

YING XIANG RACHEL WANG

PERSONAL INFORMATION

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EDUCATION

University of California, Berkeley, Berkeley, CA, USA.
PhD, Statistics, 2010-2015 (Expected).
Advisors: Haiyan Huang and Peter Bickel.

University of Sydney, Sydney, NSW, Australia.
BSc (Hons), Mathematics and Statistics, 2006-2009.
Thesis: Kernel Estimation in a Nonlinear Cointegration Model.
Advisor: Qiying Wang.

SELECTED AWARDS

Barker Graduate Scholarship, University of Sydney, Australia, 2012-2013
Eleanor Sophia Wood Postgraduate Research Travelling Scholarship, University of Sydney, Australia, 2012-2013
Berkeley Fellowship for Graduate Study, University of California, Berkeley, 2010-2012
University Medal, University of Sydney, Australia, 2009
The Joye Prize in Mathematics, University of Sydney, Australia, 2009
Australian Federation of University Women (NSW) Prize in Mathematics, 2009
University of Sydney Outstanding Achievement Scholarship, 2006-2009

PUBLICATIONS

Y.X. Rachel Wang and Peter J. Bickel. A model selection criterion for stochastic blockmodels. *Manuscript in preparation*.

Anand Bhaskar, Y.X. Rachel Wang and Yun S. Song. Efficient inference of population size histories and locus-specific mutation rates from large-sample genomic variation data. *Submitted to Genome Research*. Preprint available at <http://biorxiv.org/content/early/2014/06/28/006742.1>.

Y.X. Rachel Wang, Keni Jiang, Lewis J. Feldman, Peter J. Bickel and Haiyan Huang. Inferring gene-gene interactions and functional modules using sparse canonical correlation analysis. *Annals of Applied Statistics*, accepted.

Y.X. Rachel Wang, Michael S. Waterman and Haiyan Huang. Gene coexpression measures in large heterogeneous samples using count statistics. *Proceedings of the National Academy of Sciences*, (2014), doi: 10.1073/pnas.1417128111

Y.X. Rachel Wang and Haiyan Huang. Review on statistical methods for gene network reconstruction using expression data. *Journal of Theoretical Biology*, (2014), doi:10.1016/j.jtbi.2014.03.040.

Matthias Steinrücken, Y.X. Rachel Wang and Yun S. Song. An explicit transition density expansion for a multi-allelic Wright-Fisher diffusion with general diploid selection. *Theoretical Population Biology*, 83 (2013), 1-14.

Qiying Wang and Y.X. Rachel Wang. Nonparametric cointegrating regression with NNH errors. *Econometric Theory*, 29 (2013), 1-27.

Xin Zhang, Rachel Wang, Felicity M. Cox, Boris T. Kuhlmeier and Maryanne C.J. Large. Selective coating of holes in microstructured optical fiber and its application to in-fiber absorptive polarizer. *Optics Express*, 15 (2007), 16270-16278.

SELECTED TALKS	<p>Computational Biology Seminar, University of Southern California, CA. (Aug 2014)</p> <p>Statistics Seminar, University of Sydney, Australia. (Aug 2014)</p> <p>Bioinformatics Seminar, The Walter and Eliza Hall Institute of Medical Research, Australia. (Jul 2014)</p> <p>Statistics Seminar, University of Sydney, Australia. (Aug 2012)</p> <p>Department Seminar Series, Canon Information Systems Research Australia (CiSRA), Australia. (Aug 2011)</p>
ACADEMIC EMPLOYMENT	<p>Graduate Student Instructor, Department of Statistics, University of California, Berkeley, 2011 - 2014. Designed and taught discussion sections for Stat 20 (an introductory statistics course), Stat 245E and 245F (Statistical Genomics for graduate students).</p> <p>Summer School Lecturer, School of Mathematics and Statistics, University of Sydney, Australia, Dec 2009 - Feb 2010. Delivered lectures, held tutorial sessions and designed assessments for a summer school course on difference and differential equations for life sciences students.</p> <p>Tutor, School of Mathematics and Statistics, University of Sydney, Australia, Aug 2009 - Jul 2010. Held tutorial sessions for courses on calculus, linear algebra and introductory statistics for undergraduate science students.</p>
INTERNSHIPS	<p>Winter Analyst, Morgan Stanley, Hong Kong. (Dec 2008 - Feb 2009)</p> <p>Research Assistant, Optical Fibre Technology Centre, School of Physics, University of Sydney, Australia. (Dec 2006 - Feb 2007)</p>
OTHER	<p>Programming:</p> <p>C, C++, MATLAB, Mathematica, Python, R</p> <p>Languages:</p> <p>Mandarin (native), English (fluent), Japanese (conversational)</p>