RESUME

Personal Data

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Current Status

- Full professor in Statistics and Operations Research, Universitat de València.
- Director of the Master in Biostatistics, Universitat de València.
- Editor in Chief SORT (Statistics and Operations Research Transactions).
- Associate Editor TEST (International Journal of Statistics and Probability, sponsored by the Spanish Society of Statistics and Operations Research).
- Associate Editor RevStat-Statistical Journal.

Degrees (education background)

- (1985) First Certificate in English. University of Cambridge (UK).
- (1991) B.A. in Mathematics. Speciality on Statistics and Operations Research. Universitat de València (Spain).
- (2000) Ph. D. Universitat de València. Thesis title: "Inference and Prediction in bulk arrival and bulk service queues". Advisor: Carmen Armero.

Employment background

- (1993-2002) Assistant Lecturer (Profesor Asociado) at the Department of Statistics and Operations Research. Universitat de València.
- (2002-2019) Permanent Lecturer (Profesor Titular de Universidad) at the Department of Statistics and Operations Research. Universitat de València.
- (2019-) Full professor (Catedrático de Universidad) at the Department of Statistics and Operations Research. Universitat de València.

Other positions held

- Member on 35 Research Projects.
- Participant on 22 Contracts with firms and governamental institutions.
- Fall 1998: Visiting Scholar at Duke University (USA).
- Fall 2004: Visiting Lecturer at Lancaster University (UK).
- Spring 2010: Research Fellow in the research program Space-Time Analysis for Environmental Mapping, Epidemiology and Climate Change held at SAMSI (USA).

Interests

- Bayesian Statistical Analysis of Queues, Inventories and Stochastic Processes in general,
- Analysis of waiting lists for transplants,
- Sensitivity analysis of efficiency and productivity indices,
- Bayesian Spatio-Temporal models for determining species distribution,
- Statistical methods for the early detection of epidemics.

Professional societies

- President of the Spanish Region of the International Biometric Society (2014-2015).
- Vicepresident of the Spanish Region of the International Biometric Society (2013 and 2016).
- Member of the Executive Board of the Spanish Region of the International Biometric Society (2010-2017).
- Member of the International Biometric Society Council (July 2013-June 2015).
- Member of Spanish Society of Statistics and Operations Research (since 1994).
- Member of International Society for Bayesian Analysis (since 1994).
- Member of International Biometric Society (since 1995).

Articles submitted

1. J. Martínez-Minaya, F. Lindgren, D. Simpson, A. López-Quílez and D. Conesa (2019). The Integrated nested Laplace approximation for fitting models with multivariate response.
2. E. Lázaro, M. Sesé, D. Conesa, A. López-Quílez, V. Dalmau, A. Ferrer-Matoses and A. Vicent (2020). Tracking the outbreak. An optimized delimiting survey strategy for *Xylella fastidiosa*.
3. I. Paradinas, J. Giménez, D. Conesa, A. López-Quílez and M.G. Pennino (2020). Designing fisheries restricted areas using standard fishery survey data: a novel multilevel spatio-temporal approach.

Articles accepted for publication

1. B. Sarzo, R. King, D. Conesa and J. Hentati-Sundberg. Correcting bias in partially monitored populations using integrated models. *Journal of Agricultural, Biological and Environmental Statistics*, **in press**.

2. J. Martínez-Minaya, D. Conesa, A. López-Quílez, J.L. Mira and A. Vicent. Modelling Inoculum Availability of *Plurivorosphaerella nawae* in Persimmon Leaf Litter with Bayesian Beta Regression. *Phytopathology*, **in press**.

Articles published

1. X. Barber, D. Conesa, A. López-Quílez, J. Martínez-Minaya, I. Paradinas and M.G. Pennino (2021). Incorporating Biotic Information In Species Distribution Models: A Corregionalised Approach. *Mathematics*, **9**, 417.

2. F. Izquierdo, I. Paradinas, S. Cerviño, D. Conesa, A. Fernández, F. Velasco, I. Preciado, A. Punzón, F. Saborido-Rey and M. G. Pennino (2021). Spatio-temporal assessment of the European hake (*Merluccius merluccius*) recruits in the northern Iberian Peninsula. *Frontiers in Marine Science, section Marine Conservation and Sustainability*, **8**: 614675.

3. R. Amorós, D. Conesa, A. López-Quílez and M.A. Martínez Beneito (2020). A spatio-temporal hierarchical Markov switching model for the early detection of influenza outbreaks. *Stochastic Environmental Research and Risk Assessment*, **34**(2), 275–292.

4. A. Castilla, B. Méndez-Vigo, A. Marcer, J. Martínez-Minaya, D. Conesa, X. Picó and C. Alonso-Blanco (2020). Ecological, genetic and evolutionary drivers of regional genetic differentiation in *Arabidopsis thaliana*. *BMC Evolutionary Biology*, **20:71**.

5. M. Cendoya, J. Martínez-Minaya, V. Dalmau, A. Ferrer, M. Saponari, D. Conesa, A. López-Quílez, A. Vicent (2020). Spatial Bayesian modeling applied to the surveys of *Xylella fastidiosa* in Alicante (Spain) and Apulia (Italy). *Frontiers in Plant Science*, **11**:1204.

6. M. Cendoya, E. Lázaro, D. Conesa, A. López-Quílez, V. Dalmau, A. Ferrer, F. Beitia, E. Marco-Noales, A. Vicent (2020). Aplicaciones de la modelización epidemiológica en la zona demarcada por *Xylella fastidiosa* en Alicante. *Phytoma España*, **321** (1), 38–44 (In Spanish).

7. R. Gómez-Calvet, D. Conesa, A. Gómez-Calvet and E. Tortosa-Ausina (2020). European Energy Efficiency evaluation based on the use of superefficiency under Undesirable Outputs in Slacks-Based Measure Models. In *Advances in Efficiency and Productivity II*, 193-208. Springer International Series in Operations Research and Management Sciences.

8. I. Paradinas, D. Conesa, A. López-Quílez, A. Esteban, L. Martín, J.M. Bellido, M.G. Pennino (2020). Identifying Mullidae species (*M. surmuletus* and *M. barbatus*) persistent hot-spots in the Western Mediterranean Sea. *Marine Ecology Progress Series*, **644**, 173–185.

9. V. Sanchis, F. Pardo, J.E. Farinós and D. Conesa (2020). Do Spanish IPO firms fit the continental European model for going public? *Spanish Journal of Finance and Accounting*, **49**(3): 345–369.

10. B. Sarzo, D. Conesa and R. King (2020). Cormack-Jolly-Seber models: time and age perspectives. *Stochastic Environmental Research and Risk Assessment*, **34**: 1683–1698.

11. X. Barber, D. Conesa, A. López-Quílez and J. Morales (2019). Multivariate Bioclimatic indices modelling: A coregionalised approach. *Journal of Agricultural, Biological and Environmental Statistics*, **24**(2), 225–244.

12. D. Conesa, R. Amorós, A. López-Quílez and M.A. Martínez Beneito (2019). Contributed discussion on: 'Dynamic Bayesian Influenza Forecasting in the United States with Hierarchical Discrepancy' by Osthus et al. (2019). *Bayesian Analysis*, **14**(1), 307–308.

13. J. Martínez-Minaya, D. Conesa, H. Bakka, M.G. Pennino (2019). Dealing with physical barriers in bottlenose dolphin Tursiops truncatus distribution. *Ecological Modelling*, **406**, 44–49.

14. J. Martínez-Minaya, D. Conesa, M.J. Fortin, C. Alonso-Blanco, F.X. Picó and A. Marcer (2019). A hierarchical Bayesian Beta regression approach to study the effects of geographical genetic structure and spatial autocorrelation on species distribution range shifts. *Molecular Ecology Resources*, **19**, 929–943. **Selected by Editor to Interviews with authors blog of the Journal**.

15. M.G. Pennino, I. Paradinas, J.B. Illian, F. Muñoz, J.M. Bellido, A. López-Quílez and D. Conesa (2019). Accounting for preferential sampling in species distribution models. *Ecology and Evolution*, **9**(1), 653–663.

16. B. Sarzo, C. Armero, D. Conesa, J. Hentati-Sundberg and O. Olsson (2019). Bayesian immature survival analysis of the largest colony of common murre in the Baltic Sea. *Waterbirds*, **42**(3): 304–313.

17. J. Martínez-Minaya, M. Cameletti, D. Conesa and M.G. Pennino (2018). Species distribution modeling: a statistical review with focus in spatio-temporal issues. *Stochastic Environmental Research and Risk Assessment*, **32**, 3227–3244.

18. R. Vilela, D. Conesa, J.L. del Rio, A. López-Quílez, J. Portela and J.M. Bellido (2018). Integrating fishing spatial patterns and strategies to improve High Seas fisheries management. *Marine Policy*, **94**: 132–142.

19. I. Paradinas, M. G. Pennino, A. López-Quílez, M. Marín, J. M. Bellido and D. Conesa (2018). Modelling spatialy sampled proportion processes. *REVSTAT, Statistical Journal*, **16**(1): 71–86.

20. J. Martínez-Minaya, D. Conesa, A. López-Quílez and A. Vicent (2018). Spatial and climatic factors associated with the geographical distribution of citrus black spot disease in South Africa. A Bayesian latent Gaussian model approach. *European Journal of Plant Pathology*, **151**(4), 991–1007.

21. M.Y. Rojas-Castro, M. Travanca, M. Ávalos-Fernandez, L. Orriols, D. Conesa, and E. Lagarde (2018). `MAVIE-Lab Sports`: a M-Health for injury prevention and risk management in sport. *In Proceedings of the 2018 International Conference on Digital Health (DH '18)*. ACM Publishers. Pages 158–159.

22. M.Y. Rojas-Castro, M. Travanca, M. Ávalos-Fernandez, L. Orriols, D. Conesa, and E. Lagarde (2018). `MAVIE-Lab Sports`: a M-Health for injury prevention and risk management in sport. *Injury Prevention*, **24**(Suppl 1): A10-A11.

23. X. Barber, D. Conesa, A. López-Quílez, A. Mayoral, J. Morales and A. Barber (2017). Bayesian hierarchical models for analysing the spatial distribution of bioclimatic indices. *SORT, Statistics and Operations Research Transactions*, **41**(2), 277–296.

24. I. Paradinas, D. Conesa, A. López-Quílez and J. M. Bellido (2017). Spatio-Temporal model structures with shared components for semi-continuous species distribution modelling. *Spatial Statistics*, **22**, 434–450.

25. J. Carbonell-Caballero, A. Amadoz, R. Alonso, M.R. Hidalgo, C. Çubuk, D. Conesa, A. López-Quílez and J. Dopazo (2017). Reference genome assessment from a population scale perspective: an accurate profile of variability and noise. *Bioinformatics*, **33**(22), 3511–3517.

26. M. Marco, A. López-Quílez, D. Conesa, E. Gracia and M. Lila (2017). Spatio-temporal analysis of suicide-related emergency calls. *Int. J. Environ. Res. Public Health*, **14**, 735.

27. J. Martínez-Minaya, D. Conesa, A. López-Quílez and A. Vicent (2017). "Response to the letter on "Climatic distribution of citrus black spot caused by Phyllosticta citricarpa. A historical analysis of disease spread in South Africa" by Fourie et al. (2017)". *European Journal of Plant Pathology*, **148** 503–508.

28. J. Martínez-Minaya, A. López-Quílez, D. Conesa, Jose Luis Mira y A. Vicent (2017). Un sistema predictivo para el control de la mancha foliar del caqui causada por *Mycospharella nawae*. *Phytoma España*, **286**, 20–23. (In Spanish).

29. M. G. Pennino, J.M. Bellido, D. Conesa, M. Coll and E. Tortosa-Ausina (2017). The analysis of convergence in ecological indicators: an application to the Mediterranean fisheries. *Ecological Indicators*, **78**, 449–457.

30. D. Conesa, P. Espinosa, A. Forte, E. Tortosa-Ausina (2016). ¿Existen demasiadas sucursales bancarias en España? Un análisis para el periodo 1999-2011. *Cuadernos Económicos de ICE*, **92**, 199–232. (In Spanish).

31. R. Gómez-Calvet, D. Conesa, A. Gómez-Calvet and Emili Tortosa-Ausina (2016). On the dynamics of eco-efficiency performance in the European Union. *Computers and Operations Research*, **66**, 336–350.

32. X. Barber, D. Conesa, S. Lladosa and A. López-Quílez (2016). Modelling the presence of disease under spatial misalignment using Bayesian latent Gaussian models. *Geospatial Health*, **11**(1):415.

33. A. Biggeri, D. Catelan, D. Conesa, and P. Vounatsou (2016). Spatio-temporal statistics: applications in epidemiology, veterinary medicine and ecology. *Geospatial Health*, **11**(1):469.

34. M. G. Pennino, D. Conesa, A. López-Quílez, F. Muñoz, A. Fernández and J. M. Bellido (2016). Fishery dependent and independent data lead to consistent estimations of essential habitats. *ICES Journal of Marine Science*, **73** (9), 2302–2310.

35. I. Paradinas, M. Marín, M. G. Pennino, A. López-Quílez, D. Conesa, D. Barreda, M. González, J. M. Bellido (2016). Identifying the best fishing-suitable areas under the new European discard ban. *ICES Journal of Marine Science*, **73** (10), 2479–2487, **selected as Editor's choice**.

36. L. Alamá, D. Conesa, A. Forte, E. Tortosa-Ausina (2015). The geography of Spanish bank branches. *Journal of Applied Statistics*, **42**(4): 722–744.

37. D. Conesa, M.A. Martínez-Beneito, R. Amorós and A. López-Quílez (2015). Bayesian Hierarchical Poisson Models with a hidden Markov structure for the detection of influenza epidemic outbreaks. *Statistical Methods in Medical Research*, **24**(2): 206–223.

38. R. Amorós, D. Conesa, M.A. Martínez-Beneito and A. López-Quílez (2015). Statistical methods for detecting the onset of influenza outbreaks: a review. *REVSTAT, Statistical Journal*, **13**(1): 41–62.

39. I. Paradinas, D. Conesa, M. G. Pennino, F. Muñoz, A. M. Fernández, A. López-Quílez, J. M. Bellido (2015). Bayesian spatio-temporal approach to identifying fish nurseries by validating persistence areas. *Marine Ecology Progress Series*, **528**: 245–255.

40. J. Martínez-Minaya, A. Vicent, D. Conesa y A. López-Quílez (2015). Factores climáticos asociados con la mancha negra de los cítricos causada por Phyllosticta citricarpa en Sudáfrica. *Phytoma España*, **270**, 36–40. (In Spanish).

41. J. Martínez-Minaya, D. Conesa, A. López-Quílez and A. Vicent (2015). Climatic distribution of citrus black spot caused by Phyllosticta citricarpa. A historical analysis of disease spread in South Africa. *European Journal of Plant Pathology*, **143**, 69–83.

42. M. G. Pennino, F. Muñoz, D. Conesa, A. López-Quílez, J. M. Bellido (2014). Bayesian spatio-temporal discard model in a demersal trawl fishery. *Journal of Sea Research*, **90**: 44–53.

43. R. Gómez-Calvet, D. Conesa, A. Gómez-Calvet and Emili Tortosa-Ausina (2014). Energy efficiency in the European Union: What can be learned from the joint application of directional distance functions and slacks-based measures? *Applied Energy*, **132**: 137–154.

44. A. Martínez-Abraín, D. Conesa and A. Forte (2014). Subjectivism is an unavoidable feature of ecological statistics. *Animal Biodiversity and Conservation*, **37**(2): 141–143.

45. D. Conesa and F. Pineda (2014). Entrevista a Alan Gelfand: "A la gente le resulta muy difícil entender las estadísticas". Mètode, **83**: 93–97. (In Spanish).

46. M. González-Warleta, S. Lladosa, J. A. Castro-Hermida, A. M. Martínez-Ibeas, D. Conesa, F. Muñoz, A. López-Quílez, Y. Manga-González, M. Mezo (2013). Bovine paramphistomosis in Galicia (Spain): Prevalence, intensity, aetiology and geospatial distribution of the infection. *Veterinary Parasitology*, **191**(3-4): 252–263.

47. F. Muñoz, M. G. Pennino, D. Conesa, A. López-Quílez and J. M. Bellido (2013). Estimation and prediction of the spatial occurrence of fish species using Bayesian latent Gaussian models. *Stochastic Environmental Research and Risk Assessment*, **27**: 1171–1180.

48. M. G. Pennino, F. Muñoz, D. Conesa, A. López-Quílez, J. M. Bellido. (2013) Modelling sensitive elasmobranch habitats. *Journal of Sea Research*, **83**: 209–218.

49. M. G. Pennino, F. Muñoz, D. Conesa, A. López-Quílez, J.M. Bellido (2012). Modelling sensitive elasmobranchs habitat. *Revista de Investigación Marina*, **19**(6), 519–523.

50. E. Tortosa, C. Armero, D. Conesa and E. Grifell (2012). Bootstrapping profit change: An application to Spanish banks. *Computers and Operations Research*, **39**(8): 1857–1871.

51. M. G. Pennino, F. Muñoz, D. Conesa, A. López-Quílez, J.M. Bellido (2012). Modelling sensitive elasmobranchs habitat. *Revista de Investigación Marina*, **19**(6), 519–523.

52. M$^{\underline{a}}$. G. Pennino, J. M$^{\underline{a}}$. Bellido, D. Conesa and A. López-Quílez (2011). Trophic indicators to measure the impact of fishing on an exploited ecosystem, *Animal Biodiversity and Conservation*, **34**(1): 123–131.

53. C. Sánchez-Monzó, O. Vaamonde-Velazco, D. Conesa-Guillén, F. Gomar-Sancho (2010). Factores de riesgo en las fracturas de extremidad proximal de húmero. *Revista Española de Cirugía Osteoarticular*, **45**(244), 119–129. (In Spanish).

54. D. Conesa, A. López-Quílez, M. A. Martínez-Beneito, M. T. Miralles and F. Verdejo (2009). FluDetWeb: an interactive web-based system for the early detection of the onset of influenza epidemics. *BMC Medical Informatics and Decision Making*, **9**: 36.

55. E. Tortosa, E. Grifell, C. Armero and D. Conesa (2008). Sensitivity analysis of efficiency and Malmquist productivity indices: an application to Spanish saving banks. *European Journal of Operational Research*, **184**(3), 1062–1084.

56. A. Martínez-Abraín, D. Conesa and D. Oro (2008). Herramientas estadísticas para resolver contrastes de hipótesis con contenido biológico: su uso en Ecología del siglo XXI. *Acta Zoológica Mexicana (nueva serie)*, **24**(2), 201–220. (In Spanish).

57. M. A. Martínez-Beneito, D. Conesa, A. López-Quílez and A. López-Maside (2008). Bayesian Markov switching models for the early detection of influenza epidemics. *Statistics in Medicine*, **27**(22), 4455–4468.

58. A. Martínez-Abraín, D. Oro, D. Conesa and J. Jiménez (2008). Compromise between seabird enjoyment and disturbance: the role of observed and observers. *Environmental Conservation*, **35**(2), 104–108.

59. M.A. Sarti-Martínez, J. Alfonso-Beltrán, D. Conesa-Guillén (2008). An approach to the lumbar vertebrae morphology. *Journal of Bone and Joint Surgery - British Volume*, **91-B**, Issue SUPP-III, 464.

60. C. Armero and D. Conesa (2006). Bayesian hierarchical models in manufacturing bulk queues. *Journal of Statistical Planning and Inference*, **136** (2), 335 – 354.

61. J.J. Abellán, C. Armero, D. Conesa, J. Pérez-Panadés, O. Zurriaga, M.A. Martínez-Beneito, M.J. García-Blasco and H. Vanaclocha (2006). Analysis of the Renal Transplant Waiting List in the País Valencià. *Statistics in Medicine*, **25**(2), 345–358.

62. O. Costa and D. Conesa (2006). Analysis of the behaviour of a post office. *Bulletin of the Spanish Statistical and Operations Research Society*, **22**(3), 18 – 23. (In Spanish).

63. C. Armero and D. Conesa (2004). Statistical performance of a multiclass bulk production queueing system. *European Journal of Operational Research*, **158**, 649 – 661.

64. D. Conesa, A. López-Quílez and R. López (2004). ¿Tienen todos los titulados las mismas oportunidades en las convocatorias de becas de investigación? *Revista de la Facultat de Matemàtiques de la Universitat de València (Journal of the Faculty of Mathematics of the University of Valencia)*, **2** (1), 115–130. (In Spanish).

65. J. J. Abellán, C. Armero, D. Conesa, J. Pérez-Panadés, M. A. Martínez-Beneito, Ó. Zurriaga, M.J. García-Blasco and H. Vanaclocha (2004). Predicting the behaviour of the renal transplant waiting list in the País Valencià (Spain) using simulation modeling, in R. G. Ingalls, M. D. Rossetti, J. S. Smith and B. A. Peters editors, *Proceedings of the 2004 Winter Simulation Conference*, pages 1969–1974.

66. A. Martínez-Abrain, D. Oro, M.G. Forero and D. Conesa (2003). Modeling temporal and spatial colony-site dynamics in a long-lived seabird. *Population Ecology*, **45**, 133 – 139.

67. M.A. Sartí, J. Alfonso, D. Conesa, JF. Lisón (2001). A new perspective on the morphology of human lumbar vertebrae. *European Journal of Anatomy*, **5** (Sup.1), 20–21.

68. J. Pérez-Panadés, C. Armero, D. Conesa, J.J. Abellán, M.J. García-Blasco, M.A. Martínez-Beneito, H. Vanaclocha, O. Zurriaga (2001). An application of queueing theory to the waiting list for renal transplants in the Comunitat Valenciana (Spain). *Bulletin of the Spanish Statistical and Operations Research Society*, **17**(3), 2 – 6. (In Spanish).

69. C. Armero and D. Conesa (2000). Prediction in Markovian bulk arrival queues. *Queueing Systems*, **34**, 327–350.

70. C. Armero and D. Conesa (1998). Inference and Prediction in bulk arrival queues and queues with service in stages. *Applied Stochastic Models and Data Analysis* **14**, 35–46.

Former PhD Students

1. Roberto Gómez-Calvet: Energy efficiency and environmental performance in the European Union. June 2013. Jointly supervised with E. Tortosa-Ausina.

2. Maria Grazia Pennino: *Implementing Ecosystem Approach to Fisheries Management: Advances and New tools*. July 2013. Jointly supervised with A. López-Quílez and J. M. Bellido.

3. Raúl Vilela Pérez: *Análisis espacio-temporal de un programa de observadores pesqueros: El caso de la flota española en las aguas internacionales de la plataforma patagónica*. September 2013. Jointly supervised with A. López-Quílez and J. M. Bellido.

4. Vicent Sanchis Berenguer. *Factores determinantes de la salida a bolsa de una compañía. El caso español*. December 2016. Jointly supervised with J. E. Farinós and F. Pardo.

5. Iosu Paradinas Aranjuelo: *Species distribution modelling in fisheries science*. January 2017. Jointly supervised with A. López-Quílez and J. M. Bellido.

6. Rubén Amorós Salvador: *Bayesian temporal and spatio-temporal Markov switching models for the detection of influenza outbreaks*. June 2017. Jointly supervised with M.A. Martínez-Beneito.

7. Joaquín Martínez Minaya. *Recent statistical advances and applications of species distribution modeling*. July 2019. Jointly supervised with A. Vicent.

8. Blanca Sarzo Carles. *New insights in Bayesian survival analysis in Ecology*. July 2020. Jointly supervised with C. Armero and J. Hentati.

Current PhD Students

- José Carbonell Caballero: *Diseño e implementación de modelos estadísticos en el análisis de datos genómicos en cáncer*. To be completed in 2021. Jointly supervised with A. López-Quílez.

- Marcial Marín Villora. *Modelos jerárquicos bayesianos en ecología de aves*. To be completed in 2021. Jointly supervised with J. Monrós.

- Martina Cendoya Martínez. *Extensiones de los modelos de distribución de especies aplicados en fitopatología*. To be completed in 2022. Jointly supervised with A. Vicent.