

Dr. Yolanda Muñoz Maldonado

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Mathematical Sciences
Statistics
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Education

Ph D, Texas A&M University, 2005.

Major: Statistics

Dissertation Title: Mixed Models, Posterior Means and Penalized Least-Squares

MS, University of Texas at El Paso, 2000.

Major: Statistics

Dissertation Title: A Comparison of the Distribution of Gangliosides in Brains of Old and Young Rats: A Similarity Analysis of Curves

BS, Universidad Autonoma de Yucatan, 1997.

Major: Mathematical Education

Supporting Areas of Emphasis: Mathematics

Dissertation Title: Didactic Aspects of Proofs

Professional Positions

Academic

Assistant Professor in Statistics – Mathematical Sciences Department, Michigan Tech University, Houghton, MI (2008-2011).

New Research Fellow for the program in Object Oriented Data Analysis at the Statistics and Applied Mathematics Institute (SAMSI), Research Triangle Park, NC. (2010-2011).

Assistant Professor in Biostatistics, University of Texas-Health Science Center Houston. (July 4, 2005 - August 4, 2008).

Consulting

Technical/Professional Work, Dr. Sherif Nagueh. The Methodist Hospital in Houston, Houston, TX. (September 2007 - December 2010). Compensated

Awards and Honors (selected)

New Researcher Fellowship SAMSI, Statistical and Applied Mathematics Institute (SAMSI). (March 15, 2010).

Invited Summer visitor July-2010, the CISL Research and Supercomputing Visitor Program (RSVP). (November 11, 2009).

Graduate Scholarship, College of Sciences, Texas A&M University. (August 20, 2004).

George Bush Presidential Travel Award, George Bush Texas A&M Foundation. (August 1, 2004).

Travel Award, Department of Statistics, Oregon State University. (July 28, 2003).

Travel Award, Department of Statistics, University of Florida/NSF. (January 12, 2003).

Emmanuel Parzen Graduate Research Fellowship Award, Department of Statistics, Texas A&M University. (July 31, 2002).

Awards and Honors (continued)

Student Travel Award, International Biometric Society's Eastern North American Region (ENAR).
(March 12, 2002).

Susan M. Arseven '75, Make-A-Difference Award, College of Sciences, Texas A&M University.
(February 9, 2002).

Best Nonparametric contributed paper, Section on Nonparametric Statistics of the American
Statistical Association. (August 1, 2001).

Dean's Graduate Scholarship, College of Sciences, Texas A&M University. (August 28, 2000).

TEACHING

Teaching Experience

Michigan Tech

MA 3710, Engineering Statistics, 4 courses.
MA 5731, Linear Models, 1 course.
MA 5980, Theory & Apps of Mixed Models, 1 course.
MA 5999, Graduate Research in Math, 3 courses.

UT-Health Sciences Center

PH 1745 Sampling Techniques
PH 1915 Linear Models
PH 1970 Multivariate Analysis
PH 1988 Biostatistics Seminar

Graduate Student Advising

Doctoral Advisory Committee Chair, Mathematical Sciences. (January 11, 2010 - May 31, 2011).
Advised: James Wright

Masters' Advisory Committee Chair, Mathematical Sciences. (August 30, 2010 - April 29, 2011).
Advised: Andrew Boettcher

Doctoral Advisory Committee Member, Mathematical Sciences. (August 31, 2009 - December 17,
2010).
Advised: Beini Jiang

Masters' Advisory Committee Member, Biostatistics. (March 1, 2008 - December 1, 2010).
Advised: Sukhal Ramharak

Masters' Advisory Committee Chair, Mathematical Sciences. (January 12, 2009 - May 1, 2010).
Advised: Paul LaBine

Masters' Advisory Committee Member, Cognitive & Learning Sciences. (September 2, 2008 -
December 18, 2009).
Advised: Paul Dube

RESEARCH

Published Intellectual Contributions

Book Chapters

Muñoz Maldonado, Y. (2009). "Mixed Models, Posterior Means and Penalized Least-Squares", in Lectures Notes-Monograph Series for the Third Eric, Ed. Rojo, J., (Vol. 57 pp. 216-236). Institute of Mathematical Statistics. (*Published*)

Peer Reviewed/Refereed Journal Articles

Sherif, N. F., Bertron, G. M., Leonard, S., Karen, S. M., Andrew, W., Richard, B. G., Christopher, N., Ferdinand, L., John, B. M., Steven, R. K., Muñoz Maldonado, Y., William, S. H. "Alcohol Septal Ablation for the Treatment of Patients with Obstructive Hypertrophic Cardiomyopathy: Multicenter North American Registry", *The Journal of the American College of Cardiology*. (*Accepted for publication, June 2011*).

Van Dang, C., Day, R. S., Selwyn, B., Muñoz Maldonado, Y., Nguyen, K. C., Le, T. D., Le, M. B. (2010). "Determinants of the BMI of Vietnamese Children Initiating BMI Studies in Vietnamese Children: Changes in a Transitional Economy", Ed. Mark Wahlgvist, Duo Li, Dr Meei-Shyuan Lee, Hsing-Yi Chang, *Asia-Pacific Journal of Clinical Nutrition*, (Vol. 19, No. 2.). (*Published*)

Staniswalis, J. G., Parks, N. J., Bader, J. O., Muñoz Maldonado, Y. (2005). "Temporal Analysis of Airborne Particulate Matter Reveals a Dose-Rate Effect on Mortality in El Paso: Indications of Differential Toxicity for Different Particle Mixtures". *Journal of Air & Waste Management Association*, (Vol. 55, pp. 893-902). (*Published*)

Eubank, R. L., Huang, C., Muñoz Maldonado, Y., Wang, N., Wang, S., Buchanan, R. J. (2004). "Smoothing Spline Estimation in Varying Coefficient Models". *The Journal of The Royal Statistical Society, Series B*, (Vol. 66, No. part 3, pp. 653-667). (*Published*)

Phillips, C. D., Sherman, M., Hawes, C., Muñoz Maldonado, Y., Spector, P. (2003). "Effects of facility characteristics on departures from assisted living: Results from a national study" (Vol. 43, pp. 690-696). *The Gerontologist Journal*, (*Published*)

Muñoz Maldonado, Y., Staniswalis, J. G., Irwin, L. N., Byers, D. (2002). "A Similarity Analysis of Curves", *The Canadian Journal of Statistics*, (Vol. 30, No. 3, pp. 373-381).

Submitted Publications

Muñoz Maldonado, Y. "Sample Size Calculation for Comparison of Two Functional Means". Submitted to the Journal of the American Statistical Association (June 2011).

Roemer, K., Hamilton, S., Muñoz Maldonado, Y., Vendlinski, R., Ritcher, C. "Influence of Body Mass Index on Lower Extremity Kinetics in Ergometer Rowing", Submitted to the Journal of Biomechanics" (August 2011).

Selected Presentations

Muñoz Maldonado, Y. (Presenter & Author), 5 Minute Madness, Workshop on AOOD meets Evolutionary Biology, Statistics and Applied Mathematics Institute, Research Triangle Park, NC. (April 30 - May 02, 2011).

Selected Presentations (continued)

- Muñoz Maldonado, Y. (Presenter & Author), Eastern North American Region Meetings, "*Sample Size Calculation for Comparison of Two Functional Means*" International Biometrics Society, Miami, FL. (March 19, 2011 - March 23, 2011).
- Muñoz Maldonado, Y. (Presenter & Author), SAMSI undergraduate workshop on Object Oriented Data Analysis, "*The Importance of Sample Size Calculation*" Statistical and Applied Mathematics Institute, Research Triangle Park, NC. (February 25, 2011 - February 26, 2011).
- Muñoz Maldonado, Y., Invited Speaker, "*Contemporaneous Sample Size Problems*" Department of Statistics, University of Kentucky, Lexington, KY. (March 3, 2010 - March 6, 2010).
- Muñoz Maldonado, Y. (Presenter & Author), Joint Statistical Meetings 2009, "*Sample Size Calculation for a Mixture of Discrete and Continuous Endpoints*", American Statistical Association, International Biometric Society, etc., Washington, D.C.. (August 1, 2009 - August 6, 2009).
- Muñoz Maldonado, Y. (Presenter & Author), Eastern North American Region, Spring Meetings 2008, "*Sample Size Calculation for a Mixture of Discrete and Continuous Endpoints: An Application of the Poisson-Binomial Distribution*" International Biometric Society, Arlington, VA. (March 16, 2008 - March 19, 2009).
- Muñoz Maldonado, Y. (Presenter & Author), Eastern North American Region, Spring Meetings 2009, "*Counterintuitive Results when Calculating Sample Size in ANOVA*" International Biometric Society, San Antonio, TX. (March 14, 2009 - March 18, 2009).
- Muñoz Maldonado, Y., Invited Speaker, Blackwell-Tapia Conference 2008, "*Testing the Equality of Mean Functions for Continuous Time Stochastic Processes*" SIAM-NSF, Research Triangle Park, North Carolina. (November 14, 2008 - November 15, 2008).
- Muñoz Maldonado, Y. Invited Speaker, SACNAS National Conference 2007, "*An Application of U-Statistics in the Analysis of Ganglioside Profiles*" Society for The Advancement of Chicanos and Native Americans, Kansas City, MO. (October 11, 2007 - October 14, 2007).
- Muñoz Maldonado, Y. Invited Speaker, Third Eric L. Lehmann Symposium 2007, "*Mixed Models, Posterior Means and Penalized Least-Squares*" Rice University, Houston, TX. (May 16, 2007 - May 19, 2007).
- Muñoz Maldonado, Y. Invited Speaker, STATFEST 2006, "*My Experiences in Graduate School*" American Statistical Association/The University of Texas at El Paso, El Paso, TX. (November 18, 2006).
- Muñoz Maldonado, Y. (Presenter & Author), Joint Statistical Meetings 2006, "*The Gentle Side of Kalman Filtering*" American Statistical Association, Seattle, WA. (August 6, 2006 - August 10, 2006).
- Muñoz Maldonado, Y. (Presenter & Author), New Researchers Conference 2006, "*Mixed Models, Posterior Means and Penalized Least-Squares*" NSF/ American Statistical Association, Seattle, WA. (August 1, 2006 - August 5, 2006).

Presentations Given by students

- Muñoz Maldonado, Y. (Co-Author), Zeng, J. (Presenter & Author), Mazzoleni, C. (Co-Author), Dubey, M. (Co-Author), Nebraska Conference for Undergraduate Women in Mathematics,

"Application of Functional Data Analysis in the Study of Aerosol light Absorption and Scattering" University of Nebraska, Lincoln, Nebraska. (January 29, 2010 - January 31, 2010).

Presentations Given by students (continued)

Muñoz Maldonado, Y. (Co-Author), Zeng, J. (Presenter & Author), Mazzoleni, C. (Co-Author), Dubey, M. (Co-Author), Fifth Annual Sustainable Futures Institute (SFI) Poster Session, *"Application of Functional Data Analysis in the Study of Aerosol light Absorption and Scattering in Mexico City"* Sustainable Futures Institute, Michigan Tech Univeristy, Houghton, MI. (October 16, 2009).

SERVICE

Editorial and Review Activities

Reviewer, Conference Paper, "Best Nonparametric Student paper presented at the Joint Statistical Meetings," American Statistical Association/Section of Nonparametric Statistics. Appointed. (January 20, 2010 - Present).

Ad Hoc Reviewer, Section in Statistics in Defense and National Security. Appointed. (September 1, 2008 - Present).

Reviewer, Journal Article, "Strong Limit Theorems for Weighted sums of NOD sequence and exponential inequalities," Journal of Nonparametric Statistics. Appointed. (October 21, 2009 - October 26, 2009).

Reviewer, Conference Paper, "Best Nonparametric Student paper presented at the Joint Statistical Meetings," American Statistical Association/Section of Nonparametric Statistics. Appointed. (July 15, 2009 - August 5, 2009).

General Service

Department

Committee Member, Hiring Committee, Member. (August 2009 - April 2010).

Professional

Lab co-coordinator, Statistics and Applied Mathematics Institute. (February 24, 2011 - February 25, 2011).

Organizer of a Topic Contributed Session, American Statistical Association. (September 1, 2009 - August 2, 2010).

Conference Session Chair, American Statistical Association, Member. (August 1, 2010).

University

Reviewer of proposals, Summer Research Fellowship 2011. (January 2011).

Professional Memberships

Institute of Mathematical Statistics. (May 1998 - Present).

American Statistical Association. (April 1998 - Present).

International Biometric Society, Eastern North American Regions. (March 1998 - Present).

Development Activities Attended

Workshop, "2010 NSF CAREER workshop," Office of Research. (February 20, 2010).

Workshop, "Grants 102: Grant Writing Workshop," University of Texas-Houston Health Science Center. (October 2005 - March 2006).

Workshop, "Grants 101: Introduction to Grant Writing.," University of Texas-Houston Health Science Center. (September 2005).

Seminar, "Wavelets in the Real World: Concepts and Applications," American Statistical Association. (August 2004).

Seminar, "Effectively: Communicating with Non-Statisticians," American Statistical Association. (August 2003).