics, Graduate School of Biomedical Science (2004)

Journal Club Organizer in Genetics (2000).

Interviewer for Graduate Student Candidate, Graduate School of Biomedical Sciences (2000- present)

#### **DEAPRTMENT/SCHOOL COMMITTEES AND ACTIVITIES**

Member of Curriculum Committee (2006- Present)

Member of Bioinformatics Proposal Committee (2006-Present)

Member of Biological Science Admissions Committee (2001-2004)

Member of Faculty Annual Report Evaluation Committee (2003)

Member in M. D. Anderson Genomics Program Steering Committee (1998-2001)

Member of Faculty Annual Report Evaluation Committee (1999)

