Curriculum Vitae

Edsel A. Peña

Department of Statistics, University of South Carolina, Columbia, South Carolina 29208
Phone: (803)576-5813 (O); (803)732-1202 (H); (803)206-9401 (M); **Office Fax:** (803)777-4048
E-mail: pena@stat.sc.edu; **Website:** http://www.stat.sc.edu/~pena/

Personal Information

Personal Background

- Date and Place of Birth: August 26, 1959, Panganiban, Catanduanes, Philippines.
- Spouse: Dr. Ma. Marjorette O. Peña.
- Children: Judith Christa (b. 1986); Michelle Anne (b. 1988).
- US Immigration Status: US Citizen (Naturalized: 7/4/1998).

Academic Degrees

- Ph. D. (Statistics), Florida State University, 1986.
- M. S. (Statistics), Florida State Univerrsity, 1984.
- M. S. (Statistics),University of the Philippines at Los Baños, 1982.
- B. S. (*magna cum laude*) (Statistics), University of the Philippines at Los Baños, 1979.

Academic Positions

- Professor, University of South Carolina, Aug. 2000-Present.
- Visiting Professor, University of Michigan, 1999-2000.
- Professor, Bowling Green State University, 1997-2000.
- Visiting Assoc. Professor, University of Michigan, 1995-96.
- Associate Professor, Bowling Green State University, 1991-1997.
- Assistant Professor, Bowling Green State University, 1986-1991.
- Teaching Assistant, Florida State University, 1982-86.
- Instructor II, University of the Philippines at Los Baños, 1979-81.

Research and Consulting Positions

- Director, Biometry Core, Center for Colon Cancer Research (CCCR), University of South Carolina, August 2002-Present. The CCCR is supported by an NIH COBRE Grant.
- Visiting Researcher, 5/10/1993 to 6/20/1993, Department of Statistics, Florida State University, Supported by AFOSR.
- Visiting Researcher, 5/11/1992 to 6/20/1992, Department of Statistics, Florida State University, Supported by AFOSR.
- Director, Summer 1992 and Summer 1991, Statistical Consulting Center, Bowling Green State University.

- Assistant Director, Summer 1989 and Summer 1987, Statistical Consulting Center, Bowling Green State University.
- USC Center for Colon Cancer Research (CCCR) Biometry Core Director, 2002-Present. This position involves statistical consulting with CCCR researchers and also the development of new statistical methods appropriate for colon cancer research.

Professional Honors and Awards (including some Research Grants)

- Institute of Mathematical Statistics (IMS) Executive Secretary, August 1, 2017-July 31, 2020.
- **Elected Full Member**, Philippine-American Academy of Science and Engineering (PAASE), June 2017.
- **Elected Member**, International Statistical Institute. November 2015.
- National Institutes of Health (NIH) COBRE Grant from 2013-2018. (PI of Project: Dr. Frank Berger; Biometry Core PI: E. Peña). Title: *Biometry Core: Center for Colon Cancer Research.*
- State of South Carolina Co-Champion in Chess, 2012.
- 2011 South Carolina State Chess Blitz Champion.
- 2011 Outstanding Alumnus for Research and Instruction, University of the Philippines at Los Baños, College of Arts and Sciences Alumni Association.
- National Science Foundation (NSF) Research Grant from 2011-2014. (PI: E. Peña; Co-PI: J. Lynch)
- National Institutes of Health (NIH) Research Grant from 2011–2016. (Co-PI; PI: Dr. Marge Peña)
- National Institutes of Health (NIH) COBRE Grant from 2007-2012. (PI: Dr. Frank Berger). Title: *Biometry Core: Center for Colon Cancer Research.*
- NSF Research Grant (Co-PI; PI: Lynch). Period: 2008-2011.
- EPA Research Grant (subcontract from University of Arizona; PI: Piegorsch). Period: 2005–2009.
- 2008 University of South Carolina Educational Foundation Research Award for Science, Mathematics & Engineering Award Winner.
- 2007 University of South Carolina Michael Mungo Graduate Teaching Award Winner.
- Plenary Speaker, Fourth International Conference on Mathematical Methods in Reliability (MMR), Santa Fe, New Mexico, June 2004.
- National Institutes of Health (NIH) Research Grant. Grant 2 R01 GM056182 from 2003-2008. PI: Edsel A. Peña. Title: *New Models for Recurrent Event Data.*
- National Institutes of Health (NIH) COBRE Grant from 2002-2007. (PI: Dr. Frank Berger; PI of Biometry Core: E. Peña). Title: *Biometry Core: Center for Colon Cancer Research.*
- National Science Foundation (NSF) Research Grant Award DMS 0102870 from August 2001-July 2004. PI: Edsel A. Peña. Title: *Adaptive Goodness-of-Fit Tests, Recurrent Event Models, and Models with Alternative Time Scales.*
- **Elected Fellow**, American Statistical Association. August 2002.
- National Institutes of Health (NIH) Research Grant Award. Grant 1 R01 GM56182 from 1998-2001. PI: Edsel A. Peña. Title: *Models and Analysis of Recurrent Data with Intervention.*
- Kappa Mu Epsilon (KME) Honor Society Excellence in Math Teaching Award, 1998, Bowling Green State University.
- Kappa Mu Epsilon (KME) Honor Society Excellence in Math Teaching Award, 1990, Bowling Green State University.

- Kappa Mu Epsilon (KME) Honor Society Excellence in Math Teaching Award, 1987, Bowling Green State University.
- Ralph Bradley Student Award, Florida State University, 1986.
- Graduate Fellow, Florida State University, 1985-86.
- Teaching/Research Assistant, Florida State University, 1982-85.
- Graduate Fellow (Faculty Fellowship Program), University of the Philippines at Los Baños, 1981-82.
- Member (University of the Philippines Chapter), Phi Kappa Phi Honor Society, since 1979.
- Graduated *magna cum laude*, University of the Philippines at Los Baños, 1979.
- National Scholar, 1976-79, Integrated Academic Program for the Sciences Scholarship Program (INTAPS), University of the Philippines at Los Baños.
- National Scholar, Philippine Science High School, 1972-76.

Significant Professional Service

- Served on NIH Study Section Panel (March 2018).
- Served on NIH Study Section Panel (February 2018).
- Served on NIH Study Section Panel (January 2018).
- Served on NIH Study Section Panel (November 2017).
- Served on NSF DMS Review Panel (October 2017).
- Served on NIH Study Section Panel (October 2017).
- Institute of Mathematical Statistics (IMS) Executive Secretary, August 1, 2017 to July 31, 2020. As Executive Secretary I am also a member of the IMS Council.
- Elected to the American Statistical Association (ASA) Sections Representative, January 1, 2018 to December 31, 2019.
- Served on two NIH Study Section Panels, March 2017.
- External reviewer of an NSF Grant Proposal, December 2016.
- Served on an NIH Study Section Review Panel, December 2016.
- Served on an NIH Study Section Review Panel, November 2016.
- Chair (Jan 2016–Dec 2017), ASA Noether Awards Committee.
- Served on an NIH Study Section Review Panel, June 2016.
- Served on an NIH Study Section Review Panel, February 2016.
- NSF DMS Review Panel Member, 2015.
- Chair, American Statistical Association Section on Risk Analysis. 2014.
- Chair, University of South Carolina Tenure and Promotion Committee, 2013-2014.
- Served on an NIH Study Section Review Panel, October 2014.
- Served on an NIH Study Section Review Panel, July 2014.
- Served on an NIH Study Section Review Panel, March 2014.
- Served on an NIH Study Section Review Panel, June 2013.
- Served on an NIH Study Section Review Panel, February 2013.
- Served on an NIH Study Section Review Panel, October 2012.

- Elected to be Chair-Elect (starts January 2013) of the Section of Risk Analysis of the American Statistical Association. [Note: This is a nationally elected position. The Chair-Elect automatically takes over as Chair the following year, and then serves as Past-Chair after another year.]
- 2012 National Science Foundation DMS Review Panel Member.
- Member, College of Center for Scientific Review (CSR) Reviewers, National Institutes of Health, 2010-2012.
- Program Chair, Section on Nonparametrics, American Statistical Association, August 2009–December 2010. [Note: This is a nationally elected position.]
- Program Chair-Elect, Section on Nonparametrics, American Statistical Association, August 2008–August 2009.
- NSF DMS Review Panel. December 2009–January 2010.
- NSF DMS Review Panel. December 2008–January 2009.
- Faculty Fellow at SAMSI. Fall 2008.
- Associate Editor, *Electronic Journal of Statisticsc.* 2010–Present.
- Associate Editor, *Scandinavian Journal of Statistics.* 2008–2011.
- Temporary Member, NIMH Study Section, 2005.
- Associate Editor, *Journal of Statistical Planning and Inference*, 2004-2011.
- Associate Editor, *Technometrics*, 2004-2007.
- Chair, Awards Committee of the Nonparametric Section of the American Statistical Association, 2004–2009.
- Co-Organizer, International Conference on Reliability and Survival Analysis (ICRSA 2003), held at the University of South Carolina, May 2003.
- Permanent Member, NIH BCHI Study Section, July 2005 to June 2009.
- NSF DMS Review Panel. December 2002–January 2003.
- Associate Editor, *Journal of the American Statistical Association*, 1993–2007.

Hobbies and Other Interests: Enjoys playing a game of chess, preferably against humans; Squash & Tennis; Mathematical problem-solving and puzzles; Listening to music, primarily classical music; Reading statistics, mathematics, science and other informative books; Computers, in particular programming a computer; Reading novels, especially the John LeCarre genre books and recently Michael Lewis' books.

Memberships in Professional Organizations & Societies

1. International Statistical Institute (Elected Member since Nov. 2015).

2. American Statistical Association (Elected Fellow since 2002). Specific membership in ASA sections are below. Nonparametrics; Bayesian; Risk; Sports; Biometrics; Statistical Learning.

3. Institute of Mathematical Statistics.

4. International Biometrics Society.

5. Bernoulli Society.

6. United States Chess Federation.

Publications

1. <u>Dissertation:</u> Nonparametric Tests for Biased Coin Designs. Department of Statistics, Florida State University (1986). Major Professor: Myles Hollander

2. Estimation of Parameters under a Random Censorship Model (with V. Rohatgi), *Communications in Statistics, Theory and Methods*, **17**(1988), 2819–2829.

3. Nonparametric Tests under Restricted Treatment Assignment Rules (with M. Hollander), *Journal of the American Statistical Association*, **83**(1988), 1144–1151.

4. Survival Function Estimation for a Generalized Proportional Hazards Model of Random Censorship (with V. Rohatgi), *Journal of Statistical Planning and Inference*, **22**(1989), 371–389.

5. Families of Confidence Bands for the Survival Function (with M. Hollander), *Canadian Journal of Statistics*, **17**(1989), 59–74.

6. Bayes Estimation for the Marshall-Olkin Exponential Distribution (with A. Gupta), *Journal of the Royal Statistical Society, B*, **52**(1990), 379–389.

7. Improved Estimation for a Model Arising in Reliability and Competing Risks, *Journal of Multivariate Analysis*, **36**(1991), 18–34.

8. A Simple Motivation for the James-Stein Estimator (with A. Gupta), *Statistics and Probability Letters*, **12**(1991), 337–340.

9. A Chi-Square Goodness-of-Fit Tests for Censored Data (with M. Hollander), *Journal of the American Statistical Association*, **87**(1992), 458–463.

10. Classes of Nonparametric Goodness-of-Fit Tests for Censored Data: Simple Null Hypothesis Case (with M. Hollander), In *Nonparametric Statistics and Related Topics (1992)*, pp. 97–120, (edited by A. K. Md. E. Saleh), North-Holland: Amsterdam.

11. On the Non-Existence of Ancillary Statistics (with V. Rohatgi and G. Székely), *Statistics and Probability Letters*, **15**(1992), 357–360.

12. Small Sample and Efficiency Results for the Nelson-Aalen Estimator (with V. Rohatgi), *Journal of Statistical Planning and Inference*, **37**(1993), 193–202.

13. Some Comments About Sufficiency and Unbiased Estimation (with V. Rohatgi), *The American Statistician*, **48**(1994), 242–243.

14. Inference for a General Type II Censorship Model (with V. Rohatgi and G. Székely), *Statistics*, **26**(1995), 241–252.

15. Residuals from Type II Censored Samples. `Chapter 28` in *Recent Advances in Reliability and Life-Testing*, (ed., N. Balakrishnan), (1995), pp. 523–543, CRC Press: Boca Raton.

16. Properties of Hazard-Based Residuals and Implications in Model Diagnostics (with I. Baltazar-Aban), *Journal of the American Statistical Association*, **90**(1995), 185–197.

17. Dynamic Reliability Models With Conditional Proportional Hazards (with M. Hollander), *Lifetime Data Analysis*, **1**(1995), 377–401.

18. Dynamic Reliability Models (with M. Hollander), *Lifetime Data: Models in Reliability & Survival Analysis*, (edited by N. P. Jewell, A. C. Kimber, M. L. T. Lee, and G. A. Whitmore) (1996), 131–140.

19. Reliability Models and Inference for Systems Operating in Different Environments (with M. Hollander), *Naval Research Logistics*, **43**(1996), 1079–1108.

20. Most Powerful Tests (with V. Rohatgi). In *Encyclopedia of Biostatistics*, (edited by P. Armitage and T. Colton) (1998), Vol. 4, pp. 2703–2706, John Wiley & Sons: United Kingdom.

21. Locally Most Powerful Tests (with V. Rohatgi). In *Encyclopedia of Biostatistics*, (edited by P. Armitage and T. Colton) (1998), Vol. 3, pp. 2306–2308, John Wiley & Sons: United Kingdom.

22. Smooth Goodness-of-Fit Tests for the Baseline Hazard in Cox's Proportional Hazards Model, *Journal of the American Statistical Association*, **93**(1998), 673–692.

23. Ancillarity Properties of Generalized Residuals with Applications in Failure Time Models (with I. Aban), *Journal of Statistical Planning and Inference*, **74**(1998), 31–49.

24. Smooth Goodness-of-Fit Tests for Composite Hypothesis in Hazard-Based Models, *The Annals of Statistics*, **26**(1998), 1935–1971.

25. Properties of Test Statistics Applied to Residuals in Failure Time Models (with I. Aban), *Journal of Statistical Planning and Inference*, (**75**(1999), 181–209.

26. Order Statistic Properties, Random Generation, and Goodness-of-Fit Testing for a Minimal Repair Model (with Z. Agustin), *Journal of the American Statistical Association*, **94**(1999), 265–272.

27. Applications of a Formula for the Variance Function of a Stochastic Process (with R. Fan and K. Lange), *Statistics and Probability Letters*, **43**(1999), pp. 123-130.

28. A Dynamic Competing Risks Model (with M. Agustin), *Probability in the Engineering and Informational Sciences*, 13(1999), pp. 333–358.

29. Comment on *Model Selection and Semiparametric Inference for Bivariate Failure-Time Data* by W. Wang and M. Wells. *Journal of the American Statistical Association*, 95(2000), 73–75.

30. A Weak Convergence Result Relevant in Recurrent and Renewal Models (with R. Strawderman and M. Hollander). Chapter 31 in *Recent Advances in Reliability Theory: Methodology, Practice and Inference*, edited by N. Limnios and M. Nikulin, Birkhauser: Boston, 2000, pp. 493–514.

31. Testing Whether the Distribution of Time to First Event Occurrence in a Repairable System is in a Specified Family (with Z. Agustin). Abstracts' Book of the MMR' 2000 Second International Conference on Mathematical Methods in Reliability: Methodology, Practice and Inference, vol. 1, 2000, pp. 47–50.

32. Goodness-of-Fit of the Distribution of Time-to-First-Occurrence in Recurrent Event Models (with Z. Agustin). *Lifetime Data Analysis*, **7**(2001), 287–304.

33. Nonparametric Estimation with Recurrent Event Data (with R. Strawderman and M. Hollander). *Journal of the American Statistical Association*, **96**(2001), 1299–1315.

34. Book review of *Statistical Methods for the Reliability of Repairable Systems* by Steven Rigdon and Asit Basu. *Journal of the American Statistical Association*, 97(2002), 652–653.

35. Goodness-of-Fit Tests with Right-Censored Discrete Data (with Dawn Garrison). In *Abstracts Book, Third International Conference on Mathematical Methods in Reliability: Methodology and Practice*, 2002, pp. 517-521.

36. Classes of Fixed-Order and Adaptive Smooth Goodness-of-Fit Tests with Discrete Right-Censored Data. Chapter 31 in *Mathematical and Statistical Methods in Reliability: Series on Quality, Reliability and Engineering Statistics* (eds. B. Lindqvist and K. Doksum), 2003, 487-501.

37. Bootstrapping median survival with recurrent event data (with Juan Ramon Gonzalez). In *Proceedings of the 9th Spanish Conference on Biometrics*, 2003, pp. 349-352.

38. ICRSA 2003 (with W. Padgett and J. Lynch). *Amstat News*, 2003, July issue, p. 10.

39. Estimacion no parametrica de la funcion de supervivencia para datos con eventos recurrentes (with Juan Ramon Gonzalez). *Revista Espanola de Salud Publica*, 2004, 78: 189–199.

40. Models for Recurrent Events in Reliability and Survival Analysis (with M. Hollander). *Mathematical Reliability: An Expository Perspective*, edited by T. Mazzuchi, N. Singpurwalla and R. Soyer, 2004, 105–123.

41. Dynamic Models in Reliability and Survival Analysis (with E. Slate). Fourth International Conference on Mathematical Methods in Reliability: Methodology and Practice. In CD-ROM, Santa Fe, NM, 4 pages, 2004.

42. Joint Analysis of Longitudinal and Recurrent Event Outcomes (with E. Slate). Fourth International Conference on Mathematical Methods in Reliability: Methodology and Practice. In CD-ROM, Santa Fe, NM, 4 pages, 2004.

43. Nonparametric Methods in Reliability (with M. Hollander), *Statistical Science*, 2004, **19**, 644–651.

44. A Basis Approach to Goodness-of-Fit Testing in Recurrent Event Models (with Z. Agustin). *Journal of Statistical Planning and Inference*, 2005, **133**, 285–303.

45. Variance Estimation in a Model with Gaussian Submodels (with V. Dukić). *Journal of the American Statistical Association*, 2005, **100**, 296–309.

46. Estimating Load-Sharing Properties in a Dynamic Reliability System (with P. Kvam). *Journal of the American Statistical Association*, 2005, **100**, 262–272.

47. Modelling intervention effects after cancer relapses (with J. Gonzalez and E. Slate). *Statistics in Medicine*, 2005, **24**, 3959–3975.

48. Dynamic Modelling in Reliability and Survival Analysis (with E. Slate). Chapter 5 in *Modern Statistical and Mathematical Methods in Reliability*, edited by A. Wilson, S. Keller-McNulty, and Y. Armijo on Volume 10 of the Series on Quality, Reliability and Engineering Statistics, 2005, pp. 55–70, World Scientific.

49. Global Validation of Linear Model Assumptions (with E. Slate). *Journal of the American Statistical Association*, 2006, **101**, 341–354.

50. Book review of *Nonparametric Statistical Methods for Complete and Censored Data* by M. M. Desu and D. Raghavarao. *Journal of the American Statistical Association*, 2006, **101**, 852–853.

51. Dynamic Modelling and Statistical Analysis of Event Times. *Statistical Science*, 2006, **21**, 487–500.

52. Semiparametric Inference for a General Class of Models for Recurrent Events (with Elizabeth Slate and Juan Ramon Gonzalez). *Journal of Statistical Planning and Inference*, 2007, **137**, 1727–1747.

53. A General Class of Parametric Models for Recurrent Event Data (with R. Stocker). *Technometrics*, 2007, **49**, 210–220.

54. Parametric Latent Class Joint Model for Longitudinal Markers and Recurrent Events (with J. Han and E. Slate). *Statistics in Medicine*, 2007, 26, 5285–5302.

55. Analysis of Recurrent Events from Repairable Systems (joint with Z. Agustin and M. Agustin). In *Encyclopedia of Quality and Reliability*, Ruggeri, F., Kenett, R. and Faltin, F. W. (eds), 2007, pp 100-109.

56. Pranab Kumar Sen: Life and works (with N. Balakrishnan and M. Silvapulle). In IMS Collections entitled *Beyond Parametrics in Interdisciplinary Research: Festschrift in Honor of Professor Pranab K. Sen*, 2008, Vol. 1, pp. 1–16.

57. *Beyond Parametrics in Interdisciplinary Research: Festschrift in Honor of Professor Pranab K. Sen*, IMS Collections, (edited by N. Balakrishnan, E. Peña, and M. Silvapulle), 2008, Institute of Mathematical Statistics.

58. Adekpedjou, A., Quiton, J. and Peña, E. Some Aspects Pertaining to Recurrent Event Modeling and Analysis. Advances in Mathematical Modeling for Reliability Volume 0, 2008. Edited by Tim Bedford, John Quigley, Lesley Walls, Babakalli Alkali, Alireza Daneshkhah, Gavin Hardman, 193–207.

59. Non- and Semi-Parametric Models and Inference for Reliability Systems (with L. Taylor). *Encyclopedia of Quantitative Risk Analysis and Assessment*, 2008, Edward L. Melnick and Brian S. Everitt (editors-in-chief), Wiley & Sons Ltd, Chichester, UK, pp 1167–1175.

60. Adekpedjou, A., Peña, E. and Quiton, J. (2010). Estimation and Efficiency with Recurrent Event Data under Informative Monitoring. *Journal of Statistical Planning and Inference*, 140, 597–615. [Online Version: http://dx.doi.org/10.1016/j.jspi.2009.08.007.]

61. Confidence intervals for median survival with recurrent event data (with J. R. Gonzalez and P. Delicado), 2010, *Computational Statistics and Data Analysis*, 54, 78–89.

62. Gjessing, H., Roysland, K., Peña, E., and Aalen, O. (2010). Recurrent events and the exploding Cox model. *Lifetime Data Analysis*, Vol. 16, No. 4, pp. 525-546. doi:10.1007/s10985-010-9180-y.

63. Habiger, J. and Peña, E. (2011). Randomized *P*-Values and Nonparametric Procedures in Multiple Testing. *Journal of Nonparametric Statistics*, **23**, 583–604. [First published on: 11 June 2010 (iFirst). URL: http://dx.doi.org/10.1080/10485252.2010.482154.]

64. Peña, E., Habiger, J. and Wu, W. (2011). Power-Enhanced Family Wise Error and False Discovery Rate Controlling Multiple Decision Functions. *Annals of Statistics*, **39**, 556–583.

65. Peña, E., Habiger, J. and Wu, W. (2011). Supplement to "Power-Enhanced Family Wise Error and False Discovery Rate Controlling Multiple Decision Functions." DOI: 10.1214/10-AOS844SUPP.

66. Peña, Edsel (2012). Sample Sizes to Compare Two Poisson Rates. *The Philippine Statistician*, **61**, no. 1, 1-20.

67. Adekpedjou, Akim and Peña, Edsel (2012). Semiparametric Estimation with Recurrent Event Data under Informative Monitoring. *J. Nonparametr. Stat.*, **24**, no. 3, 733–752.
[Online: DOI:10.1080/10485252.2012.698281.]

68. W. West, W. Piegorsch, E. Peña, L. An, W. Wu, A. Wickens, H. Xiong, W. Chen. (2012). The Impact of Model Uncertainty on Benchmark Dose Estimation. *Environmetrics*, **23**, no. 8, 706–716.

69. Taylor, Laura and Peña, Edsel (2013). Parametric Estimation in a Recurrent Competing Risks Model. *Journal of the Iranian Statistical Society*, **12**, 153–181.

70. Wu, Wensong and Peña, Edsel (2013). Bayes Multiple Decision Functions. *Electronic Journal of Statistics*, **7**, 1272–1300. DOI: 10.1214/13-EJS813.

71. Piegorsch, Walter W.; An, Lingling; Wickens, Alissa A.; Webster West, R.; Peña, Edsel A.; Wu, Wensong (2013). Information-theoretic model-averaged benchmark dose analysis in environmental risk assessment. *Environmetrics*, **24**, no. 3, 143 -157.

72. Laura L. Taylor and Edsel A. Peña (2014). Nonparametric estimation with recurrent competing risks data. *Lifetime Data Analysis*, **20**, 514–537.
[Published online: September 27, 2013. DOI: 10.1007/S10985-013-9280-6.]

73. J. D. Habiger and E. A. Peña (2014). Compound p-value statistics for multiple testing procedures. *Journal of Multivariate Analysis*, **126**, 153–166.
[Online: http://dx.doi.org/10.10.16/j.jmva.2014.01.007]

74. AKM Fazlur Rahman, James Lynch, and Edsel Peña (2014). Nonparametric estimation of gap-time distribution with recurrent event data. *Journal of Nonparametric Statistics*, **26**, 575-598.
[Online: http://dx.doi.org/10.1080/10485252.2014.906744]

75. Peña, Edsel A.; Habiger, Joshua D.; Wu, Wensong (2015). Classes of multiple decision functions strongly controlling FWER and FDR. *Metrika*, 78, 563-595. [Online: DOI 10.1007/s00184-014-0516-6]

76. Liu, Piaomu and Peña, Edsel (2015). Dynamic Modeling & Analysis of Recurrent Competing Risks and a Terminal Event. Chapter 2.2 in *Statistical, Stochastic and Data Analysis Methods and Applications*, Editors: Alex Karagrigoriou, Teresa Oliviera and Christos Skiadis. ISAST: International Society for the Advancement of Science and Technology. ISBN: 978-618-5180-07-2; e-ISBN: 978-618-5180-09-6; pp. 111-117.

77. Piaomu Liu and Edsel A. Peña (2016): Sojourning with the Homogeneous Poisson Process, *The American Statistician,* **70**, pp. 413–423. DOI: 10.1080/00031305.2016.1200484

78. Peña, E. (2016). Asymptotics for a General Class of Recurrent Event Models. *Journal of Nonparametric Statistics*, **28**, 716–735.. DOI: 10.1080/10485252.2016.1225733

79. Peña, E., Wu, W., Piegorsch, W., West, R., and An, L. (2016). Model Selection and Estimation with Quantal-Response Data in Benchmark Risk Assessment. Math ArXiV: 1411.1015 [math.ST]. *Journal of Risk Analysis*, **37**, 716–732. DOI: 10.1111/risa.12644

80. Bereket Kindo, Hao Wang, Edsel Peña (2016). Multinomial probit Bayesian additive regression trees. *Stat*, **5**, 119–131. DOI: 10.1002/sta4.110

81. Christy Cassarly, Renee H. Martin, Marc Chimowitz, Edsel A. Peña, Viswanathan Ramakrishnan & Yuko Y. Palesch (2017). Assessing Type I error and power of multistate Markov models for panel data — A simulation study, *Communications in Statistics - Simulation and Computation*, 46:9, 7040-7061, DOI: 10.1080/03610918.2016.1222425.

82. Cassarly, C., Martin, R., Chimowitz, M., Peña, E., Ramakrishnan, V., and Palesch, Y. (2017). Comparison of multistate Markov modeling with contemporary outcomes in a reanalysis of the NINDS tissue plasminogen activator for acute ischemic stroke treatment trial. Accepted for publication in *PLOS ONE*.

83. Cassarly, C., Martin, R., Chimowitz, M., Peña, E., Ramakrishnan, V., and Palesch, Y. (2018). Treatment effect on ordinal functional outcome using piecewise multistate Markov model with unobservable baseline: An application to the modified Rankin Scale. Accepted for publication by *Journal of Biopharmaceutical Statistics*.

84. Agustin, Z., Agustin, M. and Peña, E. (2018). Analysis of Recurrent Events from Repairable Systems. In *Wiley StatsRef: Statistics Reference Online.* DOI: 10.1002/9781118445112.stat04170.pub2.

85. Beidi Qiang and Edsel A. Peña (2018). Improved Estimation of System Reliability with Application in Software Development. To appear in *Analytic Methods in Systems and Software Testing*, First Edition. Edited by Ron S. Kenett, Fabrizio Ruggeri, and Frederick Faltin. Published 2018 by John Wiley & Sons Ltd.

Papers Arising from Inter-Disciplinary Collaborations & Consulting

1. Jin, Y., Kotakadi, V., Ying, L., Hofseth, A., Cui, X., Wood, P., Windust, A., Matesic, L., Peña, E., Chiuzan, C., Singh, N., Nagarkatti, M., Nagarkatti, P., Wargovich, M., and Hofseth, L. (2008). "American ginseng suppresses inflammation and DNA damage associated with mouse colitis," *Carcinogenesis*, **29**, 2351–2359.

2. Young, L., Sanduja, S., Bemis-Standoli, K., Peña, E., Price, R., and Dixon, D. (2009). "The mRNA Binding Proteins HuR and Tristetraprolin Regulate Cyclooxygenase 2 Expression During Colon Carcinogenesis," *Gastroenterology*, 136, 1669–1679.

3. Meeh, P., Farrell, C., Croshaw, R., Crimm, H., Miller, S., Oroian, D., Kowli, S., Zhu, J., Carver, W., Wu, W., Peña, E., Buckhaults, P. (2009). "A Gene Expression Classifier of Node-Positive Colorectal Cancer," *Neoplasia*, 11, 1074–1083.

4. Cui X, Jin Y, Hofseth AB, Peña E, Habiger J, Chumanevich A, Poudyal D, Nagarkatti M, Nagarkatti P, Singh U, and Hofseth LJ (2009). Resveratrol suppresses colitis and colon cancer associated with colitis. *Cancer Prevention Research*, 3, 549–559.

5. Cui, X., Jin, Y., Poudyal, D., Chumanevich, A., Davis, T., Windust, A., Hofseth, A., Wu, W., Habiger, J., Peña, E., Wood, P., Nagarkatti, M., Nagarkatti, P., Hofseth, L. (2010). Mechanistic insight into the ability of American ginseng to suppress colon cancer associated with colitis. *Carcinogenesis*, **31**, 1734–1741.

6. Barbour, K., Xing, Y., Peña, E. and Berger, F. (2012). Characterization of the Bipartite Degron that Regulates Ubiquitin-Independent Degradation of Thymidylate Synthase. *Bioscience Reports*, Immediate Publication, doi:10.1042/BSR20120112.

7. Ying Shi, Lingling Ou, Shuling Han, Mingson Li, Maria Pena, Edsel Pena, Chunming Liu, Mitzi Nagarkatti, Daping Fan, Walden Ai (2014). Deficiency of Kruppel-like factor KLF4 in myeloid-derived suppressor cells inhibits tumor pulmonary metastasis in mice accompanied by decreased fibrocytes." *Oncogenesis*, 3, e129. DOI:10.1038/oncsis.2014.44.

8. Watson, S., Liu, P., Peña, E., Sutton, M., Eberth, J., and Lessner, S. (2016). Comparison of Aortic Collagen Fiber Angle Distribution in Mouse Models of Atherosclerosis Using Second-Harmonic Generation (SHG) Microscopy. *Microsc. and Microanal.*, 1-8.

9. David Oliver, Hao Ji, Piaomu Liu, Alexander Gasparian, Ellen Gardiner, Samuel Lee, Adrian Zenteno, Lillian Perynskaya, Mengqian Chen, Phillip Buckhaults, Eugenia Broude, Michael D Wyatt, Homayoun Valafar, Edsel Pena, Michael Shtutman (2017). Identification of novel cancer therapeutic targets using a designed and pooled shRNA library screen. February *Scientific Reports* 7:43023 DOI10.1038/srep43023.

10. A. Abdalla, C. Atcherley, P. Pathirathna, S. Samaranayake, B. Qiang, E. Pena, S. Morgan, M. Heien, P. Hashemi. (2017). *In Vivo* Ambient Serotonin Measurements at Carbon-fiber Microelectrodes. *Anal. Chem.*, 89 (18), pp 9703–9711 DOI: 10.1021/acs.analchem.7b01257.

11. Jan M. Eberth, Annie Thibault, Renay Caldwell, Michele J. Josey, Beidi Qiang, Edsel Peña, Delecia LaFrance, and Franklin G. Berger. (2017/18). A Statewide Program Providing Colorectal Cancer Screening to the Uninsured of South Carolina. Accepted for publication in *Cancer*. Online version has appeared.

Packages Contributed to the CRAN (Comprehensive R Archive Network) Library

- Software package named `gcmrec` by J. Gonzalez, E. Peña, and R. Strawderman. Contributed November 2005.

- Software package named `survrec` by J. Gonzalez, E. Slate, and E. Peña. Contributed April 2006.

- Software package named `gvlma` by E. Slate and E. Peña. Contributed May 2006.

Manuscripts Submitted, Under Revision, or Almost Ready for Submission

- B. Qiang, A. Abdalla, S. Morgan, P. Hashemi, E. Pena. (2017). Estimating Concentration Response Function and Change-Point using Time-Course and Calibration Data. Currently under revision.

- E. Pena and L. Wang. (2017). Recurrent Event Modeling and Analysis of Occurrence of Mass Shootings in the United States. Currently under revision.

- E. Pena and T. Kim (2018). Confidence Regions for Median in Nonparametric Models. About to be submitted for publication.

- Rahman, F. and Peña, E. (2018). Nonparametric Bayes Estimation of Reliability Function of a Coherent System. Almost finished and ready for submission.

Current Research Projects

Nonparametric Bayes Approaches to Inference of Lifetime of Complex Systems
Competing Recurrent Events with Applications to Precision Medicine
Construction of Confidence Regions and Multiple Confidence Regions
Multiple Testing and Decision-Making
Multi-Group Sequential Decision-Making
Change-Point Problems and Sequential Monte Carlo Methods
State-Space Event-Time Models
Decision-Making with Model Selection
Joint Modeling of Longitudinal Markers, Recurrent Events, and Terminal Events
Adaptive Hazard-Based Goodness-of-Fit with Incomplete Data
Models with Alternative Time-Scales in Survival Analysis and Reliability
Modeling and Analysis of Recurrent Data with Intervention
Analysis of Recurrent Data Under an Informative Stopping Rule
Exact and Asymptotic Properties of Residuals in Survival Models
Goodness-of-Fit, Residuals, and Model Diagnostics
Dynamic Models of Reliability Systems
Statistical Analysis of Data from Dynamic Reliability Models

Major Research Interests

Multiple Decision-Making Under Uncertainty
Semiparametric and nonparametric methods in Survival Analysis
Reliability Theory with particular emphasis in Dynamic Models
Goodness-of-Fit, Residuals, and Model Diagnostics
Mathematical Statistics
Stochastic Processes in Survival Models and Reliability
Inference in Dynamic Reliability Models
High-Dimensional Data Analysis
Development of Statistical Methods for Cancer Research

Research and Conference Grants Awarded

- Funding Agency: American Heart Association. Period: 07/01/2017 - 06/30/2019. Total Amount: $77,000. Grant/Contract #: 17GRNT33650018. Role: Co-PI. (PI: Mohamad Azhar). Title: Role of TGFbeta Ligands in Development and Progression of Aneurysm.

- Funding Agency: NATIONAL INSTITUTE ON DRUG ABUSE/NIH. Grant/Contract #: 1R03DA043428-01A1. Total Amount: $146,500. Period of Project: 02/01/2017 ? 01/31/2019. Role: Co-I (PI: Michael Shtutman). Title: Functional identification of new mechanisms of neurotoxicity induced by HIV and drugs of abuse.

- Funding Agency: National Cancer Institute (NCI)/NIH. Grant/Contract #: 1R21CA191966-01A1. Period: 04/01/2016 - 03/31/2018. Role: Co-PI (PI: Angela Murphy). Amount: $331,862. Title: Linking Macrophages to Gut Microbiota in Obesity Enhanced Colon Cancer.

- 2013-2018, NIH COBRE Grant (PI: Dr. Frank Berger), Biometry Core (PI: Edsel Peña) of the Center for Colon Cancer Research.

- 2013-2015, NIH R21 Grant (PI: A. Murphy; Co-I: Pena). Macrophages in High Fat Diet Enhanced Colorectal Cancer.

- 2011-2014, NSF Grant (PI: Peña; Co-PI: Lynch). Recurrent Events, Dynamic Reliability Systems, and Multiple Decision-Making with High-Dimensional Data.

- 2011-2016, NIH Grant (PI: M. Peña; Co-PI: Peña). Stromal Modulation of Response to Thymidylate Synthase Inhibitors.

- 2008-2011, NSF Grant (PI; Lynch; Co-PI: Peña) Dynamic Models and Decision Making for Complex Reliability Systems.

- 2007-2012, NIH COBRE Grant (PI: Dr. Frank Berger), Biometry Core (PI: Edsel Peña) of the Center for Colon Cancer Research.

- 2007-2008, NSF Conference Grant (co-PI; PI: Don Edwards). Current and Future Trends in Nonparametrics.

- 2005-2010, EPA Grant #RD-83241901 (PI: Walt Piegorsch). Model selection and multiplicity adjustment for benchmark analysis in quantitative risk assessment.

- 2003-2008, NIH R01 Grant. New Models with Recurrent Event Data. (PI: E. Peña)

- 2002-2007, NIH COBRE Grant (PI: Dr. Frank Berger), Biometry Core (PI: Edsel Peña) of the Center for Colon Cancer Research.

- 2003-2004, NIH Grant, International Conference on Reliability and Survival Analysis (Co-PIs: W. Padgett).

- 2002-2003, NSF Grant, International Conference on Reliability and Survival Analysis (Co-PI: W. Padgett, J. Lynch).

- 2002-2003, Army Research Office (ARO) Grant, International Conference on Reliability and Survival Analysis (PI: W. Padgett; Co-PI: E. Peña)

- 2002-2004, USC Internal Grant. USC-MUSC Collaborative Grant entitled *Joint Modeling of Longitudinal Markers and Recurrent Events*. This is a joint grant with Dr. Elizabeth Slate of the Medical University of South Carolina.

- 2001-04, NSF Grant DMS 0108270.

- 1998-01, NIH/NIHGMS Grant 1 R01 GM56182.

- 1996-97, BGSU FRC Basic Research Grant.

- 1994-95, BGSU FRC Basic Research Grant.

- Summer 1993, Consultant to AFOSR Grant 91-0048 to Florida State University.

- Summer 1992, Consultant to AFOSR Grant 91-0048 to Florida State University.

Computer Expertise

UNIX-based systems and X-window systems.
Macintosh and Windows-type computers.
FORTRAN, C and C++ programming languages.
S, S-Plus, GNU R, and SAS statistical packages.
TEX and LATEX typesetting.
Microsoft Office.
Minitab.

Talks in Professional Meetings and in Colloquia & Seminars

- Department of Statistics, Florida State University, 1986.

- Department of Statistics, University of Connecticut, 1986.

- Department of Statistics, State University of New York at Buffalo, 1986.

- Department of Mathematics and Statistics, Bowling Green State University, 1986.

- Division of Statistics, University of California at Davis, 1986.

- Northwest Ohio Chapter of ASA Meeting; Bowling Green, Ohio, April 28, 1987; Title: Inference under the Proportional Hazards Model of Random Censorship.

- Institute of Mathematical Statistics (IMS) Regional Meeting; Blacksburg, Virginia, May 29, 1987; Title: Nonparametric Tests under Restricted-Treatment Assignment Rules.

- Joint Statistical Meetings; San Francisco, California, August 17-20, 1987; Title: Confidence Bands under Proportional Hazards.

- Department of Mathematics and Statistics Colloquium Talk; Bowling Green State University, September 30, 1988; Title: Survival Function Estimation under a Generalized Proportional Hazards Model of Random Censorship.

- Joint Statistical Meetings; Washington, D. C., August 6-10, 1989; Title: Improved Estimation for an Exponential-Multinomial Distribution with Applications to Marshall-Olkin MVE Distribution.

- Department of Mathematics and Statistics Colloquium Talk; Bowling Green State University, November 17, 1989; Title: Estimation for a Reliability and Competing Risks Model.

- Department of Mathematics and Statistics Colloquium Talk; Bowling Green State University, October 5, 1990; Title: A Simple Derivation of James-Stein Estimators.

- Department of Statistics and Probability Colloquium Talk; Michigan State University, October 16, 1990; Title: A Simple Derivation of James-Stein Estimators.

- Department of Statistics Biostatistics Colloquium Talk; Ohio State University, January 31, 1991; Title: Tests of Fit with Censored Data.

- First Lukacs Symposium; Bowling Green State University, April 27-28, 1991; Title: Tests of Fit with Censored Data.

- Second Lukacs Symposium; Bowling Green State University, March 1992.

- Joint Statistical Meetings; Boston, MA, August 9-13, 1992.

- Department of Mathematics and Statistics Colloquium Talk; Bowling Green State University, February 1993; Title: Properties of Hazard-Based Residuals.

- Third Lukacs Symposium; Bowling Green State University, March 1993.

- Department of Mathematics Colloquium Talk; University of North Carolina at Charlotte, May 1993; Title: Properties of Hazard-Based Residuals.

- Joint Statistical Meetings; San Francisco, CA, August 8-11, 1993; Titles: (i) Models and Inference for Series Systems Operating under Different Environments; (ii) Properties of Hazard-Based Residuals (presented by I. Baltazar-Aban, co-author); Chair of an IMS Contributed Papers Session.

- International Conference in Reliability and Life-Testing; Harvard University, June 14-17, 1994; Title of Papers Presented: (i) Residuals from Failure-Time Models; (ii) Dynamic Reliability Models (presented by M. Hollander, co-author).

- Department of Biostatistics Colloquium Talk; University of Michigan, September 29, 1994; Title: Properties of Hazard-Based Residuals.

- Department of Statistics Colloquium Talk; University of Illinois at Urbana-Champaign, March 21, 1995; Title: Inference for Hazard Regression Models of Reliability Systems.

- Joint Statistical Meetings; Orlando, Florida, August 12-16, 1995; Title: Dynamic Reliability Models; Chaired one of the IMS contributed paper sessions.

- Ohio Statistics Conference; Columbus, Ohio, November 16, 1995; Title: When to Release a Software?

- Department of Statistics Colloquium Talk; University of Iowa, Iowa City, January 25, 1996; Title: Smooth Goodness-of-Fit Tests in Failure-Time Models.

- Department of Biostatistics Colloquium Talk; University of Michigan, Ann Arbor, MI, February 15, 1996; Title: Smooth Goodness-of-Fit Tests in Failure-Time Models.

- 1996 Joint Statistical Meetings; Chicago, Illinois; Title: Smooth Goodness-of-Fit Tests in Failure-Time Models.

- Department of Mathematics and Statistics Colloquium Talk; Bowling Green State University, September 19, 1996; Title: Smooth Goodness-of-Fit Tests.

- 1997 Lukacs Symposium Talk; Bowling Green State University, April 26, 1997; Title: Smooth Goodness-of-Fit Tests.

- Department of Statistics Colloquium Talk; University of Pittsburgh, December 5, 1997; Title: Smooth Goodness-of-Fit Tests in Failure-Time Models.

- International Conference in Reliability and Life-Testing; Northern Illinois University, June 21-24, 1998; Title: Goodness-of-Fit Tests and Residuals in Hazard-Based Models.

- 1998 Joint Statistical Meetings; Dallas, Texas; Title: Smooth Goodness-of-Fit Tests in Hazard-Based Models.

- Department of Mathematics and Statistics Colloquium Talk; Bowling Green State University, December 4, 1998; Title: Event-Time Analysis.

- Division of Statistics Colloquium Talk; Department of Mathematical Sciences; Northern Illinois University; October 15, 1999; Title: A Class of Smooth Goodness-of-Fit Tests for Survival Analysis and Reliability.

- Department of Biostatistics Talk; University of Michigan at Ann Arbor; January 6, 2000.

- Department of Statistics Talk; University of Michigan at Ann Arbor; January 11, 2000.

- Department of Statistics Talk; University of South Carolina at Columbia, South Carolina; January 28, 2000.

- Department of Statistics Talk; Case Western Reserve University; Cleveland, Ohio; March 31, 2000.

- Mathematical Methods in Reliability Conference in Bordeaux, France, July 2000; Title: Analysis of Recurrent Events.

- Joint Statistical Meetings in Indianapolis, Indiana, August 2000; Title: Analysis of Recurrent Events.

- Department of Statistics, University of South Carolina, Colloquium Talk. August 31, 2000; Title: Hazard-Based Goodness-of-Fit Testing.

- Department of Statistics, University of Georgia. Colloquium Talk. November 16, 2000; Title: Hazard-Based Goodness-of-Fit Testing.

- Department of Statistics, University of Virginia. Colloquium Talk. December 1, 2000; Title: Hazard-Based Goodness-of-Fit Testing.

- Joint Statistical Meetings; Atlanta, Georgia; August 2001; Title of Talk: Goodness-of-Fit Testing with Censored Discrete Data.

- Department of Mathematics and Statistics; University of North Carolina at Charlotte; October 12, 2001. Title: Nonparametric Estimation with Recurrent Event Data.

- Department of Mathematics and Statistics; Mississippi State University; October 19, 2001. Title: Nonparametric Estimation with Recurrent Event Data.

- Department of Biometry and Epidemiology; Medical University of South Carolina; November 12, 2001. Title: Nonparametric Estimation with Recurrent Event Data.

- Department of Epidemiology and Biometry; University of South Carolina. 2002.

- Department of Statistics, Cornell University. 2002.

- ENAR, Alexandria, Virginia, March 2002.

- IISA Conference, De Kalb, Illinois, June 2002.

- Invited Talk, MMR Conference, Trondheim, Norway, June 2002.

- JSM, New York City, August 2002.

- Department of Statistics, University of South Carolina, October 2002.

- Department of Mathematics and Statistics, Florida International University, Miami, FL, November 2002.

- Department of Statistics, Florida State University, Tallahassee, FL, January 2003.

- ENAR, Tampa Bay, Florida, March 2003.

- ICRSA, University of South Carolina, May 2003.

- JSM, San Francisco, California, August 2003.

- Department of Biostatistics, University of Michigan, Ann Arbor, October 2003.

- Department of Health Studies, University of Chicago, Chicago, Illinois, October 2003.

- StatFest, North Carolina State University, Raleigh, North Carolina, November 2003.

- Nonparametric Meeting at Florida State University, January 2004.

- Gave two talks at Deparment of Mathematics and Statistics, Idaho State University, March 2004.

- Contributed Talk, ENAR Meeting, Pittsburgh, PA, March 2004.

- Graduate Recruiting Talk at Columbia College, Columbia, SC, April 2004.

- Plenary Talk, Fourth International Conference on Mathematical Methods in Reliability (MMR), June 2004, Santa Fe, NM.

- Contributed Talk, IBC Meeting, Cairns Australia, July 2004.

- Colloquium Talk, Department of Statistics, University of South Carolina, September 2004.

- Colloquium Talk, Department of Biostatistics, University of North Carolina at Chapel Hill, September 2004.

- Colloquium Talk, Department of Biostatistics, Columbia University, New York, NY, November 2004.

- Invited Talk, ENAR Meeting, Austin, Texas, March 2005.

- Invited Talk, SRCOS Meeting, Clemson, South Carolina, June 2005.

- Special Contributed Talk, JSM Meeting, Minneapolis, Minnesota, August 2005.

- Colloquium Talk, Department of Statistics, University of South Carolina, September 2005.

- Colloquium Talk, Department of Mathematics and Statistics, Mississippi State University, March 2006.

- Colloquium Talk, Department of Biostatistics, University of Alabama at Birmingham, March 2006.

- Invited Talk, International Chinese Statistical Association Conference, University of Connecticut at Storrs, June 2006.

- Contributed Talk, JSM 2006 (August), Seattle, Washington.

- Colloquium Talk, Georgia Tech, Atlanta, Georgia, October 2006.

- Colloquium Talk, University of Minnesota, Minnesota, November 2006.

- Invited Talk, ENAR Meeting, Atlanta, GA, March 2007.

- Invited Talk, Hollander Symposium, Florida State University, Tallahassee, FL, April 1007.

- Invited Talk, International Chinese Statistical Association Conference, Raleigh, North Carolina, June 2007.

- Invited Talk, Mathematical Methods in Reliability Conference, Glasgow, Scotland, July 2007.

- Topic Contributed Talk, Joint Statistical Meetings, Salt Lake City, Utah, August 2007.

- Invited Talk, ISBIS Conference, Azores, Portugal, August 2007.

- Invited Talk, International Biometrics Society Conference, Dublin, Ireland, July 2008.

- Topic Contributed Talk, Joint Statistical Meetings, Denver, Colorado, August 2008.

- Colloquium Talk, Department of Statistics and Department of Biostatistics, University of Wisconsin at Madison, November 2007.

- Colloquium Talk, Department of Statistics, Columbia University at New York, November 2007.

- Colloquium Talk, Department of Biostatistics, University of North Carolina, October 2008.

- Colloquium Talk, Department of Statistical Sciences, Duke University, October 2008.

- Colloquium Talk, Department of Statistics, North Carolina State University, November 2008.

- Research Talks, University of Oslo, Norway, November 2008.

- Research Talks, Norwegian University of Science and Technology, Trondheim, Norway, November 2008.

- Research Talk, National Institutes of Health, December 2008.

- University of Wisconsin, Statistics.

- JSM 2009 @ Denver.

- University of Wisconsin, Biostatistics.

- Georgia State University, Mathematics and Statistics.

- Texas A & M University Conference.

- SAMSI 2009, Closing Workshop.

- ICSA 2010 @ Indianapolis.

- JSM 2010 @ Vancouver, Canada.

- Univ of South Carolina, September 2010.

- Univ of Miami, April 2011.

- Mathematical Methods in Reliability Conference, Beijing, China, June 2011.

- Tianjin University of Commerce, Tianjin, China, June 2011.

- University of the Philippines at Diliman, June 2011.

- University of the Philippines at Los Baños, June 2011.

- JSM 2011 @ Miami Beach, Florida.

- Missouri University of Science and Technology, March 2012.

- New Jersey Institute of Technology FACM '12 Conference. May 2012.

- JSM 2012 @ San Diego, California.

- Georgia Health Sciences University. October 2012.

- Vanderbilt University, October 2012.

- New Jersey Institute of Technology, November 2012.

- Medical University of South Carolina, November 2012.

- University of South Carolina, November 2012.

- University of Virginia, March 2013.

- ICSA @ Boston, Massachussetts. June 2013.

- University of Louisville, September 2013.

- Clemson University, November 2013.

- INSA, Toulouse, France, January 2014.

- University of Vilnius, Lithuania. June 2014.

- JSM 2014 @ Boston, Massachusetts. August 2014.

- CWRU. October 2014.

- MMR 2015. Tokyo, Japan. June 2015.

- CREAL, Barcelona, Spain. June 2015.

- Maastricht University, Maastricht, Netherlands. June 2015.

- ASMDA Conference, Piraeus, Greece. July 2015.

- ICSA Conference, Atlanta, June 2016.

- JSM Conference, Chicago, August 2016.

- Lifetime Data Conference, Storrs, CT, May 2017.

- MMR Conference, Grenoble (Speaker and Sessions Organizer), France, July 2017.

- ISI World Statistics Congress (Session Organizer), Marrakech, Morocco, July 2017.

- JSM Conference, Baltimore, July-August 2017.

- University of Grenoble Alps, France, March 2018.

- Moderator in Sessions at the Bernard Harris Symposium on Risk, Raleigh, NC, May 2018. (Forthcoming)

- Speaker at a Workshop in Quality, Dortmund, Germany, June 2018. (Forthcoming)

- Topic-Contributed Talk at JSM in Vancouver, Canada, July 2018. (Forthcoming)

Teaching Information

Courses Taught

<u>Undergraduate Courses</u>

At Bowling Green State University and the University of Michigan
- Introduction to Statistics (multiple)
- Discrete Mathematics (multiple)
- Mathematics for Elementary Teachers
- Fundamentals of Statistics (multiple)
- Probability and Statistics for Engineers and the Sciences (at Univ. of Michigan)
- Probability and Statistics I and II (multiple)

At University of South Carolina
- Stat 110, Introduction to Statistical Reasoning (Spring 2009, Fall 2016)
- Stat 509, Statistics for Engineers (Fall 2000, Spring 2001, Spring 2010, Fall 2012, Fall 2014, Spring 2018)
- Stat 515, Statistics Methods I (Spring 2002)
- Stat 511, Probability (Fall 2012, Fall 2014)
- Stat 512, Mathematical Statistics (Spring 2013, Spring 2015)
- Stat 513, Theory of Statistical Inference (Fall 2003, Fall 2013, Fall 2015)
- SCCC 312A, [SC Honors College], Proseminar in Statistics (Spring 2004)

<u>Graduate Courses</u>

At Bowling Green State University and the University of Michigan
- Probability Theory I (multiple)
- Mathematical Statistics II (multiple)
- Mathematical Statistics III (multiple)
- Applied Probability (multiple)
- Stochastic Processes (multiple)
- Nonparametric Statistical Inference (multiple)
- Survival Analysis (multiple)
- Reliability Theory and Life Testing
- Sequential Analysis (multiple)
- Advanced Mathematical Statistics I (multiple)
- Advanced Mathematical Statistics II (multiple)
- Smooth Tests of Goodness-of-Fit
- Applied Biostatistics (at Univ. of Michigan; multiple)
- Applied Stochastic Processes (at Univ. of Michigan)
- Counting Process Models in Survival Analysis (multiple)

At University of South Carolina
- Stat 700, Applied Statistics I (Fall, 2000, 2001)
- Stat 701, Applied Statistics II (Spring 2001, Spring 2002)
- Stat 722/822, Advanced Mathematical Statistics (Fall 2001, Fall 2005, Fall 2007, Fall 2009, Fall 2011)

- Stat 710/810, Advanced Probability Theory I (Fall 2002, Fall 2004, Fall 2006, Fall 2010, Fall 2016)
- Stat 711/811, Advanced Probability Theory II (Spring 2003, Spring 2005, Spring 2011, Spring 2017)
- Stat 712, Mathematical Statistics I (Fall 2004, Fall 2005, Fall 2006, Fall 2007)
- Stat 713, Mathematical Statistics II (Spring 2005, Spring 2006, Spring 2007, Spring 2008)
- Stat 718, Special Topics: Modern Event Time Analysis (Spring 2006, Spring 2014)
- Stat 723/823, Large-Sample Theory (Spring 2008, Spring 2010)
- Stat 724/824, Theory of Nonparametrics (Spring 2009, Spring 2011, Spring 2013, Spring 2015, Spring 2017)
- Stat 761/J761, Reliability and Life-Testing (Fall 2009, Fall 2011, Fall 2013, Fall 2015)
- Stat 718, Topics in Statistical Learning (Spring 2012, Spring 2016).
- Stat 721, Stochastic Processes (Spring 2016, Spring 2018).

Completed PhD Advisees

- Dr. Inmaculada Aban; Date Graduated (PhD): August 1995; Current Affiliation: Faculty member, Department of Biostatistics, University of Alabama at Birmingham.

- Dr. Marcus Agustin; Date Graduated (PhD): August 1997; Current Position: Faculty member, Department of Mathematics and Statistics, Southern Illinois University at Edwardsville, Illinois.

- Dr. Zenia Nobleza-Agustin; Date Graduated (PhD): August 1997; Current Position: Faculty member, Department of Mathematics and Statistics, Southern Illinois University, Edwardsville, Illinois.

- Dr. Russell Stocker IV; Date Graduated (PhD): August 2004; Initial Affiliation: Faculty member, Department of Mathematics and Statistics, Mississippi State University. Has since moved as a faculty member to Indiana University of Pennsylvania.

- Dr. Jun Han; Date Graduated (PhD): May 2005; Initial Affiliation: Faculty member, Department of Mathematics and Statistics, Georgia State University. Has recently moved to a job in an insurance company in Charlotte, NC.

- Dr. Juan Ramon Gonzalez (PhD): July 2006; Current Affiliation: Researcher, Center for Genomic Regulation and Catalan Institute of Oncology, Barcelona, Spain.

- Dr. Akim Adekpedjou (PhD): August 2007; Current Affiliation: Faculty Member, Department of Mathematics and Statistics, Missouri University of Science and Technology.

- Dr. Jonathan Quiton (PhD): August 2007; Initial Affiliation: Faculty Member, Department of Mathematics, Western Kentucky University. Recently moved as Statistical Analyst at Nissan North America in Nashville, TN.

- Dr. Alexander McLain (PhD): August 2008; Current Affiliation: Faculty Member, Department o Epidemiology and Biostatistics, University of South Carolina.

- Dr. Laura Taylor (PhD): August 2008; Current Affiliation: Faculty Member, Department of Mathematics, Elon University.

- Dr. Joshua Habiger (PhD): August 2010; Current Affiliation: Faculty Member, Department of Statistics, Oklahoma State University. Has just moved to the University of Kansas in 2016.

- Dr. Wensong Wu (PhD): August 2011; Current Affiliation: Faculty Member, Department of Mathematics and Statistics, Florida International University.

- Dr. AKM Fazlur Rahman (PhD): August 2014; Initial Affiliation: Research Associate, Department of Epidemiology and Biostatistics, Emory University. Current Affiliation: Assistant Professor at the University of Alabama at Birmingham.

- Dr. Piaomu Liu (PhD): August 2016; Current Affiliation: Assistant Professor, Department of Mathematics, Bentley University.

- Dr. Bereket Kindo (PhD). December 2016. Current Affiliation: Humana Insurance Corporation, Louisville, KY.

- Dr. Beidi Qiang (PhD). August 2017. Current Affiliation: Assistant Professer, Department of Mathematics and Statistics, Southern Illinois University at Edwardsville, IL (starting August 2017).

Current Doctoral Advisees

- Mr. Shiwen Shen.

- Mr. Taeho Kim.

- Mr. Jeffrey Thompson.

- Mr. LiLi Tong.

- Mr. Islam Tahmidul.

Completed MS and MAS Students at USC

- Hang Lai.

- Dawn Garrison.

- Maggie Wang.

- Vessemil Koltchev.

Undergraduate Honors Thesis Advising

- Sterling Swygert, 2013.

- Hannah Knowles, 2014.

- Isaac Molynieux, 2015-2016.

- John Arnold, 2015-2016.

- Carter Allen, 2016-2017.

- Daniel DeVuono, 2016-2017.

- Chris Buckman, 2016-2017.

Service Information

Editorial Board Membership

Associate Editor, 1993–2007, *Journal of the American Statistical Association (JASA)*.

Associate Editor, *Technometrics*, September 2004–2007; January 2013-December 2015.

Associate Editor, *Journal of Statistical Planning and Inference*, July 2004-December 2011.

Associate Editor, *Scandinavian Journal of Statistics*, August 2008-December 2011.

Associate Editor, *Electronic Journal of Statistics*, January 2010-December 2015.

Reviewer/Referee for the Journals

Annals of Statistics (multiple)
Journal of the American Statistical Association (multiple)
Journal of the Royal Statistical Society (multiple)
Statistics and Probability Letters (multiple)
Statistics in Medicine (multiple)
Lifetime Data Analysis (multiple)
Biometrika
Biometrics (multiple)
Journal of Statistical Planning and Inference (multiple)
Communications in Statistics (multiple)
Statistics and Decisions (multiple)
Computational Statistics and Data Analysis (multiple)
Nonparametric Statistics and Related Topics (a conference proceeding)
Brazilian Journal of Probability and Statistics
Canadian Journal of Statistics
Journal of Nonparametric Statistics (multiple)
Metrika (multiple)
Annals of the Institute of Statistical Mathematics (multiple)
Annals of Applied Statistics (multiple)
Stochastic Processes and Their Applications

Grant Proposals Reviewer

Ad-hoc member of several NIH Study Sections. Continuing since 2011.

Served as Permanent Member, NIH BCHI Study Section, July 2006-June 30, 2009.

Served on several review panels of the National Science Foundation, Division of Mathematical Sciences.

Served as Temporary Member, NIMH Study Section, June 2006.

Reviewed a research proposal for the Medical Research Council (MRC) of the United Kingdom.

National Institutes of Health proposals (multiple times).

National Science Foundation proposals (multiple times).

EPSRC (United Kingdom) reviewing of grant proposal.

External Evaluator for Tenure and/or Promotion for the following Universities:

1. University of Michigan, Ann Arbor, Michigan (multiple).

2. Cornell University.

3. Washington State University.

4. Medical University of South Carolina (multiple).

5. University of North Carolina, Charlotte.

6. University of Maine.

7. Yale University.

8. MD Anderson Cancer Center, University of Texas, Houston, Texas (multiple).

9. University of Richmond, Richmond, VA.

10. University of Kentucky, Lexington, KY (multiple).

11. North Carolina State University, Raleigh, NC.

12. Florida International University.

13. Georgia State University, Atlanta, Georgia (multiple)

14. Ohio State University.

15. Clemson University.

16. New Jersey Institute of Technology (multiple).

17. IUPUI.

18. Virginia Commonwealth University.

19. University of Michigan.

20. NCSU.

21. Foreign Reviewer of an Habilitation Thesis, University of Grenoble, Alpes.

22. Foreign Reviewer of a PhD Dissertation, Savitribai Phule Pune University (formerly University of Pune).

Committee Membership

<u>University Committees</u>

At Bowling Green State University, 1986-2000:

- BGSU University Faculty Senate (1998)
- College of Arts and Sciences Promotion and Tenure Committee (1997-99). Served as Chair of Committee from 1998-99.
- BGSU University Program Review Panel (1997-99). For 1998, this Panel, which consisted of six faculty members and the Vice-Provost for Academic Affairs, prepared final reports of the program review of the Department of Geology, College of Technology, College of Health and Human Services, Department of Political Science, School of Art, and the School of Communications.

- BGSU University Welfare Committee, 1992-93.
- BGSU University Research Computing Committee, 1992-95.

<u>Departmental Committees</u>

At Bowling Green State University, 1986-2000:

- Advisory Committee, 1993-97.
- Colloquium Committee, 1986-88.
- Personnel Committee, 1987-88, 1992-94.
- Undergraduate Curriculum Committee, 1991-94.
- Statistics Committee, 1991-1998.
- Faculty Search Committee, 1992-94, 1997-99.
- BGSU Graduate Committee, 1992-94, 1998-00.
- BGSU Department's Program Review Committee, 1998-00.

At University of South Carolina, 2000-Present:

- **Departmental Committees:**
  - University Faculty Senator, Fall 2014-Summer 2017.
  - Member, Promotion and Tenure Committee, 2013-Present.
  - Chair, Committee to Revise Department's Tenure and Promotion Procedures and Criteria, 2011-2012.
  - Provost's Faculty Replenishment Initiative Committee, 2010–2011 (senior position); 2011-2012 (cluster position with Biology).
  - Co-Program Chair, SRCOS Conference for 2011.
  - Chair, Organizing Committee of 2007 Nonparametric Conference, 2006–2007.
  - Chair, Faculty Search Committee, 2004–2005; 2006-2008; 2009–2010; 2011–2013.
  - Chair, Tenure and Promotion Committee, 2007–2008; 2009-2011; 2011–2013.
  - Chair, Post-Tenure Review Committee, 2005–2006; 2009–2013.
  - Graduate Director, July 2002-August 2004; August 2007–August 2010.
  - Co-Organizer of the Nonparametric Conference, 2006–2007.
  - Chair of Department's Colloquium Committee, August 2000–May 2002.
  - Co-Organizer of the Reliability Conference, 2002-2003.
  - Department's Library Representative, August 2000–2007.
  - Member, Faculty Search Committee, 2000–2001.
  - Graduate Committee, 2001-2006; 2007–2010.
  - Other departmental committees, e.g., Promotion/Tenure, PhD Comprehensive and Qualifying Examination Committee, VIGRE, Peer Review of Teaching, etc.

- **College/University Committees:**
  - Member, College of Arts and Sciences Dean's Advisory Committee, 2017-Present.
  - Member, College of Arts and Sciences Dean's Academic Planning Committee, 2016-2017.
  - Member, College of Arts and Sciences Dean Search Committee, 2015-2016.
  - Chair, University Committee on Tenure and Promotion, 2013-2014.
  - Elected Member, University Committee on Tenure and Promotion, 2011-2013.
  - Member, Faculty Senate Steering Committee, 2013-2014.

- Member, Russell and Educational Foundation Research Award Committee, 2011-2014.
    - Member, University's Faculty Salary Equity Committee, 2006-2011.
    - Ex-Officio Member, University's Faculty Grievance Committee, August 2007-July 2011.
    - Elected Member, College of Arts and Sciences Dean's Academic Planning Council, 2006-2009.
    - Member, SC Honor's College Dean Search Committee, December 2004–May 2005.
    - Elected Member, University's Faculty Grievance Committee, August 2005-July 2007.
    - Member, University's Community of Libraries, August 2004-2010.
- **Statistics Profession:**
    - Constantly serving on NIH Study Section Panels every year.
    - Member, NSF Panel to review Career Grant Proposals in Statistics, October 2018.
    - Elected as Representative to the Council of Sections from the Section of Risk Analysis, American Statistical Association. January 1, 2018-December 31, 2019.
    - Institute of Mathematical Statistics (IMS) Executive Secretary, August 1, 2017-July 31, 2020. As Executive Secretary, I am also a member of the IMS Council.
    - Session Organizer and Chair at the International Statistical Institute's World Statistics Congress held at Marrakech, Morocco, July 2017.
    - Member of Organizing Committee, Mathematical Methods in Reliability Conference to be held in Grenoble, France in July 2017.
    - Chair (2016–2018), ASA Noether Awards Committee.
    - Chair (Nationally Elected Office), ASA Section on Risk Analysis. 2014. [Was Chair-Elect in 2013].
    - Member, American Statistical Association Noether Award Committee, 2011-2016.
    - Member of 3-person External Review Committee, Department of Statistics, University of Kentucky, 2011-2012.
    - External Statistical Consultant for the University-wide Salary Equity Study for Georgia State University, 2011-2012.
    - Program Chair (Nationally Elected Office), Section on Nonparametrics, American Statistical Association, 2009–2010.
    - Member, Organizing Committee, Mathematical Methods in Reliability Conference, Beijing, China, June 2011.
    - Member, Organizing Committee, Mathematical methods in Reliability Conference, Glasgow, Scotland, July 2007.
    - Co-Organizer (with Don Edwards), Nonparametrics Conference, University of South Carolina, May 2007.
    - Chair, Committee on Awards for Contributed Talks at JSM, Nonparametrics Section of the ASA, 2004-2009.
    - Member, Organizing Committee, Mathematical Methods in Reliability Conference, Santa Fe, NM, June 2004.
    - Co-Organizer (with W. Padgett and J. Lynch), International Conference in Reliability and Survival Analysis (ICRSA), Columbia, SC, May 2003.

Last Update: April 20, 2018