

**TENURE AND PROMOTION CURRICULUM VITAE  
OF  
WENSONG WU, DEPARTMENT OF MATHEMATICS AND STATISTICS**

**EDUCATION**

<i>Degree</i>	<i>Institution</i>	<i>Field</i>	<i>Dates</i>
PhD	University of South Carolina	Statistics	2011
MS	University of South Carolina	Mathematics	2007
BS	Nanjing University	Computational Math	2004

**FULL-TIME ACADEMIC EXPERIENCE**

<i>Institution</i>	<i>Rank</i>	<i>Field</i>	<i>Dates</i>
FIU	Assistant Professor	Statistics	Aug 2011 - present

**PART-TIME ACADEMIC EXPERIENCE**

<i>Institution</i>	<i>Rank</i>	<i>Field</i>	<i>Dates</i>
Univ. of S. Carolina	Graduate Assistant	Statistics	Jan 2007- May 2011
Univ. of S. Carolina	Graduate Assistant	Mathematics	Aug 2004- Dec 2007

**EMPLOYMENT RECORD AT FIU**

<i>Rank</i>	<i>Dates</i>
Assistant Professor	Aug 2011 - present

**PUBLICATIONS IN DISCIPLINE**

**Articles (Peer-reviewed)**

1. Edsel A. Pena\*, **Wensong Wu\***, Walter W. Piegorsch, Ronald W. West, Lingling An. (2016). Model Selection and Estimation with Quantal-Response Data in Benchmark Risk Assessment. *Risk Analysis*. In press. **\*These authors contribute equally.**
2. Annia Mesa, Mitch Fernandez, **Wensong Wu**, Giri Narasimhan, Eric L. Greidinger, DeEtta K. Mills. (2016). Can SLE classification rules be effectively applied to diagnose unclear SLE cases? *Lupus*. In press. pii: 0961203316655212. Epub ahead of print.
3. Marwan Tabbara, Juan C Duque, Laisel Martinez, Luis A Escobar, **Wensong Wu**, Yue Pan, Natasha Fernandez, Omaidia C. Velazquez, Edgar A. Jaimes, Loay H Salman, and Roberto Vazquez-Padron. (2016). Pre-existing and Postoperative Intimal Hyperplasia and Arteriovenous Fistula Outcomes. *American Journal of Kidney Disease*. 68(3):455-464
4. Edsel A. Pena, Joshua D. Habiger, and **Wensong Wu**. (2015). Classes of multiple decision functions strongly controlling FWER and FDR. *Metrika*. Volume 78, Issue 5, pp 563-595. DOI: 10.1007/s00184-014-0516-6

5. Anas Salah Eddin, Jin Wang, **Wensong Wu**, Saman Sargolzaei, Bruce Bjornson, Richard A Jones, William D Gaillard, and Malek Adjouadi. (2014). The Effects of Pediatric Epilepsy on a Language Connectome. *Human Brain Mapping*. 35(12):5996-6010.
6. Jin Wang, Xiaozhen You, **Wensong Wu**, Magno R. Guillen, Mercedes Cabreriza, Joseph Sullivan, Elizabeth Donner, Bruce Bjornson, William D. Gailard, and Malek Adjouadi. (2014). Classification of fMRI Patterns - A Study of the Language Network Segregation in Pediatric Localization Related Epilepsy. *Human Brain Mapping*, Apr; 35(4):1446-60. doi: 10.1002/hbm.22265
7. **Wensong Wu** and Edsel A. Pena. (2013). Bayes Multiple Decision Functions. *Electronic Journal of Statistics*, Volume 7, 1272-1300. DOI:10.1214/13-EJS813.
8. Annia Mesa, Jason A. Somarelli, **Wensong Wu**, Laisel Martinez, Melissa B. Blom, Eric L. Greidinger, and Rene J. Herrera. (2013). Differential immunoglobulin class-mediated responses to components of the U1 small nuclear ribonucleoprotein in Systemic Lupus Erythematosus and Mixed Connective Tissue Disease. *Lupus*, 22(13): 1371-1381. DOI: 10.1177/0961203313508444.
9. Walter W. Piegorsch, Lingling An, Alissa A. Wickens, R. Webster West, Edsel A. Pena, and **Wensong Wu**. (2013). Information-theoretic model-averaged benchmark dose analysis in environmental risk assessment. *Environmetrics*, 24(3), 143–157. DOI: 10.1002/env.2201.
10. R. Webster West, Walter W. Piegorsch, Edsel A. Pena, Lingling An, **Wensong Wu**, Alissa A. Wickens, Hui Xiong, and Wenhai Chen. (2012). The Impact of Model Uncertainty on Benchmark Dose Estimation. *Environmetrics Special Issue: Modern quantitative methods for environmental risk assessment*, 23, 706–716. DOI: 10.1002/env.2180.
11. Edsel A. Pena, Joshua D. Habiger, and **Wensong Wu**. (2011). Power-Enhanced Multiple Decision Functions Controlling Family-Wise Error and False Discovery Rates. *Annals of Statistics*, 39(1), 556-583. DOI:10.1214/10-AOS844.
12. Edsel A. Pena, Joshua D. Habiger, and **Wensong Wu**. (2011). Supplement to “Power-enhanced multiple decision functions controlling family-wise error and false discovery rates”. *Annals of Statistics (to appear as online supplement)*. DOI: 10.1214/10-AOS844SUPP.
13. Xiangli Cui, Yu Jin, Deepak Poudyal, Alexander A. Chumanevich, Tia Davis, Anthony Windust, Anne Hofseth, **Wensong Wu**, Joshua Habiger, Edsel Pena, Patricia Wood, Mitzi Nagarkatti, Prakash S. Nagarkatti, and Lorne Hofseth. (2010). Mechanistic insight into the ability of American ginseng to suppress colon cancer associated with colitis. *Carcinogenesis*, 31(10), 1734--1741. DOI: 10.1093/carcin/bgq163.
14. Paul F Meeh, Christopher L Farrell, Randal Croshaw, Hampton Crimm, Samantha K Miller, Dora Oroian, Sangeeta Kowli, Jinyu Zhu, Wayne Carver, **Wensong Wu**, Edsel Pena, and Phillip J Buckhaults. (2009). A gene expression classifier of node positive colon cancer. *Neoplasia*, 11(10), 1074--1083.
15. Lili Ju, **Wensong Wu**, and Weidong Zhao. (2009). Adaptive finite volume methods for steady convection-diffusion equations with mesh optimization. *Discrete and Continuous Dynamical Systems - Series B*, Volume: 11, Number: 3, pp. 669--690.

#### Articles (Non-peer-reviewed)

16. **Wensong Wu**. (2011). Bayes multiple decision functions: theory, computation and application. *PhD dissertation*. University of South Carolina.

## PRESENTED PAPERS, AND LECTURES

1. "Bayes Multiple Classification with Frequent Pattern Mining." Jun. 2016. International Chinese Statistical Association Applied Statistics Symposium, Atlanta, GA. 30-minute invited talk.
2. "Bayes Multiple Binary Classifier". Nov. 2015, Mathematics Colloquium Series, Nova Southeastern University, Miami, FL. 60-minute invited talk.
3. "Logic Regression with Correlated Data." Aug. 2015, Joint Statistical Meetings, Seattle, WA. 15-minute contributed talk.
4. "Introduction to Statistics in Biomedical Engineering." Feb. 2015, BME 1008 Introduction to Biomedical Engineering, FIU, Miami, FL. 60-minute invited guest lecture.
5. "Bayes Multiple Classification with Frequent Pattern Mining." Aug. 2014, Joint Statistical Meetings, Boston, MA. 15-minute contributed talk.
6. "Make decisions like a Bayesian". May 2014, Research seminar, Department of Mathematics, Nanjing University, Nanjing, China. 60-minute invited talk.
7. "Make decisions like a Bayesian". May 2014, Research seminar, College of Power Engineering, Nanjing University of Science and Technology, Nanjing, China. 60-minute invited talk.
8. "Bayesian Statistics with High Dimensional Data". May 2014, Research seminar, School of Automation, Nanjing University of Science and Technology, Nanjing, China. 60-minute invited talk.
9. "Make decisions like a Bayesian". Mar. 2014. Computational and Molecular Biology Interest Organization, FIU, Miami, FL. 60-minute invited talk.
10. "Bayes Multiple Decision Functions with Frequent Pattern Mining." Mar. 2014, ENAR Spring Meeting, International Biometric Society, Baltimore, MD. 15-minute contributed talk.
11. "Bayes Multiple Decision Functions in Classification." Mar. 2013. ENAR Spring Meeting, International Biometric Society, Orlando, FL. 15-minute contributed talk.
12. "Logic Regression Modeling with Repeated Measurement Data and its Applications on Syndromic Diagnosis of Vaginal Infections in India." Mar. 2013. ENAR Spring Meeting, International Biometric Society, Orlando, FL. Poster.
13. "Bayes Multiple Decision Functions in Classification." Nov. 2012. Seminar Series of Division of Biostatistics, Department of Epidemiology and Public Health, University of Miami, Miami, FL. 50-minute invited talk.
14. "Large Data, Better Decision? - The Bless and Curse of Dimensionality." Apr. 2012. Math Awareness Month Talk Series. Department of Mathematics, Miami Dade Collage North Campus, Miami, FL. 50-minute invited talk.
15. "Model Selection and Estimation with Quantal-Response Data in Benchmark Risk Assessment". Oct. 2011. Research Colloquium, Division of Statistics, Department of Mathematics and Statistics, FIU, Miami, FL. 50-minute invited talk.
16. "Bayes Multiple Decision Functions With Combined Losses." Oct. 2010, Research Seminar, Department of Statistics, University of South Carolina. 50-minute invited talk.
17. "A Partition-Based Bayesian Test for Equality of Parameters with Multigroups." Jun. 2011, Southern Regional Council on Statistics (SRCOS) 2011 Summer Research Conference, McCormick, SC. Poster.
18. "Bayes Multiple Decision Functions in Multiple Testing." Aug. 2010, Joint Statistical Meetings, Vancouver, BC, Canada. 15-minute contributed talk.
19. "Optimal Multiple Decision Functions." Jul. 2010. First Joint Biostatistics Symposium,

Beijing, China. 20-minute invited talk.

## WORKS IN PROGRESS

### Papers submitted to journals for consideration

1. Yuanchang Sun, **Wensong Wu**, Jack Xin. Computational Modeling of Spectral Data Fitting with Nonlinear Distortions. Submitted to *Signal, Image and Video Processing*.

### Other completed papers

2. **Wensong Wu**. Bayesian Multiple Classification Function. In revision for submission.
3. Edsel A. Pena, **Wensong Wu**, Bereket Kindo, Black. Hill, Fazlur Rahman, and Lillian Wanda. Multi-Group and Multi-Agent Binary Decision-Making. In revision for resubmission.
4. Annia Mesa, **Wensong Wu**, Mitch Fernandez, Emanuel Martinez, Jonathan Levy, DeEtta K. Mills, and Eric L. Greidinger. U1A protein is a candidate biomarker for kidney and lung disease in SLE and MCTD patients. In revision for resubmission.

### Research in progress

5. Jobany Heredia Rico\*, **Wensong Wu**. Simulations Studies of Logic Regression Models with Correlated Data. \* Master student
6. **Wensong Wu** and Tan Li. Bayesian Model Selection and Averaging with Frequent Pattern Mining.
7. Tan Li and **Wensong Wu**. Logic Regression Modeling with Repeated Measurement Data and its Applications on Syndromic Diagnosis of Vaginal Infections in India.

### Grant Proposals

8. Bayesian Multiple Classifications with Frequent Pattern Mining. To be submitted to NSF-DMS (CDS&E-MSS) in Dec. 2016. Solo-PI.
9. Restoring Sensation With a Neural-Enabled Prosthetic Hand System for Home Use: a First-in-Human Study. Submitted to DOD, May 2016. Role: Co-Investigator. PI: Ranu Jung.
10. Mesenchymal Stem Cells as Drug Carrier for Targeted Anti-HIV Therapy. Submitted to NIH, Jan 2016. Role: Co-Investigator. PI: Upal Roy. **Score: 37 (in a very good position for possible funding)**
11. Cohort Studies in HIV/AIDS and Substance Abuse in Miami. Submitted to NIH, Feb 2016. Role: Co-Investigator. PI: Marianna Baum.

## FUNDED RESEARCH

1. 1R01DA042477-01. Understanding tobacco flavor effects on waterpipe smoker. NIH. 2016-2019. PI: Wasim Maziak. \$1,282,902.90. Role: Co-Investigator. YR2 and YR3 10% AY.
2. 1R01MH097819-01A1. Improving Medication Adherence in ADHD Adolescents. NIH. 2015-2019. PI: William Pelham. \$1,384,269.00. Role: Co-Investigator. 3.502% AY and 4% SMR.

## **PROPOSALS SUBMITTED BUT NOT FUNDED**

1. Data-Driven Low Radiation Dose Computed Tomography Perfusion for Stroke. Submitted to NIH, Feb 2016. Role: Co-Investigator. PI: Ruogu Fang. \$1,948,094.80
2. Nanomedicine based anti-HIV drug delivery targeting Microfold cells. Submitted to NIH, Sep 2015. Role: Co-Investigator. PI: Upal Roy. \$362,500.00
3. Development of Nanodiamond based Drug Delivery in the brain for neuroAIDS. Resubmitted to NIH, Jan 2015. Role: Co-Investigator. PI: Upal Roy. \$423,735.00
4. Role of DJ1 in reward system of methamphetamine and HIV infected brain. Submitted to NIH, Nov 2014. Role: Co-Investigator. PI: Upal Roy. \$423,735.00
5. Nanomedicine based anti-HIV drug delivery targeting Microfold cells. Submitted to NIH, Sep 2014. Role: Co-Investigator. PI: Upal Roy. \$1,630,068.00
6. Center of Excellence in Research Data Analysis. Submitted to U.S. Air Force Research Laboratory, July 2014. Role: Co-PI. PI: Shu-Ching, Chen. \$4,999,28.00
7. Development of Nanodiamonds based Drug Delivery in the brain for neuroAIDS. Submitted to NIH, May 2014. Role: Co-Investigator. PI: Upal Roy. \$428,284.00
8. Collaboration Grants for Mathematicians. Submitted to Simmons Foundation, Jan 2014. Role: Sole-PI. \$35,000.00
9. Role of HIV in Hematopoietic stem cell differentiation. Submitted to NIH, Jan 2014. Role: Co-Investigator. PI: Upal Roy. \$450,245.00

## **PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS**

- 2015, invited attendee for ENAR Workshop for Junior Investigators, International Biometric Society.
- 2011, R. L. Anderson Poster Award, Southern Regional Council on Statistics (SRCOS) 2011 Summer Research Conference.
- 2010, James D. Lynch Summer Research Award, Dept of Statistics, U. of South Carolina.
- 2007, Outstanding Graduate Student in Academic, Dept of Statistics, U. of South Carolina.

## **OFFICES HELD IN PROFESSIONAL SOCIETIES**

- 2014-2015. Publication Officer, Risk Analysis Section, American Statistical Association.

## **OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE**

- 2015 - present. Faculty advisor to Statistics Club, FIU.
- 2015. External reviewer for the National Security Science and Engineering Faculty Fellowship (NSSEFF) sponsored by the Basic Research Office, Office of Assistant Secretary of Defense for Research and Engineering (ASD (R&E))
- 2014 - 2016. Committee of annual outstanding student paper award, Risk Analysis Section, American Statistical Association.
- 2014. Judge for outstanding poster award in ENAR spring meeting.
- 2014. Session chair in Joint Statistical Meetings.
- 2013 - present. Faculty Statistician, Integrated Biostatistics and Data Management Center, FIU.

- Member of
  - American Statistical Association
  - ENAR, International Biometric Society
  - International Chinese Statistical Association
  
- Associated Editor for
  - Journal of Probability and Statistical Science
  
- Reviewer for
  - Electronic Journal of Statistics
  - Environmetrics
  - Mathematical Reviews
  - Frontiers in Neuroscience, section Brain Imaging Methods
  - Frontiers in Genetics, section Statistical Genetics and Methodology
  
- Department Service
  - Fall 2011-present, Colloquium committee, Division of Statistics, Department of Mathematics and Statistics, FIU.
  - Fall 2014-present, Student recruitment committee, Division of Statistics, Department of Mathematics and Statistics, FIU.
  
- Dissertation/Thesis Committees
  - Master student as major advisor: Jobany Heredia Rico (2016)
  - Master students: Sergio Perez-Melo (2014), Andrew Hadden (2015), James Adefisoye (2015), Smit Shah (2015), Yawen Guo (expected 2016)
  - Ph.D students: Annia Mesa (Department of Human and Molecular Genetics, College of Medicine, 2014), Yexi Jiang (School of Computing and Information Sciences, 2015), Tiffanie Stewart (Department of Dietetics and Nutrition, Robert Stempel College of Public Health and Social Work, 2016), Laura Timm (Department of Biology, CASE, expected 2017), Praew Chantarasinlapin (Department of Dietetics and Nutrition, Robert Stempel College of Public Health and Social Work, expected 2017), Daniel G Merselis (Department of Biology, CASE, expected 2017), Dana Farrell-Smith (Department of Health Promotion and Disease Prevention, Robert Stempel College of Public Health and Social Work, expected 2016), Katherine Dougan (Department of Biology, CASE, expected 2018), Iian Black (Department of Biomedical Engineering, College of Engineering and Computing, expected 2017), Homa Fartash (Department of Civil Engineering, College of Engineering and Computing, expected 2018), Mohammad Ali Lavasani (Department of Civil Engineering, College of Engineering and Computing, expected 2017), MD Asif Raihan (Department of Civil Engineering, College of Engineering and Computing, expected 2018), Tyler Stout (Department of Psychology, CASE, expected 2016), Chunqiu Zeng (School of Computing and Information Sciences, expected 2016), Janelle Nunez-Castilla (Department of Biology, CASE, expected 2019), Christyl Dawson (Department of Epidemiology, Robert Stempel College of Public Health and Social Work, expected 2019)