

CURRICULUM VITAE

Jing Qiu

ADDRESS AND CONTACT INFORMATION:

Assistant Professor
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EDUCATION

- 1998-2004 **Cornell University**, Ithaca, New York
Ph.D., Dept. of Statistical Science, August 2004.
Dissertation: “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”
Advisor: J.T. Gene Hwang
- 1998-2004 **Cornell University**, Ithaca, New York
M.S., Dept. of Statistical Science, May 2002.
Thesis: “Improving upon Mid P-value Test in 2-by-2 Contingency Table”
Advisor: J.T. Gene Hwang
- 1993-1998 **University of Science & Technology of China**, Hefei, P.R. China
B.S., Dept. of Information Management and Decision Theory, July 1998.
B.E., Dept. of Electronic Science and Technology, July 1998.

POSITIONS AND EMPLOYMENT

- September 2004-Present: Assistant Professor of Statistics, University of Missouri-Columbia
- September 2004-Present: Missouri Agricultural Experiment Station Consulting Statistician, University of Missouri-Columbia
- September 1998-May 2004: Teaching Assistant, Cornell University
- Spring 2003: Research Assistant, Jackson Laboratory
- Summer 2000: Internship, Food and Drug Administration

PROFESSIONAL SERVICES

- Committee on Women in Statistics, ASA, January, 2006-December, 2008.
- Organizer of IMS topic contributed session, JSM, 2007
- Chair of IMS contributed session, JSM, 2007
- Coordinator of Department Colloquium Series, University of Missouri-Columbia, Fall 2007
- Committee on Undergraduate Studies, University of Missouri-Columbia, Fall 2004-Present

PROFESSIONAL MEMBERSHIPS

- September, 2004- Present, member of International Biometric Society
- September, 2004- Present, member of Institute of Mathematical Statistics
- September, 2004- Present, member of American Statistical Association
- June, 2006- Present, Member of International Chinese Statistical Association

PUBLICATIONS (SUBMITTED OR PUBLISHED)

- Hwang, J.T.G., **Qiu, J.** and Zhao, Z. (2008) Empirical Bayes Confidence Intervals Shrinking Both Means and Variances, *invited revision by Journal of Royal Statistical Society, Series B.*
- Qiu, J.** and Hwang J.T.G. (2008), “Reply to Dr. Glimm’s comment on Qiu and Hwang (2007), *Biometrics* 63, p. 767-776”, *invited by Biometrics and submitted.*
- Franck, W.L., Chang, W.S., **Qiu, J.**, Smith, S.A. and Stacey, G. (2007). “Whole-Genome Transcriptional Profiling of *Bradyrhizobium japonicum* during Chemoautotrophic Growth.”, *submitted.*
- Schulz, L.C, Widmaier E.P., **Qiu, J.**, and Roberts R.M. (2007) “Leptin Action in Primary Mouse Trophoblast Cells,” *submitted.*
- Srivastava, G. P., **Qiu, J.** and Xu, D. (2007). “Genome-Scale Functional Annotation from Meta-Analysis of Microarray Datasets”, *submitted.*
- Qiu, J.** and Cui, X. (2007), “Identifying Equivalent Gene Expressions in DNA Microarrays Using a Mix-scaled Equivalence Criterion”, *submitted.*
- Qiu, J.** and Hwang J.T.G. (2007), “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”, *Biometrics* **63**, 767-776.
- Kumar, R, **Qiu, J.**, Joshi, T., Valliyodan, B., Xu, D. and Nguyen, H. (2007), “Single Feature Polymorphism Discovery in Rice”, *PLoS ONE* **2** (3):e284.
- Cui, X., Hwang J.T.G., **Qiu, J.**, Blades, N.J. and Churchill, G.A. (2005), “Improved Statistical Tests for Differential Gene Expression by Shrinking Variance Components Estimates”, *Biostatistics* **6**, 59-75.

MANUSCRIPTS

- Qiu, J.**, Li, Q., Cui, X.Q. and Churchill, G.A. (2003) Biological Variation in Transcript Levels of Inbred Mice Revealed by Microarray Data Analysis, *Technical report*
- Qiu, J.** and Hwang, J.T. G. (2002) Improving upon Unconditional Mid P-value Test in 2-by-2 Contingency Table, *Technical report*

ADVISING STUDENTS

- **Master Student:** Zhuang, Shimin, January, 2007- Present

Title: *Investigating the performance of false discovery rate procedures for non-uniformly distributed p-values*

CONSULTING EXPERIENCES:6. Mouse Project

September, 2007–Present, with Laura Schulz and Michael Roberts, Department of Animal Science, University of Missouri-Columbia

5. Single Feature Polymorphism Discovery in Soybean

May, 2007–Present, with Wu, X., Kumar, R. and Nguyen, H, Division of Plant Sciences, National Center for Soybean Biotechnology, University of Missouri-Columbia

4. Proteo-genomics of Bacteroid Development

February, 2007-Present, With Jeong, S. and Emerich, D., Division of Biochemistry, University of Missouri-Columbia

3. Bradyrhizobium japonicum project

January, 2006-Present, with Chang, W. S. Franck, B. and Stacey, G., Division of Plant Sciences, University of Missouri-Columbia

2. Single Feature Polymorphism Discovery in Rice

Nov, 2005-Present, with Kumar, R. and Nguyen, H, Division of Plant Sciences, National Center for Soybean Biotechnology, University of Missouri-Columbia

1. Soybean and Medicago project

April, 2005- Present, with Valliyodan, B., Pathan, M.S. and Nguyen, H., Division of Plant Sciences, National Center for Soybean Biotechnology, University of Missouri-Columbia

INTERDISCIPLINARY COLLABORATIONStatistical and Computational Analyses of multiple Sets of Microarray Data

March, 2006-Present, with Srivastava, G. P. and Xu, D., Digital Biology Laboratory, Computer Science Department, University of Missouri-Columbia

PROJECT EXPERIENCES:1. Biological Variation in Transcript Levels of Inbred Mice Revealed by Microarray Analysis

Spring 2003, Supervised by Dr. Gary Churchill, Funded by the Jackson Laboratory.

2. Adjusting for baseline by inducing a partial ordering in randomized clinical trials

Summer 2000, Funded by Food and Drug Administration.

3. Using local polynomial method to fit binary data

Spring 2000, Supervised by Professor Naomi Altman, Funded by Cornell Univeristy.

GRANT ACQUISITION ACTIVITIES

1. Predoctoral Research Training in Biostatistics at the University of Missouri-Columbia
SPONSOR: NIH; FUNDS: \$881,246; PERIOD: 09/01/2007-08/31/2012.
PI: Sun, Jianguo; STATUS: Awarded; My role: Mentor

2. Summer Research Fellowship of University of Missouri-Columbia
Sponsor: Internal funding; Status: Awarded on April 1, 2005.
Amount: \$5000. My role: PI

INVITED TALKS

- “Double Shrinkage Empirical Bayesian Confidence Intervals for Multiple Parameters When the Variances are Unequal and Unknown”, Joint Statistical Meeting, Salt Lake City, UT, 2007.
- “Statistical Equivalence Testing Applied to Microarray Data”: Department of Animal Science, University of Missouri-Columbia, MO, Nov., 2006.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: Summer Workshop on Multiplicity and Reproducibility in Scientific Studies, SAMSI, RTP, NC, 2006.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: the ICSA Symposium, Storrs, CT, 2006.
- “Statistical Equivalence Testing Applied to Microarray Data”: UAB’s Microarray Research Coordination Network annual retreat, Mohonk, NY, 2005.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: Northwestern University, 2004.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: New York University, 2004.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: University of Connecticut, 2004.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: University of Missouri-Columbia, 2004.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: University of Kentucky, 2004.
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”: Louisiana State University, 2004.

CONTRIBUTED PRESENTATIONS

- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”, Joint Statistical Meeting, August, 2005, Minneapolis, Minnesota, USA
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”, Eighth North American New Researcher Conference, August, 2005, Minneapolis, Minnesota, USA
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to Microarray Data Analysis”, OBayes5 - The Fifth International Workshop on Objective Bayes Methodology, June, 2005, Branson, Missouri, USA

- “Biological Variation in Transcript Levels of Inbred Mice Revealed by Microarray Analysis”,
The Life Sciences Week, March, 2005, University of Missouri, Columbia, USA
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to
Microarray Data Analysis”, ENAR, March, 2005, Austin, USA
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to
Microarray Data Analysis”, Statistical Seminar, Cornell University, October 2003
- “Sharp Simultaneous Intervals for the Means of Selected Populations with Application to
Microarray Data Analysis”, Churchill Group, Jackson Laboratory, March 2003
- “Improving upon Unconditional Mid P-value Test in 2-by-2 Contingency Table”, Biometrics
Unit Discussion Series, Cornell University, April 2002

TEACHING & ADVISING EXPERIENCE

- **Graduate Course:**

Theory of Linear Model(Fall 2005 and Fall 2006, University of Missouri-Columbia)
Introduction to Probability Theory(Spring 2006, UMC)
Analysis of Variance(Fall 2007, UMC)

- **Undergraduate Courses:**

Introduction to Mathematical Statistics(Spring 2005 and Spring 2007, UMC)
Introduction to Probability theory (Spring 2006, UMC)
Analysis of Variance (Fall 2007, UMC)

HONORS/AWARDS

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| 2006 | NSF Travel Grant |
| 2005 | NSF Travel Grant |
| 2005 | Summer Research Fellowship of University of Missouri-Columbia |
| 2003 | NIH Travel Grant. |
| 1999 and 2003 | Graduate School Fellowship, Cornell University. |
| 1997-1998 | GuoMoruo Scholarship (<i>the highest honor for undergraduate students</i>), University of Science & Technology of China. |
| 1996-1997 | Shekou Scholarship (<i>the highest honor for undergraduate students in Business School</i>), University of Science & Technology of China. |
| 1995-1996 | Panasonic Scholarship, University of Science & Technology of China. |