

Curriculum Vitae
(updated 15/09/2023)

Personal details

Full name: Maria Franco Villoria

Date of Birth: 4/10/84

Nationality: Spanish

Email: maria.francovilloria@unimore.it

Education and Work Experience

- December 2022-present: **Associate Professor**, Dipartimento di Economia "Marco Biagi", Università di Modena e Reggio Emilia, Italy.
(maternity leave 14/09/22-31/05/23)
- December 2019-November 2022: **Tenure Track Researcher (type b)**, Dipartimento di Economia "Marco Biagi", Università di Modena e Reggio Emilia, Italy.
(maternity leave 24/08/19-30/05/20)
- June 2018-November 2019: **Tenure Track Researcher (type a)**, Dipartimento di Economia e Statistica "Cognetti de Martiis", Università di Torino, Italy.
- July 2013-June 2018: **Postgraduate Research Assistant**, Dipartimento di Economia e Statistica "Cognetti de Martiis", Università di Torino, Italy.
- February 2013-June 2013: **Postgraduate Research Assistant**, School of Mathematics and Statistics, University of Glasgow, UK.
- October 2012-January 2013: **Graduate Teaching Assistant**, School of Mathematics and Statistics, University of Glasgow, UK.
- October 2008-February 2013: **PhD in Statistics**, School of Mathematics and Statistics, University of Glasgow, UK.
Thesis: Temporal and Spatial Modelling of Extreme River Flow Values in Scotland
Supervisors: Prof. Marian Scott, Prof. Trevor Hoey (School of Geographical and Earth Sciences) and Prof. Denis Fischbacher-Smith (Business School).
- October 2007-September 2008: **MSc by Research**, School of Mathematics and Statistics, University of Glasgow, UK.
Thesis: Statistical Modelling of Body Composition in Children and their Parents
Supervisors: Prof. John McColl and Prof. Charlotte Wright (College of Medical, Veterinary and Life Sciences)
- September 2002-June 2007: **Mathematics Degree (5 years)**. University of Salamanca, Spain.
- September 2005-June 2007: **Statistics Degree (3 years)**. University of Salamanca, Spain.
- September 2005-June 2006: **Study abroad (Erasmus)**. School of Mathematics and Statistics, University of Glasgow, UK

ASN

- 13/D1-Statistica, seconda fascia (from 19/06/2020 to 19/06/2029)

Administrative duties (Dipartimento di Economia “Marco Biagi”, Università di Modena e Reggio Emilia)

- Department seminars a.y. 2021/2022
- Member of the committee to evaluate Italian knowledge of foreign students a.y. 2019/2020, 2020/2021, 2021/2022, 2023/2024

Third Mission (Dipartimento di Economia “Marco Biagi”, Università di Modena e Reggio Emilia)

- Public Engagement di Ateneo 2023. Progetto: “La statistica per tutti 3.0: Dalla datificazione dei processi alla previsione” (PI Maria Franco Villoria)
- Public Engagement di Ateneo 2022. Progetto: “La statistica per tutti 2.0: il nostro mondo in dati” (PI Maddalena Cavicchioli)
- Public Engagement di Ateneo 2021. Progetto: “La statistica per tutti. La statistica fa crescere” (PI Isabella Morlini)

Journal Articles

- Morlini I, **Franco-Villoria M**, Orlandini S (2023) Modelling local climate change using site-based data. *Environmental and Ecological Statistics* 30(2): 205-232.
- **Franco-Villoria M**, Ventrucci R, Rue H (2022) Variance partitioning in spatio-temporal disease mapping models. *Statistical Methods in Medical Research* 31(8): 1566-1578.
- Marmai N, **Franco Villoria M**, Guerzoni M (2022) How the Black Swan damages the harvest: Extreme weather events and the fragility of agriculture in development countries. *PLoS ONE* 17(2): e0261839.
- **Franco-Villoria M**, Ventrucci M, Rue H (2019) A unified view on Bayesian varying coefficient models. *Electronic Journal of Statistics*, 13 (2), 5334-5359
- **Franco-Villoria M** (2019) Variogram. *Wiley StatsRef: Statistics Reference Online*. DOI: 10.1002/9781118445112.stat07792.pub2
- **Franco-Villoria M**, Scott M, Hoey T (2019) Spatio-temporal modelling of hydrological return levels. A quantile regression approach. *Environmetrics* 30(2), e2522. DOI: 10.1002/env.2522
- Bakka HC, Castro-Camilo D, **Franco-Villoria M**, Freni-Sterrantino A, Huser RG, Opitz T, Rue H (2018) Discussion of “Using Stacking to Average Bayesian Predictive Distributions” by Yao et. al. *Bayesian Analysis*, 13, 917-1003
- **Franco Villoria M**, Ignaccolo R (2017) Bootstrap based uncertainty bands for prediction in functional kriging. *Spatial Statistics* 21, 130-148. DOI: 10.1016/j.spasta.2017.06.005
- Bruno F, Cameletti M, **Franco-Villoria M**, Greco F, Ignaccolo R, Ippoliti L, Valentini P, Ventrucci M (2016) A survey on ecological regression for health hazard associated with air pollution. *Spatial Statistics*, 18, 276-299
- **Franco-Villoria M**, Wright CM, McColl, JH, Sherriff A, Pearce MS and the Gateshead Millennium Study core team (2016) Assessment of adult body

- composition using bioelectrical impedance: comparison of researcher calculated to machine outputted values. *BMJ Open*, 6(1): E008922. DOI: 10.1136/bmjopen-2015-008922
- Elayouty A, Scott M, Miller C, Waldron S, **Franco-Villoria M** (2016) Challenges in modeling detailed and complex environmental data sets: a case study modeling the excess partial pressure of fluvial CO₂. *Environmental and Ecological Statistics*, 23(1): 65-87. DOI 10.1007/s10651-015-0329-4
 - Ignaccolo R, **Franco-Villoria M**, Fassò A (2015) Modelling collocation uncertainty of 3D atmospheric profiles. *Stochastic Environmental Research and Risk Assessment*, 29(2): 417-429. DOI 10.1007/s00477-014-0890-7
 - Fassò A, Ignaccolo R, Madonna F, Demoz B, **Franco-Villoria M** (2014) Statistical modelling of collocation uncertainty in atmospheric thermodynamic profiles. *Atmospheric Measurement Techniques* 7: 1803-1816
 - **Franco Villoria M**, Scott EM, Hoey T, Fischbacher-Smith D (2012) Temporal investigation of flow variability in Scottish rivers using wavelet analysis. *Journal of Environmental Statistics*, 3 (6): 1-20
 - Pearce MS, James, PW, **Franco Villoria M**, Parkinson KN, Jones AR, Basterfield L, Drewett RF, Wright CM, Adamson AJ, Gateshead Millennium Study core team (2013) Creation of a childhood adiposity index for children aged 6-8 years: The Gateshead Millennium Study. *BioMed Research International*, Volume 2013, Article ID 431825
 - Wright CM, Cox KM, Sherriff A, **Franco Villoria M**, Pearce MS, Adamson AJ, Gateshead Millennium Study core team (2012) To what extent do weight gain and eating avidity during infancy predict later adiposity? *Public Health Nutrition*, 15(4):656-662

Book Chapters

- Cavicchioli M, Demaria F, **Franco-Villoria M**, Frederic P, Morlini I (2023) Statistica: la scienza che modella i dati. Un'introduzione alle diverse tipologie di dati. ISBN: 978-88-89427-04-0
- Cavicchioli M, **Franco-Villoria M**, Frederic P, Morlini I (2022) Che cos'è la statistica? Una prima introduzione alla scienza dei dati. ISBN: 978-88-89427-03-3
- **Franco-Villoria M**, Ignaccolo R (2021) Universal, Residual and External Drift Functional Kriging. In: Mateu J, Giraldo R (eds.) *Geostatistical Functional Data Analysis*. Wiley. ISBN: 978-1-119-38784-8 (in press)

Working Papers

- Page, G, Ventrucci M, **Franco-Villoria M** (2023) Informed Bayesian Finite Mixture Models via Asymmetric Dirichlet Priors Variance partitioning in spatio-temporal disease mapping models. *ArXiv 2308.00768*

Conference attendance (without proceedings)

- **Franco-Villoria M**, Ventrucci M, Rue H (2021) Prior specification in smooth interaction models. 50th Meeting of the Italian Statistical Society (SIS2021), Pisa, 21-25 June 2021 (online conference)
- **Franco-Villoria M**, Ventrucci M, Rue H (2019) Prior specification for the functional linear regression model. Final Cronos Meeting & Workshop on Multivariate Data Analysis Limassol, Cipro, 14-16 April 2019. **Invited Talk**
- **Franco-Villoria M**, Ventrucci M, Rue H (2018) Constructing priors for functional linear regression models. 49th Meeting of the Italian Statistical Society (SIS2018), Palermo, 20-22 June 2018. **Invited Talk**
- **Franco-Villoria M**, Ignaccolo R, Scott M (2017) Quantile regression for functional data: a PIRLS approximation. Fourth International Workshop on Functional and Operatorial Statistics (IWFOS), A Coruña (Spain), 15-17 June 2017. *Poster presentation*
- **Franco-Villoria M**, Ignaccolo R, Scott M (2016) *Quantile regression for functional data*. Satellite CRoNoS Workshop on Functional Data Analysis, Oviedo, Spain, 26-28 August 2016. **Invited Talk**
- **Franco-Villoria M**, Ignaccolo R, Scott M (2016) *Quantile regression for functional data*. 26th Annual Conference of The International Environmetrics Society (TIES) Edinburgh, UK. July 2016. **Invited Talk**
- **Franco-Villoria M**, Ignaccolo R (2013) Uncertainty evaluation in functional kriging with external drift. Functional and Complex Structure Data Analysis, ECAS 2013. Castro Urdiales, Spain, 17-21 September. *Oral presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D. (2012) Extreme river flow dependence in Northern Scotland. European Geosciences Union (EGU) General Assembly, Vienna, Austria. April 2012. *Poster presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2011) Spatial Analysis of Flood Risk in Scotland. 1st Conference on Spatial Statistics - Mapping Global Change, University of Twente, Enschede, The Netherlands. March 2011. *Poster presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2010) Análisis de wavelets aplicado al estudio de la variabilidad de los ríos escoceses. Primer Congreso de Jóvenes Investigadores en Estadística (JEDE), Toledo, Spain. November 2010. *Oral presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2009) Approaches to modelling long river flow time series. 20th Annual Conference of The International Environmetrics Society (TIES) Bologna, Italy. July 2009. *Oral presentation*

Conference attendance and conference proceedings

(First author corresponds to presenting author)

- **Franco-Villoria M**, Ventrucci M, Rue H (2022) Spatial heterogeneity of Covid-19 cases in Italy. Proceedings of the METMA X Conference, Lleida, Spain, 1-3 June 2022. Pages 81-84 ISBN 978-84-9144-364-3.
- **Franco-Villoria M**, Ventrucci M, Rue H (2021) Revisiting space-time disease mapping models. Proceedings of the GRASPA 2021 Conference. Rome, 7-9

- June 2021. Pages 73-76 ISBN 979-12-200-8496-3. *Invited Talk*
- **Franco-Villoria M**, Scott M, Hoey H (2019) Spatio-temporal analysis of extreme river flow. Proceedings of the GRASPA 2019 Conference. Pescara, 15-16 July 2019. Pages 90-92 ISBN 978-88-97413-34-9 ISSN 2037-7738
 - **Franco-Villoria M**, Ventrucci M, Rue H (2019) Prior specification in flexible models. Smart Statistics for Smart Applications, Book of Short Papers SIS 2019. Milan 18-21 June 2019. Pages 885-888 ISBN 9788891915108
 - **Franco-Villoria M**, Ventrucci M, Rue H (2018) Constructing priors for varying coefficient models. 11th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2018), Pisa, 14-16 December 2018. Page 25 ISBN 978-9963-2227-5-9 *Invited Talk*
 - **Franco-Villoria M**, Ventrucci M, Rue H (2018) Varying coefficient models for areal data. Proceedings of the IX International Workshop on Spatio-Temporal Modelling (METMAIX), pp 119-120, Montpellier, France, 13-15 June 2018. *Poster presentation*
 - Ventrucci, M, **Franco-Villoria M**, Rue H (2017) Penalized complexity priors for varying coefficient models. Proceedings of the 32nd International Workshop on Statistical Modelling (IWSM), Groningen (Netherlands), 2-7 July 2017.
 - **Franco-Villoria M**, Ventrucci M, Rue H (2017) Penalized complexity priors for varying coefficient models. Joint TIES-GRASPA meeting on Climate and Environment, Book of Abstracts of the 27th Annual Conference of The International Environmetrics Society joint with Biennial GRASPA Conference Bergamo, 24-26 July 2017. Page 108, ISSN 2037-7738. *Poster presentation*
 - Ignaccolo R, Bande S, **Franco-Villoria M**, Giunta A (2017) Data Fusion for Functional Data. Joint TIES-GRASPA meeting on Climate and Environment, Book of Abstracts of the 27th Annual Conference of The International Environmetrics Society joint with Biennial GRASPA Conference (GRASPA WORKING PAPERS ISSN 2037-7738), Bergamo, 24-26 July 2017. Page 42, ISSN 2037-7738
 - Quarello A, Ignaccolo R, **Franco-Villoria M**, Coppa G, Merlone A (2017) Experimental Evaluation of Temperature Uncertainty Components due to Siting Condition with respect to WMO Classification. Joint TIES-GRASPA meeting on Climate and Environment, Book of Abstracts of the 27th Annual Conference of The International Environmetrics Society joint with Biennial GRASPA Conference (GRASPA WORKING PAPERS ISSN 2037-7738), Bergamo, 24-26 July 2017. Pages 99-100, ISSN 2037-7738
 - **Franco-Villoria M**, Scott M (2017) *Quantile regression for functional data*. Italian Statistical Society Conference. Statistics and Data Science: new challenges, new generations, Firenze, 28-30 June 2017. ISBN 978-88-6453-521-0. *Invited talk*
 - Ignaccolo R, **Franco-Villoria M** (2016) Functional Kriging Uncertainty Assessment. Proceedings of SIMAI 2016, The XIII Biannual Congress of SIMAI, 13-16 September 2016, Milan (Italy). Pages 566-570. ISBN 978-88-6493-035-0
 - Fassò A, **Franco-Villoria M**, Ignaccolo R (2015) A model for collocation uncertainty of atmospheric profiles. Proceedings of the 60th World Statistics Congress of the International Statistical Institute (ISI2015) Rio di Janeiro, 26-31 July 2015. ISBN - 978-90-73592-35-3
 - Ignaccolo R, **Franco-Villoria M** (2015) Uncertainty evaluation for functional kriging: an application to the Canadian temperature data set. Proceedings of the 60th World Statistics Congress of the International Statistical Institute (ISI2015) Rio di Janeiro, 26-31 July 2015. ISBN - 978-90-73592-35-3

- **Franco-Villoria M**, Ignaccolo R, Fassò A, Madonna F, Demoz BB (2015) Collocation uncertainty in climate monitoring, in: A. Fassò and A. Pollice (Editors). Proceedings of the GRASPA2015 Conference, Bari, 15-16 June, 2015. Special issue of GRASPA Working Papers. ISSN 2037-7738. *Invited talk*
- Berchialla P, Blangiardo M, Cameletti M, Finazzi F, **Franco-Villoria M**, Ignaccolo R (2014) Spatial model for cardio-respiratory diseases hospital admission in Torino province. Proceedings of the METMAVII – GRASPA 14 Conference, Torino, 10-12 September, 2014. Special issue of GRASPA Working Paper (ISSN: 2037-7738), pp.1-4
- **Franco-Villoria M**, Ignaccolo R (2014) Kriging uncertainty for functional data: a comparison study. Proceedings of the METMAVII – GRASPA 14 Conference, Torino, 10-12 September, 2014. Special issue of GRASPA Working Paper (ISSN: 2037-7738), pp.1-4. *Poster presentation*
- **Franco-Villoria M**, Ignaccolo R (2014) Uncertainty evaluation in functional kriging with external drift. in E.G. Bongiorno, E. Salinelli, A. Goia, P. Vieu (Ed's), Contributions in infinite-dimensional statistics and related topics (Proceedings of the Third International Workshop on Functional and Operatorial Statistics (IWFOSS), Stresa, 19-21 June, 2014). Società Editrice Esculapio, ISBN 978-88-7488-763-7, pp.113-118. *Oral presentation*
- **Franco-Villoria M**, Ignaccolo R (2014) Kriging for functional data: uncertainty assessment, in S. Cabras, T. Di Battista and W. Racugno (Ed's), Proceedings of the 47th Scientific Meeting of the Italian Statistical Society, Cagliari, 11-13 June, 2014. CLUEC editor ISBN 978-88-8467-874-4, pp.1-6. *Invited talk*
- Berchialla P, Blangiardo M, Cameletti M, Finazzi F, **Franco-Villoria M**, Ignaccolo R (2014) Spatial modelling for air pollution epidemiology: hospital admission risk for cardio-respiratory diseases in Torino province, in S. Cabras, T. Di Battista and W. Racugno (Ed's), Proceedings of the 47th Scientific Meeting of the Italian Statistical Society, Cagliari, 11-13 June, 2014. CLUEC editor ISBN 978-88-8467-874-4, pp.1-6
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2012) Spatio-temporal quantile modelling of river flow in Scotland. Proceedings of the VI International Workshop on Spatio-Temporal Modelling (METMAVI), Guimaraes, Portugal, 12-14 September 2012, editor University of Minho, Portugal, ISBN 978-989-97939-0-3, pp. 1-4. *Oral presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2011) Conditional Probability of Flood Risk in Scotland. Proceedings of the 26th International Workshop on Statistical Modelling (IWSM), Valencia, Spain, 11-15 July 2011, eds. Conesa D., Forte A., Lopez-Quilez A., Munoz F., Copiformes S.L, ISBN 9788469451298, pp. 228-233. *Oral presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2010) Assessing the variability of Scottish rivers using wavelet analysis. Proceedings of the 25th International Workshop on Statistical Modelling (IWSM), Glasgow, UK, 5-9 July 2010, ed. Adrian W. Bowman, pp 211-215. *Oral presentation*
- **Franco Villoria M**, Scott M, Hoey T, Fischbacher-Smith D (2010) Spatio-temporal study of Scottish rivers using wavelet analysis. Proceedings of the V International Workshop on Spatio-Temporal Modelling (METMAV), Santiago de Compostela, Spain. June 2010, eds. W. González-Manteiga et al Unidixital. ISBN 978-84-934272-8-3. *Poster presentation*

Prizes/Awards

- 2019 Best poster presentation at the GRASPA 2019 Conference, Pescara
- 2018 Best poster presentation at the IX International Workshop on Spatio-Temporal Modelling (METMAIX), Montpellier, France
- 2012 Best poster presentation at the Kelvin-Smith annual event, Glasgow. UK
- 2012 Selected PhD student to present a poster to the Scottish Science Advisory Council meeting, Glasgow, UK
- 2010 Best poster presentation at the V International Workshop on Spatio-Temporal Modelling (METMAV), Santiago de Compostela, Spain
- 2009 Best student presentation at the 20th Annual Conference of The International Environmetrics Society (TIES) Bologna, Italy

Grants/Scholarships

- PRIN 2022 Project: “METABarcoding for METAcommunities: towards a genetic approach to community ecology (META²)”. PI: Alex Laini (Unito)
- 2022 FAR Dipartimentale (linea B ricerca diffusa), Dipartimento di Economia “Marco Biagi”, Univesità di Modena e Reggio Emilia. Project: “*Informed Bayesian Finite Mixture Models*”
- 2021 FAR Dipartimentale (linea B ricerca diffusa), Dipartimento di Economia “Marco Biagi”, Univesità di Modena e Reggio Emilia. Project: “*Variance partitioning in smooth interaction models*”
- 2016 *World Wide Style* – second edition (WWS II) from the University of Torino to visit the School of Mathematics and Statistics, University of Glasgow (3 months)
- 2010 *Jim Gatheral Scholarship* to visit the Statistical and Applied Mathematical Sciences Institute (SAMSI) and work with Prof. Montserrat Fuentes (2 months)
- 2008 PhD funding: *Kelvin-Smith Scholarship* from the University of Glasgow (4 years)
- 2007 MSc funding to cover tuition fees and living expenses from the University of Glasgow (1 year)
- 2005 *Erasmus Scholarship* from the University of Salamanca, Spain (10 months)

Visiting Positions

- November 2018 (3 weeks). Visiting researcher at King Abdullah University of Science and Technology (KAUST) to work with Prof. Haavard Rue
- May 2018 (1 month). Visiting researcher at King Abdullah University of Science and Technology (KAUST) to work with Prof. Haavard Rue
- March 2017 (1 week). Visiting researcher at the Department of Mathematics, University Jaume I, Castellon to work with Prof. Jorge Mateu
- January-March 2016. Visiting researcher at the School of Mathematics and Statistics, University of Glasgow
- March-April 2010. Visiting researcher at the Statistical and Applied Mathematical Sciences Institute (SAMSI) under the supervision of Prof. Montserrat Fuentes.

Teaching experience

- Department of Economics, University of Modena and Reggio Emilia, Italy

Academic year 2023/2024

- *Statistics*. Course lecturer (taught in Italian)
- *Statistical learning and prediction modelling*. Course lecturer (taught in English)

Academic years 2020/2021, 2021/2022

- *Statistics*. Course lecturer (taught in Italian)

- Department of Economics and Statistics, University of Torino, Italy

Academic year 2018/2019

- *Probability and Statistical Inference*. Tutor (taught in Italian)
- *Probability*. Course lecturer (taught in Italian)
- *Data Mining and Statistical Learning*. Course lecturer (taught in Italian)

Academic year 2017/2018

- *Introduction to R*. Course lecturer (taught in Italian)
- *Probability and Statistical Inference*. Tutor (taught in Italian)
- *Quantitative Methods of Social Sciences*. Course lecturer (taught in English)
- *Data Mining and Statistical Learning*. Course lecturer (taught in Italian)

Academic year 2016/2017

- *Introduction to R*. Course lecturer (taught in Italian)
- *Statistics pre-course*. Course lecturer (taught in Italian)
- *Probability and Statistical Inference*. Tutor (taught in Italian)
- *Quantitative Methods of Social Sciences*. Course lecturer (taught in English)

Academic year 2015/2016

- *Statistics pre-course*. Course lecturer (taught in Italian)
- *Inference* (module within the course "Statistics"). Course lecturer and tutor (taught in Italian)
- *Quantitative Methods of Social Sciences*. Tutor (taught in English)

Academic years 2013/2014, 2014/2015

- *Quantitative Methods of Social Sciences*. Tutor (taught in English)

- School of Mathematics and Statistics, University of Glasgow

Academic year 2012/2013

- *Biostatistics*. Course lecturer and tutor.
- *Science Fundamentals* (statistics module). Course lecturer.

Academic years 2011/2012, 2010/2011

- *S2Y Regression Modelling*. Tutor and lab taker.
- *S2S Statistical Methods*. Tutor and lab taker.
- *S2R Probability*. Tutor and workshop taker.
- *S2X Probability Models*. Tutor and workshop taker.

Academic year 2009/2010

- *S1Y Probability and Statistical Methods*. Tutor.
- *S1Z Statistics in Action*. Tutor.

Academic year 2008/2009

- *S1C Statistics for Psychologists*. Lab taker.

- Other courses

- Short course on Basic Statistics, Master in World Heritage and Cultural Projects for Development, 14 February 2019, International Training Centre of the ILO, Torino
- Course lecturer for “Data Visualization” and “Architetture e IT”, Master in Data Science for Business Intelligence, 7-8 February 2019, University of Torino
- Short course on Extreme Value Analysis, Despina for Intesa Academy (Despina Big Data Lab), 15 October 2018, Intesa San Paolo, Torino
- Statistical Inference Lecturer at the Master in Data Science for Business Intelligence, 6 April 2018, University of Torino
- Statistics Lecturer at the Master in Applied Labour Economics for Development, 12-19 February 2018, International Training Centre of the ILO, Torino
- Short course on Basic Statistics, Master in World Heritage and Cultural Projects for Development, 21 February 2018, International Training Centre of the ILO, Torino
- Short course on Basic Statistics, Master in World Heritage and Cultural Projects for Development, 1 March 2017, International Training Centre of the ILO, Torino
- Short course on Extreme Value Analysis, Despina for Intesa Academy (Despina Big Data Lab), 17 March 2017, Intesa San Paolo, Torino
- Short course on Functional Data Analysis in collaboration with Dr. Rosaria Ignaccolo (University of Torino) during the workshop “Environmental Statistics and Data Analytics Training”, 28-29 August 2015, University of Glasgow, UK.

Student supervision

- Supervisor of Bachelor students academic years 2019-2020, 2020-2021, 2021-2022, 2023-2024
- Supervisor of four masters students in the academic year 2018-2019
- Supervisor of two masters students in the academic year 2017-2018

- Co-supervision of five masters students in the academic years 2015-2016, 2016-2017, 2017-2018

PhD thesis reviewer and examiner

- 2019 External reviewer of the PhD thesis by Joaquin Martinez Minaya, title: Recent statistical advances and applications of species distribution modeling. University of Valencia, Spain
- 2019 External reviewer and examiner of the PhD thesis by Oscar Rodriguez de Rivera Ortega, title: Spatio-temporal modeling of species distribution. University of Valencia, Spain

Further education

- Advanced English degree (5 years), Official School of Languages (EOI), Salamanca, Spain
- Academy for PhD training in Statistics (APTS). Academic Year 2008/2009
- Scottish Mathematical Sciences Training Centre (SMSTC). Statistics Branch. Academic Year 2007/2008
- Postgraduate Research Training Course. University of Glasgow. Academic Year 2007/2008

Organization of Conferences and Workshops

- Organizer of a session at CMStatistics, Berlin, 16-18 December 2023
- Member of the Scientific and Organizing committee of the joint meeting TIES (The International Environmetrics Society) –GRASPA (Research Group for Statistical Applications to Environmental Problems), Bergamo, 24-26 July 2017
- Organizer of a session at TIES-GRASPA, Bergamo, 24-26 July 2017
- Member of the Organizing committee of the joint meeting Seventh International Workshop on Spatio-Temporal Modelling (METMA7)-2014 meeting of the Research Group for Statistical Applications to Environmental Problems (GRASPA14), Torino 10-12 September 2014

Referee Activity

- Associate editor of Environmetrics
- Referee for Annals of Applied Statistics; Spatial Statistics; Stochastic Environmental Research and Risk Assessment; Statistical Methods and Applications; Statistica Applicata (Italian Journal of Applied Statistics); City, Culture and Society; Advances in Statistical Analysis; Environmental Modelling and Software; International Journal of Environmental Research and Public Health; Journal of Statistical Computation and Simulation; WIREs Data Mining and Knowledge Discovery

Affiliations

- GRASPA, SIS
- Honorary research fellow, School of Mathematics and Statistics, University of Glasgow

Languages

- Spanish: native language
- English: upper level (written and spoken)
- Italian: upper level (written and spoken)

Computing skills

- Document processing: Microsoft Word and Latex
- Presentation skills: PowerPoint, Beamer (Latex) and Prezi
- Statistical Software: R, and basic knowledge of Minitab and Mathematica