Yen-Yi Ho

Office Address
University of Minnesota,
A454-1 Mayo Building, MMC 303
420 Delarware Street SE,
Minneapolis, MN 55455

Contact Information
Phone: 612-624-7656
Email: `yho@umn.edu`
Website: `http://www.biostat.umn.edu/∼yho`

Education

May 2009	Ph.D., Biostatistics, Johns Hopkins University
	Thesis: *Gene Association Networks and Higher-Order Interactions: Algorithms and Statistical Models*
	Committee: Dr. Giovanni Parmigiani (Advisor), Dr. Leslie Cope, Dr. Pien-Chien Huang, Dr. Thomas Louis
2001	M.S., Epidemiology, National Taiwan University
1999	B.S., Double major in Medical Technology & Public Health, National Taiwan University

Research Experience

2011 –	Assistant Professor, Division of Biostatistics, School of Public Health, University of Minnesota
2011 –	Member, Masonic Cancer Center Biostatistics Share Resource Core, University of Minnesota
2009 – 2011	Postdoctoral Research Fellow (Advisor: Dr. Aravinda Chakravarti) McKusic-Nathans Institute of Genetic Medicine Johns Hopkins University School of Medicine
2009 – 2011	Research Collaborator, The Johns Hopkins Center on Aging and Health Research project: *Genetic association studies of frailty in older adults.*
2006 – 2007	Statistical Consultant, Biostatistics Consulting Center Department of Biostatistics, Johns Hopkins University
2005 – 2009	Statistical Consultant, School of Nursing Johns Hopkins University
1998 – 1999	Student Investigator, Undergraduate Research Grant Project *Genetic linkage analysis for schizophrenia patients in Taiwan* supported by the Taiwanese National Science Council

Teaching Experience

2004 – 2009   Teaching Assistant, Department of Biostatistics, Johns Hopkins University
Courses:
Biostatistics in Medical Product Regulation
Biostatistics for Laboratory Scientists

Foundations of Statistics I: Decision Theory (Biostatistics PhD core curriculum)
Statistical Methods in Public Health (1-year graduate level course)
Statistical Reasoning in Public Health (1-year graduate level course)
Data Analysis Workshop (Johns Hopkins University Summer Institute)

Responsibilities: Provided feedbacks for computational programs,
provided discussion sections for data analysis projects,
graded homework and exams, held office hours

2007 – 2008   Member, Teaching Assistant Training Committee
Department of Biostatistics, Johns Hopkins University

Responsibilities: Provided training and mentoring to new teaching assistants

2000 – 2001   Teaching Assistant, Department of Epidemiology, National Taiwan University
Course: Introduction to Biostatistics.

Responsibilities: Designed and gave lectures about programming using
SAS during lab sessions, prepared and graded homework for lab sessions

Awards and Grants

2008   Travel Award to the 2008 Joint Statistical Meetings from
the Department of Biostatistics, Johns Hopkins University

2007   Travel Award to the 2007 ENAR Spring Meeting from
the Department of Biostatistics, Johns Hopkins University

2003 – 2005   Government Funded Scholarship, Taiwanese Ministry of Eduction

1999   Research Creativity Award, National Science Council, Taiwan
Awarded for outstanding undergraduate research

1999   President's Award, National Taiwan University (top 5% of class)

1998 – 1999   Undergraduate Research Grant:
Genetic linkage analysis for schizophrenia patients in Taiwan
awarded by Taiwanese National Science Council

Professional Memberships and Service

American Statistical Association
Institute of Mathematical Statistics
American Society of Human Genetics
Referee, BMC Bioinformatics (2010)

Software

Ho, Y.-Y. (2009). LiquidAssociation: R/Bioconductor package for estimating liquid association using the conditional normal model. Available at http://www.bioconductor.org

Publications

Articles

Ho, Y.-Y., Cope, L.M., Parmigiani, G. (2011). nPARS: A comprehensive search algorithm for constructing Bayesian networks using large-scale genomic data. (Submitted)

Jiang, Q., **Ho, Y.-Y.**, Hao L, Nichols Berrios C, Chakravarti, A. (2011). Copy number variants in candidate genes are genetic modifiers of Hirschsprung disease. *PLoS One* 6, e21219.

Ho, Y.-Y., Matteini A.M., Beamer B., and Fried L., et al. (2011). Exploring biologically relevant pathways in frailty. *Journal of Gerontology A Biological Sciences and Medical Sciences* 66 975-979.

Ho, Y.-Y., Parmigiani, G., Louis, T.A., Cope, L.M. (2010). Modeling Liquid Association. *Biometrics* 67, 133-141. doi: 10.1111/j.1541-0420.2010.01440.x

Lee, W.-C., **Ho, Y.-Y.** (2003). Potential for gene-gene confounding bias in case-parental control studies. *Annals of Epidemiology* **13**, 261-266.

Chen, W.J., Liu P.-H., **Ho, Y.-Y.**, and Chien, K.-L., et al. (2003). Sibling recurrence risk ratio analysis of the metabolic syndrome and its components over time. *BMC Genetics* **4**, S33-S28.

Book Chapters

Ho, Y.-Y., Cope, L., Dettling, M., and Parmigiani, G. (2007). Statistical methods for identifying differentially expressed gene combinations. *Methods in Molecular Biology* **408**, 171-191.

Presentations

Oral Presentation

Gene Association Networks and Higher-Order Interactions: Algorithms and Statistical Models (2008), Thesis Defense Seminar, Johns Hopkins University.

Exploring Liquid Association in Non-Gaussian Multivariate Distributions (2008), Joint Statistical Meetings.

Statistical Methods for identifying differentially expressed gene combinations (2007), International Biometric Society Eastern North American Region (ENAR).

Invited Talks: Tutorial of Statistical Software and Sample Size Calculation (2006–2007), School of Nursing, Johns Hopkins University.

Poster Presentation

Ho, Y.-Y., Cope, L.M., Parmigiani, G. nPARS: A comprehensive search algorithm for constructing Bayesian networks using large-scale genomic data (2010), 4th Annual Young Investigator Symposium on Genomics & Bioinformatics at Johns Hopkins University.

Jiang, Q., **Ho, Y.-Y.** Chakravarti, A. Targeted analysis of genomic copy number alterations in multifactorial Hirschsprung disease (2010), American Society of Human Genetics 60th annual meeting.

Ho, Y.-Y., Xue, Q., Mattenini, A., and Yao, W., et al. Candidate gene association study of frailty in community-dwelling older women (2010), American Society of Human Genetics 60th annual meeting.

November, 2011