MONTSERRAT "MONTSE" FUENTES, PH.D.
President, St. Edward's University | Professor of Mathematics

Website: https://www.stedwards.edu/about/university-leadership/president
LinkedIn: https://www.linkedin.com/in/montse-fuentes/

EXECUTIVE PROFILE:

Montserrat "Montse" Fuentes, Ph.D., is President of St. Edward's University and Professor of Mathematics, and an internationally recognized scholar in statistics and data science. She has held senior leadership roles at major research universities, including Executive Vice President and Provost at the University of Iowa, Dean at Virginia Commonwealth University, and Department Head at North Carolina State University. A collaborative and mission-driven leader, she focuses on advancing research excellence, expanding access to transformative education, and strengthening partnerships with industry, government, and communities to advance institutional growth and societal impact.

EDUCATION:

National Center for Atmospheric Research	Postdoc	1999	Environmental Sciences
University of Chicago, Chicago, IL	Ph.D.	1998	Statistics
University of Valladolid, Spain	B.S.	1994	Mathematics and Statistics (Extraordinary award of Graduation)
University of Valladolid, Spain	B.S.	1994	Music and Piano

PROFESSIONAL EXPERIENCE:

St. Edward's University
2021 - Present	President
2021 - Present	Professor of Mathematics

University of Texas at Austin
2021 - Present	Adjunct Professor of Statistics and Data Sciences

University of Iowa
2019 - 2020	Executive Vice President and Provost
2019 - 2020	Professor of Statistics

Virginia Commonwealth University
College of Humanities and Sciences
2016 - 2019	Dean
2016 - 2019	Full Professor of Statistics (College of Humanities and Sciences), Full Professor of Biostatistics (School of Medicine)

North Carolina State University
Department of Statistics
2011 - 2016	Department Head
2015 - 2016	James M. Goodnight Distinguished Professor of Statistics
2008 - 2016	Full Professor (tenured)
2003 - 2008	Associate Professor (tenured)

1999 - 2003	Assistant Professor

North Carolina State University
Department of Marine, Earth & Atmospheric Sciences

2003 - 2016	Associate status

STATMOS

2011 - 2016	NSF Center Director (NSF-DMS, "Collaborative Research: RNMS Statistical methods for atmospheric and oceanic sciences")

The Environmental Protection Agency (EPA)
Atmospheric Modeling Division

1999 - 2016	Visiting Scientist

National Center for Atmospheric Research

1998 - 1999	Postdoctoral Research Scientist

RESEARCH IMPACT

100+ peer-reviewed publications | 8,400+ citations | h-index 43 | Internationally recognized scholar in spatial statistics, Bayesian modeling, environmental forecasting, and health analytics.

ADMINISTRATIVE ACCOMPLISHMENTS:

President of St. Edwards University. 2021 – Present

Founded in 1885 by the Congregation of Holy Cross, St. Edward's University sits atop a hill overlooking Austin, Texas, and enrolls more than 3,500 undergraduate and graduate students. The university serves a highly diverse community: more than 50% of students are first-generation college students, and 51% received Pell Grants in 2025.

As President and Chief Executive Officer, I report directly to the Board of Trustees and lead the development and execution of the university's strategic vision. I champion an exceptional student experience, foster collaborative leadership and shared governance, and steward the institution's financial sustainability and enrollment strength. I also cultivate external partnerships, elevate the social and economic impact of higher education, expand professional and workforce-aligned academic offerings, and guide comprehensive fundraising efforts to secure the resources necessary to advance the university's mission.

Initiatives and accomplishments:

- Led the development of a comprehensive five-year strategic plan for the university
- Successfully achieved an 11% increase in new enrollment from 2021 to 2024
- Increased student retention from 72% in 2021 to 83% in 2025
- Established the School of Health Sciences to enhance academic offering
- Spearheaded the inaugural 2024 nursing cohort, expanding program offerings and securing CCNE accreditation
- Guided the School of Business through the AACSB accreditation process to successful completion
- Led the University to achieve Carnegie Research University designation.

- Elevated the University to its highest rankings by the US News and World Report 2025, achieving #5 in the West region.
- Spearheaded efforts leading the institution to obtain the Seal of Excelencia for student success, underscoring its commitment to academic excellence and support.
- Achieved recognition as a top producer of Fulbrights, securing the institution's highest ranking in history as #3 among all universities with the same Carnegie Designation.
- Successfully expanded the university's athletic offerings by introducing five new athletic varsity teams, enriching the student experience and promoting holistic development.
- Achieved a remarkable 90% student success rate for our student athletes, demonstrating a strong commitment to supporting their academic and athletic pursuits simultaneously.
- During my tenure, the university achieved five consecutive years of financial surpluses, enabling meaningful salary increases for faculty and staff while avoiding any reductions. These surpluses strengthened long-term institutional stability and allowed for strategic investments in academic innovation, student support, and campus infrastructure.
- Achieved a remarkable 40% increase in fundraising through new gifts compared to previous years. Endowment at $170M in 2026, from $118M, over 40% growth in five years.
- Initiated the launching of a new Comprehensive Capital Campaign with a $125 million goal to support university growth and development
- Enhanced institutional reputation, leading to a resolution of recognition from the Texas House and Texas Senate
- Established infrastructure for research, leading to the largest federal grant for the institution
- Recipient of $2.1 Million to support students from disadvantaged backgrounds from the Lopez Foundation. The first award offered by the Lopez Foundation to a private institution
- Recognized for the impact in the community, reflected in the "Corazon Award" offered to the President from *Con Mi Madre*. President named "Power Player" from *Austin Business Journal.* President named "Change Maker" from the *Austin Woman Magazine.*

<u>Executive Vice President and Provost of the University of Iowa.</u> 2019- 2020
The University of Iowa is a nationally recognized R1 public research university, serving more than 32,000 students from all 50 states and around the world. A member of the Association of American Universities and the Big Ten Conference, the university advances its mission through 12 colleges offering undergraduate, graduate, professional, and health sciences education and is anchored by a comprehensive academic medical center that is central to its research, clinical care, and educational mission.

As Executive Vice President and Provost, I served as the university's chief academic officer, reporting directly to the president. I communicated regularly with the Iowa Board of Regents on academic matters and played a central role in collaborative, university-wide decision-making, including strategic planning, budget development, oversight of auxiliary enterprises and health care services, and the advancement of research and scholarship. Working closely with faculty, staff, shared governance bodies, and unions, I provided academic and intellectual leadership across the institution, overseeing academic programs, faculty affairs, and student academic life while advancing the university's academic mission.

Initiatives and accomplishments:
- Implementation and refinement of a new hybrid-Responsibility Center Management (RCM) budget model to strategically allocate a budget of $745M in general education

funds to Colleges and central units.

- Establishment of the *Provost postdoctoral program* to create a pipeline to increase the diversity of the faculty.
- Establishment of the *First Generation Hawkeye* program to reduce the equity gap in the graduation/retention rates between first generation students and continuing-generation education students through mentoring, engagement and access to high impact practices.
- Promotion of the *Iowa Edge* program that led to the increase in retention rates of minority students.
- *Provost Investment Funds* to enhance research productivity and academic success of students
- Seed funds to support: diversity, equity and inclusion training; strategies to address high rates of DFW rates in gateway courses; establishment of a postdoctoral fellows institutional infrastructure; and increase of experiential opportunities and civic engagement for students.
- Successful reaffirmation of accreditation by the Higher Learning Commission (HLC).
- Recognition of the faculty. Increasing promotional salary raises for faculty.
- Establishment of the inaugural *University of Iowa Distinguished Professorships* to recognize faculty
- Establishment of metrics and strategies to enhance the stature of the academic units.
- Leading the implementation of current strategic plan and development of new institutional strategic plan.
- Establishment of the first strategic enrollment management plan (SEM) to identify, recruit, enroll, retain, and graduate a student body of undergraduate, graduate and professional students, in accordance with the institution's mission and goals while also achieving fiscal sustainability.

Dean of College of Humanities and Sciences at VCU. 2016 – 2019
Virginia Commonwealth University is a nationally recognized R1 public research university anchored by a comprehensive academic medical center and serves as a major engine for research, innovation, and community engagement in the Commonwealth of Virginia.
The College of Humanities and Sciences is the university's largest academic unit, enrolling more than 15,000 students and comprising approximately 500 full-time and 230 part-time faculty. The College accounts for 50% of all credit hours and 60% of undergraduate credit hours taught at VCU and leads the Monroe Park Campus in externally funded research activity.

The College includes two professional schools—the Robertson School of Media and Culture and the School of World Studies—along with 15 academic departments, ROTC, and three additional degree-granting undergraduate programs: Liberal Studies for Early and Elementary Education, the Interdisciplinary Science Program, and Science, Technology, and Society. It serves as the administrative home for 85 undergraduate majors and concentrations, five certificate programs, 12 master's programs, 10 doctoral programs, and five cross-disciplinary Ph.D. programs, including Media, Art and Text; Nanoscience and Nanotechnology; Systems Modeling and Analysis; Rehabilitation and Movement Science; and Chemical Biology.

As the College's chief academic and administrative officer, I was responsible for faculty recruitment and retention and for oversight of all academic programs. I also served as the College's

primary advocate internally and externally, leading fundraising and friend-raising efforts and strengthening relationships with legislators, alumni, and community partners.

Initiatives and accomplishments:
- Managed a complex budget of $69M with state appropriated funds and tuition funds, and additional $20M in development funds
- Funded research increased by 29%, from $17M to $22M
- $121M from Legislature in capital funds for new building
- Philanthropy: gift funds increased by 52%. $4M raised in FY18 in gift funds
- Supported/established new interdisciplinary degrees/programs in Addiction Studies, LGBTQ studies, Data Science, Digital Sociology, Science Technology and Society, and Nanoscience.
- Led a strategic planning initiative for the College
- Created 30 new faculty lines (6 % increase in faculty)
- Launched interdisciplinary cluster hires, leading to three main themes: Migration studies, Big Data, and LGBTQ studies.
- Strengthened the College research infrastructure by adding a grants writer and internal research seed funds for faculty
- Promoted experiential learning with the new David Baldacci $1M gift to support real-world learning
- Promoted a student-centered and life learning-model of education, by strengthening advising (22 new advisors) and mentoring for career planning, and exposing

  undergraduate students to research-led training, internships, and capstone experiences. Increase in retention/graduation rates.
- Established the College Staff Council to promote staff governance, functioning on parallel with the College Faculty Council
- Established mentoring and advocacy groups for minority students
- More than 30% of the College tenure-track hires from underrepresented groups
- New longer-term contracts for non-tenure track faculty lines, with opportunities for promotion

Head, Department of Statistics, NC State. 2011- 2016
North Carolina State University is a nationally recognized R1 land-grant university with a longstanding mission of research, innovation, and public service. Within this context, the Department of Statistics at NC State is jointly housed in the College of Sciences and the College of Agriculture and Life Sciences. The department is top-ranked nationally and is both one of the largest and one of the oldest statistics departments in the country, with 45 faculty members, 14 staff, approximately 180 graduate students—primarily Ph.D. students—175 undergraduate majors, and 64 students enrolled in the online M.S. program.
As Department Head, I provided academic and administrative leadership for the department, overseeing faculty recruitment and retention, budgeting and resource allocation, academic program development, and the advancement of interdisciplinary research and graduate education aligned with the university's land-grant mission.

Initiatives and accomplishments:
- Established an entirely online MS program in statistics

- Established two online certificates in statistics-education and applied statistics
- Established a new online graduate program on Data Science in partnership with the Computer Science Department.
- Launched an intense (face-to-face) 1 year MS program
- Increased rankings (becoming #12 by US News and World report)
- Funded research increased by 50%
- Size of the faculty increased by 30%,
- Increased number of endowments: 3 new named professorships, 3 named rooms, new fellowships for graduate students and undergraduate students
- Strengthened the Department research infrastructure by adding two new grant-support related positions: a new grants administrator and a research director
- Organized grant writing and student mentoring workshops for the Statistics faculty
- Established a new consulting center, the Laboratory for Collaborations and Statistical Innovation (L-CSI), to provide solutions to real-life statistical problems arising from various fields in industry
- Increased partnerships with industry through Graduate Industrial Traineeships (GIT) to build relationships between the department and local organizations or companies
- Established new practices and policies to facilitate life and work integration, in particular by introducing a new reassignment of duties policy due to family circumstances and a parental leave for graduate students

Director, STATMOS. 2011- 2016.

I served as Principal Investigator of **The Network on Statistical Methods in Atmospheric and Oceanic Sciences (STATMOS)**, an NSF-funded center dedicated to advancing multi-institutional and interdisciplinary research and training at the intersection of statistics and the atmospheric and oceanic sciences. The center brought together more than 200 members across 21 affiliated institutions, fostering national collaboration, workforce development, and scientific innovation in climate and environmental research.

Initiatives and accomplishments:
- Managed a $5M budget
- Coordinated statistical research across the 21 institutions based on issues in atmospheric and oceanic science
- Developed a cadre of PhD students, postdocs and young faculty with substantial experience in doing cross disciplinary work with statisticians and physical, biological and social scientists
- Organized a series of workshops and summer schools to disseminate the research ideas promoted by the network
- Sponsored and launched a new international open-access journal, *Advances in Statistical Climatology, Meteorology and Oceanography* (ASCMO)

HONORS & AWARDS:

2024	*Corazon Award* from Con Mi Madre for dedication to serve students from underserved communities
2023	Named *Power Player* by the Austin Business Journal
2023	Named *Change Maker* by the Austin Woman Magazine
2017	*Medal of Distinguished Achievement* by the American Statistical

Association, Environmental Statistics Section for major statistical methodology contributions, leadership and mentoring roles.

2016	*NC State D.D. Mason Award*. The award recognizes Fuentes's outstanding contributions as department head from 2011 to 2016.
2013	*NC State Equity of Women award*, for major contributions to the equity and well-being of women.
2012	*Scientific and Technological Achievement Award* offered by the United States Environmental Protection Agency for the development of an air quality model evaluation framework that fosters scientific credibility for model applications
2012	Best *Biometrics* paper of the year
2010	Best *International Journal of Environmental Research and Public Health* paper of the year
2008	American Statistical Association (ASA) fellow for outstanding research in spatial statistics
2003	Abdel El-Shaarawi Young Researcher's Award in recognition of outstanding contributions to environmetric research

PROFESSIONAL LEADERSHIP:

2025-	Chair of the Presidents Council of the Lone Star Conference (NCAA DII)

National Academy of Sciences

2019 - 2022	National Academies of Sciences, Engineering, and Medicine Illustrating Math Committee
2015 - 2017	Intelligence Science and Technology Experts, National Research Council (NRC)
2015 - 2017	Committee on the Review of the Department of Veterans Affairs Airborne Hazards and Open Burn Pit Registry
2012 - 2017	Committee on Applied and Theoretical Statistics, Second term
2007 - 2008	Committee on Ozone Mortality Risk Reduction Benefits, NRC

Editorial Boards

2016 - 2018	**Editor,** *Journal of the American Statistical Association, Applications and Case Studies,* (*JASA-ACS*), (Considered a top journal in Statistics and the flagship journal of the American Statistical Association)
2016 - 2018	**Coordinating Editor** of *JASA*
2015	**Founder,** *Advances in Statistical Climatology, Meteorology and Oceanography (*ASCMO), international open-access. Sponsored by the STATMOS network
2011 - 2015	**Editor,** *Journal of the Agricultural, Biological, and Environmental Statistics* (JABES) (second term)
2009 - 2012	**Associate Editor**, *JASA-ACS*
2006 - 2011	**Associate Editor**, *Annals of Applied Statistics* (second term)
2003 - 2011	**Associate Editor**, *Environmetrics* (third term)

2003 - 2010	**Associate Editor**, *Biometrics* (third term)

Government and Non-Profit

2024 - Present	**The Southern Association of Colleges and Schools Commission on Colleges** (SACSCOC), Board of Trustees
2024 - Present	**Council of Independent Colleges** (CIC), Board of Governors
2025 – Present	**National Association of Independent Colleges and Universities (NAICU)** Board of Trustees
2025 - Present	**President's Alliance** Steering Committee
2023 - Present	Independent Colleges and Universities of Texas, Board of Governors and Executive Committee
2023 - Present	Ascension Health Texas, Board of Trustees
2022 – Present	Frost Bank, Board of Governors
2022 - Present	Austin Community Foundation Board of Governors
2021 - Present	Ballet Austin Board of Directors
2021 - 2024	The Austin Symphony Honorary Advisory Council
2021 - Present	Austin Area Research Organization (AARO)
2021 - 2024	Assumption Cemetery Board of Directors (Chair)
2010 - 2011	US EPA. Science Advisory Board, Trichloroethylene (TCE) Panel
2009 – 2015	National Children Study. iSMOC committee
2007	Department of Justice. (U.S. v. American Electric Power) Expert witness and consultant
2006 - 2007	US EPA. Ethylene Oxide Review Panel
2005 - 2009	NIH. Member of the Biostatistical Methods and Research Design (BMRD) Study Section
2004 - 2009	US EPA. Science Advisory Board

Professional Societies

2015 - 2016	**Special Committee** of the Board of Directors on the *Role of Statistics in Data Science,* American Statistical Association
2015 - 2016	**Chair,** Environmental Statistics Section of the International Society for Bayesian Analysis
2013 - 2016	**Steering committee** of the National Consortium of Data Science (NCDS)
2013 - 2014	**Chair,** Computing and Graphics Section of the American Statistical Association (ASA)
2012 - 2015	**Officer,** Academic Representative, ASA Academic Caucus
2009 - 2012	**Board of Trustees** of the National Institute of Statistical Sciences
2009 - 2012	**Member,** ASA Climate Change Policy Advisory Committee
2009 - 2011	**Officer**, ASA Committee on Federally Funded Research
2009 - 2010	**Officer**, Council of Sections. ASA Section on Statistical Computing
2007 - 2010	**Member**, Institute of Mathematic Statistics (IMS), Council
2007 - 2008	**Treasurer and secretary,** ASA Bayesian Statistical Science Section
2003 - 2006	**Regional Advisory Board** of the Eastern North American Region of the Biometric Society (ENAR)

International Advisory Boards

2023 -present	Scientific Advisory Committee for Learning the Earth with Artificial Intelligence and Physics (**LEAP**) Columbia University.
2021 -present	Scientific Advisory Committee for Basque Center for Applied Mathematics, Spain
2015 - 2019	Scientific Advisory Board of the Engineering and Physical Sciences Research Council (EPSRC), WEFWEBs project at University of Glasgow, Scotland
2014 - 2016	Scientific advisory committee of the ARC Centre of Excellence for Mathematical & Statistical Frontiers (ACEMS), The University of Melbourne, Australia
2008 - 2016	Scientific Advisory Committee of Health Canada

REFERRED PUBLICATIONS:

Books

1. Gelfand, A., **Fuentes, M.**, Smith, R., and Hoeting, J. (2018). *The Handbook of Environmental and Ecological Statistics*. CRC Press. ISBN 9781498752121
2. Gelfand, A., **Fuentes, M.**, Guttorp, P., and Diggle, P. (2009). *The Handbook of Spatial Statistics*. CRC Press.

Book Chapters

3. **Fuentes, M**, Yen Ning Huang and Reich, B. (2017). Exposure Assessment. Chapter in *The Handbook of Environmental and Ecological Statistics*. CRC Press. ISBN 9781498752121
4. Reich, B., and **Fuentes, M.** Nonparametric Spatial Models. (2017). Chapter in *The Handbook of Nonparametric Statistics*. CRC Press.
5. Warren, J., **Fuentes, M.**, and Herring, A. (2015). Spatio-temporal Modeling of Pre-term Birth. *The Handbook of Spatial Epidemiology*. CRC.
6. **Fuentes, M.** and Foley, K. (2013). Ensembles methods, in the *Encyclopedia of Environmetrics*. Wiley.
7. **Fuentes, M.** (2012). Spectral methods, chapter in the *Encyclopedia of Environmetrics*. Wiley.
8. **Fuentes, M.** and Foley, K. (2012). Ensemble methods, Spectral methods, chapter in the *Encyclopedia of Environmetrics*. Wiley.
9. Reich, B., and **Fuentes, M.** (2012). Accounting for design in spatial modeling, chapter in *Spatio-Temporal design: advances in efficient data acquisition*. Wiley. Editors, Mateu and Werner.
10. Steel, M. and **Fuentes, M.** (2009). Nonparametric Modeling of Spatial Data. Chapter in the *Handbook of Spatial Statistics*. CRC Press.
11. **Fuentes, M.** and Reich, B. (2009). Spectral Analysis for Spatial Data. Chapter in the *Handbook of Spatial Statistics*. CRC Press.
12. **Fuentes** and members of the National Research Council Committee on Ozone Mortality Risk Reduction Benefits (2008). Estimating Mortality Risk Reduction Benefits from Decreasing Tropospheric Ozone Exposure. National Academies of Science.
13. **Fuentes, Montserrat**, Guttorp, Peter, and Sampson, Paul. (2007). Using transforms to analyze space-time processes, chapter in *Statistics of Spatio-Temporal Systems*. Editors, Held and Finkenstadt. CRC/Chapman Hall. Pages: 77-151.

14. Chen, L., **Fuentes, M.** and Davis, J.M. (2006). Spatial-temporal statistical modeling and prediction of environmental processes. Pages 121-144 in *Hierarchical Modelling for the Environmental Sciences: Statistical methods and applications* (eds., J.S. Clark and A.E. Gelfand). New York: Oxford University Press, 205pp.

15. **Fuentes, M.** (2002*). Spatial interpolation of environmental processes, in Spatial Statistics through Applications.* WIT Press, Boston. Chapter 4, pp. 71-104.

16. **Fuentes, M.**, Doney, S. C., Glove D. M. and McCue S. J. (2000). Spatial structure of ocean color data in the North Atlantic in *Case Studies in Statistics and the Atmospheric Sciences.* Springer-Verlag, New York, pp. 153-172.

Journal Articles

17. Naji1, Z., **Fuentes, M**., Ma, L., Moradi Rekabdarkolaee, H. (2026), Bayesian Tensor Regression for Neuroimaging Data. *Statistics Sinica*, *in press.*

18. Muyskens, A., Guinness, J., and **Fuentes, M.** (2022). Partition-Based Non-Stationary Covariance Estimation using the Stochastic Score Approximation. Search Results. *Journal of Computational and Graphical Statistics*, *31*(4), 1025–1036.

19. Muyskens, A., Guiness, J., and **Fuentes, M**. (2022). Partition-based non-stationary covariance estimation using the stochastic score approximation. *Journal of Computational and Graphical Statistics*, 31:4, 1025-1036.

20. Zhao, J., Zhang, Q., **Fuentes, M**., Ma, Y., Gerard, M.F., (2021). A Spatio-temporal Model for Detecting the Effect of Cocaine Use Disorder on Functional Connectivity. *Journal of Spatial Statistics*, 45, 100530

21. Moradi, H., Wang, Q., Naji, Z., and **Fuentes, M.** (2021). New parsimonious multivariate spatial model: spatial envelope *Statistica Sinica*, 30, 1583-1604.

22. Moradi, H., Wang, Q., Naji, Z., and **Fuentes, M.** (2021). New parsimonious multivariate spatial model: spatial envelope *Statistica Sinica*, 30, 1583-1604.

23. Joseph, A-C, **Fuentes, M.,** Wheeler, D.C. (2020). The Impact of Population Mobility on Estimates of Environmental Exposure Effects in a Case-Control Study. *Statistics in Medicine*. https://doi.org/10.1002/sim.8501

24. Jhuang, A-T**., Fuentes, M.,** Bandyopadhyay, D., and Reich, B. (2020). Spatiotemporal signal detection using continuous shrinkage priors. Statistics in Medicine. https://doi.org/10.1002/sim.8514.

25. Moradi, H., and **Fuentes, M.** (2019). Multivariate space-time functional model or hurricane tracks and intensity. *Spatial Statistics,* 29, 351-365.

26. Huang, Yen-Ning, Reich, B., **Fuentes, M**., and Sankarasubramanian, A. (2019). Complete Spatial Model Calibration. *Annals of Applied Statistics*, 13, 746-766.

27. Jhuang, A-T., **Fuentes, M.**, Jones, J., Esteves, G., Fancher, C., Furman, M., and Reich, B. (2019). Spatial signal detection using continuous shrinkage priors. (2018). *Technometrics,* 61, 494-506

28. Terres, M., **Fuentes, M.**, Hesterberg, D., and Polizzotto, M. (2018). Bayesian Spectral Modeling of Microscale Spatial Distributions in a Multivariate Soil Matrix. *Journal of Bayesian Analysis*, 13, Number 1, pp. 1–28

29. Kaufeld, K., **Fuentes, M.,** Reich, B., Herring, A., Shaw, G., and Terres, M. (2017). A Multivariate Dynamic Spatial Factor Model for Speciated Pollutants and Adverse Birth Outcomes. *International Journal of Environmental Research and Public Health*, 14(9): 1046 (16 pages)

30. Miao, G., Noormets, A., Domec, J. C ., **Fuentes, M.,** Trettin, C. C., Sun, G., McNulty, S. G., King, J. S. (2017). Hydrology and microtopography control carbon dynamics in wetlands: implications in partitioning ecosystem respiration in a coastal plain forested wetland. *Agricultural and Forest Meteorology,* 247 (December 2017): 343-355.

31. Guinness, J., and **Fuentes, M.** (2017). Circulant Embedding of Approximate Covariances for Inference from Gaussian Data on Large Lattices. *Journal of Computational and Graphical Statistics, 26*(1), 88-97.

32. Guinness, J., and **Fuentes, M.** (2016). Isotropic covariance functions on spheres: Some properties and modeling considerations. *Journal of Multivariate Analysis,* vol. 143, issue C, 143-152.

33. Mannshardt, E., Sucic, K., **Fuentes, M.**, and Bingham, F. (2016). Comparison of distributional statistics of Aquarius and Argo sea surface salinity measurements. *Journal of Atmospheric and Oceanic Technology*, *http://dx.doi.org/10.1175/JTECH-D-15-0068.1*

34. Warren, J., Stingone, J., Herring, A., Luben, T., **Fuentes, M.**, Aylsworth, Langlois, P., Botto, L., Correa, A., Olshan, A., and the National Birth Defects Prevention Study (2016). Bayesian Multinomial Probit Modeling of Daily Windows of Susceptibility for Maternal Fine Particulate Matter Exposure and Congenital Heart Defects. *Statistics in Medicine,* 35(16):2786-2801

35. Reich, B., and **Fuentes, M.** (2016). Discussion of Spatial Product Partition Models by Garritt L. Page and Fernando A. Quintana. *Bayesian Analysis,* 11, 1, 265-298.

36. Sun, Y., Wang, H.J., and **Fuentes, M.** (2016). Fused Lasso for Spatial and Temporal Quantile Function Estimation. Technometrics, 58, 127-137.

37. Boehm, L., Reich, B., **Fuentes, M.**, and Domini, F. (2015). Spatial variable selection methods for investigating acute health effects of fine particulate matter components. *Biometrics*, in press. 71, 167-177.

38. Guinness, J., **Fuentes, M.** (2015). Likelihood Approximations for Big Nonstationary Spatial Temporal Lattice Data. Statistica Sinica, 25, 329-349.

39. Guinness, J., **Fuentes, M.**, Hesterberg, and D., Polizzotto, M. (2014). Multivariate spatial modeling of conditional dependence in microscale soil elemental composition data. Spatial Statistics, 9, 93-108.

40. Jeanette A. Stingone, Thomas J. Luben, Julie L. Daniels, M. **Fuentes**, David B. Richardson, Arthur S. Aylsworth, Amy H. Herring, Marlene Anderka, Lorenzo Botto, Adolfo Correa, Suzanne M. Gilboa, Peter H. Langlois, Bridget Mosley, Gary M. Shaw, Csaba Siffel, and Andrew F. Olshan (2014). Maternal Exposure to Criteria Air Pollutants and Congenital Heart Defects in Offspring: Results from the National Birth Defects Prevention Study. *Environmental Health Perspectives*, 122, 863-872.

41. Smith, L., **Fuentes, M.**, Gordon-Larsen, P., and Reich, B. (2015). Quantile Regression for Mixed Models. *Annals of Applied Statistics*, 9, 1226-1246.

42. Smith, L., Reich, B., and Herring, A, and **Fuentes, M.** (2015). Multilevel Quantile Function Modeling with Application to Birth Outcomes. *Biometrics*, 71, 508-519.

43. Smith L, **Fuentes M**, Reich B, Eder B. (2013). [Prediction of Speciated Particulate Matter and Bias Assessment of Numerical Output Data.](#) *International Journal of Environmental Science and Engineering Research*, 4, 8-17.

44. Mannshardt, E., Sucic, K., Jiao, W., Dominici, F., Frey, H. C., Reich, B., & **Fuentes, M.** (2013). Comparing exposure metrics for the effects of fine particulate matter on emergency hospital admissions. *Journal of Exposure Science and Environmental Epidemiology*, 23, 627-636.

45.   Joshua L. Warren, **M. Fuentes**, Amy H. Herring and Peter H. Langlois (2013). Air Pollution Metric Analysis while Determining Susceptible Periods of Pregnancy for Low Birth Weight. *ISRN Obstetrics and Gynecology*, Article ID 387452. 9 pages.

46.   **Fuentes M**, Reich BJ (2013). Multivariate spatial nonparametric modeling via kernel processes mixing. *Statistica Sinica*, 23, 75-97.

47.   **Fuentes, M.**, Henry, J., and Reich, B. (2013). Nonparametric Spatial Models for Extremes: Application to Extreme Temperature Data. *Journal of Extremes*, 16, 75-101

48.   Modlin, D., **Fuentes, M.**, and Reich, B. (2012). Circular Conditional Autoregressive Modeling of Vector Fields, *Envrionmetrics,* 23, 46--53.

49.   Chang, H., **Fuentes, M.**, and Frey, C. (2012). Time Series Analysis of Personal Exposure to Ambient Air Pollution and Mortality Using an Exposure Simulator, *Journal of Exposure Science and Environmental Epidemiology,* 22, 483-8.

50.   Bravo, M., **Fuentes, M.**, Zhang, Y., and Bell, M. (2012). Comparison of Exposure Estimation Methods for Air Pollutants: Ambient Monitoring Data and Regional Air Quality Simulation," *Environmental Research*, 116, 1-10.

51.   Banarjee, S., and **Fuentes, M.** (2012). Bayesian Modeling for Large Spatial Datasets. WIREs *Computational Statistics*, 4, 59-66.

52.   Reich BJ, Kalendra E, Storlie CB, Bondell HD, **Fuentes M** (2012).Variable selection for high-dimensional Bayesian density estimation: Application to human exposure simulation. *Journal of the Royal Statistical Society: Series C*, 61, 47-66.

53.   Reich. B., and **Fuentes, M.** (2012). Nonparametric Bayesian models for a spatial covariance. *Statistical Methodology*, 9, 265-274.

54.   Warren, J, **Fuentes, M**, Herring, A, and Langlois, P. (2012) Spatial-Temporal Modeling of the Association between Air Pollution Exposure and Preterm Birth: Identifying Critical Windows of Exposure. *Biometrics*, 68, 1157-1167. *BEST BIOMETRICS PAPER of 2012.*

55.   Warren, J. **Fuentes, M.** Herring, A, and Langlois, P. (2012). Spatial-temporal Model for Cardiac Congenital Anomalies and Ambient Air Pollution Risk Assessment. *Environmetrics*, 8, 673-684.

56.   Zhou, J., Chang, Howard H., and **Fuentes, M.** (2012), Estimating the Health Impact of Climate Change with Calibrated Climate Model Output, *Journal of Agricultural, Biological, and Environmental Statistics,* 17, 377-394.

57.   Reich BJ, Kalendra, E., Storlie, CB, Bondell, HD, **Fuentes M.** (2012). Variable selection for high-dimensional Bayesian density estimation: Application to human exposure simulation*. JRSS-C,* 61, 47–66.

58.   Zhou, Jingwen, **Fuentes, Montserrat**, and Davis, Jerry (2011), Calibration of numerical model output using nonparametric spatial density functions, *Journal of Agricultural, Biological, and Environmental Statistics*, 16, 531-553

59.   **Fuentes, M.**, Xi, B. and Cleveland, W. (2011) Trellis Display for Modeling Data from Designed Experiments. *Journal of Statistical Analysis And Data Mining,* 4, 133-145..

60.   Reich, B., **Fuentes, M.** and Dunson, D. (2011). Bayesian spatial quantile regression. JASA Case Studies, 106, 6–20.

61.   Chang, H., Zhou, J. and **Fuentes, M.** (2010). Impact of climate change on ambient ozone level and mortality in Southeastern United States. *International Journal of Environmental Research and Public Health.* 7, 2866-2880. *BEST PAPER AWARD OF 2010.*

62.   Dennis, Fox, **Fuentes**, Gilliland, Hanna, Hogrete, Irwin, Rao, Scheffe, Schere, Steyn,

Venkatram. (2010). A framework for evaluating regional-scale numerical photochemical modeling systems. *Environmental Fluid Mechanics*, 10, 471-489.

63.   **Fuentes, M.** (2009). Statistical issues in health impact assessment at the state and local levels. *Air Quality, Atmosphere and Health,* 2, 47-55.

64.   Reich, B., **Fuentes, M.**, Herring, A., and Evenson KR (2010). Bayesian Variable Selection for Multivariate Spatially-Varying Coefficient Regression. *Biometrics,* 66, 772-782.

65.   Choi, J., **Fuentes, M.**, and Reich, B. (2009). Spatial-temporal association between fine particulate matter and daily mortality. *Journal of Computational Statistics and Data Analysis*, 53, 2989-3000.

66.   **Fuentes, M.** (2009). The role of statisticians in U.S. environmental regulation and policy. *Boletin de Estadistica e Investigacion Operativa*, 25, 46-50.

67.   **Fuentes, M.** (2009). Comments on: Approximate Bayesian inference for latent Gaussian models by using integrated nested Laplace approximations (Rue, Martino and Chopin). *Journal of the Royal Statistical Society, B*, 71, 319-392.

68.   Choi, J., Reich, B., **Fuentes, M.**, and Davis, J.M. (2009). Multivariate spatial-temporal modeling and prediction of speciated fine particles. *Journal of Statistical Theory and Practice*, 3, 407-418.

69.   Reich, B., **Fuentes, M.**, and Burke, J. (2009). Analysis of the effects of ultrafine particulate matter while accounting for human exposure. *Environmetrics,* 20, 131-146.

70.   **Fuentes, M.**, Peter Guttorp, P., and Stein, M.L. (2008). Special section on statistics in the atmospheric sciences. *Annals of Applied Statistics*, 2, 1143-1147.

71.   **Fuentes, M.**, Reich, B., and Lee, G. (2008). Spatial-temporal mesoscale modelling of rainfall intensity using gage and radar data. *Annals of Applied Statistics*, 4, 1148-1169.

72.   Song, H.R., **Fuentes, M.**, Ghosh, S. (2008). A comparative study of Gaussian geostatistical models and Gaussian Markov random field models. Journal of Multivariate analysis, 99, 1681-1697.

73.   **Fuentes, M.**, Chen, L, and Davis, J. (2008) A class of nonseparable and nonstationary spatial temporal covariance functions. Environmetrics, 19, 487-507.

74.   Park, M.S., and **Fuentes, M.** (2008).Testing Lack of Symmetry in Spatial-Temporal Processes. *Journal of Statistical Planning and Inference*, 138, 2847-2866.

75.   Foley, K. and **Fuentes, M.** (2008). A statistical framework to combine multivariate spatial data and physical models for hurricane surface wind prediction. *Journal of Agricultural, Biological, and Environmental Statistics*, 13, 37-59.

76.   Foley, K., and **Fuentes, M.** (2008). Multivariate space-time models for environmental processes. *Encyclopedia of GIS*, Springer. Shekhar, Shashi; Xiong, Hui (Eds.).

77.   **Fuentes, M.** (2007). Approximate likelihood for large irregularly spaced spatial data. *Journal of the American Statistical Association, Theory and Methods*, 102, 321-331.

78.   Reich, B., and **Fuentes, M.** (2007). A multivariate semiparametric Bayesian spatial modeling framework for hurricane surface wind fields. *Annals of Applied Statistics*, 1, 249-264.

79.   **Fuentes, M.**, Chaudhuri, A. and Holland, D. (2007). Bayesian entropy for spatial sampling design of environmental data. *Environmental and Ecological Statistics*, 14, 323-340.

80.   Xie, L., Bao, S., L.P. Pietrafesa, Foley, K., and **Fuentes, M.** (2006). A real-time hurricane surface wind forecasting model: formulation and verification. *Monthly Weather Review,* 134, 1355–1370.

81.   Flores, F.J., Allen, H. L., Cheshire, H., Davis, J. M., **Fuentes, M.**, and Kelting, D. L.

(2006). Using multispectral satellite imagery to estimate leaf area and response to silvicultural treatments in loblolly pine stands. *Can. J. Forest Research,* 37, 1587-1596.

82.   **Fuentes, M.** (2006). Dynamic Gaussian Process Priors, with Applications to the Analysis of Space-time Data (discussion of chapter by Gamerman, Salazar and Reis). *Bayesian Statistics 8*. Editors: Bernardo, Bayarri, Berger, Dawid, Heckerman, Smith and West.

83.   **Fuentes, M.**, Kittel, T. and Nychka, D. (2006). Sensitivity of ecological models to spatial-temporal estimation of their climate drivers: Statistical ensembles for forcing. *Ecological Applications*, 16, 99–116.

84.   **Fuentes, M.**, Song, H.R., Ghosh, S., Holland, D. and Davis, J. (2006). Spatial association between speciated particulate matter and mortality. *Biometrics*, 62, 855-863.

85.   Taylor, C., Thompson, J., Rand, P., and **Fuentes, M.** (2005). Sampling and statistical considerations for hydroacoustic surveys used in estimating abundance of forage fishes in reservoirs, *North American Journal of Fisheries Management*, 25, 73-85

86.   **Fuentes, M.** (2005). A formal test for nonstationarity of spatial stochastic processes. *Journal of Multivariate Analysis*, 96, 30-55

87.   **Fuentes, M.** and Raftery, A. *(2005).* Model evaluation and spatial interpolation by Bayesian combination of observations with output from numerical models. *Biometrics,* 61*, 36-45.*

88.   **Fuentes, M.**, Chen, L., Davis, J. and Lackmann, G. (2005). A new class of nonseparable and nonstationary covariance models for wind fields. *Environmetrics*, 16, 449-464.

89.   **Fuentes, M.** (2004). Nonstationary multivariate process modeling through spatially varying coregionalization: Comment. *TEST* (invited discussion of a paper by Gelfand, Schmidt and Banerjee), 13**,** 33-36.

90.   **Fuentes, M.** (2004). Testing for separability of spatial-temporal covariance functions. *Journal of Statistical Planning and Inference*, 136, 447-466.

91.   Mateu J, Montes F, **Fuentes M.** (2003). Recent advances in space-time statistics with applications to environmental data: An overview. *Journal of Geophysical Research, Atmosphere*, 108 (D24), 8774.

92.   **Fuentes, M.** (2003). Statistical analysis of areas of compliance with the air pollution standards. Invited paper for *a special issue in Journal of Geophysical Research, Atmosphere*, 108 (D24), 8780.

93.   **Fuentes, M.** (2003). Book review: Predictions in time series using regression models. *Journal of the American Statistical Association*, 98, 768-769.

94.   **Fuentes, M.** (2003). Spatial-Temporal Nonlinear Filtering Based on Hierarchical Statistical Models: Comment. *TEST* (invited discussion of a paper by Irwin, Cressie and Johannesson), 2, 284-287.

95.   Doney, S., Glover, **Fuentes, M.**, and McCue, S. (2003). Mesoscale variability of Sea-viewing Wide Field-of-View Sensor (SeaWiFS) satellite ocean color: Global patterns and spatial scales. *Journal of Geophysical Research, Oceans.* 108 (C2), 3024

96.   **Fuentes, M**, Guttorp, and Challenor, P. (2003). Statistical assessment of numerical models. *International Statistical Review,* 71, 2, 201-221.

97.   **Fuentes, M.** (2002). Modeling and prediction of nonstationary spatial processes. Statistical Modelling: *An International Journal*, 2, 281-298.

98.   **Fuentes, M.** (2002). Periodogram and other spectral methods for nonstationary spatial processes. *Biometrika*, 89, 197-210.

99.   **Fuentes, M.** (2001). A High Frequency Kriging for Nonstationary Environmental

Processes. *Environmetrics*, 12, 1-15.

100. **Fuentes, M.** (2001). Fixed-domain asymptotics for variograms using subsampling. *Mathematical Geology*, 33, 6, 679-691.

101. **Fuentes, M.** (2000). Predicting Integrals of Diffusion Processes with unknown diffusion parameters. *Stochastics*, 69, 255-283.

102. **Fuentes, M.** (2000). Predicting Integrals of Diffusion Processes. *Journal of Statistical Planning and Inference*, 90, 183-193.

103. Smith, R.L., Kim, Y., **Fuentes, M.**, and Spitzner, D. (2000). Threshold dependence of mortality effects for fine and coarse particles in Phoenix, Arizona. *Journal of the Air and Waste Management Association* 50, 1367-1379.

104. LeGrange, Carter, **Fuentes**, Boos, Freeny, Cleveland, and Miller. (1997). The Dependence of the Electro-Optical Properties of Polymer Dispersed Liquid Crystals on the Photopolymerization Process. *Journal of Applied Physics*, vol. 81 (9).

Podcasts:

1. **EdUp Experience** 2025. Listen here: https://www.edupexperience.com/montsefuentes/ The future of Higher Education

2. **"Austin and St. Edward's University with Dr. Montse Fuentes"** on Austin Technology Council, 2023. Listen here: https://open.spotify.com/episode/2AdOgUOyG4fr7Vn0IBnerj

3. **"Leaders on Leadership: Montserrat Fuentes"** on Academic Search, 2024. Listen here: https://www.academicsearch.org/blog/leaders-on-leadership-montserrat-fuentes/

4. **"Women and Minority Leaders in Education"** on Leading out the Woods, 2023. Listen here https://www.edupodcastnetwork.com/show/leadingoutthewoods/women-and-minority-leaders-in-education/

5. **The Plexuss Presidential Podcast Series with Montse Fuentes**, 2024. Available soon, https://plexuss.com/plexuss-podcasts/higher-education

6. **City Cast Austin**. 2024. Listen here: https://austin.citycast.fm/podcasts/could-austins-economy-survive-without-festivals

Op-Ed:

1. **Fuentes, M**. 2022. Diverse Issues in Higher Education*: "It's Time to Double Pell Because All Students Deserve a Transformative Education",* available here https://www.diverseeducation.com/opinion/article/15289242/its-time-to-double-pell-because-all-students-deserve-a-transformative-education

2. **Fuentes, M.** 2024. Diverse Issues in Higher Education. *"Intentionality is Key in First-generation Student Success",* available here: https://www.diverseeducation.com/opinion/article/15677517/intentionality-is-key-in-firstgeneration-student-success

3. **Fuentes, M.** 2024. Austin American-Statesman Newspaper. *OPINION: First-generation college students succeed with targeted support, not luck* Available here: https://www.statesman.com/story/opinion/columns/guest/2024/09/20/opinion-support-leads-to-success-for-first-generation-students/74982225007/

SELECTED INVITED PRESENTATIONS SINCE 2016:

2024   South by Southwest (SXSW). Invited speaker, *"Austin High Tech Boom Powered by Higher Education"*. March 2024, Austin, TX.

Del Valle High School. Keynote speaker for Decision Day. May 1, 2024.

Council of Independent Colleges. Presidents Annual Meeting. Invited speaker. *"Persistent Disparities in the Socio-Economic Mobility of Latino Students"*, January 2024, Hollywood, Florida

2023   Women Economic Forum. Keynote Speaker, *"The Power of Belonging"*, October 2023, San Antonio, Texas.

Young Catholic Professionals. Keynote speaker, *"Faith Informed Leadership"*, September, 2023, Austin, Texas.

SRCOS Conference. Keynote speaker, *"Statistics for Environmental Justice"*. June 2023, Baylor University, Texas.

Woman's Way Awards & Gala. Keynote speaker, *"The Power of Belonging"*, May 2023, Austin, Texas.

Commencement speaker for *Con Mi Madre* graduation ceremony. May 2023, Austin, Texas.

Arizona State University (ASU) +GSV Summit. Keynote speaker on *"Role of Hispanic Serving Institutions in Workforce Development"*. April 2023 San Diego, CA

School of Public Health at Indiana University. Distinguished speaker,*" Spatial Statistical Modeling of Neuroimaging Data and Drug Addiction"*. April 2023, Indiana University.

The Greater Austin Hispanic Chamber of Commerce. Keynote speaker for the Austin Hispanic Leadership Program. *"Challenges and Opportunities for the Latino Community in Higher Education."* January 2023, Austin, Texas

Austin Hispanic Bar Association. 20th Annual Austin Bar Foundation Gala. Keynote speaker, *"Empowering and Developing the Hispanic workforce in the Law Sector",* January 2023, Austin, Texas

Council of Independent Colleges. Presidents Annual Meeting. Invited speaker, *"Serving Latino Students with Intentionality "*, January 2023, San Francisco, California.

2022   *Austin Young Chamber*. Keynote speaker for the LEAD series. September, 2022, Austin, Texas.

ENAR Diversity Workshop. Keynote speaker, *"Fostering Diversity in Biostatistics",* March 2022, Nashville, Tennessee.

2020   35th International Workshop on Statistical Modelling (IWSM2020). "Spatial Modelling of Brain Imaging". Bilbao, Spain. July. Keynote speaker

2020 STEM Celebration of MLK, Jr**.** "Leading with Data". Iowa City, IA. January. Keynote speaker.

"2020 Annual Update on Diversity, Equity and Inclusion". Iowa City, IA. January. Public presentation.

2019   *Challenges, Opportunities and Planning for the Future in Higher Education.* Witching hour Festival. Iowa City, IA, November. Public presentation.

2019 Iowa City/Coralville Area Convention & Visitors Bureau Annual Luncheon. *"University of Iowa: A Destination University".* Coralville, IA. December. Keynote presenter. Public presentation.

2018   Dalhousie Statistics Seminar, "Spatial modeling of adverse pregnancy outcomes". Canada, January – Seminar.

New England Statistical Symposium, "Spatial tensor analysis for neuroimaging". *Keynote Speaker*, April, MASS-Amherst

International Indian Statistical Association. "Brain imaging studies for drug addicts". April 2018. University of Florida Gainesville, Florida. *Keynote Speaker.*

Big Data and Data Science for learning in the Digital World Symposium. "Tensor Analysis for neuroimaging data" June 2018. Madrid. *Keynote Speaker.*

International Society for Bayesian Analysis. "Bayesian Analysis for neuroimaging data". June 2018. Edinburgh. *Keynote Speaker*

Emory University– "Spatial regression for neuroimaging"- October –Georgia– Seminar.

Old Dominion University – "Studying the brain of cocaine addicts"- October – Virginia– Seminar.

2017   **"**Human health Impacts of extreme weather and air pollution", February. VSU, Petersburg, Virginia. *Keynote Speaker*

"Nonparametric Spatial-Temporal Modeling of the Association between Ambient Ambient Air Pollution and Adverse Pregnancy Outcomes", February -Seminar – Biostatistics Department, VCU. Richmond, Virginia

ENAR 2017 Spring Meeting, March - Washington, DC

John Hopkins Biostatistics – "Spatial association between preterm birth and pollution"- March – Baltimore, Maryland – Seminar.

"Human health impacts of extreme weather and air pollution: what big data tells us", Plenary Talk at Old Dominion University, April - Norfolk, Virginia

Humphrey Fellowship Program Graduation Ceremony – April 30 – Keynote Speaker – Richmond, Virginia

JSM Baltimore 2017, July – Invited Speaker- "Multivariate Functional Model for Hurricane forecasting".

Women Who Mean Business –Speaker –Richmond, October 2017

2016   "Spatial temporal association between air pollution and adverse pregnancy outcomes" March. National Institutes of Health. Washington, DC.

"Spatial hurricane forecasting" March. Workshop on Environmental Statistics. Ohio State University.

"Work and Life Balance in Academia". April. SAMSI workshop. *Keynote Speaker.*

"Statistics for Big Data". May. A celebration of Statistics at Chicago (70 years celebration). University of Chicago. *Keynote speaker.*

"Dynamic spatial temporal modeling of the impact of air pollution on adverse pregnancy outcomes" June. The International Environmetrics Society, Glasgow, Scotland. *Keynote speaker.*

"Functional spatial modeling of hurricane tracks." August 2016 Joint Statistical Meeting (JSM). Chicago, IL.

"Forecasting of weather extreme events". 2016 International Conference on Computational Statistics. August, Spain.

GRANTS FUNDED:
NIH. Fuentes and Wheler (PI). 2021-2024. *Modeling cancer risk and environmental exposures using residential histories*
Budget: $1M direct costs

NSF Fuentes (PI). NSF 16-594. 2019-2023. ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers. Institutional Transformation. "*Overcoming Immunity to Change (ITC): ADVANCE IT VCU*"
Budget: $3M.

EPA 2014-2017, Fuentes (co-PI)
"Characterizing the Determinants of Vehicle Traffic Emissions Exposure: Measurement and Modeling of Land-use, Traffic, Emissions." Budget: $762k.

NIH/NCATS – 2017-2022–Center for Clinical Translational Research, Fuentes co-PI. (FG Moeller PI). "Clinical Translational Science Award". Budget 21.5M

NSF DMS-1406016. 2014-2019, Fuentes (PI)
"Spatial temporal models and methods for big nonstationary multivariate data on Euclidean spaces and the sphere." Budget: $201k.

NSF EAR-1349374 2014-2019, Dean Hesterberg and Montse Fuentes (Co-PIs)
"Microscale Reactivity of Trace Elements in Complex Geochemical Systems." $498k.

NSF DMS-1107046. 2011-2019, Fuentes (PI), Guttorp (UW) and M. Stein (UC) (Co-PIs)
"Collaborative Research: RNMS Statistical methods for atmospheric and oceanic sciences." Budget: $5,000,000.

NSF 2013-2018, Fuentes (Co-PI)

"Promoting Academic and Career Success for Raleigh Future Scholars at NC State." Budget: $634k

NOAA 2011-2014, Fuentes (Co-PI)
"Incorporating Climate Change Effects into Next-Generation Coastal Inundation Maps: An Integrated Approach." Budget: $390k.

RISF 2013-2015, Dean Hesterberg and Montse Fuentes (Co-PIs)
"Development of Stochastic/Mechanistic Models for Predicting Environmental Impacts of Toxic Trace Elements." Budget: $23k.

Centers for Disease Control and Prevention (CDC) 2014-2019
The North Carolina Center for Birth Defects Research and Prevention
Andrew Olshan (PI), Fuentes is an Institutional PI (summer support)

NIH- R01 Fuentes (PI, in collaboration with UNC-Biostatistics and Duke). 2012-2015
"Space-time Modeling for Linking Climate Change, Pollutant Exposure, Built Environments, and Health Outcomes." Budget: $1,094,446.

NIH R13. Travel awards. Fuentes (PI)
This award provides 6 travel awards for students and junior investigators attending the IMS-ISBA 2011 conference in Utah.

NSF DMS. CMG 2009-2011, Fuentes (PI)
"Multivariate nonstationary spatial extremes in climate and atmospherics."
Co-PIs: Alan Gelfand (Duke), Peter Guttorp (UW), Doug Nychka (NCAR) and Kate Calder (OSU). Consultant: Richard Smith (UNC). L. Mearns (NCAR), and Rick Katz (NCAR)

NASA 2009-2011. Fred Bingham (Prof. of Oceanography, UNCW) and Fuentes (PIs) "Statistical Validation of Sea Surface Salinity Measurements from Aquarius." Budget: $150k.

EPA- STAR 2009-2012, Fuentes (PI) "Spatial Temporal Analysis of Health Effects Associated With sources and Speciation of Fine PM." Total Budget: $893k.

NIH- R01 Starting Jan 2008, Fuentes (PI, 30% of time + a graduate student) "A Spatial temporal modeling approach for Environmental Epidemiological Data." Total Budget: $1,086,133.

NSF August 2007. Fuentes (PI) Award for 2,000 from the associated for women in Mathematics. Budget: $2k

Centers for Disease Control and Prevention (CDC) 12/01/2008 – 12/01/2013. The North Carolina Center for Birth Defects Research and Prevention Andrew Olshan (PI), Fuentes is a Co-PI (summer support). Budget: $ 6,321,731.

GIT: Graduate industrial trainee program. GIT with Waratah Corporation under EPA Prime contract EP-D-06-072, Fuentes (PI) "Impact of climate change on future ambient ozone values." Student supported: Jingwen Zhou (advisor: Fuentes). Research conducted in collaboration with EPA. This GIT provides full support for the student.

Center for Environmental Health and Susceptibility, UNC. August 2007. A. Herring and M. Fuentes (PIs) "New Statistical Approaches for Combining Multiple-Source Environmental Data." (Summer 2007 support for Fuentes)

NSF-DMS. 2007-2010. Fuentes (PI). Co-PIs: Lian Xie (Professor of Oceanography) and Brian Reich (postdoc). "Multivariate space-time models and methods to combine large disparate spatial data and numerical models." Budget: $260k.

NSF-DMS. 2004-2007, Fuentes (PI) "Estimation, Modeling and prediction of nonseparable and nonstationary space-time processes." Budget: $112k.

NSF-DMS. 2000-2004, Fuentes (PI) "Spatial Modeling, Analysis and Prediction of Nonstationary Environmental Processes." Budget: $150k.

NSF-DMS. 2005, Fuentes (PI) Travel award for the IMS-ISBA conference (Italy) to support student traveling. Budget: $10k.

NSF-DMS. 2003, Fuentes (PI) Travel award for the ISI Environmental and health statistics (Spain) to support student

traveling. Budget: $9k

NSF-DMS. VIGRE. 2005-2008, Fuentes (Co-PI)
Integrated and Mentored Program of Research and Education in Statistical Sciences.
Budget: $3,807,965.

NSF-DMS. 2001-2002. Bloomfield (PI), Fuentes (Co-PI)
Scientific Computing Research Environments for the Mathematical Sciences. Budget $22k.

NIH. 2003, Fuentes (PI)
Travel award for the ISI international conference on Environmental Statistics and Health.
$9,000. To support student/junior investigators traveling. Budget: $9k.

EPA 2003, Fuentes (PI)

Travel award for the ISI international conference on Environmental Statistics and Health to
support student/junior investigators/invited speakers.

Center for Environmental Health and Susceptibility, UNC. 2007. A. Herring and M.
Fuentes (PIs).
"New Statistical Approaches for Combining Multiple-Source Environmental Data."
 (Summer support for Fuentes)

EPA 2001-2005, Fuentes (PI), David Higdon (Co-PI).
"Statistical Methodology for Spatial Modeling and Interpolation of Air and Deposition
Pollutants." Budget: $470k.

DOD 2001-2004, Fuentes (PI), J. Davis (Co-PI)
"The development of a model for predicting the wind field over the Chesapeake Bay."
Budget: $230k.

NOAA. 2001-2003, Fuentes and Morrison (PIs)
 "Climate Scale Sea-Surface-Temperature Analyses." (Support for a graduate student).
Budget: $100k.
NOAA. 2003 – 2007, Pietrafesa (PI) Xie and Fuentes (Project Leaders)
(1 month of summer salary and 1 graduate student for Fuentes)
"Climate and Weather Impacts on Society & the Environment" Budget: $3,000,000.

Faculty Research and Professional Development Fund, NC State. 2001, Fuentes (PI)
"New methodology for spatial interpolation of nonstationary environmental processes."
Budget: $5k.

Alfred P. Sloan Foundation. 2002-2003, Fuentes (PI)
Budget: $29k.

EPA. 1999-2001, Fuentes (PI)
 "Spatial structure of dry deposition." Budget: $62k/year for salary + $5k/year for travel.

EPA
1. Coop with EPA to support a PhD students working with Fuentes (Man Sik Park). Jan. 2004-Dec 2005.
2. Coop with EPA to support a PhD student working with Jungsoong Choi. June 2005-June 2006.
3. Coop with EPA to support a PhD student working with Fuentes (Hae-Ryoung Song). May 2004-Dec 2006.

PH.D. STUDENTS SUPERVISED:
PhD Thesis Students (Fuentes chair of thesis committee)

1. Xingzhi Wang. Statistical analysis and inference of brain imaging tensor data. Graduation date 2023. University of Iowa. (co-advising with Kung-Sik Chan).
2. Jifang Zhao. "Dimension reduction for brain imaging data". Graduated 2021. VCU (co-advising with Yanjun Qian).
3. Halley Brantley. "Spatial source apportionment for air pollution". Graduated: 2019
4. Amanda Bell. "Spatial spectral modelling". Graduated 2019.
5. An-Ting Jhuang. "Data assimilation". Graduated 2018
6. Marcela Cordoba. Spatial Likelihood approximations". Graduated 2017.
7. Luke Smith. "Multivariate spatial quantile regression. Graduated May 2014.
8. Laura Boehm. "Variable selection models for spatial data." Graduated May 2013. Assistant Professor at St. Ola College, MN.
9. Darryl Cooney, Ph.D. "Methods to approximate the spatial likelihood of nonstationary processes". On leave. GIT at Scimetrika.
10. Danny Modlin. Probabilistic hurricane forecasting. Expected graduation date: May 2015. (supported by Fuentes's NSF award). Started full-time at SAS in April 2011.
11. Josh Warren. "Spatial nonparametric modeling of the association between exposure to air pollution and birth outcomes." Graduated July 2011. (supported by Fuentes's STAR-EPA award). Tenured faculty at Yale University.
12. Jingwen Zhou. Topic: Spatial quantile nonparametric regression, in the context of air atmospherics. Graduated May 2012. (supported by Fuentes's NASA awrd)
13. Eric Kalendra. "Space-time modeling of health effects due to exposure to particulate matter." Graduated May 2010 (supported by Fuentes's NIH award). Currently at George Mason University.
14. Shenek Heyward. "Spatial temporal modeling of temperature trends (modeling climate change)". Graduated December 2010 (supported by NOAA award).
15. Jungsoon Choi. "Multivariate space-time models for air pollutants." Graduated December 2008. Assistant Professor, Department of Biostatistics, College of Medicine, Korea University, Seoul, South Korea.
16. Tsuei-long Chen. Started to work on his dissertation under Fuentes's supervision on Jan 2007. Topic: Multivariate spatial temporal models to study association between mortality and speciated particulate matter.
17. Liyun Ma. "Spectral likelihood methods for incomplete large spatial datasets." Graduated August 2006. Currently working as a research analyst at the headquarters of Capital One financial corporation in Mclean, VA.
18. Kristen M. Foley. "Data assimilation methods for space-time processes." Graduated August 2006. Currently a statistician (permanent position) at U.S. EPA, RTP, NC.

19. Hae-Ryoung Song. "Spatial-temporal hierarchical Poisson model to study association between speciated fine particles and human health effects from pollution." Graduated May 06. Currently a Postdoc working with Andrew Lawson at University of South Carolina.

20. Man Sik Park. "Test for axial and diagonal symmetry of space-time processes". Graduated May 2006. Initially went to a postdoc at Colorado State University working with Dr. Hoeting.

21. Li Chen. "Spatial-temporal non-separable models for wind fields." Graduated May 2004 (co-advisor: J. Davis from MEAS). Initially went to a postdoc at the University of Chicago working with Dr. M. Stein.

22. Prashenn Agarwal. "Bootstrap for spatial data." Graduated March 2003. Research biostatistician at Bristol-Myers Squibb, Pharmaceutical Research Institute, (co-advisor: M. Overton from Civil Engineering).

23. Jarrett Barber. "Modeling and prediction of non-stationary environmental processes." Graduated May 2002. Assistant Professor at Montana State University School of Mathematical and Statistical Sciences, Arizona State University.

24. Hon-Jung Kim, Ph.D. "Spectral Analysis with Spatial periodogram and Data Tapers." PhD. August 2000. She is an assistant professor (tenure-track) at University of Oulu (Finland).

Postdocs mentored by Fuentes
1. Abdolnasser Sadeghkhani supported by NIH (2019-2020). Currently faculty at The Ohio State University.
2. Hossein Rekabdarkolaee, supported by NSF (2017-2019). Currently tenure-track faculty at South Dakota University.
3. Yen-Ning Huang supported by NIH (2015-2017). Currently faculty at Indiana University.
4. Kimberly Kaufeld supported by NIH and NSF (2014-2016). Currently at Los Alamos.
5. Maria Terres supported by STATMOS-NSF and STAR EPA award (2014-2015). Currently senior scientist at Climate Corporation.
6. Joe Guiness, postdoc supported by STATMOS-NSF award (2012-2013). Currently a tenure-track faculty member at NC State.
7. Elizabeth Mannshardth, postdoc supported by STATMOS-NSF award (2012-2014). Currently scientist at the Environmental Protection Agency.
8. Dorit Hammerling, postdoc supported by SAMSI (2012-2014). Currently scientist at the National Center for Atmospheric Research.
9. Ying Sun. Postdoc supported by SAMSI and STATMOS (2011-2013). Currently assistant Professor (tenure-track) at Ohio State University, Department of Statistics.
10. Howard Chang, postdoc (2009-2011). Currently assistant professor tenure-track at the Biostatistics Department, Emory University.
11. John Henry, postdoc (July 2008-august 2009)
12. Brian J. Reich, PhD from Biostatistics, University of Minnesota. Postdoc (2006-2008) Faculty position at NC State (tenure-track).
13. Guillaume Vernieres, Ph.D. in oceanography from Oregon State University. Postdoc 2006-2007.