CURRICULUM VITA

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Personal Information.

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Education.

Columbia University, Ph.D 1990, Thesis directed by Hyman Bass.
Columbia University, M.A. 1987.
Graduate School of Academy of Sciences of China, M.A. 1983.

Honors, Fellowships.

Fellowship, Columbia University, 1984-1988.
Postdoctoral Fellow, Mathematical Sciences Research Institute, UC Berkeley, 1989-1990.

Academic Positions Held.

Postdoctoral Fellow, Mathematical Sciences Research Institute, UC Berkeley, 1989–1990.
Visiting Assistant Professor, Washington University in St. Louis, 1990–1992.
Visiting Assistant Professor, Michigan Technological University, 1992–1993.
Assistant Professor, Michigan Technological University, 1993–1999.
Associate Professor, Michigan Technological University, 1999–2005.
Professor, Michigan Technological University, 2005-present

Refereed Publications.

(1) Jiang R (1986) *Homotopy invariants and normal form of a pair of matrices*, Acta Mathematica Sinica, 29 no. 1, pp. 20–31. [MR 88e:55011].
(2) Jiang R (1987) *Relations between invariants of special matrices and their realization*, Acta Mathematica Sinica, 30 no. 5, pp. 577–587. [MR 89a:15010].
(3) Jiang R (1991) *Branch points and free actions on R-trees*, Arboreal group theory, ed R. Alperin, Mathematical Sciences Research Institute Publications 19, Springer-Verlag, pp. 251–293.
(4) Jiang R (1991) *Free product with amalgamation and free actions on R-trees*, The Bulletin of London Mathematical Society, 23, pp. 53–58.

(5) Jiang R (1993) *Number of orbits of branch points of R-trees*, The Transaction of American Mathematical Society, 335 No.1, pp. 341–368.

(6) Jiang R (1994) *Bounded automorphisms of groups*, The Journal of Algebra, 168 No. 3, pp. 903–935.

(7) Jiang R (1996) *Bounded automorphisms of surfaces*, Acta Mathematica Sinica, 12, pp. 49–53.

(8) Bass H and Jiang R (1996) *Automorphism groups of tree actions and of graphs of groups*, The Journal of Pure and Applied Algebra, 112, pp. 109–155.

(9) Jiang R (1996) *Simplicial complex of graphs of groups*, Note di Mathematica, Vol. 16 - n. 1, pp. 117–130.

(10) Dong J and Jiang R (1998) *Contingency table probability estimation – a projection pursuit approach*, Journal of Computational Statistics, 13, pp. 425–445.

(11) Dong J. and Jiang R. (2000), *A boundary kernel for local polynomial regression*, Communications in Statistics: Theory and Methods, Vol 29, No 7. pp. 1549-1558.

(12) Jiang R, Dong J, Wang D, Sun F (2001), *Fine-scale mapping using Hardy-Weinberg Disequilibrium*, The Annals of Human Genetics, Volume 65, pp. 207–219.

(13) Li J, Wang D, Dong J, Jiang R, Zhang K, Zhang S, Zhao H, Sun F, (2001) *The power of transmission disequilibrium tests for quantitative traits*, Genetic Epidemiology, Volume 21 (Suppl 1) S632–S637.

(14) Jiang R, Dong J, and Zhang S (2003) *Multipoint fine-scale mapping susceptibility genes with multiple ancestral haplotypes*, Proceedings of The 2003 International Conference on Mathematics and Engineering Techniques in Medicine and Biological Sciences, pp. 66–71.

(15) Zhang S, Sha Q, Chen H, Dong J, and Jiang R, (2003) *Transmission/disequilibrium test based on haplotype sharing for tightly linked markers*, American Journal of Human Genetics, Vol. 73, pp. 566–579.

(16) Zhang S, Sha Q, Chen H, Dong J, and Jiang R (2004) *Impact of genotyping error on Type I error rate of the haplotype-sharing transmission/disequilibrium test (HS-TDT): reply to Knapp and Becher*, American Journal of Human Genetics, Vol 74, pp. 591–593.

(17) Sha Q, Dong J, and Jiang R, Chen H, Zhang S (2005) *Haplotype Sharing Transmission/ Disequilibrium Tests That Allow for Genotyping Errors.* Genetic Epidemiology. Vol 28, pp. 341-351.

(18) Sha Q. Dong J. Jiang R. and Zhang S. (2005) *Tests of association between quantitative traits and haplotypes in a reduced-dimensional space,* Annals of Human Genetics, Vol. 69, pp 715-732.

(19) Jiang R, Dong J, and Dai Y (2009) *Genome-wide association study of rheumatoid arthritis by a score test based on wavelet transfromation.* BMC Proceedings, accepted.

(20) Dong J and Jiang R (2009) *Multinomial probability estimation by wavelet threshold-*

ing. Communications in Statistics - Threory and Methods, accepted.

Papers Published in Proceedings.

(1) Dong J and Jiang R (1997) *Simulation results of a projection pursuit probability estimator for two - and three - dimensional contingency tables*, Proceedings of the American Statistical Association, Statistical graphics section, pp. 36–40.

(2) Jiang R and Dong J (1999) *Asymptotic properties of a wavelet based estimator of multinomial probabilities* Dimension Reduction, Computational Complexity and Information, ed. S. Weisberg, pp. 51–54.

(3) Jiang R and Dong J *On optimal boundary kernels* (1999) Proceedings of the American Statistical Association, Statistical Graphics section: pp. 147-150.

(4) Jiang R and Dong J (2001) *When is the bias caused by population stratification negligible?* American Journal of Human Genetics 69 (4): 409-409 1325 Suppl. 1

(5) Dong J, Zhang S, and Jiang R (2002) *A new method of fine mapping of genes of diseases with multiple ancestral haplotypes and allelic heterogeneity*, Proceedings of the American Statistical Association, Statistical Epidemiology Section.

(6) Jiang R, Dong J, and Zhang S (2003) *Multipoint fine-scale mapping susceptibility genes with multiple ancestral haplotypes*, Proceedings of the 2003 International Conference on Mathematics and Engineering Techniques in Medicine and Biological Sciences, 66-71.

(7) Jiang, R. Dong, J, Zhang, SL, and Sha, Q. (2005), *A multilocus association analysis method based on projection pursuit discriminant analysis [Abstract]* Genetic Epidemiology, 29:257-258.

(8) Jiang R., Dong, J, Zhang SL. and Sha Q.A (2006), *Multiple test procedure controling Type I error for genome scan association studies using HapMap data*, Joint Statistical Meetings Proceedings, Section on Statistics in Epidemiology, 2552-2554.

(9) Jiang R, Dong J, and Dai Y. (2008) *A wavelet based method in association [Abstract].* Genetic Epidemiology, 32:697-697.

(10) Jiang R, Dong J, and Dai Y (2008) *A wavelet thresholding based association test for improving adaptability [Abstract].* The Annual meeting of the American Society of Human Genetics.

Grant Proposal Funded.

(1) *Automorphism groups of tree actions and graphs of groups*, PI, National Security Agency, 1995-1997.

(2) *A wavelet based multinomial density estimator*, PI, MTU Faculty Development Grants to attend International Congress of Mathematicians, Berlin, Germany, August 1998.

(3) *Statistical Methods for Fine Mapping of Disease Genes*, PI MTU Faculty Development Grants to attend The 10th Conference of the International Genetic Epidemiology Society, Garmisch-Partenkirchen, Germany, September 2001.

(4) *Association Mapping for Complex Disease Genes* Co-PI, Research Excellent Fund -

RS grant of Michigan Technological University, (2002-2003).

(5) Statistical method for mapping complex disease genes Co-PI, National Institutes of Health, (2005-2008)

Awards Received.

Outstanding Research Faculty (Assistant Professor Level), Department of Mathematical Sciences, Michigan Technological University (1997-98)