FABRIZIA MEALLI

Office Contact Information

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Personal Information

Born July 22nd, 1966, Italian Citizen, married (with three children). Languages: Italian (mother tongue), English (fluent), German (fluently spoken).

Research Interests

Causal Inference for Experimental and Observational Studies, Analysis of Broken Randomized Experiments, Principal Stratification, Bayesian Analysis, Random Effect Models for Transition Data, Missing Data Methods, Applications to Social, Biomedical and Environmental Sciences, Program Evaluation. Google scholar citations 2878, h-index 26, i10-index 46 (as of July 10 2020).

EDUCATION

1994 PhD in Statistics, University of Florence, Italy.

1990 Laurea in Economics (summa cum laude), University of Florence, Italy.

PROFESSIONAL EXPERIENCE

Primary Appointments

2005 - present	Professor of Statistics, University of Florence.
2019 -	Director, Florence Center for Data Science, University of Florence.
2017 – present	Director of Graduate Studies, PhD programme in Mathematics, Computer Science and Statistics, Statistics track, University of Florence.
1998 - 2004	Associate Professor of Statistics, University of Florence.
2002 - 2005	Director of Graduate Studies, PhD programme in Applied Statistics, University of Florence.
1994 - 1998	Assistant Professor of Statistics, University of Florence.
1994	Research Associate, Department of Economics, University of Leicester, UK.

Other Appointments and Affiliations

2014 — present	Member of the Scientific Committee, Action Research for CO-develpment (ARCO), Research Center, University of Florence.
2017	$\label{thm:continuous} \mbox{ Visiting Professor of Statistics, Department of Statistics and Department of Biostatistics, Harvard University.}$
2015	Visiting Professor of Statistics, Department of Statistics, Harvard University.
2012	Visiting Professor, Luxembourg Institute for Socio-Economic Resarch (LISER), Luxembourg.

2011	Visiting Scholar,	Department	of Statistics.	Harvard Unive	ersitv.

2006 - present External Research Associate, Institute for Social and Economic Research (ISER), Uni-

versity of Essex, UK.

2001 Visiting Associate Professor of Statistics, Department of Statistics, Harvard University.

2000 Visiting Fellow, Department of Economics, University of California, Los Angeles.

1993 Research Assistant, Department of Applied Economics, University of Cambridge, UK.

FELLOWSHIPS AND HONORS

2013 Fellow of the American Statistical Association.

2010 Outstanding Reviewer Award for the Journal of Educational and Behavioral Statistics.

2001 Qualification as Professor of Statistics, University of Pisa, Italy.

1995 – 1999 Honorary Visiting Fellow, Department of Economics, University of Leicester.

1992 Fellowship, Centro Interuniversitario di Econometria (CIDE).

1990 Associazione Villa Favard Award for outstanding student in Economics.

1990 Fondazione Federico del Vecchio Award for the best thesis in Economics.

EDITORIAL BOARDS

2018 – present Associate Editor, Observational Studies.

2018 Guest Editor, Themed issue on Causal Inference from Non-Experimental Studies: Chal-

lenges, Developments and Applications, Journal of the Royal Statistical Society Series

A (Statistics and Society).

2014 – 2018 Associate Editor, Biometrics.

2013 - present Associate Editor, The Annals of Applied Statistics.

2011 — present — Associate Editor, Journal of the American Statistical Association - Theory and Methods.

2011 - 2014 Associate Editor, Journal of the Royal Statistical Society - Series A.

2008 – 2012 Associate Editor, Statistical Methods and Applications, Springer Verlag.

PUBLICATIONS

Submitted Manuscripts and Work in progress

Baccini M., Cereda G., Viscardi C., Gottard A., **Mealli F.** Oltre il picco: analisi e previsioni dell'epidemia da SARS-CoV-2 in Toscana. Rivista Scientifica: E&P Repository 2020. E&P Code: repo.epiprev.it/1085.

Baccini M., Mattei A., Rocco E., Vannucci G., **Mealli F.**. Evaluating COVID-19 screening strategies based on serological tests.

https://www.medrxiv.org/content/10.1101/2020.06.12.20129403v1.

Baccini M., **Mealli F.**, Cereda G., Gottard A., Pedone M., Rocco E., Viscardi C.; ARS; ISPRO Strategie di sorveglianza e biomonitoraggio del contagio da SARS-CoV-2 tramite tamponi individuali, pool testing e test sierologici: il protocollo per affrontare il dopo lockdown in Regione Toscana. Rivista Scientifica: E&P Repository 2020. E&P Code: repo.epiprev.it/1235.

Forastiere L., **Mealli F.**, Wu A., Airoldi E.M., Estimating Causal Effects Under Interference Using Bayesian Generalized Propensity Scores, <u>Journal of Machine Learning</u> Research (under review), (https://arxiv.org/abs/1807.11038).

Choirat C., Papadogeorgou G., Zigler C.M., Dominici F., **Mealli F.**, Wasfy J.H., Causal Impact of the Hospital Readmissions Reduction Program on Hospital Readmissions and Mortality, (https://arxiv.org/abs/1809.09590).

Mattei A., Ding P., **F. Mealli**, Assessing causal effects in the presence of treatment switching through principal stratification, <u>Journal of the American Statistical Association</u> (under review).

Branson Z., **F. Mealli**, Local Randomization and Beyond for Regression Discontinuity Designs, <u>Journal of Educational and Behavioral Statistics</u> (under review) (https://arxiv.org/abs/1810.02761).

Wu X., **Mealli F.**, Kioumourtzoglou M.-A., Dominici F. and Braun D., Matching on generalized propensity scores with continuous exposures, <u>Journal of the American Statistical Association</u> (under review).(https://arxiv.org/abs/1812.06575).

Forastiere L., **Mealli F.**, Zigler C.M., Evaluating power plant regulations with methods for causal inference on bipartite networks with interference, Technical Report.

Comment L., **Mealli F.**, Haneuse S., Zigler C.M., Survivor average causal effects for continuous time: a principal stratification approach to causal inference with semicompeting risks <u>Journal of the American Statistical Association</u> (under review) (https://arxiv.org/abs/1902.09304).

Journal Articles: Statistical theory and methods

Nethery R.C., **Mealli F.**, Sacks J.D., Dominici F. (2020) Causal inference and machine learning approaches for evaluation of the health impacts of large-scale air quality regulations, *Journal of the American Statistical Association*, A & CS, in press.

Forastiere L., Airoldi E.M., **Mealli F.** (2020), Identification and estimation of treatment and interference effects in observational studies on networks, <u>Journal of the American Statistical Association</u>, T&M, in press. (https://arxiv.org/abs/1609.06245).

Mattei A., **Mealli F.** Ricciardi F.(2019) Bayesian Inference for Sequential Treatments under Latent Sequential Ignorability, <u>Journal of the American Statistical Association</u>, 1-20, https://doi.org/10.1080/01621459.2019.1623039.

Forastiere L., Lattarulo P., Mariani M., **Mealli F.**, Razzolini L. (2019) Exploring Encouragement, experience and spillover effects using principal stratification in a field experiment on teens' museum attendance, <u>Journal of Business and Economic Statistics</u> 1-15, https://doi.org/10.1080/07350015.2019.1647843.

Papadogeorgou G., **Mealli F.**, Zigler C.M. (2019) Causal inference for interfering units with cluster and population level treatment allocation programs, <u>Biometrics</u>, 75,3, 778-787, https://doi.org/10.1111/biom.13049.

Nethery R.C., **Mealli F.**, Dominici F. (2019), Estimating Population Average Causal Effects in the Presence of Non-Overlap: A Bayesian Approach <u>The Annals of Applied Statistics</u>, 13, 2, 1242-1267 (https://arxiv.org/abs/1805.09736).

Forastiere L., **Mealli F.**, Miratrix L. (2018) Posterior Predictive P-values with Fisher Randomization Tests in Noncompliance Settings: Test Statistics vs Discrepancy Variables, *Bayesian Analysis*, 13, 681701.

- Baccini M., Mattei A., **Mealli F.** (2017) Bayesian inference for causal mechanisms with application to a randomized study for postoperative pain control, <u>Biostatistics</u>, 18, 605-617.
- Feller A., Mealli F., Miratrix L. (2017) Principal Score Methods: Assumptions and Extensions, *Journal of Educational and Behavioral Statistics*, 42, 726-758.
- Mattei A., **Mealli F.** (2016) Regression Discontinuity Designs as Local Randomized Experiments, *Observational Studies*, 2, 156-173.
- Mealli F., Pacini B., Stanghellini E. (2016) Identification of Principal Causal Effects Using Additional Outcomes in Concentration Graphs, <u>Journal of Educational and Behavioral Statistics</u>, 41, 463480.
- Forastiere L., **Mealli F.**, VanderWeele T. (2016) Identification and Estimation of Causal Mechanisms in Clustered Encouragement Designs: Disentangling Bed Nets using Bayesian Principal Stratification, *Journal of the American Statistical Association*, 111, 510-525.
- Frumento P., **Mealli F.**, Pacini B., and Rubin D.B. (2016) The Fragility of Standard Inferential Approaches in Principal Stratification Models Relative to Direct Likelihood Approaches, *Statistical Analysis and Data Mining*, 9(1), 58-70.
- Mealli F., Rubin D.B. (2015) Clarifying Missing at Random and Related Definitions, and Implications when Coupled with Exchangeability, <u>Biometrika</u>, 102 (4): 995-1000. (Correction in *Biometrika* (2016) 103 (2): 491).
- Li F., Mattei A., **Mealli F.** (2015) Evaluating The Causal Effect of University Grants on Student Dropout: Evidence from a Regression Discontinuity using Principal Stratification, *The Annals of Applied Statistics*, 9, 1906-1931.
- Mercatanti, A, Li, F, and **Mealli, F.** (2015) Improving inference of Gaussian mixtures using auxiliary variables. *Statistical Analysis and Data Mining*, 8, 34-48.
- Li F., and **Mealli**, **F.** (2014) A Conversation with Donald B. Rubin. <u>Statistical Science</u>, 29(3), 439-457.
- Mattei A., **Mealli F.**, Pacini B. (2014) Identification of causal effects in the presence of nonignorable missing outcome values, *Biometrics*, 70(2), 278-288.
- Mattei A., **Mealli F.**, Pacini B. (2014) Identification of local causal effects with missing outcome values and an instrument for nonresponse, <u>Communications in Statistics</u> Theory and Methods, 43(4), 815-825.
- Li F., Baccini M., Frangakis C.E., **Mealli F.** (2014) Rubin D. B., Zell E., Multiple Imputation by Ordered Monotone Blocks with Application to the Anthrax Vaccine Adsorbed Trial, *Journal of Computational and Graphical Statistics*, 23(3), 877-892.
- Mattei A., Li F., **Mealli F.** (2013) Exploiting multiple outcomes in Bayesian inference for causal effects with intermediate variables, <u>The Annals of Applied Statistics</u>, 7, 2336-2360.
- **Mealli F.**, Pacini B. (2013) Using secondary outcomes to sharpen inference in randomized experiments with noncompliance, <u>Journal of the American Statistical Association</u>, 108, 1120-1131.
- Frumento P., Mealli F., Pacini B., and Rubin D.B. (2012) Evaluating the Effect of Training on Wages in the Presence of Noncompliance, Nonemployment, and Missing

- Outcome Data, Journal of the American Statistical Association, 107, 450-466.
- Mattei A., **Mealli F.** (2012) A Refreshing Account of Principal Stratification, <u>International</u> Journal of Biostatistics, 1, 1-37.
- Roli G., **Mealli F.**, Pacini B. (2012) Estimation of causal effects in latent strata with an encouragement for response <u>Communications in Statistics Theory and Methods</u>, 41, 3150-3161.
- **Mealli F.**, Rampichini C. (2012) Evaluating the effects of university grants using regression discontinuity designs, <u>Journal of the Royal Statistical Society Series A</u>, 175, 775-798.
- Schwartz S., Li F., **Mealli F.** (2011) A Bayesian Semiparametric Approach to Intermediate Variables in Causal Inference, <u>Journal of the American Statistical Association</u>, 106, 1331–1344.
- Mattei A., **Mealli F.** (2011) Augmented Designs to Assess Principal Strata Direct Effects, *Journal of the Royal Statistical Society Series B*, 73, 729-752.
- Arpino B., **Mealli F.** (2011) The specification of the propensity score in multilevel observational studies, *Computational Statistics and Data Analysis*, 55, 1770-1780.
- Zhang J., Rubin D.B., and **Mealli F.** (2009) Likelihood-based Analysis of Causal Effects of Job-Training Programs using Principal Stratification, <u>Journal of the American Statistical Association</u>, 104, 166–176.
- Mealli F., and Pacini B. (2008) Comparing principal stratification and selection models in parametric causal inference with nonignorable missingness, <u>Computational Statistics</u> and Data Analysis, 53, 507–516
- Ichino A., **Mealli F.**, and Nannicini T. (2008) From Temporary Help Jobs to Permanent Employment: What Can We Learn from Matching Estimators and their Sensitivity?, *Journal of Applied Econometrics*, 23, 305–327
- Grilli L., and **Mealli F.** (2008) Nonparametric Bounds on the Causal Effect of University Studies on Job Opportunities Using Principal Stratification, <u>Journal of Educational</u> and Behavioral Statistics, 33, 1, 111–130.
- Mattei A., and **Mealli F.** (2007) Application of the Principal Stratification Approach to the Faenza Randomized Experiment on Breast Self-Examination, <u>Biometrics</u>, 63 (2):437–46.
- **Mealli F.**, Imbens G., Ferro S., and Biggeri A. (2004) Analyzing a Randomized Trial on Breast Self Examination with Noncompliance and Missing Outcomes, <u>Biostatistics</u>, 5(2), 207–222.
- **Mealli F.**, and Rubin D.B. (2002) Assumptions when Analyzing Randomized Experiments with Noncompliance and Missing Outcomes, <u>Health Services and Outcomes</u> Research Methodology, 3, 3-4, 225–232.
- Mealli F., and Pudney S.(1999) Specification tests for random-effects transition models: An application to a model of the British Youth Training Scheme, *Lifetime Data Analysis*, 5, 213–237.
- Mealli F., and Rampichini C. (1999) Estimating Binary Multilevel Models through Indirect Inference, *Computational Statistics and Data Analysis*, 29, 313–324.

Journal Articles: Statistical Applications to the Social and Biomedical Sciences

Yitshak Sade M., Nethery R.C., Abu Awad Y., **Mealli F.**, Dominici F., Zanobetti A. (2020) How Many Hospital Admissions in Massachusetts Would Have Been Prevented by Lowering Levels of Particulate Air Pollution?, *Journal of the American College of Cardiology*, in press.

Caloffi A., Mariani M., Mattei A., **Mealli F.** (2019) What kinds of R&D consortia enhance SMEs productivity? A hierarchical Bayesian approach for the analysis of a regional innovation policy, forthcoming, *Papers in Regional Science*.

Mariani M., **Mealli F.** (2018) The Effects of R&D Subsidies to Small and Medium-Sized Enterprises. Evidence from a Regional Program, <u>Italian Economic Journal</u>, 4, 249281.

Baccini, M., Mattei, A., **Mealli, F.**, Bertazzi, P.A. and Carugno, M. (2017) Potential outcome approach to causal inference in assessing the short term impact of air pollution on mortality, *Environmental Health*, 16, 7.

Conti E., Duranti S., Mattei A., **Mealli F.**, Sciclone N. (2014) The effects of a dropout prevention program on secondary students' outcomes. <u>Rassegna Italiana di Valutazione</u>, 58, 15-49.

Baccini M., Cook S., Frangakis C.E., Li F., Mealli F., Rubin D. B., and Zell E.R. (2010) Multiple Imputation in the Anthrax Vaccine Research Program, *Chance*, 23, 1.

Guarcello L., **Mealli F.**, and Rosati F.C. (2010) Household vulnerability and child labour: the effects of shocks, credit rationing and insurance, <u>Journal of Population</u> Economics, 23, 169-198

Mattei A., **Mealli F.**, and Pudney S. (2009) Living standards and fertility in Indonesia: A Bayesian analysis, *Giornale degli Economisti e Annali di Economia*, , 68, 175-210.

Aassve A., Engelhardt H., Francavilla F., Kedir A., Kim J., **Mealli F.**, Mencarini L., Pudney S., and Prskawetz A. (2006) Poverty and Fertility Dynamics: A comparative analysis, *Population Review*, 45(2).

Ichino A., **Mealli F.**, and Nannicini T. (2005) Temporary Work Agencies in Italy: a Springboard toward Permanent Employment?, *Giornale degli Economisti e Annali di Economia*, 64, 1, 1–27.

Parretti E., Mealli F., Magrini A., Cioni R., Mecacci F., La Torre P., Periti E., Scarselli G., and Mello G. (2003) Cross-sectional and longitudinal evaluation of uterine artery Doppler velocimetry for the prediction of pre-eclampsia in normotensive women with specific risk factors, *Ultrasound Obstet Gynecol*, 22(2), 160–5.

Mello G., Parretti E., Cioni R., Lagazio C., **Mealli F.**, and Pratesi M. (2002) Individual longitudinal patterns in biochemical and hematological markers for the early prediction of pre-eclampsia, *Journal of Maternal-Fetal & Neonatal Medicine*, 11(2), 93–9.

Pudney S., Galassi F.L., and **Mealli F.** (1998) An Econometric Model of Farm Tenures in Fifteenth-Century Florence, *Economica*, 65, 535–56.

Mealli F., and Pudney S. (1996) Occupational pensions and job mobility in Britain: estimation of a random-effects competing risks model, *Journal of Applied Econometrics*, 11, 293–320.

Mealli F., Pudney S., and Thomas J. (1996) Training duration and post-training outcomes: a duration-limited competing risks models, *Economic Journal*, 106, 422–433.

Invited Discussions

Mattei A., **Mealli F.** (2015) Commentary on "On Bayesian estimation of marginal structural models" by Saarela O., Stephens D. A., Moodie E. E. M., Klein M. B. *Biometrics*, 71, 293-296.

Mealli F. (2013) Invited Discussion of "Experimental Designs for Identifying Causal Mechanisms" by Imai, Tingley and Yamamoto, <u>Journal of the Royal Statistical Society</u> - Series A, 176.

Li F., **Mealli F.** (2011) Discussion of the paper "Transparent parametrization of models for potential outcomes" by Richardson, Evans and Robins, in J. M. Bernardo, M. J. Bayarri, J. O. Berger, A. P. Dawid, D. Heckerman, A. F. M. Smith, and M. West (Eds.) *Bayesian Statistics 9*, Oxford University Press.

Mealli F., and. Rubin D.B. (2003) Commentary: Assumptions allowing the estimation of direct causal effects, *Journal of Econometrics*, 112, 79–87.

Mealli F. (2002) and Rubin D.B., Discussion of "Estimation of intervention effects with noncompliance: Alternative model specifications" by B. Jo, *Journal of Educational and Behavioral Statistics*, 27(4), 411–416.

Book Chapters and Proceedings

Mattei A., **Mealli F.**, Nodehi A. (2020) Design and Analysis of Experiments. In *Hand-book of Labor*, *Human Resources and Population Economics*. Springer, in press.

Mattei A., **Mealli F.**, Pacini B. (2013) Exploiting Multivariate Outcomes in Bayesian Inference for Causal Effects with Noncompliance. In N. Torelli; F. Pesarin, A. Bar-Hen (Eds.). *Studies in Theoretical and Applied Statistics*. Part III: Statistical Modelling and Data Analysis. Springer.

Mealli F. (2013) Potential Outcomes. Entry in the *Encyclopedia of Quality of Life Research*.

Mealli F., Pacini B., Rubin D.B. (2011) Statistical Inference for Causal Effects, in Kenett R. and Salini S. (Eds.) *Modern Analysis of Customer Satisfaction Surveys*, Chapter 10, Wiley.

Mattei A., **Mealli F.**, Rubin D.B. (2011) Missing Data and Imputation Methods, in Kenett R. and Salini S. (Eds.) *Modern Analysis of Customer Satisfaction Surveys*, Chapter 8, Wiley.

Mealli F., Pacini B., and Roli G. (2011) Evaluating the effects of subsidies to firms with nonignorably missing outcomes, in Ingrassia S., Rocci R. and Vichi M. (Eds.), *New Perspectives in Statistical Modeling and Data Analysis*, Springer.

Frumento P., **Mealli F.** and Pacini B. (2011) Causal inference with multi variate outcomes: a simulation study, in Ingrassia S., Rocci R. and Vichi M. (Eds.), *New Perspectives in Statistical Modeling and Data Analysis*, Springer.

Zhang J., Rubin D.B., and **Mealli F.** (2007) Evaluating The Effects of Job Training Programs on Wages through Principal Stratification, in D. Millimet, J. Smith, and E. Vytlacil (eds.), *Advances in Econometrics: Modeling and Evaluating Treatment Effects in Econometrics*, Elsevier Science Ltd, UK.

Grilli L., and **Mealli F.** (2007) University Studies and Employment. An Application of the Principal Strata Approach to Causal Analysis, in L. Fabbris (ed.), *Effectiveness of University Education in Italy*, Physica-Verlag HD, 219–231

Grilli L., and **Mealli F.** (2004) Analysis of the effect of the degree programs by means of principal stratification, *Proceedings of the XLII Scientific Meeting of the Italian Statistical Society*, Cleup, Padova.

Mealli F., and Chiandotto B. (2004) Decision oriented evaluation, Invited Paper, *Proceedings of the XLII Scientific Meeting of the Italian Statistical Society*, Cleup, Padova.

Mattei A., and **Mealli F.** (2004) Assessing the Effect of a Teaching Program on Breast Self-Examination in a Randomized Trial with Noncompliance and Missing Data. *Proceedings of the 19th International Workshop on Statistical Modeling*, 455–459.

Mealli F., and Pudney S. (2003) Applying heterogeneous transition models in labour economics: the role of youth training in labour market transitions, in C. Skinner e R.L Chambers (eds.), *Analysis of Survey Data*, Wiley, New York.

Mealli F., and Rampichini C. (2002) Impact evaluation of University grants, *Proceedings of the 2002 Joint Statistical Meetings, American Statistical Association*, New York.

Calzolari G., Magazzini L., and **Mealli F.** (2001) Simulation-Based Estimation of Tobit Model with Random Effects, in R. Friedmann, L. Knueppel, and H. Luetkepohl (eds.), *Econometric Studies, a Festschrift in Honour of Joachim Frohn*, Muenster: LIT Verlag, 349–369.

Mealli F., and Rampichini C. (2001) Impact evaluation of University grants, *Proceedings of the Intermediate Scientific Meeting of Italian Statistical Society*, Tor Vergata, Rome, Italy.

Mealli F., and Biggeri A. (2000) Identifiability of Causal Relationships in Non-Experimental Studies: Some Case Studies, *Proceedings of the XL Scientific Meeting of the Italian Statistical Society*, Florence, Italy.

Mealli F. (1998) Three score tests for binary response random effect models, *Proceedings of the XXXIX Scientific Meeting of Italian Statistical Society*, Sorrento, Italy.

Corradi F., and **Mealli F.** (1996) Nonparametric specification of error terms in dynamic models, in Berger et al. (eds.), *Bayesian Robustness*, Institute of Mathematical Statistics, Lecture notes series.

Corradi F, and **Mealli F.** (1996) Dynamic Linear Models: a semi-parametric approach, *Proceedings of the XXXVIII Scientific Meeting of Italian Statistical Society*, Rimini.

Mealli F., and Rampichini C. (1993) Duration and completion of university studies amongst Italian undergraduates: individual choice and education policy, *Bulletin of the International Statistical Institute*, 49th session.

Mealli F., and Pacini B. (1992) Estimating Linear Models with Ordinal Qualitative Regressors by Maximum Likelihood. A comparison among estimation methods, in G. Diana, L. Pace e A. Salvan (eds.), *Due temi di metodologia statistica*, Rocco Curto Editore.

Publications in Italian

Mealli F., and Rampichini C. (2006) Metodi e modelli per la valutazione di impatto delle borse per il DSU, in L. Biggeri e G. Catalano (eds) L'efficacia delle politiche di sostegno agli studenti universitari: l'esperienza italiana nel panorama internazionale, Il Mulino, Bologna.

Mealli F., Mele S., Rampichini C., and Sciclone N. (2005) La valutazione dell'efficacia delle borse per il diritto allo studio, *Rivista Italiana di Politiche Pubbliche*, 1,1–10.

Grilli L., and **Mealli F.** (2005) L'effetto degli studi universitari sulle opportunit di lavoro un'analisi principal strata model, in Crocetta (a cura di), *Modelli statistici per l'analisi della transizione università-lavoro*, Cleup, Padova.

Mealli F., and Pagni R. (2002) (a cura di) Analisi e valutazione delle politiche per le nuove imprese. Il caso della LR Toscana 27/93, Franco Angeli, Milano.

Baccini M., and **Mealli F.** (2001) L'utilizzo dei residui a fini diagnostici nei modelli per dati di durata, *Serie Didattica del Dipartimento di Statistica "G. Parenti*", University of Florence, Florence University Press.

Mealli F., Viviani A., Pierotti F. (1999) Funzioni frontiera su dati panel: il caso della distribuzione commerciale, *Statistica Applicata*, 11(1), 77–92.

Chiandotto B., and **Mealli F.** (1999) Decisioni statistiche: risvolti prescrittivi della teoria e applicazioni in campo assicurativo, in *Proceedings of the Giornate di Studio: Progetto Strategico CNR "Decisioni Statistiche: Teoria e Applicazioni"*, Pitagora Editrice, Bologna.

Mealli F., and Corradi F. (1997) Studio di fattibilità per la valutazione dell'efficacia assoluta dei corsi di formazione professionale in Toscana, Appendice B del Volume Monitoraggio e valutazione ex post dell'attività di formazione professionale - Anno formativo 1993-94, Flash Lavoro, Quaderni 46, Regione Toscana.

Mealli F. (1994) Scelte politomiche ed autoselezione, Statistica, 4, 501–519.

Gori E., **Mealli F.**, Rampichini C. (1993) Indicatori di efficienza ed efficacia per la valutazione dell'attività di formazione professionale, *Statistica*, 3, 501–533.

Ph.D. Theses in Statistics Supervised as Primary or Sole Advisor

- Ph.D. 2021 Anahita Nodehi, PhD candidate in Statistics, University of Florence Italy.
- Ph.D. 2020 Fiammetta Menchetti, PhD candidate in Statistics, University of Florence Italy.

Costanza Tortu', PhD candidate in Economics, Networks and Business Analytics, IMT Lucca, Italy.

- Ph.D. 2015 Laura Forastiere, "Bayesian Analysis of Cluster Randomized Encouragement Designs" University of Florence. Current Position: Assistant Professor, Yale University.
- Ph.D. 2009 Paolo Frumento, "Exploting mixtures models in causal inference." University of Florence. Current Position: Associate Professor, University of Pisa, Italy.
- Ph.D. 2008 Bruno Arpino, "Causal Inference for Observational Studies Extended to Multilevel Settings. The Case of the Fertility Effect on Poverty in Vietnam." University of Florence. Current Position: Associate Professor, University of Florence, Italy.

Vincenzo Mauro, "Statistical methods for the evaluation of policies for firms." University of Florence. Current Position: Assistant Professor, University of Pisa, Italy.

- Ph.D. 2007 Michela Bia, "Applications of the Generalized Propensity Score. Evaluation of public contribution to Piedmont enterprises." University of Florence. Current Position: Senior Researcher, LISER, Luxembourg.
- Ph.D. 2005 Alessandra Mattei, "Estimating causal effects in experimental and observational studies suffering from missing data." University of Florence. Current Position: Associate Professor of Statistics, University of Florence, Italy.

Davide Conforti, "Evaluating the effects of a policy to support young enterpreneurs (LR 27/93)." University of Florence. Current Position: Funzionario, Agenzia delle Entrate, Direzione regionale della Toscana, Florence, Italy.

- Ph.D. 2000 Andrea Mercatanti, "Causal Inference with Noncompliance and missing data." University of Florence. Current Position: Funzionario, Banca d'Italia, Rome, Italy.
- Ph.D. 1999 Antonella D'Agostino, "A model for analyzing the school-to-work transition." University of Florence. Current Position: Associate Professor of Economic Statistics, University of Naples "Parthenope", Italy.
- Ph.D. 1998 Cheti Nicoletti, "Regression analysis with incomplete panel data." University of Florence. Current Position: Professor of Economics, University of York, UK.

Ph.D. Theses Jointly Supervised/Collaboration

- Ph.D. 2020 Falco Bargagli Stoffi, PhD candidate in Economics, Networks and Business Analytics, IMT Lucca, Italy.
- Ph.D. 2019 Leah Comment, PhD candidate in Biostatistics, Harvard School of Public Health.
- Ph.D. 2019 Reagan Mozer, PhD candidate in Statistics, Harvard University.
- Ph.D. 2018 Georgia Papadogeorgou, PhD in Biostatistics, Harvard School of Public Health. Current Position: Post-Doc, Duke University.
- Ph.D. 2005 Tommaso Nannicini, PhD in Economics, European University Institute. Current Position: Professor of Economics, Bocconi University, Milan, Italy.
- Ph.D. 2005 Francesca Francavilla, "Investment in Education versus Early Entry in the Labour Market in Developing Countries." Ph.D. in Development Economics, University of Florence, Italy. Current Position: Research Fellow, OCSE, Paris, France.
- Ph.D. 2002 Junni Zhang, "Causal Inference with Principal Stratification." Ph.D. in Statistics, Harvard University. Current Position: Associate Professor of Statistics and Econometrics, Beijing University, China.
- Ph.D. 2002 Michela Baccini, PhD in Applied Statistics, University of Florence, Italy. Current position: Associate Professor of Medical Statistics, University of Florence, Italy.

TEACHING AND SHORT COURSES

Undergraduate Courses

- 1998 present Statistics, Statistics for the Social Sciences, School of Political Science, University of Florence.
- 2015 Statistics 186 Statistical Methods for Evaluating Causal Effects, Harvard University.
- 2001 Statistics 100 Introduction to Quantitative Methods, Harvard University.

1997 - 2000Statistical Decision Theory (BA programme in Statistics), Faculty of Economics, University of Florence. 1994 - 1998Statistics I, Statistics II, Econometrics I (BA programme in Statistics), Faculty of Economics, University of Florence. Graduate Courses and International Schools Statistical Inference, Causal Inference and Program Evaluation, University of Florence, 1996 – present Master and PhD programmes in Statistics. 2019 Atlantic Causal Inference Conference, Montreal, Canada. Pre-conference course: Bayesian Causal Inference. 2018 4th Annual Advanced Workshop on Research Design for Causal Inference, Northwestern Pritzker School of Law, Chicago, IL. 2nd "Giovanni Anania" Summer School on Evidence-Based Policy Making, University of Calabria, Arcavacata di Rende. European Causal Inference Meeting, Florence, Italy. Pre-conference course: Theory and Practice of Principal Stratification Analysis. 2017 Statistics 286 – Causal Inference and Program Evaluation, Harvard University. 3rd ARCO Summer School, Methods for Program Evaluation, LISER, Luxembourg 2016 Atlantic Causal Inference Conference, New York, NY. Pre-conference course: Principal stratification. 2nd ARCO Summer School, Methods for Program Evaluation, Florence. 2015 Statistics 286 — Theory and Practice of Principal Stratification Analysis, Harvard University. Causal Inference in Epidemiology and applications to Environmental Health, Summer School, University La Sapienza, Rome. ARCO Summer School, Methods for Program Evaluation, Florence. 2012 Theory and practice of program evaluation, Short Course, CEPS/INSTEAD, Luxembourg. Issues and Methods for the Evaluation of Public Policies, Summer School, University of Naples "Federico II", Naples. 2011 Statistical Methods for Causal Effects, Short Course, University of Helsinki. 2009 Causal Inference, Bocconi University, Milan. 2007 Missing data in Statistical Practice, Applied Statistics Week, University Pompeu Fabra, Barcelona. Duration Models in Population Studies, School of the Italian Statistical Society, Flo-2002 Statistical Models for the Analysis of Educational Processes, School of the Italian Statistical Society, Florence. 2001 Statistics 214-Causal Inference, Harvard University.

Quantitative Methods (MA programme in Economics), University of Leicester.

1994

OTHER PROFESSIONAL ACTIVITIES

2020	Member of the Organizing Committee of the Online Causal Inference Seminar
	https://sites.google.com/view/ocis/home?authuser=0
2018-2019	Member of the Scientific International Program Committee, 30th International Biometric Conference 2020, Seoul, Korea.
2018-2019	Member of the Scientific Program Committee, International Conference for Health Policy Statistics 2020, San Diego, CA.
2018-2022	Scientific Director - DiSIA, Fondo del Ministero dell'Istruzione, dell'Universita' e della Ricerca destinato a strutture di ricerca di eccellenza.
2018	Head of the Organizing and Scientific Committee, European Causal Inference Meeting EuroCIM, Florence, Italy.
2013 - 2014	Member of the National Committee for "Abilitazione Scientifica Nazionale - ASN" for Statistics.
2003 - 2010	Member of the Ethical Committee for Pharmaceutical Experimentation (Comitato Etico Sperimentazione Farmaci) of the Arezzo Health Agency, Italy.
2013	Member of the Programme Committee, Fifth Italian Congress of Econometrics and Empirical Economics, CIDE, Genova, Italy.
2012	Member of the Programme Committee, Meeting of the Italian Statistical Society 2012, Member of the Programme Committee, Rome, Italy.
2011	Consultant for Istituto Regionale Programmazione Economica della Toscana (IRPET) for the analysis and evaluation of industrial and social policies in Tuscany, Italy.
2010	Member of the Programme Committee, Fourth Italian Congress of Econometrics and Empirical Economics, CIDE, Pisa, Italy.
2009	Member of the Programme Committee, CLADAG 2009 — Seventh Scientific Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society, Catania, Italy.
2009	Member of the Programme Committee, Statistical Methods for the analysis of large datasets, Italian Statistical Society, Pescara, Italy.
2008	Member of the Programme Committee, International Conference on Health Policy Statistics, Philadelphia, USA.
2007	Short Term Consultant, The World Bank, April-June.
2005	Member of the Programme Committee, First Italian Congress of Econometrics and Empirical Economics, CIDE, Venezia, Italy.
2000	Member of the Organizing Committee, Scientific Meeting of the Italian Statistical Society, Florence, Italy.
2003-2004	Research consultant, UCW (Understanding Children's Work), an ILO, UNICEF, and the World Bank inter-agency research project.
2003 - 2008	Research consultant, $\textit{Multiple Imputation of AVA Clinical Trials}$, Centers for Disease Control and Prevention (CDC).

Membership in Professional Societies: Italian Statistical Society (Società Italiana di Statistica, SIS), American Statistical Association (ASA), Econometric Society, International Society for Bayesian Analysis (ISBA), International Biometric Society (IBS).

FUNDING

1998 - 2000

2016 - 2018	Design and analysis of experimental and observational studies for decision-making in epidemiological, socio-economic, environmental and technological sciences, Progetto strategico di ricerca di base, University of Florence, (Fabrizia Mealli as PI).
2014 - 2016	Bayesian Inference for Causal Effects in Experimental and Observational Studies, PRIN 2012 grant, Italian Ministry of Research and Higher Education, (Fabrizia Mealli as PI).
2013 - 2015	Mixture and latent variable models for causal inference and analysis of socio-economic data FIRB 2012 grant, Italian Ministry of Research and Higher Education, (with Alessandra Mattei as local PI and Francesco Bartolucci, University of Perugia, as PI and coordinator).
2011 - 2014	Towards proper estimation of drug effectiveness: application of causal models to control for confounding, Research project financed by the Academy of Finland, with Risto Huupponen, University of Turku, as PI.
2010 - 2011	Statistical methods for the evaluation of educational processes MIUR-COFIN 2009 grant, Italian Ministry of Research and Higher Education, (with Carla Rampichini).
2010	Analysis and evaluation of financial aids to $R \ \ \ \ \ \ $ D investments. Istituto Regionale di Programmazione Economica Toscana (IRPET) funded project.
2006	Analysis and evaluation of financial aids to Tuscan artisan firms. Istituto Regionale di Programmazione Economica Toscana (IRPET) funded project.
2005 - 2007	Statistical methods for the evaluation of educational, training, and development policies. MIUR-COFIN 2005 grant, Italian Ministry of Research and Higher Education, (with Enrico Rettore).
2004 - 2006	Poverty and Fertility Dynamics in Developing Countries. European Science Foundation (ESF) funded research network (European Collaborative Research Projects in the Social Sciences) (with Arnstein Aassve)
2003 - 2005	Causal inference and graphical models. MIUR-COFIN 2003 grant, Italian Ministry of Research and Higher Education (with Fabio Corradi).
2003	Evaluation of Italian Student Aid Policies. Research project funded by the Italian Ministry of Education and IRPET (with Carla Rampichini).
2002 - 2003	Temporary work agencies as a springboard toward permanent employment. Italian Ministry of Welfare grant, (with Andrea Ichino and Tommaso Nannicini). Evaluation of Regional and State Aids to Firms (LR27). IRPET funded project.

INVITED TALKS AND PRESENTATIONS (selection)

Assessing causal effects in the presence of treatment switching through principal stratification, *CMStatistics 2018*, Pisa, Italy.

Evaluating power plant regulations with methods for causal inference on bipartite networks with interference, Invited session, $Joint\ Statistical\ Meetings$, Vancouver, Canada.

Evaluation of Regional Vocational Training Programmes. IRPET funded project.

2017 Beyond Noncompliance: Assessing Causal Effect Heterogeneity in Longitudinal Studies Using Principal Stratification, Invited speaker, Conference on Causal Inference in Longitudinal Studies, Columbia University, NY. Beyond noncompliance: causal inference with intermediate variables using principal stratification, Keynote speaker, UK Causal Inference Meeting, Essex, UK. 2016 Bayesian Causal Inference, Keynote speaker, BAYSM, Florence, Italy. Principal Stratification and Types of Mediation, Invited session, Atlantic Causal Inference Conference, New York, NY. Bayesian Inference for Regression Discontinuity Designs, UK Causal Inference Meeting, London, UK. 2015 Bayesian Analysis of Clustered Randomized Experiments, Invited talk, NESS, University of Connecticut, CT. Analysis of Clustered Randomized Experiments with Interference, Keynote speaker, Social and labour market policy evaluation with administrative data, LISER, Luxembourg. 2014 Bayesian Inference for Sequential Treatments under Latent Sequential Ignorability, Invited talk, Atlantic Causal Inference Conference, Providence, RI. 2013 The role of secondary outcomes and covaraites in causal studies with intermediate variables, Invited talk, Joint Statistical Meetings, Montreal, Canada. 2012 Bayesian causal analysis with multiple outcomes, Invited talk, ISBA 2012 World Meeting, Kyoto, Japan. Identification of causal effects in the presence of nonignorable missing outcome values, Invited talk, Joint Statistical Meetings, San Diego, California. 2011 Using Secondary Outcomes and Covariates to Sharpen Inference in Instrumental Variable Settings 7th IZA Conference on Labor Market Policy Evaluation, Harvard University, Institute for Quantitative Social Science (IQSS). Augmented Designs to Assess Principal Strata Direct Effects, Invited talk, Joint Statistical Meetings, Miami, Florida. 2009 Living Standards and Fertility in Indonesia: A Bayesian analysis, 3rd Italian Congress of Econometrics and Empirical Economics, Ancona, Italy. Evaluating Multiple Imputation Procedures using Simulations in a Bayesian Prospective, 2009 Joint Statistical Meetings, American Statistical Association, Washington D.C. Living Standards and Fertility in Indonesia: A Bayesian analysis, 64th European meeting of the Econometric Society, Barcelona, Spain. Evaluating the effect of training on wage in the presence of noncompliance and missing outcome data, 64th European meeting of the Econometric Society, Barcelona, Spain. 2008 Exploiting instrumental variables in causal inference with nonignorable outcome nonre-

sponse, 63th European meeting of the Econometric Society, Milan, Italy.

Arcavacata di Rende, Italy.

Evaluating Direct and Indirect Effects in a Non-Experimental Setting Using Principal Stratification. An Application, XLIV Scientific Meeting of the Italian Statistical Society,

2007 Finding alternative sources of identification in generalized selection models using principal stratification. Invited Presentation. Causal Effects in Economics, Uppsala. 2005 The effect of university studies on job opportunities: an application of the principal strata approach to causal inference. 25th European Meeting of Statisticians, Oslo. Multiple Imputation by Ordered Monotone Blocks: The case of the Anthrax Vaccine Clinical Trial, Invited Talk, 6th International Conference on Health Policy Research, Boston, MA. 2004 Analysis of the effect of the degree programs by means of principal stratification, XLII Scientific Meeting of the Italian Statistical Society, Bari, Italy. Decision oriented evaluation, Invited Presentation. XLII Scientific Meeting of the Italian Statistical Society, Bari, Italy. Assessing the Effect of a Teaching Program on Breast Self-Examination in a Randomized Trial with Noncompliance and Missing Data. 19th International Workshop on Statistical Modeling, Florence, Italy. Impact evaluation of University grants, 2002 Joint Statistical Meetings, American Statistical Association, New York. 2001 Assumptions when Analyzing Randomized Experiments with Noncompliance and Missing Outcomes, Invited Presentation, International Conference on Health Policy Research, Boston, MA. Impact evaluation of University grants, Intermediate Scientific Meeting of the Italian Statistical Society, Tor Vergata, Roma, Italy. 2000 Identifiability of Causal Relationships in Non-Experimental Studies: Some Case Studies, Invited Presentation. XL Scientific Meeting of the Italian Statistical Society, Florence, Italy. 1998 Three score tests for binary response random effect models, XXXIX Scientific Meeting of Italian Statistical Society, Sorrento, Italy. 1996 Modelli dinamici lineari: un approccio semiparametrico, XXXVIII Scientific Meeting of Italian Statistical Society, Rimini, Italy. 1995 Nonparametric specification of error terms in dynamic models Second International Workshop on Bayesian Robustness Rimini. 1993 Duration and completion of university studies amongst Italian undergraduates: individual choice and education policy, International Statistical Institute, 49th session, Florence, Italy.