

Sara Lopez-Pintado, PhD

Associate Professor
Department of Health Sciences
Bouvé College of Health Sciences
Northeastern University
316 Robinson Hall, Rm 312c
Boston, MA 02115
phone: 617-373-8249 (office)
email: s.lopez-pintado@northeastern.edu

Date of preparation of CV:

August 24, 2018

Personal data:

Name: Sara Lopez-Pintado
Birthdate: May 2, 1975
Birthplace: Cordoba, Spain
Citizenship: Spain

Academic appointments and work experience:

- August, 2018 - present, Associate Professor, Department of Health Sciences, Bouvé College of Health Sciences, Northeastern University, Boston, MA, USA.
- January, 2010 - August 2018, Assistant Professor of Biostatistics, Department of Biostatistics, Mailman School of Public Health, Columbia University, New York, USA.
- September, 2006 - present, Associate Professor of Statistics, Department of Economics and Quantitative Methods, University Pablo de Olavide, Seville, Spain, (currently on leave).
- September, 2007 - August, 2008, Visiting Professor, Department of Biostatistics, Columbia University, New York, USA.
- September, 2005 - August 2006, Postdoc and Lecturer, Department of Statistics, Rutgers University, New Jersey, USA.
- September, 1998 - August, 2005, Instructor, Department of Statistics and Econometrics, University Carlos III of Madrid, Spain.

Education:

- September, 1998 - August, 2005, PhD (Statistics) July, 2005, Department of Statistics and Econometrics, University Carlos III of Madrid, Spain.
Thesis title: On the concept of depth for functional data
Sponsor: Juan Romo
Best thesis award in University Carlos III of Madrid, 2005
- October, 1994 - July, 1998, BA Mathematics (field statistics), University of Sevilla, Spain.

Training:

- September, 2005 - August 2006, Postdoctoral training, Department of Statistics, Rutgers University, New Jersey, USA.

Gaps in work/training/education:

I had two children during the tenure track period: Daniel (born in September 2011) and Emma (born in May 2014). My tenure clock was stopped two times coinciding with the births of my children. I had an extended maternity leave for 5 months since December 2011 until April 2012.

Honors and Awards:

- Nominated on December 2017 as 'women in science spotlight' by a Columbia University student group of women scientists.
- Calderone Prize Award for Junior Faculty in 2013. Columbia University. New York.
- Best thesis award in 2005. University Carlos III of Madrid, Spain.

Professional Organizations and Societies:

- Referee for the following journals:
 - *Annals of Statistics*
 - *Biostatistics*
 - *International Journal of Biostatistics*
 - *Computational Statistics and Data Analysis*
 - *Journal of the American Statistical Association*
 - *Test*

- *Journal of Computational and Graphical Statistics*
- *Computational Statistics*
- *Technometrics*
- *Stat*
- *Statistics and its Interface*

- Editorial Board:

- Associate Editor of Computational Statistics and Data Analysis 2014-2015

Grants support:

Present Support:

- August, 2017 - June, 2021, Research member, NIH, "Advanced modeling techniques for brain imaging data with PET", PI: Ogden, Co-investigator: Sara Lopez-Pintado; 16% effort.

Past Support:

- April, 2017 - August 2018, Research member, NIH, "Translating an Evidence-based Urban Asthma Program for Rural Adolescent: Testing Its Effectiveness and Cost-effectiveness and Understanding Implementation Factors", PI: Bruzzese, Statistician: Sara Lopez-Pintado; 15% effort.
- July, 2016 - August 2018, Research member, NIH, "Clinical and Translational Science Award-Biostatistics Resource", PI: Reilly, Statistician: Sara Lopez-Pintado; 20% effort.
- February, 2017 - July, 2018, Research member, American Diabetes Association Postdoctoral Fellowship Award, "Rare variant discovery in severe early onset obesity driven by electronic health records", PI: Thaker, Statistician: Sara Lopez-Pintado; 10% effort.
- July, 2017 - July, 2018, Research member, Komen, "Immune regulation of triple negative breast cancer metastasis", PI: Swarnali, Statistician: Sara Lopez-Pintado; 4% effort.
- September, 2011 - August 2016, Research member, NIH, "HIT for facilitating problem solving in diabetes management", PI: Hripcsak, Statistician: Sara Lopez-Pintado; 15% effort.
- July 2013-July 2015, Research member NIH, "A web-based intervention to prevent drug abuse among adolescents", PI: Schwinn, 14% effort.

- July, 2012 - July 2015, Co-Investigator, NSF, "Statistical methods for screening individual childhood growth paths", PI: Wei, Co-investigator: Sara Lopez-Pintado; 9% effort.
- June 2011 - June 2016, Research member NIH, "Prenatal stress: The epigenetic basis of maternal and perinatal effects. ", PI: Monk, 5% effort.
- September 2009 - June 2016, Research member NIH, "The effects of Prenatal stress and poor nutrition on brain and cognition", PI: Monk, 5% effort.
- September 2011 - May 2014, Research member NIH, "Exercise and Inflammation: autonomic, affective, and cellular mechanisms", PI: Sloan, 10% effort.
- July, 2010 - July 2011, Research member, NIAID, "The efficacy of written treatment plans in asthma", PI: David Evans, Co-PI: Shears; 10 % effort.
- May, 2010 - May 31, 2011, Research member, NIAID, "Risk factors for spread of staphylococcus Aureus in prisons". PI: Lowy, Co-PI: Larson; 10 % effort.
- May, 2010 - July 31, 2011, Research member, NIAID, "Modeling of S. Aureus transmission in Northern Manhattan". PI: Lowy; 10 % effort.
- May, 2010 - July 31, 2011, Research member, NIAID, "S. Aureus clones ST398 - an emerging community-based pathogen ". PI: Lowy; 5 % effort.
- April, 2010 - April, 2012, Research member, Spanish Government, "Human Development and the labor market"; PI: Antonio Villar; 20 % effort.
- December, 2007 - December, 2009, Research member, Spanish Government, "Development and welfare: Health, education and science"; PI: Antonio Villar; 20 % effort.
- December, 2007 - December, 2009, Research member, Spanish Government, "Development and welfare: Health, education and Income"; PI: Antonio Villar; 20 % effort.
- December, 2004 - December, 2007, Research member, Spanish Government, "Model selection for high-dimensional data in economics"; PI: Daniel Pena; 20 % effort.
- January, 2006 - December, 2006, Research member, Spanish Government, "Nonparametric and computational intensive techniques in statistics"; PI: Juan Romo; 20 % effort.
- January, 2005 - December, 2005 , Research member, Spanish Government, "Nonparametric techniques for economic data"; PI: Juan Romo; 30 % effort.

- November, 2002 - October, 2005, Research member, Spanish Government, "Techniques for the statistical analysis of functional data in economics and business"; PI: Juan Romo; 40 % effort.
- December 2000 - December, 2003, Research member, Spanish Government, "Statistical analysis of large and complex data sets in economics and business"; PI: Daniel Pena; 20 % effort.

Pending Support:

- December, 2018 - November, 2020, PI, NIH R21, "Nonparametric robust methods for analyzing high-dimensional data with applications to brain imaging", PI: Lopez-Pintado, 20% effort.
- July, 2017 - May, 2020, Research member, NIH, "Health and Psychosocial need: The asenze study of risk and protection in adolescence", PI: Davidson, 20% effort.
- July, 2017 - June, 2022, Research member, NIH, "Targeting epigenetic pathways for treating resistant BCCsin Gorlin syndrome", PI: Bickers, 6% effort.
- April, 2018 - March, 2023, Research member, NIH, "Understanding the interplay of HIV and successful aging of a New York vulnerable population of women living with HIV/AIDS, 50 and older ", PI: Odlum, 6% effort.

Fellowships:

- November 2013, Calderone Award for Junior Investigators, Columbia University, USA.
- August 2012, Fellowship to participate as an invited speaker in ICORS12, Vermont, USA.
- September, 2007 - August, 2008, Columbia University, USA. Fellowship from Spanish Government "Jose Castillejo". Title of the project: "Nonparametric tools for the analysis of functional data".
- January 2003, Fellowship to participate in Workshop on "Functional data analysis" in University of Florida, USA.
- July, 2001 - August, 2001, Cambridge University, UK. Fellowship for predoctoral students. Fundacion Carlos III. Title of the project: "Functional data analysis: a depth approach";

Educational contributions. Teaching experience and responsibilities:

- Teaching:
 - 2015-present, P6107: Biostatistical Analysis with SPSS. Master course. Columbia University.
 - 2015-present, P6110: Statistical Analysis with SAS. Master course. Columbia University.
 - 2010 - present, P6103 Introduction to Biostatistics. Master Course. Columbia University.
 - 2006 - 2009, Biostatistics, undergraduate course for Biotechnology degree. University Pablo de Olavide.
 - 2006 - 2009, Statistics, undergraduate course for Computer Science Engineering degree, University Pablo de Olavide.
 - 2006 - 2009, Biostatistics, undergraduate course for Nutrition degree, University Pablo de Olavide.
 - 2006 - 2009, Statistics, graduate course for Ph.D in High efficiency in physical activities, University Pablo de Olavide.
 - 2007 - 2008, Statistics, undergraduate course for Environmental science, University Pablo de Olavide.
 - 2005 - 2006, Regression Methods, graduate course for Ph.D and Masters degree in Statistics. Rutgers University.
 - 2005 - 2006, Linear Regression Methods, undergraduate course for Statistics degree, Rutgers University.
 - 1999 - 2005, Statistics II, undergraduate course for Economic degree and Business degree, University Carlos III of Madrid.
 - 2003 - 2005, Statistics I, undergraduate course for Economic degree and Business degree. University Carlos III of Madrid.
 - 2003 - 2005, Statistics III, undergraduate course for Statistics degree. University Carlos III of Madrid.
 - 2003 - 2005, Multivariate Analysis, undergraduate course for Statistics degree. University Carlos III of Madrid.
 - 2001 - 2005, Statistics, graduate course for Statistics Ph.D. University Carlos III of Madrid.

- 2002 - 2004, Design of experiments, undergraduate course for Statistics degree. University Carlos III of Madrid.
- 2001 - 2003, Statistics, graduate course for degree in Master in Finance. University Carlos III of Madrid.
- 2001 - 2003, Statistics, graduate course for degree in Master in Business Administration. University Carlos III of Madrid.
- Students supervision:
 - Advised Master students: Noah Levin, Yuning Wang, Yazhen Zheng in 2016 and Adam King, Shengchao Hou, Yiyi Zhao, Lu Gan, Zhuyu Qiu and Leiyu Yue, 2017.
 - Master program practicum trainees: Jasmine Williams, Linzi Chen (Spring 2016), Jiyeon Choi and Yuhe Xia (spring 2017), Yitong Feng, Kun Qian, Ranran Guo (2017-2018).
 - Research mentor of: PhD students Julia Wrobel, Zilan Choi and Master students, Kun Qian, Ranran Guo, Jiayi Ding and Yitong Feng in 2016- 2018
 - Mentoring postdocs: Carlo Sguera, University Carlos III of Madrid, 2013 and Andrew Simpkin from Bristol University, 2015-2016
 - Mentoring students through the Fee for Services and CTSA (Clinical and Translational Science Awards) at Columbia University
 - Doctoral committee member for Wenfei Zhang (Biostatistics) 2012
 - Mentor for the BEST program at Columbia University on 2010 and 2013
- Teaching evaluations: Excellent evaluations in many of the courses I've taught, for example:
 - 2005-2006, Linear Regression (course 463), Rutgers University. Obtained 4.2 out of maximum of 5
 - 2005-2006, Regression Methods, Ph.D. course, Rutgers University. 4.3 out of 5
 - 2006-2007, Statistics, Technical Engineer in Computer Science, University Pablo de Olavide. 9.01 out of 10
 - 2007-2008, Biostatistics, Biotechnology degree, University Pablo de Olavide. 7.9 out of 10.
 - 2012-2016 Introduction to Biostatistics, Master course P6103, Biostatistics, Columbia University.

Most of the years the evaluations were above 4.5 out of 5

- Summer 2015 and 2016. Statistical Analysis with SAS. Master course P6110, Biostatistics, Columbia University. Excellent evaluations. (4.8 out of 5)
- Spring 2016 and 2017 Biostatistical Analysis with SPSS, Master course P6107, Biostatistics, Columbia University. Excellent evaluations. (4.8 out of 5)

Publications:

1. Original, peer reviewed articles

1. **Lopez-Pintado S**, Wrobel J (2017). Robust nonparametric tests for imaging data based on data depth. *Stat*, 6, 405-419. DOI: 10.1002/sta4.168
2. Wilson PT, Baiden F, Brooks JC, Morris MC, Giessler K, Punguyire D, Apio G, Agyeman-Ampromfi A, **Lopez-Pintado S**, Sylverken J, Nyarko-Jectey K, Tagbor H, Moresky RT (2017). Continuous positive airway pressure for children with undifferentiated respiratory distress in Ghana: an open-label, cluster, crossover trial. *Lancet Global Health* 5: 615-623.

Note: This paper appeared in a very high profile journal. I am sole statistician in this paper. I made substantial contribution regarding analysis and interpretation of the data. I wrote the statistical sections, produced the tables and revised the manuscript for intellectual content.

3. Cohen LP, Hummel SL, Maurer MS, **Lopez-Pintado S**, Wessler JD (2017). Salt taste recognition in a heart failure cohort. *Journal of Cardiac Failure* 23(7): 538-544.

Note: I made substantial contributions to the statistical analysis and interpretation of the data and I wrote the statistical sections of the manuscript.

4. Hecht EM, Liu, MZ, Prince MR, Jambawalikar S, Remotti HE, Weisberg SW, Garmon D, **Lopez-Pintado S**, Woo Y, Kluger MD, Chabot JA (2017). Can diffusion-weighted imaging serve as a biomarker of fibrosis in pancreatic adenocarcinoma? *Journal of Magnetic Resonance Imaging* 46(2): 393-402 PMID:28152252 DOI: 10.1002/jmri.25581.

Note: I made substantial contributions to the study design and writing of the paper. I performed all the statistical analysis of the data.

5. Stein GE, Zheng L, **Lopez-Pintado S**, Merriam JC (2017). Effect of iris hooks on surgically induced astigmatism in cataract surgery. *Clinical and Experimental Ophthalmology* 1:5. PMID: 28382663 DOI: 10.1111/ceo.12955

Note: I made substantial contributions to the statistical analysis and interpretation of the data, and I wrote the statistical sections of the manuscript.

6. Consul N, Guo X, Coker C, **Lopez-Pintado S**, Hibshoosh H, Zhao B, Kalinsky k, Acharyya S (2016). Monitoring metastasis and cachexia in a patient with breast cancer: A case study. *Clinical Medical Insights Oncology* 10: 83-94 PMID: 27660506 DOI: 10.4137/CMO.S40479

Note: I made substantial contributions to this paper with respect to the analysis and interpretation of the data and drafting the manuscript.

7. **Lopez-Pintado S** (2015). Discussion of "Multivariate functional outlier detection" (by Hubert et al.). *Statistical Methods and Applications* 2: 253-257.
8. Sujirakul T, Lin MK, Duong J, Wei Y, **Lopez-Pintado S**, Tsang SH (2015). Multi-modal imaging of central retinal disease progression in a 2-year mean follow-up of Retinitis Pigmentosa. *American Journal of Ophthalmology* 160(4):786-798. e4. PMID: 26164827 DOI: 10.1016/j.ajo.2015.06.032

Note: I made substantial contributions to this paper with respect to the data analysis and interpretation.

9. Felker GM, Mentz RJ, Teerlink JR, Voors AA, Pang PS, Ponikowski P, Greenberg BH, Filippatos G, Davison BA, Cotter G, Prescott, MF, Hua TA, **Lopez-Pintado S**, Severin T, Metra M (2015). Serial high sensitivity cardiac troponin T measurement in acute heart failure: insights from the RELAX-AHF study. *European Journal of Heart Failure* 17(12):1262-1270. PMID: 26333655 DOI10.1002/ejhf.341

Note: I made substantial contribution to this paper with respect to data analysis and interpretation.

10. **Lopez-Pintado S**, Sun Y, Lin JK, Genton MG (2014). Simplicial Band depth for multivariate functional data. *Advances in Data analysis and Classification* 8: 321-338.
11. Alonso A, Casado D, **Lopez-Pintado S**, Romo J (2014). Functional data based methods for time series classification. *Journal of Classification* 31: 325-350.

Note: I made substantial contribution to this paper with respect to the proposed robust classification method, the analysis and interpretation of the data, and the drafting of the manuscript.

12. Torrente A, **Lopez-Pintado S** and Romo J (2013). DepthTools: An R package for robust analysis of gene expression data. *BMC Bioinformatics* 14:237.PMC3750619 DOI: 10.1186/1471-2105-14-237

Note: I made substantial contribution to this paper with respect to the conception, the development of the methodology used and the implementation.

13. Spicer J, Werner E, Zhao Y, Choi CW, **Lopez-Pintado, S**, Feng T, Altemus M, Gyamfi C, Monk C (2013). Ambulatory assessments of psychological and peripheral stress-markers predict birth outcomes in teen pregnancy. *Journal of Psychosomatic Research* 75(4): 305-313.
Note: I made substantial contribution to this paper with respect to the study design, data analysis and interpretation.
14. Lindgren M, Alex C, Shapiro PA, McKingley PS, Brondolo EN, Myers MM, Choui CJ, **Lopez-Pintado S**, Sloan RP (2013). Effects of aerobic conditioning on cardiovascular sympathetic response to and recovery from challenge. *Psychophysiology* 50: 963-973.
Note: I made substantial contribution to this paper with respect to the design of the study, data analysis and interpretation.
15. **Lopez-Pintado S**, McKeague I (2013). Recovering gradients from sparsely observed functional data. *Biometrics* 69(2):396-404.
16. Cornell AG, Chilrud SN, Mellins RB, Acosta, LM, Miller RL, Quinn JW, Yan B, Divjan A, Olmedo OE, **Lopez-Pintado, S**, Kinney, PL, Perera, FP, Jacobson JS, Goldstein IF, Rundle AG, Perzanowski MS (2012). Domestic airborne black carbon and exhaled nitric oxide in children in NYC. *Journal of Exposure Science and Environmental Epidemiology* 22(3): 258-266.
Note: I made substantial contributions to this paper with respect to its conception and design of the study.
17. Olmedo O, Acosta L, Goldstein IF, Divjan A, Rundle A, Chew GL, Mellins RB, Hoepner L, Andrews H, **Lopez-Pintado S**, Quinn JW, Perera FP, Miller RL, Jacobson JS, Perzanowski MS (2011). Neighborhood differences in cockroach, mouse and dust mite allergen exposure and sensitization in NYC. *Journal of Allergy and Clinical Immunology* 128(2): 284-292.
Note: I made substantial contributions to this paper with respect to its conception and revising the manuscript for intellectual content.
18. **Lopez-Pintado, S**, Wei Y (2011). Depth for sparse functional data. *Recent Advances in Functional Data and Related Topics*, ed. F. Ferraty, Berlin: Springer 209-212.
19. McKeague I, **Lopez-Pintado S**, Hallin M, Siman R (2011). Analyzing growth trajectories. *Journal of Developmental Origins of Health and Disease* 2: 322-329.
Note: I made substantial contributions to this paper with respect to its conception, analysis and interpretation of the data, and revising the manuscript for intellectual content.

20. **Lopez-Pintado S**, Romo J (2010). A half-region depth for functional data. *Computational Statistics and Data Analysis* 55: 1679–1695.
21. **Lopez-Pintado S**, Romo J, Torrente A (2010). Robust depth-based tools for the analysis of gene expression data. *Biostatistics* 11(2): 254-264.
22. **Lopez-Pintado S**, Romo J (2009). On the concept of depth for functional data. *Journal of the American Statistical Association* 104: 486-503.
Note: This paper has been cited 279 times
23. **Lopez-Pintado S**, Romo J (2007). Depth-based inference for functional data. *Computational Statistics and Data Analysis* 51: 4957-4968.
24. **Lopez-Pintado S**, Jornsten R (2007). Functional Analysis via extensions of the band depth. *IMS Lecture Notes-Monograph Series. Institute of Mathematical Statistics*, 54: 103-119.
25. **Lopez-Pintado S**, Romo J (2006). Depth-based classification for functional data. *DIMACS Series in Discrete Mathematics and Theoretical Computer Science. Data Depth: Robust Multivariate Analysis, Computational Geometry and Applications. American Mathematical Society* 72: 103-120.

2. Working papers:

1. Sguera C, **Lopez-Pintado S**, Garcia-Portugues E, Torrecilla-Noguerales JL (2018). Interval depth for sparse functional data. Working paper.
2. **López-Pintado S**, Chai Z, Ogden T (2018). Outlier detection methods for image data. Working paper.
3. **López-Pintado S**, Qian, K (2018). Depth-based global envelope test for image data. Working paper.

3. Books

1. Porras Sánchez M, Aquino Llinares N, Martínez L, **Lopez-Pintado S** et al. (2008). Hábitos y actitudes de los sevillanos en edad escolar ante el deporte. Editorial: Instituto Municipal de Deportes, Ayuntamiento de Sevilla. ISBN: 978-84-96098-37-4.
2. Porras Sánchez M, Aquino Llinares N, Martínez L, **Lopez-Pintado S** et al. (2008). Hábitos y actitudes de los sevillanos ante el deporte. Editorial: Instituto Municipal de Deportes, Ayuntamiento de Sevilla. ISBN: 978-84-92417-01-8.

3. Porras Sánchez M, Aquino Llinares N, Martinez L, **Lopez-Pintado S** et al. (2007). Hábitos y actitudes de los sevillanos mayores ante el deporte. Editorial: Instituto Municipal de Deportes, Ayuntamiento de Sevilla. ISBN: 84-96098-73-7.

Invited and Peer-Selected Presentations

- Invited Colloquia
 - March 2015, Ranking multivariate functions. Department of Statistics, Florida State University, Tallahassee, Florida, USA.
 - April, 2011, A half-region depth for functional data. Department of Economics and Quantitative Methods, University Pablo de Olavide, Seville, Spain.
 - April 2009, Robust analysis of functional data. Department of Biostatistics, Columbia University, New York, USA.
 - October 2007, Nonparametric tools for analyzing curves. Department of Economics and Quantitative Methods. Universidad Pablo de Olavide, Seville, Spain.
 - April 2007, Analyzing shape of trajectories. Department of Biostatistics, Columbia University, New York, USA.
 - November 2005, Statistical inference for functions: a depth approach. Department of Statistics, Rutgers University, NJ, USA
 - May 2004, Statistical inference for functions: a depth approach (with J. Romo). Department of Computer Science. Tufts University, MA, USA.
 - February 2000, Inference for functional data. Department of Statistics. Universidad Carlos III de Madrid. Spain.
- Invited Conference Talks
 - December 2017, invited speaker, Depth-based methods for sparse and complex functional data, CMStatistics 2017, London, UK.
 - August 2017, invited speaker, Depth for sparse functional data, JSM 2017, Baltimore, USA.
 - December 2016, invited speaker, Non-parametric tests for imaging data based on a Multivariate Volume Depth, CMStatistics 2016, Seville, Spain.
 - June 2016, invited speaker, Robust nonparametric statistics for imaging data. IS-NPS 2016, Avignon, France.

- December 2015, invited speaker, CMStatistics 2015, London, UK.
 - August 2012, invited speaker, ICORS12 (International Conference on Robust Statistics), Vermont, USA.
 - December 2010, invited speaker, ICSA, Guangzhou, China.
 - December 2010, invited speaker, ERCIM2010, London, England.
 - September 2009, invited speaker, XII Conferencia Espanola de Biometria, Cadiz, Spain.
 - June 2009, invited speaker, ICORS09, Parma, Italy.
 - June 2008, invited speaker, ERCIM08, Neuchatel, Switzerland.
 - September 2007, invited speaker, ICORS07 (International Conference on Robust Statistics 07), Buenos Aires, Argentina.
 - May 2005, invited speaker, X Conferencia Espanola de Biometria. Oviedo, Spain.
 - May 2003, invited speaker, DIMACS Workshop on Data Depth: Robust Multivariate Analysis and Computational Geometry and Applications. Rutgers University, NJ, USA.
 - January 2003, invited participant (poster presentation), 2003 Winter Workshop: an IMS Mini-Meeting on functional Data Analysis. University of Florida, Gainesville, USA.
- Contributed Conference Talks
 - August 2016, Non-parametric test for imaging data based on a Multivariate Volume Depth, JSM, Seattle, USA.
 - August 2015, Robust depth-based statistics for complex data, JSM, Seattle, USA.
 - June 2008, Principal components for gradients of sparse functional data. ERCIM08, Neuchatel, Switzerland.
 - October 2005, A depth based inference for functional data. World Conference on Computational Statistics and Data Analysis. Limassol, Cyprus.
 - October 2005, Tools for analyzing functional data. 28 Congreso Nacional de Estadística e Investigación Operativa. Cadiz, Spain.
 - Julio 2005, Functional data: a depth approach. XXV European Meeting of Statisticians. Oslo.

- July 2004, Functional observations and depth. 6th BS/IMSC Meeting. Barcelona. Spain.
- May 2004, Depth-based classification for microarray data. Conference on Analysis of Genomic Data. Harvard University. Boston, MA.
- Julio 2003, A functional depth analysis for environmental data. The ISI International Conference on Environmental Statistics and Health. Santiago de Compostela, Spain.
- April 2003, Estadísticos de orden para datos funcionales. 27 Congreso Nacional de Estadística e Investigación Operativa. Lerida, Spain.
- August 2002, On the concept of depth for functional data. 2002 Joint Statistical Meetings. New York.

Other merits:

- My service activities for the Department of Biostatistics at Columbia University are: member of the Master Admission Committee, member of Qualifying Exam Committee, member of Recruitment Committee and organizer of the seminars in the Department during the spring semester of 2016.
- Senior consultant since 2015 in Clinical and Translational Research Award at Irving Institute at Columbia University and worked as a consulting for Fee for service in the Department of Biostatistics.
- NSF grant submitted in 2014 received excellent scores and a recommendation to fund if possible. Due to the budget cut it was not funded in the end.
- March 2011: Invitation with financial support to participate in the Workshop: Level sets and depth contours in high-dimensional data. Oberwolfach, Germany.
- Habilitation to Tenure Assistant Professor by the Andalusia Evaluation Agency since January 2010.
- Lopez-Pintado and Romo (2009) “On the concept of depth for functional data” published in JASA is a highly cited paper (279 citations). It is considered to be a seminal contribution to the field of robust functional data analysis.
- June 1998: Award with predoctoral fellowship to participate in the Master Program in the Department of Mathematics, Kaiserslautern, Germany.