

# Joshua D. Habiger

## Home Address

2202 N. Burdick  
Stillwater, OK 74075  
Voice: (785) 565-3993

## Work Address

Oklahoma State University  
Department of Statistics  
301 - G, MSCS bldg.  
Stillwater, OK 74078-1056  
Voice: (405) 777-5684  
Fax: (405) 744-3533  
email: jhabige@okstate.edu

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## Degrees

August, 2010 Ph.D., Statistics, University of South Carolina  
May, 2006 M.S., Statistics, Kansas State University  
May, 2004 B.S., Mathematics; Minor, Statistics, Kansas State University

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## Experience

2010 - present **Assistant Professor**, Department of Statistics, Oklahoma State University  
2009 - present **Consultant**, National Institute of Statistical Sciences and the USDA  
2008 - 2010 **Webmaster**, Department of Statistics, University of South Carolina  
2008 - 2010 **Research Assistant**, Department of Statistics, University of South Carolina  
2006 - 2010 **Teaching Assistant**, Department of Statistics, University of South Carolina

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## Major Areas of Current Research Interest

Simultaneous Inference, Nonparametric Statistics, Categorical Data Analysis

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## Publications

- Habiger, J.** and Peña, E. (2010). Randomized  $p$ -Values and Nonparametric Procedures in Multiple Testing. *Journal of Nonparametric Statistics, in press*
- Peña, E., **Habiger, J.**, and Wu, W. (2010). Power-Enhanced Multiple Decision Functions Controlling Family-Wise Error and False Discovery Rates. *Annals of Statistics, in press*
- Xiangli Cui<sup>1</sup>, Yu Jin<sup>1</sup>, Deepak Poudyal, Alexander A. Chumanevich, Tia Davis, Anthony Windust, Anne B. Hofseth<sup>1</sup>, Wensong Wu, **Joshua Habiger**, Edsel A. Pena, Patricia A. Wood, Mitzi Nagarkatti, Prakash Nagarkatti, and Lorne J. Hofseth (2010). Mechanistic Insight Into the Ability of American Ginseng to Suppress Colon Cancer Associated with Colitis. *Carcinogenesis, in press*
- Cui, X., Jin, Y., Hofseth, A., Pena, E., **Habiger, J.**, Chumanevich, A., Nagarakatti, M., Nagarakatti, P., Singh, U., Hofseth, H. (2010). Resveratrol Suppresses Colitis and Colon Cancer Associated with Colitis. *Cancer Prevention Research 3; 549*
- Lauter, N., Mosco, M., **Habiger, J.**, and Moose, S. (2008). Quantitative Genetic Dissection of Shoot Architecture in Maize: Towards a Functional Genomics Approach. *The Plant Genome 1:99-110*

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## Submitted Articles

- Habiger, J.** (2010). A Method for Modifying Multiple Testing Procedures. *Biometrika*
- Habiger, J.** and Peña, E. (2010). Compound  $p$ -Values for Multiple Testing Procedures. *Journal of the American Statistical Association*
- Robbins, M., Ghosh, S. and **Habiger, J.** (2010). Imputation in High-Dimensional Economic Data: An Introduction and Comparison of Methods as Applied to the Agricultural Resource Management Survey. *Journal of the American Statistical Association*
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**Research in Progress**

Average Confidence Intervals: An Alternative Method for Parameter Estimation in the Presence of Discrete Data

Nonparametric Compound  $p$ -Values for Multiple Testing Procedures

Unbiased Power Estimation in Multiple Testing

Constructing Dependent and Valid  $p$ -value Statistics from Independent Data to Increase Power

Multiple Model Selection and Global Type I Error Rates

Size and Average Size with an Emphasis in Large-Scale Simultaneous Inference

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**Presentations**

An Assessment of Imputation Methods for the USDA's Area Resource Management Survey. *20 minute talk.* Joint Statistical Meetings, Vancouver, Canada, Aug. 3, 2010

Randomized  $p$ -values in Multiple Testing. *Poster presentation.* Joint Statistical Meetings, Washington D.C., Aug. 1, 2009

Nonparametric Randomized  $p$ -Values in Microarray Analysis. *30 minute talk.* Conference on Applied Statistics in Agriculture, Kansas State University, Apr. 21, 2009

A Generalized B-H Procedure. *50 minute talk.* Department of Statistics, University of South Carolina, Aug. 27, 2008

Optimal Sizes for Marginal False Discovery Rate Control. *Poster presentation.* SRCOS, Charleston, SC, Jun. 8-11, 2008

Nonparametric Confidence Intervals for Quantitative Trait Loci. *Poster presentation.* Joint Annual Bioinformatics Symposium, Iowa State University, Jul. 13-14, 2006

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**Awards**

Nominee for the Journal of Nonparametric Statistics and ASA Student Paper of the Year, 2010 (results expected Jan. 2011)

Dean's Award for Excellence in Graduate Study, University of South Carolina, 2010

Winner of the Student Paper Competition in the ASA Nonparametric Statistics section at JSM, 2009

James D. Lynch Graduate Student Researcher of the Year Award, 2009

College of Arts and Sciences, University of South Carolina Student Travel Award to attend the JSM in Washington, D.C., 2009

Department of Statistics, University of South Carolina travel award to attend JSM in Washington D.C., 2009

ASA travel award to attend SRCOS at Jekyll Island, GA, 2009

Travel award to attend Applied Statistics in Agriculture Conference at Kansas State University, 2009

ASA travel award to attend SRCOS at Charleston, SC, 2008

Inducted into Mu Sigma Rho Statistics Honor Society, 2007

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