

CURRICULUM VITAE

Andrea Gloria Rotnitzky, Ph.D.

1/24/2023

1. Biographical Information

Address: Department of Biostatistics
Hans Rosling Center for Population Health
3980 15th Avenue NE
Box 351617
Seattle, WA 98195-1617
United States,
Phone: 206-616-2721
E-mail: arotnitz@uw.edu

2. Education

- University of Buenos Aires, Buenos Aires, Argentina, Licentiate in Mathematics, 1982, with honors.
- University of California at Berkeley, Master of Arts, Statistics, 1986
- University of California at Berkeley, Ph.D., Statistics, 1988

3. Professional Positions

- Postdoctoral Research Fellow, Department of Biostatistics, Harvard T. H. Chan School of Public Health, 1988-1989,
- Assistant Professor, Department of Biostatistics, Harvard T. H. Chan School of Public Health, 1989-1995,
- Associate Professor, Department of Biostatistics, Harvard T. H. Chan School of Public Health, 1995-2000,
- Senior Lecturer, Department of Biostatistics, Harvard T. H. Chan School of Public Health, 2000-2005,
- Visiting Professor, Department of Economics, Universidad Torcuato Di Tella, Buenos Aires, Argentina, 2000-7/2005,
- Adjunct Professor, Department of Economics, Universidad Torcuato Di Tella, Buenos Aires, Argentina, 8/2000-present,
- Associate Professor, Department of Economics, Universidad Torcuato Di Tella, Buenos Aires, Argentina, 8/2000-12/2005,
- Professor, Department of Economics, Universidad Torcuato Di Tella, Buenos Aires, Argentina, 11/2005-12/2022,
- Principal Researcher, Consejo de Investigaciones Cientificas y Tecnicas, Argentina, 1/2012-present (on leave).

4. Honors, Awards, Scholarships

- Teaching Award, Department of Statistics, University of California, Berkeley, 1987
- Mellon Foundation Faculty Development Award, Harvard T. H. Chan of Public Health, 1991
- Outstanding Reviewer Award, Journal of Educational and Behavioral Statistics, 2008

- The Bliss of the Commons Award for Outstanding Service to Institutional Development, Di Tella University, 2021
- The Rousseeuw prize of Statistics, King Boudeain Foundation, Belgium, 2022

5. Professional Activities (outside of UW)

- Associate Editor
 - Biometrics (1998-2000),
 - Bernoulli (1999-2000),
 - Annals of Statistics (2007-2008),
 - Journal of Causal Inference (2011- 2022),
 - Statistical Science (2012-2014) (Guest associate editor),
 - Journal of the American Statistical Association (2014-2017 and 2020 -2022)
- Manuscript reviewer for
 - Annals of Statistics, Bernoulli, Journal of the American Statistical Association, Journal of the Royal Statistical Society series B and C, Biometrika, Biometrics, Statistics in Medicine, Journal Multivariate Analysis, Statistical Science, Biostatistics, Statistics and Probability Letters, Restat, Journal of Business and Economic Statistics, Scandinavian Journal of Statistics, Canadian Journal of Statistics, Journal of Statistical Planning and Inference, Metrika, Statistica Sinica, Lifetime Data Analysis, Journal of Educational and Behavioral Statistics, Journal of Statistical Computation and Simulation, International Statistical Review, Biometrical Journal, Medical Care, Computational Statistics and Data Analysis
- Professional Societies
 - Member, Institute of Mathematical Statistics
 - Member, American Statistical Association
- International Consortiums
 - Member, STRATOS (STRengthening Analytical Thinking for Observational Studies) International Initiative. 2015-2017
- Oversight Committees
 - Member, US National Academies of Sciences CNSTAT Oversight Committee for guidelines on Handling Missing Data in Clinical Trials, 2009-2010.
- Governing Boards
 - Member and Secretary, Honorary Academic Committee of Di Tella University. 2010-present.

- Scientific Review Committees
Member, Review Committee in Mathematics and Statistics, Consejo Nacional de Ciencia y Técnica and the Agencia Nacional de Promoción Científica y Tecnológica, Argentina, 2012
- Project reviewer
Consejo Nacional de Ciencia y Técnica, Argentina, 2008- present.
Agencia Nacional de Promoción Científica y Tecnológica, Argentina, 2008-present.
US National Science Foundation, 2013
Swiss National Science Foundation, 2021
- Visiting Scholar positions
Simons Institute for Computing, University of California at Berkeley, 1/2022-5/2022.

Bibliography

Refereed research articles

1. **Rotnitzky, A.** and Jewell, N.P. (1990). "Hypothesis testing of regression parameters in semiparametric generalized linear models for cluster correlated data." *Biometrika*, 77, 485-497.
2. Su, J., **Rotnitzky, A.**, Burge, A., and Spengler, J. (1992). "Examination of fungi in domestic interiors by factor analysis: Correlations and associations with home factors." *Journal of Applied and Environmental Microbiology*, 58, 181-186.
3. Gold, D., **Rotnitzky, A.**, Damokosh, A., Ware, J., Speizer, F., Ferris, B., Jr. (1993). "Race and gender differences in respiratory illness prevalence and their relationship to environmental exposures in children 7 to 14 years of age." *American Review of Respiratory Disease*, 148, 10-18.
4. Fitzmaurice, G., Laird, N., and **Rotnitzky, A.** (1993). "Regression models for discrete longitudinal responses." *Statistical Science*, 8, 284-309.
5. Watanabe, H., Hu, H. and **Rotnitzky A.** (1994) Correlates of bone and blood lead levels in carpenters. *American Journal of Industrial Medicine*, 26: 255-264.
6. Robins, J., **Rotnitzky, A.** and Zhao, L.P. (1994) Estimation of regression coefficients when some regressors are not always observed. *Journal of the American Statistical Association*, 89: 846-866.
7. **Rotnitzky, A.** and Wypij, D. (1994). "A note on the bias of estimators with missing data." *Biometrics*, 50, 1163-1170.
8. Hu, H., Watanabe, H., Payton, M., Korrick, S., and **Rotnitzky, A.** (1994) "The relationship between bone lead and hemoglobin." *Journal of the American Medical Association*, 272, 1512-1517.
9. Hu, H., Aro, A. and **Rotnitzky, A.** (1995) Bone lead measured by X-ray fluorescence: Epidemiological methods and a new biomarker. *Environmental Health Perspectives*, 103:(suppl.1) 105-100.
10. Robins, J., **Rotnitzky, A.** and Zhao, L.P. (1995). "Analysis of semiparametric regression models for repeated outcomes under the presence of missing data." *Journal of the American Statistical Association*, 90,106-121.
11. Robins, J. and **Rotnitzky, A.** (1995). "Semiparametric efficiency in multivariate regression models with missing data." *Journal of the American Statistical Association*, 90, 122-129.
12. **Rotnitzky, A.** and Robins, J. (1995). "Semiparametric estimation of models for means and covariances in the presence of missing data." *Scandinavian Journal of Statistics*, 22, 323-334.

13. Colditz, G.A., Willett, W.C., **Rotnitzky, A.**, and Manson, J.E. (1995). "Weight gain as a risk factor for clinical diabetes in women." *Annals of Internal Medicine*, 122, 481-486.
14. **Rotnitzky, A.** and Robins, J. (1995). "Semiparametric regression estimation in the presence of dependent censoring." *Biometrika*, 82, 805-820.
15. Kim R, Aro A, **Rotnitzky A**, Amarasiriwadena C, and Hu H. (1995) X-ray fluorescence measurements of bone lead concentration: The analysis of low-level data. *Physics in Medicine and Biology*, 40:1475-1485.
16. Kim R., Hu H., **Rotnitzky A.**, Bellinger D., and Needleman H. (1995) Chronic lead exposure and physical growth parameters in a 13-year follow-up study. *Environmental Health Perspectives*, 103:952-957
17. Hu H, Payton M, Korrick S, Sparrow D, Weiss ST, Aro A, **Rotnitzky A.** (1996). Determinants of bone and blood lead levels among community exposed middle aged to elderly men, The Normative Aging Study. *American Journal of Epidemiology*; 144:749-759.
18. Proctor SP, **Rotnitzky A**, Sparrow D, Weiss S and Hu H. (1996). The relationship of blood lead and dietary calcium to blood pressure in the normative aging study. *International Journal of Epidemiology*; 25:528-536.
19. Hu, H., Aro, A., Payton, M., Korrick, S., Sparrow, D., Weiss, S.T., and **Rotnitzky, A.** (1996). "The relationship of blood and bone lead to hypertension among middle-aged to elderly men." *Journal of the American Medical Association*, 275, 1171-1176.
20. Kim, R., **Rotnitzky, A.**, Sparrow, D., Weiss, S., and Hu, H. (1996) "Longitudinal study of low-level lead exposure and renal function in the normative aging study." *Journal of the American Medical Association*, 275, 1177-1181.
21. Kawachi, I. Troisi, R.J., **Rotnitzky, A.**, Coakley, E.H., and Colditz, G.A. (1996). "Can physical activity minimize weight gain in women after smoking cessation?" *American Journal of Public Health*, 86, 999-1004.
22. Kim R, Hu H, **Rotnitzky A**, Bellinger D, and Needleman H. (1996). Longitudinal relationship between dentin lead levels in childhood and bone lead levels in young adulthood. *Archives of Environmental Health*, 1996; 51:375-382.
23. Kim, R., Landrigan C, Mossman P., **Rotnitzky, A.**, Sparrow, D., and Hu, H. (1997). "Longitudinal relationship between bone lead and blood lead levels in community-exposed men." *American Journal of Epidemiology*, 146, 586-591.
24. **Rotnitzky, A.** and Robins, J. (1997). "Analysis of semiparametric regression models with non-ignorable non-response." *Statistics in Medicine*, 16, 81-102.
25. **Rotnitzky, A.**, Holcroft, C. and Robins, J. (1997). "Efficiency Comparisons in Multivariate Multiple Regression with Missing Outcomes." *Journal of Multivariate Statistics*, 61, 102-128.
26. Holcroft, C., **Rotnitzky, A.** and Robins, J. (1997). "Efficient estimation of regression parameters from multistage studies with validation of outcomes and covariates." *Journal of Statistical Planning and Inference*, 65, 349-374.
27. **Rotnitzky, A.**, Robins, J. and Scharfstein, D. (1998). "Semiparametric regression for repeated outcomes with non-ignorable non-response." *Journal of the American Statistical Association*, 93, 1321-1339.
28. Korrick, S., Hunter, D., **Rotnitzky, A.**, Hu, H., and Speizer, F. (1999). "Lead and hypertension in a sample of middle-aged women." *American Journal of Public Health*, 89, 330-335.
29. Scharfstein, D., **Rotnitzky, A.**, and Robins, J. (1999). "Adjusting for non-ignorable drop-out using semiparametric drop-out models." Special Invited Paper of the *Journal of the American Statistical Association*, 94, 1096-1120.

30. **Rotnitzky, A.**, Cox, D.R., Bottai, M. and Robins, J. (2000). "Likelihood based inference with singular information matrix." *Bernoulli*, 6, 243-284.
31. **Rotnitzky, A.**, Scharfstein, D., Su, T.L. and Robins, J. (2000). "Methods for conducting sensitivity analysis of trials with possibly non-ignorable competing causes of censoring." *Biometrics*, 57, 111-121.
32. Scharfstein, D., Robins, J., Eddings, W. and **Rotnitzky, A.** (2001) "Inference in Randomized Studies with Informative Censoring and Discrete Time-to-Event Endpoints." *Biometrics*; **57(2)**:404-413.
33. Schisterman E, **Rotnitzky, A.** (2001) Estimation of the mean of a K-sample and U-statistic with missing outcomes and auxiliaries. *Biometrika*; **88**:713-725.
34. Birmingham, J., **Rotnitzky, A.**, and Fitzmaurice, G. (2003) "Pattern-mixture and selection models for analyzing monotone missing data" *Journal of the Royal Statistical Society, Series B*; 65, 275-297.
35. Robins, J. and **Rotnitzky, A.** (2004) "Estimation of Treatment Effects in Randomised Trials with Noncompliance and a Dichotomous Outcome using Structural Mean Models." *Biometrika*; 91:763-783.
36. **Rotnitzky, A.**, Faraggi, D. and Schisterman, E. (2006). "Doubly-robust estimation of the area under the receiver operating characteristic curve in the presence of verification bias". *Journal of the American Statistical Association*: 101, 1276-1288.
37. Shepherd, B., Gilbert, P., Jemai, Y. and **Rotnitzky, A.** (2006). "Sensitivity Analyses Comparing Outcomes Only Existing in a Subset Selected Post-Randomization, Conditional on Covariates, with Application to HIV Vaccine Trials". *Biometrics*: 62, 332-342
38. **Rotnitzky, A.**, Farall, A., Bergesio, A. and Scharfstein, D. (2007) Analysis of failure time data under competing censoring mechanisms. *Journal of the Royal Statistical Society, Series B*: 69, 307-327
39. Jemai, Y., **Rotnitzky, A.**, Shepherd, B., Gilbert, P. (2007). "Semiparametric Estimation of Treatment Effects Given Baseline Covariates on an Outcome Existing Only if a Post-Randomization Event Occurs". *Journal of the Royal Statistical Society, Series B*: 69, 879-901.
40. Vansteelandt, S., **Rotnitzky, A.** and Robins, J. (2007) "Estimation of regression models for the mean of repeated outcomes under non-ignorable non-monotone non-response". *Biometrika*. 94: 841-860.
41. Robins, J., **Rotnitzky, A.** and Vansteelandt, S. (2007). Discussion of "Principal stratification designs to impute data missing due to death", by Frangakis, C., Rubin, D., An, M-W and MacKenzie, Ellen. *Biometrics*, 63: 650-653.
42. Robins, J., Orellana, L. and **Rotnitzky, A.** (2008). Estimation and extrapolation of optimal treatment and testing strategies. *Statistics in Medicine*. 27(23):4678-721
43. **Rotnitzky, A.**, Bergesio, A, and Farall, A. (2009). Analysis of Quality of Life Adjusted Failure Time Data in the Presence of Competing, Possibly Informative, Censoring Mechanisms. *Lifetime Data Analysis*. 15, pp. 1:25.
44. Page, J. and **Rotnitzky, A.** (2009). Estimation of the disease-specific diagnostic marker distribution under verification bias. *Computational Statistics and Data Analysis*.53 (3): 707-717.
45. Fluss, R., Reiser, B., Faraggi, D. and **Rotnitzky, A.** (2009). Estimation of the ROC Curve under verification bias. *Biometrical Journal*. 51 (3): 475-490.
46. Tchetgen Tchetgen, E., Robins, J. and **Rotnitzky, A.** (2010). On doubly robust estimation in a semiparametric odds ratio model. *Biometrika*. 97(1):171-180.
47. Orellana, L., **Rotnitzky, A.** and Robins, J. (2010). Dynamic Regime Marginal Structural Mean Models for Estimation of Optimal Dynamic Treatment Regimes, Part I: Main Content. *The*

International Journal of Biostatistics: Vol. 6 : Iss. 2, Article 8. DOI: 10.2202/1557-4679.1200
<http://www.bepress.com/ijb/vol6/iss2/8>

48. Orellana, L., **Rotnitzky, A.** and Robins, J. (2010). Dynamic Regime Marginal Structural Mean Models for Estimation of Optimal Dynamic Treatment Regimes, Part I: Proofs of Results. *The International Journal of Biostatistics* Vol. 6 : Iss. 2, Article 9. DOI: 10.2202/1557-4679.1242
<http://www.bepress.com/ijb/vol6/iss2/9>
49. Wang, L., **Rotnitzky, A.** and Lin, X. (2010) Nonparametric Regression with Missing Outcomes Using Weighted Kernel Estimating Equations. *Journal of the American Statistical Association*. 1135-1146
50. **Rotnitzky, A.**, Li, L., Li, X. (2010). A note on overadjustment in inverse probability weighted estimation. *Biometrika*. 98. 171-180
51. Tchetgen Tchetgen, E., **Rotnitzky, A.** (2011). "Double-Robust Estimation of an Exposure-Outcome Odds Ratio Adjusting for Confounding in Cohort and Case-control Studies". *Statistics in Medicine* . 30, pp 335–347
52. Tchetgen Tchetgen, E., **Rotnitzky, A.** (2011). On protected estimation of an odds ratio model with missing binary exposure and confounders. *Biometrika*. 98, pp 749-754
53. **Rotnitzky, A.**, Lei, Q., Sued, M. y Robins, J. (2012). Improved double-robust estimation in missing data and causal inference models. *Biometrika*. 99, pp. 439-456.
54. Wang, L., **Rotnitzky, A.**, Lin, X., Millikan, R., and Thall, P. (2012). Evaluation of Viable Dynamic Treatment Regimes in a Sequentially Randomized Trial of Advanced Prostate Cancer. *Journal of the American Statistical Association (with Discussion)*, 107 (498), 493-508.
55. Roderick J Little, Ralph D'Agostino, Michael L Cohen, Kay Dickersin, Scott S Emerson, John T Farrar, Constantine Frangakis, Joseph W Hogan, Geert Molenberghs, Susan A Murphy, James D Neaton, Andrea **Rotnitzky**, Daniel Scharfstein, Weichung J Shih, Jay P Siegel, Hal Stern. (2012). The prevention and treatment of missing data in clinical trials. *New England Journal of Medicine*. 367, (14), pp. 1355-1360.
56. Haneuse, S. and **Rotnitzky, A.** (2013). Estimation of the effect of interventions that modify treatment. *Statistics in Medicine*. 32 (30), p.p. 5260-5277
57. Gilbert, P., Yu, L., **Rotnitzky, A.** (2014). Optimal auxiliary-covariate-based two-phase sampling design for semiparametric efficient estimation of a mean or mean difference, with application to clinical trials. *Statistics in Medicine*. 33, 6, pp. 901–917
58. Richardson, T. and **Rotnitzky, A.** (2014). Causal Etiology of the Research of James M. Robins. *Statistical Science*. 29 (4), 459-484
59. Robins, J.M. and **Rotnitzky, A.** (2014). Discussion of "Dynamic treatment regimes: Technical challenges and applications". *Electronic Journal of Statistics*. 8, 1273-1289.
60. Ogburn, E., **Rotnitzky, A.** and Robins, J. (2015). Doubly robust estimation of the local average treatment effect curve. *Journal of the Royal Statistical Society, Series B*. 77, 2, pp. 373-396.
61. Scharfstein, D., **Rotnitzky, A.**, Abraham, M., McDermott, A., Chaisson, R. and Geitner, L. (2015) On the analysis to tuberculosis studies with intermittent missing sputum data. *Annals of Applied Statistics*. 9, 4, 2215-2236. DOI: 10.1214/15-AOAS860
62. Molina, J., **Rotnitzky, A.**, Sued, M. and Robins, J.M. (2017). Multiple robustness in factorized likelihood models. *Biometrika*. Vol 104, 3, pp. 561–581
63. Babino, L., **Rotnitzky, A.** y Robins, J. (2019). Multiple robust estimation of marginal structural models for unconstrained outcomes. *Biometrics*. Vol 75-1, pp. 90-99

64. **Rotnitzky, A.**, Smucler, E. (2020). Efficient Adjustment Sets for Population Average Causal Treatment Effect Estimation in Graphical Models. *Journal of Machine Learning Research*. 21(188):1–86
65. **Rotnitzky, A.**, Smucler, E. y Robins, J. (2021). Characterization of parameters with a mixed bias property. *Biometrika*. Vol 108, 1, pp 231–238
66. Liu, L., Shahn, Z., Robins, J., **Rotnitzky, A.** (2021) Efficient estimation of optimal regimes under a no direct effect assumption. *Journal of the American Statistical Association*. 116 (533), 224-239.
67. Smucler, E., Sapienza, F. and **Rotnitzky, A.** (2022). Efficient adjustment sets in causal graphical models with hidden variables. *Biometrika*. Vol 109, 1, pp 49–65.
68. Smucler, E. and **Rotnitzky, A.** (2022) A note on efficient minimum cost adjustment sets in causal graphical models. *Journal of Causal Inference*. Vol. 10, no. 1, 2022, pp. 174-189. <https://doi.org/10.1515/jci-2022-0015>

Other refereed scholarly publications

1. **Rotnitzky, A.** (1997). “Discussion of the paper ‘Inference for non-random samples by Copas, J.H. and Li, H.J.’” *Journal of the Royal Statistical Society, Series B*, 59, 55-95.
2. Robins, J.M. and **Rotnitzky, A.** (1997). “Discussion of the paper ‘Robust models in probability sampling’ by D. Firth and K. Bennett.” *Journal of the Royal Statistical Society, Series B*, 60, 41-56.
3. Robins, J., **Rotnitzky, A.**, and Van der Laan, M. (2000). Discussion of the Paper ‘On Profile Likelihood’ by S. Murphy and A. van der Vaart. *Journal of the American Statistical Association*, 95, 477-482.
4. Robins, J., **Rotnitzky, A.** and Bonetti, M. (2001) Discussion of the paper by Frangakis, C. and Rubin, D. “A note on addressing an idiosyncrasy in estimating survival curves using double-sampling in the presence of self-selected right censoring.” *Biometrics*; **57**:343-347.
5. Robins, J., **Rotnitzky, A.** (2001) Discussion of a paper by Peter Bickel and Jaimyoung Kwon. *Statistica Sinica*, 2001; **4**: 920-936.
6. Robins, J., Hernan, M. and **Rotnitzky, A.** (2007). “Effect modification by time varying covariates”. Discussion of “History-Adjusted marginal structural models to estimate time-varying effect modification”, by Petersen M, Deeks S, Martin J, van der Laan M. *American Journal of Epidemiology* , 166: 994-1002
7. Robins, J. M., Sued, M., Quanhong-Gomez, L. and **Rotnitzky, A.** (2007). Performance of double-robust estimators when inverse probability weights are highly variable. Discussion of the paper by Kang, J. and Shafer, J., *Statist. Sci.* 22, 544–59.

Book Chapters

1. Robins, J. and **Rotnitzky, A.** (1992). “Recovery of information and adjustment for dependent censoring using surrogate markers.” in *AIDS Epidemiology*; N.P. Jewell, K. Dietz and B. Farewell, eds. Birkhauser, Boston.
2. Lefkopoulou, M., **Rotnitzky, A.**, and Ryan, L. (1994). “Trend tests for clustered data.” in *Statistics in Toxicology*; Byron Morgan, ed. Oxford University Press, pp. 179-197.
3. **Rotnitzky, A.** (1998). “Efficiency and Efficient Estimators.” *Encyclopedia of Biostatistics*, 2, 1286-1292.
4. Robins, J., **Rotnitzky, A.**, Scharfstein, D. O. (1999) Sensitivity analysis for selection bias and unmeasured confounding in missing data and causal inference models. In *Statistical Models for*

Epidemiology, the environment, and Clinical Trials. E. Halloran and D Berry, editors.; IMA Volume 116. NY, Springer-Verlag, pp.1-92.

5. **Rotnitzky, A.** and Robins, J. (2005) "Inverse Probability Weighted in Survival Analysis". *The Encyclopedia of Biostatistics*. Vol 4. pp. 2619-2625. Second Edition. Edited by Peter Armitage and Theodore Colton., 2004.
6. **Rotnitzky, A.** (2005). "On Semiparametric Inference". In *Celebrating Statistics in honour of Sir David Cox on his 80th birthday*. Edited by Anthony C. Davison, Yadolah Dodge and Nanny Wermuth. Oxford University Press.
7. **Rotnitzky, A.** (2008). Inverse Probability Weighted Methods. In *Longitudinal Data Analysis: A Handbook of Modern Statistical Methods*". Fitzmaurice, G., Davidian, M., Verbeke, G. and Molenberghs, G. editors. Chapman and Hall.
8. **Rotnitzky, A.** and Vansteelandt, S. (2014). Double robust methods. In *Handbook of Missing Data* Molenberghs, G; Fitzmaurice, GM; Kenward, MG; Tsiatis, AA; Verbeke, G; Chapman and Hall/CRC.

Other non-refereed published scholarly publications

1. Robins, J. and **Rotnitzky, A.** (2000). Estimation in missing data models. *Proceedings of the XXth International Biometrics Society Conference*, 2000; 2:153-162.
2. **Rotnitzky, A.** (2008). Review of *Semiparametric Theory and Missing Data*. by Tsiatis, A., Springer. *Biometrics*. Volume 65, Issue 1, March 2009, Pages: 326–328.
3. **Rotnitzky, A.** (2013). Review of Targeted Learning, by van der Laan, M. and Rose, S., Springer, 2011. *Biometrics*. Volume 69, Issue 1, March 2013, Page: 293.
4. **Rotnitzky, A.**, Robins, J. and Babino, L. (2017) On the multiply robust estimation of the mean of the g-functional. <https://arxiv.org/abs/1705.08582>
5. Smucler, E., **Rotnitzky, A.** and Robins, J. (2019) A unifying approach for doubly-robust ℓ_1 regularized estimation of causal contrasts. <https://arxiv.org/abs/1904.03737>
6. Robins, J., Sued, M., Lei-Gomez, Q., and **Rotnitzky, A.** (2020). Double-robust and efficient methods for estimating the causal effects of a binary treatment. <https://arxiv.org/abs/2008.0050>

6. Funding History

Past Funded Projects

R01 ES005257 01-05 "Epidemiology of Lead, Diet and High Blood Pressure" PI: Howard Hu
NIH-NIEHS Role: Collaborator % Effort: 15% Dates: 3/1991 – 12/1996

R01 AI032475 04-13 "Analytic Methods for HIV Treatment and Co-factor Effects" PI: J. Robins
NIH-NIAID Role: Co-Investigator % Effort: 15% - 30 % Dates: 6/1995 – 5/2005

R37 AI032475 14-23 "Analytic Methods for HIV Treatment and Co-factor Effects" PI: J. Robins
NIH-NIAID Role: Co-Investigator % Effort: 15% - 30 % Dates: 6/2005 – 3/2017

R29 GM048704 01-05 "Methods for Analyzing Longitudinal Data with Missingness" PI: A. Rotnitzky

S M S N L R Role: Principal Investigator % Effort: 50% Dates: 1/1994 – 12/1998

R01 GM048704 06-08 “Methods for Analyzing Health Studies with Missing Data” PI: A. Rotnitzky
S M S N L R X Role: Principal Investigator % Effort: 30-50% Dates: 1/1998 – 12/2001

R01 GM048704 09-11 “Methods for Analysis with Missing and Censored Data” PI: A. Rotnitzky
S M S N L R X Role: Principal Investigator % Effort: 30-50% Dates: 8/2002 – 7/2006

R01 AI051164 01-03 “Methods for Long-Term Follow-Up of HIV-Infected Patients” PI: V. Degruttola
NIH-NIAID Role: Co-Investigator % Effort: 15% Dates: 3/2002 – 2/2005

R01 GM048704 12-11 “Methods for Analysis with Missing and Censored Data and for Causal Inference” PI: A. Rotnitzky
S M S N L R X Role: Principal Investigator % Effort: 30-50% Dates: 8/2006 – 7/2012

Current Funded Projects

R37 AI029168 “Statistical Issues in Aids Research” PI: J. Hughes
S M S N F N I Role: Co Investigator % Effort: 20% Dates: 1/2023 – 4/2024

UM1 AI068635 “SDMC: HIV Vaccine Trials Network” PI: P. Gilbert
S M S N F N I ; Fred Hutchinson Cancer Cr Role: Co Investigator % Effort: 25% Dates: 1/2023 – 11/2027

7. Conferences and Symposiums

Selected invited Oral Presentations and Seminars (since 2005)

1. Primera escuela argentina de Matemática y biología. Córdoba, Argentina. December. 2005.
2. Primer Encuentro Regional de Probabilidad y Estadística. Buenos Aires, Argentina. November. 2005.
3. Segundo Encuentro Regional de Probabilidad y Estadística. Buenos Aires. Argentina. November. 2006.
4. Meeting of the Irish Biometrics Society. Dublin, Ireland, May 2007.
5. SAMSI summer research program on Challenges in Dynamic Treatment Regimes and Multistage Decision-Making. Chapel-Hill, North Carolina, June, 2007.
6. International conference on Robust Statistics, Buenos Aires, September, 2007
7. Joint Statistical Meetings of the American Statistical Association, Salt Lake City, Utah, August 2007.
8. Bocconi University, Dep. of Decision Sciences, Milan, Italy, December 2007.
9. Reunión anual de la Unión Matemática Argentina, Mendoza, Argentina, October 2008.
10. Congreso Monteiro. Bahía Blanca, Argentina, May 2009.
11. Special Workshop on Emerging Issues in the Analysis of Longitudinal Data. Banff, Alberta, Canada, August, 2009.
12. Joint Statistical Meetings of the American Statistical Association, Washington, D.C. August 2009.

13. Connecticut chapter of the American Statistical Association, University of Connecticut at Storrs, March, 2010.
14. University of Bologna, Buenos Aires branch, Symposium on Causal Inference. Buenos Aires, Argentina, July 2010.
15. European Meeting of Statisticians. Pireus, Greece, August 2010.
16. Reunión Anual de la Unión Matemática Argentina. Tandil, Argentina. October, 2010.
17. Congreso de la Sociedad Latinoamericana de Estadística, Viña del Mar, Chile. October, 2010
18. International Biometrics Society Meetings. Florianopolis, Brazil, December, 2010
19. Meeting of the Eastern North American Region of the Biometrics Society, Miami, March, 2011
20. Johns Hopkins University, Department of Biostatistics, Baltimore, MD, April, 2011.
21. Causal Inference in Health Research Conference organized by the Centre de Recherches Mathematiques, McGill University, Montreal, Canada. May 2011.
22. Annual Meeting of the Eastern American Region of the Biometrics Society, Washington, DC. March 2012
23. Time for Causality – Causal Inference and Dynamic Decisions in Longitudinal Studies, Bristol, UK. April 2012.
24. 33th Annual Conference of the International Society of Clinical Biostatistics. Bergen. Norway, August, 2012.
25. Atlantic Causal Inference Conference, Boston, MA. USA. May 2013.
26. Nordic-Baltic Biometrics Conference. Stockholm, Sweden, June, 2013
27. Universidad de Córdoba, FAMAf. CIEM Seminar series, Noviembre, 2013
28. D. R. Cox, 90th Birthday Celebration, Oxford, U.K., July, 2014
29. Meeting of the Eastern North American Region of the International Biometric Society, Austin, TX, March, 2016.
30. World meeting of the International Biometric Society, Victoria, Canada, July, 2016.
31. Big Data conference, Fundacion Gadea, Madrid, Spain, March, 2018
32. National Cancer Institute, seminar speaker, Bethesda, MD, September, 2018
33. European Causal Inference Meeting, Bremen, Germany, March 2019
34. Harvard University, Institute for Quantitative Social Sciences, Statistics Seminar. Boston, USA. September, 2019
35. University of Pennsylvania, Wharton School, Statistics Seminar, Philadelphia, USA. September 2019.
36. Columbia University, Biostatistics Seminar, Nueva York, USA. October 2019
37. Thirty-third Conference on Neural Information Processing Systems (NIPPS), Vancouver, Canada, December, 2019
38. "Causal Inference and Machine Learning". Virtual Satellite Invited Session of the 65th Annual Meeting of the German Association for Medical Informatics, Biometry and Epidemiology (GMDS), and the Meeting of the Central European Network (CEN: German Region, Austro-Swiss Region and Polish Region) of the International Biometric Society (IBS). (online) September, 2020
39. University of Michigan, Ann Arbor, Invited Seminar of the Biostatistics Department, (online) November, 2020
40. University of North Carolina at Chapel Hill, UNC Causal Inference Research Group Seminar, November, (online) 2020
41. Stanford University, Online Causal Inference Seminar, March, 2021
42. University of Pennsylvania, department of Biostatistics, Causal Inference Group. (online) April, 2021.
43. The Netherlands causal inference group, Leiden University. (online) May, 2021
44. 8th Causal Inference Workshop at Conference of Uncertainty in Artificial Intelligence, (online) July, 2021.
45. Congreso Latinoamericano de Matemáticos (CLAM). (online) September, 2021

46. Simons Institute, University of California, Berkeley. Causality Program Visitor Speaker Series, March, 2022
47. University of Washington, Seattle, department of Biostatistics, Invited Seminar, (online), April, 2022.
48. BIRS Conference on Emerging Challenges for Statistics and Data Sciences: Complex Data with Missingness, Measurement Errors, and High Dimensionality. Invited talk. Kelowna, British Columbia, Canada, May 2022.
49. Karolinska Institute, Stockholm, Biostatistics methods week invited talk. June, 2022.
50. Annual Meeting of the Institute of Mathematical Statistics, London, UK, Invited talk (online). June, 2022
51. Joint Statistical Meetings, Invited talk. Washington D.C. August, 2022
52. University of Leuven, Conference speaker at the Rousseeuw Prize in Statistics celebration, Leuven, Belgium, October, 2022.
53. Academia Nacional de Ciencias Economicas, Buenos Aires, Argentina, November 2023
54. Universidad de Buenos Aires, Departamento de Matematica, Buenos Aires, Argentina, November 2023

8. University Service

- | | |
|-------------------------------|---|
| 1989-2000 (alternating years) | Ph.D. Qualifying Exam Committee (chair) (Harvard T. H. Chan School .
of Public Health) |
| 1989-2000 (alternating years) | Curriculum Committee (member) (Harvard T. H. Chan School of Public .
Health) |
| 2002-2022 | Promotions Review Committee (Di Tella University) |

9. Teaching History

Courses taught at the Harvard T. H. Chan School of Public Health as primary instructor

- | | |
|--------------------|--|
| 1. Spring 1989-94. | BIO251 Statistical Inference I |
| 2. Spring 1995-97 | BIO 245 Multivariate Analysis |
| 3. Spring 1998-99 | BIO 251 Statistical Inference I |
| 4. Spring 2000. | BIO211 Regression & Analysis Variance in Experimental Research |
| 5. Spring 2002. | BIO274 Applied Stochastic Processes and Models in Public Health |
| 6. Spring 2003. | BIO235 Advanced Regression and Statistical Learning |
| 7. Spring 2004. | BIO288 Semiparametric Methods For The Analysis Of Missing And
Censored Data |
| 8. Spring 2004. | BIO235 Advanced Regression and Statistical Learning |
| 9. Spring 2005. | BIO288 Semiparametric Methods For The Analysis Of Missing And
Censored Data |
| 10. Spring 2005. | BIO235 Advanced Regression and Statistical Learning |
| 11. Spring 2006. | BIO250 Probability Theory and Applications II |
| 12. Spring 2007. | BIO250 Probability Theory and Applications II |
| 13. Spring 2008. | BIO291 Statistical Methods for Causality |
| 14. Spring 2010. | BIO251 Statistical Inference II |
| 15. Spring 2010. | BIO291 Statistical Methods for Causality |

- | | | |
|--------------------------|--------|-------------------------------------|
| 16. Spring 2011. | BIO251 | Statistical Inference II |
| 17. Spring2 2012. | BIO518 | Theory and Methods for Causality |
| 18. Spring1 2015. | BIO251 | Statistical Inference, part I |
| 19. Fall 1, 2016, 18, 20 | BIO256 | Theory and Methods for Causality I |
| 20. Fall 1, 2017, 19, 21 | BST257 | Theory and Methods for Causality II |

Courses taught at di Tella University as primary instructor

1. Spring 2001- 2022. Statistical Inference (Master's level)
2. Spring 2001- 2022. Introduction to Probability / Statistical Analysis (Undergraduate level, alternating years)
3. Spring 2004-2006. Semiparametric Theory
4. Spring 2007-2008 Sample Surveys

Other teaching activities as primary instructor

September 1991 .	Survival Analysis,	Centro Universitario de Salud . Publica, Madrid, Spain
June 1996 . .	The Analysis of Studies with Missing Data,	Department of Statistics and . Operations Research, Polytechnic University of Barcelona, Spain
June 1997 . .	Recent Developments in Biostatistics	World Health Organization, International Agency for Research on Cancer, Annecy, France
August 2008-12 . . .	Methods for Drawing Causal Conclusions from Observational Studies	Program for Spanish and Latin. America Researchers in Public . Health, Universidad Complutense at Harvard, Boston, MA
June 2009-13 . .	Causal Inference	Bioepi Summer School on Modern Methods in Biostatistics and . Epidemiology, Treviso, Italy.
May 2015 .	Lectures in Causal Inference.	University of Milano-Bicocca,. Department of Biostatistics.

10. Advising and Formal Mentoring

PhD Dissertations directed of Harvard T. H. Chan School of Public Health students as chair or co-chair

1991 Masahiro Takeuchi (co-chair with Prof. James Ware)

1995	Christina Holcroft (chair)
1997	Matteo Bottai (chair)
1998	Mary Morrisey (co-chair with Prof. Donna Spiegelman)
2001	Jolene Birmingham (co-chair with Prof. Nan Laird)
2004	John Page (co-chair with Prof. James Robins)
2005	Yannis Jemai (chair)
2007	Liliana Orellana (chair)
2008	Lu Wang (co-chair with Prof. Xihong Lin)
2012	Quanhong Lei-Gomez (co-chair with Prof. James Robins)
2012	Elizabeth Ogburn (co-chair with Prof. Tyler vanderWeele)

PhD Dissertations directed of University of Buenos Aires students as chair or co-chair

2015	Julieta Molina (co-chair with Prof. Mariela Sued)
2019	Lucia Babino (chair)