

Lihua Chen, Associate Professor of Statistics

- CONTACT INFORMATION** Roop Hall 338 MSC 1911 (540)568-6533
Harrisonburg, VA, USA *E-mail:* chen3lx@jmu.edu
- RESEARCH INTERESTS** Model combining, information theory, categorical data analysis,
Bayesian methods
- EDUCATION** **Iowa State University**, Ames, IA, USA
- Ph.D., Statistics 2005
Dissertation Topic: “Combining Generalized Linear Models”
- M.S., Economics, 2003
- Beijing University**, Beijing, China
- M.S., Economics (Area: International Finance), 1993
B.S., Economics, 1990
- PROFESSIONAL EXPERIENCE** Associate professor, Department of Mathematics and Statistics, James Madison University, Aug 2015 - present
Assistant professor, Department of Mathematics and Statistics, James Madison University, Aug 2009 - May 2015
Assistant professor, Department of Mathematics and Statistics, the University of Toledo, Aug 2005 - May 2009
- PUBLICATIONS** C. Watt, C. Swanson, D. Miller, L. Chen and C. May, “Social hierarchies override environmental conditions in determining body coloration of brook trout”, *Journal of Freshwater Ecology*, Vol 32, No. 1, 575-580, 2017.
- G. Dong, J. Wang, X Zeng, L. Chen, X. Qin, Y. Zhou, L. Meng, M. Yang, Y. Zhao, W. Ren and Q. Hu. “Interactions between air pollution and obesity on blood pressure and hypertension in Chinese children”. *Epidemiology*, Vol 26, Issue 5, P 740-747, 2015.
- P. Giannakouros and L. Chen, “A problem-solving approach to data analysis for economics”, *Forum for Social Economics*, DOI:10.1080/07360932.2015.1078737, Aug, 2015.
- M. Yang, L. Chen and G. Dong. “Semiparametric Bayesian AFT model with interval-censored data”. *Journal of Statistical Computation and Simulation*, 5, (2015), issue 10, 2049-2058.

P. Giannakouros and L. Chen. "Reclaiming mathematics for economics: A pedagogical approach to overcoming a barrier to pluralism in economics". *International Journal of Pluralism in Economics and Education*, Vol 3, no. 2, pp 118-143, 2012.

L. Chen, P. Giannakouros and E. Berkeley. "Are the significant effects really significant?". *Human Reproduction*, 27(11):3358, 2012.

L. Chen and Y. Yang. "Combining statistical procedures". Higher Dimensional Data Analysis. Frontiers of Statistics book series. Editors: Tony Cai and Xiaotong Shen, World Scientific Pub Co Inc, November, 2010.

L. Chen, P. Giannakouros and Y. Yang. "Model Combining in Factorial Analysis" *The Journal of Statistical Planning and Inference*, Vol 137, 2920-2934, 2007.

E. Berkeley, K. Snodgrass, H. Haefele, A. Eyres and L. Chen. "Effects of rainfall and conception date on reproductive performance of a critically endangered antelope, the addax (*Addax nasomaculatus*), under semi-free-ranging conditions". Technical Report submitted to Fossil Rim Wildlife Center. 2011.

P. Giannakouros and L. Chen. "A Free Software Live DVD for Statistics." *2007 JSM Proceedings, Alexandria, VA: American Statistical Association*.

L. Chen and P. Giannakouros. "A comparison of Model Combining Methods." *2007 JSM Proceedings, Alexandria, VA: American Statistical Association*.

GRANTS AND HONORARIA

Funded

- Jeffress Memorial Trust grant (2014-2015), Christine May (PI), Lihua Chen (Co-PI), Patrice Ludwig (Co-PI) and Anthony Tongen (Co-PI). Grant proposal "Developing an Innovative Mathematical Simulation Model to Inform Recovery Strategies for the Endangered James Spiny mussel (*Pleurobema collina*)". \$100K.
- NSF summer REU grant (2014). \$4750.
- James Madison University summer REU grant (2013) \$2000.
- The University of Toledo Summer Research Grant (2008). \$3500.
- The University of Toledo Center for Teaching and Learning Small Grant, (Spring 2010). Funded iPoIDE for USB drives. \$300.
- The University of Toledo Center of eLearning (Spring 2010), mastered iPoIDE DVD.
- Honoraria, Graybill Conference on Statistics in Information Technology, Fort Collins, CO, (2005). \$500.

CONFERENCE
PRESENTATIONS

- Giannakouros and Lihua Chen, “ Simple graphs in policy persuasion: Examples from Harrisonburg, Virginia and the U.S. Senate”, Virginia Academy of Science annual meeting, Harrisonburg, VA, 2015.
- Marisa Draper, Dylana Wilhelm, Maranda Pepe, Alaina Esposito, Lihua Chen and Anthony Tongen, “ Modeling and analysis of the James Spiny mussel”, Virginia Academy of Science annual meeting, Harrisonburg, VA, 2015.
- A.C. Esposito, P M. Ludwig, L. Chen and C. L. May, ” Using state-of-art mark-recapture techniques to create a conservation plan for the endangered freshwater mussels”, Virginia of Academy of Science annual meeting, Harrisonburg, VA, 2015.
- A.C. Esposito, P M. Ludwig, C. L. May and L. Chen, ” Using state-of-art mark-recapture techniques to create a conservation plan for the endangered freshwater mussels”, Joint American Fisheries Societies annual meeting, Blacksburg, VA, Feb. 2015.
- Chen, Lihua and Giannakouros, Panayotis. “Estimating the survival function via model averaging”, Virginia Academy of Science annual meeting, Richmond, VA, May, 2014.
- Chen, Lihua and Giannakouros, Panayotis. “Entropy, data compression and model combination”, MAA MD-DC-VA section meeting, Harrisonburg, VA, April, 2014.
- Panayotis Giannakouros and Lihua Chen. “Statistical Practice in Economics 75 years after the Keynes-Tinbergen Debate”. The Empirical Methods and Times Series section of Midwest Economic Association Annual Meeting 2013. Columbus, OH.
- Panayotis Giannakouros and Lihua Chen. “Reclaiming Keynesian mathematics”. *11th International Post-Keynesian Conference*. Kansas City, MO. September, 2012.
- Panayotis Giannakouros and Lihua Chen. “Reclaiming math for economists”. *Midwest Economic Association Annual Meeting*, Chicago. March 2012.
- Lihua Chen and Panayotis Giannakouros. “Incorporating statistical thinking with free software in an introductory statistics course”, poster presentation. *UseR! Conference*, Gaithersburg, MD, USA, July 2010.
- Panayotis Giannakouros and Lihua Chen. “A Free Software DVD for Statistics.” *26th American Statistical Association Joint Statistical Meetings*, poster presentation. Salt Lake City, August 2007.
- Lihua Chen and Panayotis Giannakouros. “A Comparison of Model Combining Methods.” *26th American Statistical Association Joint Statistical Meetings*, Salt Lake City, August 2007.

- Panayotis Giannakouros and Lihua Chen. “A Free Software DVD for Statistical Computing.” poster presentation. *UseR! Conference*, Ames, August 2007.
- Lihua Chen and Panayotis Giannakouros. “An Xgrid Oriented R Package for Prediction-based Model Combining.” poster presentation. *UseR! Conference*, Ames, August 2007.
- Lihua Chen and Panayotis Giannakouros. “Estimating Survival Functions via Model Combining.” *25th American Statistical Association Joint Statistical Meetings*, Seattle, August 6-10, 2006.
- Panayotis Giannakouros and Lihua Chen, “Tuned and Guided ARM” *25th American Statistical Association Joint Statistical Meetings*, Seattle, August 6-10, 2006
- Lihua Chen and Yuhong Yang. “Combining Loglinear Models.” *24th Joint Statistical Meeting*, Minneapolis, 2005.
- Lihua Chen, Panayotis Giannakouros and Yuhong Yang. “An Alternative to Model Selection Demonstrated on a Capture-Recapture Study” Poster presentation, *Graybill Conference on Statistics in Information Technology*, Fort Collins, CO, June 2005.
- Lihua Chen and Yang, Yuhong. “Model Combining in Factorial Data Analysis.” *23rd Joint Statistical Meeting*, Toronto, Canada, 2004.

TEACHING
EXPERIENCE

James Madison University *Associate Professor* **August, 2015 - present**
Assistant Professor **August, 2015–May, 2015**

Elementary Statistics
Topics in Mathematics
Introduction to Probability and Statistics
Statistical Decision Theory
Applied Linear Regression
Analysis of Variance and Experimental Design
Probability and Mathematical Statistics
Categorical Data Analysis
Research Project in Statistics

The University of Toledo

Assistant Professor

August, 2005–2009

Undergraduate

Introduction to Statistics
Introduction to Mathematical Statistics

Graduate

Introduction to Probability Theory
Categorical Data Analysis
Nonparametric Statistics
Topics on Statistics: Nonparametric Classification Methods
Topics on Statistics: Bayesian Statistics
Topics on Statistics: Information Theory and Statistics

Ph.D. Theory Core

Measure-Theoretic Probability
Theory of Statistics

Iowa State University, Ames, IA, USA

Instructor

August, 2003–2005

Undergraduate Engineering Statistics (4 semesters)

Teaching Assistant

August, 1998–2003

(Graduate Courses)

Applied Time Series Statistics
Statistical Methods I
Statistical Methods II
Time Series Analysis

(Undergraduate Courses)

Principles of Statistics
Introduction to Business Statistics
Principles of Macroeconomics
Principles of Microeconomics

Advising

Honor thesis committee: Amanda Miller, Marissa Draper, Noah Watson

Master thesis committee: Alaina Esposito, Dorottya Boisen

Ph.D. dissertation committees: Shuwen Wany, Shiju Zhang, Xin Deng, Ming Zhao and Kim Chow.

**OTHER
PROFESSIONAL
ACTIVITIES**

Referee for

Journal of Statistical Planning and Inference

Statistical Surveys

Journal of Econometrics

International Journal of Pluralism in Economics and Education

