# YUAN HUANG

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## EDUCATION

2015        Ph.D. in Statistics, Pennsylvania State University

## PROFESSIONAL EXPERIENCE

2017 – Present        Assistant Professor
                     Department of Biostatistics, University of Iowa, Iowa City, IA

2018 – Present        Associate Member
                     Holden Comprehensive Cancer Center, University of Iowa

2015 – 2017        Postdoc Research Associate
                     Department of Biostatistics, Yale University, New Haven, CT
                     VA Cooperative Studies Program Coordinating Center, West Haven, CT

## PEER-REVIEWED PAPERS

Huang, Y., & Ma, S. (2018). Comments on "Double sparsity kernel learning with automatic variable selection and data extraction." *Statistics and Its Interface*. In press.

Shi, X., Huang, Y., Huang, J., & Ma, S. (2018). A forward and backward stagewise algorithm for nonconvex loss functions and convex penalties. *Computational Statistics & Data Analysis*. In press.

Zhao, N., Qiu, J., Ma, S., Zhang, Y., Lin, X., Tang, Z., ... & Bell, M. L. (2018). Effects of prenatal exposure to ambient air pollutant PM10 on ultrasound-measured fetal growth. *International Journal of Epidemiology*. In press.

Fan, X., Liu, M., Fang, K., Huang, Y., & Ma, S. (2017). Promoting structural effects of covariates in the cure rate model with penalization. *Statistical Methods in Medical Research*., 26(5): 2078-2092.

Chai, H., Shi, X., Zhang, Q., Huang, Y., & Ma, S. (2017). Analysis of cancer gene expression data with an assisted robust marker identification approach. *Genetic Epidemiology*, 41(8): 779-789.

Jiang, Y., Huang, Y., Du, Y., Zhao, Y., Ren, J., Ma, S., & Wu, C. (2017). Identification of prognostic genes and pathways in lung adenocarcinoma using a Bayesian approach. *Cancer Informatics*, 1-7.

Coca, S.G., Nadkarni, G.N., Huang, Y., , …& Parikh, C.R. (2017). Plasma biomarkers and kidney function decline in early and established diabetic kidney disease. *Journal of the American Society of Nephrology*, 28(9): 2786-2793.

Huang, Y., Zhang, Q., Zhang, S., Huang, J., & Ma, S. (2016). Promoting similarity of sparsity structures in integrative analysis. *Journal of the American Statistical Association*, 112(517): 342-350.

Huang, Y., Liu, J., Yi, H., Shia, BC., & Ma, S. (2016). Promoting similarity of model sparsity structures in integrative analysis of cancer genetic data. *Statistics in Medicine*, 36(3): 509-559.

Percival, C. J., Huang, Y., Jabs, E. W., Li, R., & Richtsmeier, J. T. (2014). Embryonic craniofacial bone volume and bone mineral density in Fgfr2$^{+/P253R}$ and nonmutant mice. *Developmental Dynamics*, 243(4): 541-551.

Huang, Y., Huang, J., Shia, BC., & Ma, S. (2012). Identification of cancer genomic markers via integrative sparse boosting. *Biostatistics*, 13(3): 509-522.

Ma, S., Huang, Y., Huang, J., & Fang, K. (2012). Gene network-based cancer prognosis analysis with sparse boosting. *Genetic Research*, 94(4): 205-221.

Ma, S., Zhang, Y., Huang, J., Huang, Y., Lan, Q., Rothman, N., & Zhang, T. (2012). Integrative analysis of cancer prognosis data with multiple subtypes using regularized gradient descent. *Genetic Epidemiology*, 36(8): 829-838.

## OTHER PUBLICATIONS

Percival, C. J., Kawasaki, K., Huang, Y., Weiss, K., Jabs, E.W., Li, R. & Richtsmeier, J. T. (2017). The contribution of angiogenesis to variation in bone development and evolution. In: Building Bones: Bone Formation and Development in Anthropology (Eds: Percival, C. J. and Richtsmeier, J.T.), Cambridge Studies in Biological and Evolutionary Anthropology, Cambridge University Press.

Huang, Y., Wang, X., & Shia, BC. (2009). Efficiency and consistency study on Carma. In NCM'09 Proceedings of the 5th International Joint Conference on INC, IMS, and IDC (pp. 589-594). IEEE.

## PRESENTATIONS

Automated safety event monitoring using electronic medical records in a clinical trial setting - Validation study using the VA NEPHRON-D trial. The 8th International Forum on Statistics. Invited. Beijing, China. July 2018.

A joint learning of multiple precision matrices with sign consistency. The 2nd International Conference on Econometrics and Statistics. Invited. Hong kong. June 2018.

A joint learning of multiple precision matrices with sign consistency. PSU Statistics department's 50th-anniversary conference. Invited. State college, PA. May 2018.

A joint learning of multiple precision matrices with sign consistency. Departmental seminar, Department of Statistics at the of the University of Iowa. Invited. Iowa City, Iowa. April 2018.

Joint and assisted learning of marker selection. Informatics showcase, the University of Iowa. Invited. Iowa City, Iowa. March 2018.

Joint precision matrix estimation with sign consistency. The 7$^{th}$ International Workshop on Perspectives on High-dimensional Data Analysis. *Invited*. Guanajuato, Mexico. June 2017.

A close examination of anti-retroviral drug selection and management in the OPTIMA study. 2017 Translational Science meeting. Washington DC. April 2017.

Promote sign consistency in the joint learning of possibly heterogeneous networks. Symposium on Statistical and Computational Methods for Pharmacogenetic Epidemiology of Cancer. New York, NY. August 2016.

Joint precision matrix estimation with sign consistency, International Chinese Statistical Association Applied Statistics Symposium. *Invited*. Atlanta, GA. June 2016.

Projection test for high-dimensional mean vectors with optimal direction. International Chinese Statistical Association Applied Statistics Symposium/Graybill Joint Conference. *Student paper award*. Fort Collins, CO. June 2015.

Projection test for high-dimensional mean vectors with optimal direction. Joint Statistical Meetings. Seattle, WA. August 2015.

Promoting similarity of model sparsity structures in integrative analysis. Joint Statistical Meetings. Boston, MA. August 2014.

Promoting similarity of model sparsity structures in integrative analysis. Women in Statistics Conference. Cary, NC. May 2014.

Promoting similarity of model sparsity structures in integrative analysis. ENAR Spring Meeting. Baltimore, MD. March 2014.

Efficacy and consistency study on Carma. The 5th International Joint Conference on INC, IMS, and IDC. Peer-reviewed. Seoul, Korea. August 2009.

## TEACHING EXPERIENCE

### Instructor, University of Iowa

BIOS 5730:  Biostatistics Methods in Categorical Data, spring 2018
BIOS 6110:  Applied Categorical Data Analysis, fall 2017

### Instructor, Pennsylvania State University

RM 420: Property, Casualty, and Health Insurance, spring 2015
STAT 319: Applied Statistics in Science, spring 2013

## PROFESSIONAL SERVICE

### Committee and Programs

ENAR 2019, committee member

### Peer review service

Annals of the Institute of Statistical Mathematics

Bioinformatics

Biomarkers in Medicine

Briefings in Bioinformatics

Genomics

Informatics in Medicine Unlocked

Journal of the American Statistical Association

Molecular Omics

Methods of Information in Medicine

Scientific Reports

Statistics and Its Interface

Statistics in Biosciences

Statistics & Probability Letters

The American Statistician

## CERTIFICATIONS

Certified Base Programmer for SAS 9

Society of Actuaries (SOA) exams: P (2006), FM (2006), M (2006), and C (2007)

## HORNORS AND AWARDS

Member of Mu Sigma Rho honor society, since 2015.

Paper award and travel grants, International Chinese Statistical Association Symposium, 2015

University Graduate Fellowship, Pennsylvania State University, 2010