The Vita of Guido Wilhelmus Imbens

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Birthdate: September 3rd, 1963 Citizenship: Dual US/Netherlands
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Education: PhD., Economics, May 1991, Brown University, Providence, RI.

A.M., Economics, May 1989, Brown University, Providence, RI.

M. Sc. Economics and Econometrics, (with distinction), July 1986, The University of Hull, U.K.

Candidatum Exam, Econometrics, June 1983, Erasmus University Rotterdam, The Netherlands.

Propadeutical Exam, Econometrics, June 1982, Erasmus University Rotterdam, The Netherlands.

Professional Experience:

Professor of Economics, Harvard University, July 2006 - Present

Professor, Department of Economics, and Department of Agricultural and Resource Economics, University of California at Berkeley, January 2002 – June 2006

Visiting Professor, European University Institute, Florence, Italy, May/June 2000

Professor of Economics, University of California at Los Angeles, July 1997 – December 2001

Visiting Associate Professor, Arizona State University, December 1996 – June 1997

Associate Professor, Harvard University, July 1994 – June 1997

Assistant Professor, Harvard University, July 1990 – June 1994

Lecturer, Tilburg University, January 1989 – June 1990

Teaching and Research Assistant, Brown University, 1986–1989.

Research Officer, The University of Hull, 1985–1986.

Research Assistant, Erasmus University Rotterdam, 1983–1984.

Awards and Fellowships:

National Science Foundation grant SES 0961707 for 2010-2012

National Science Foundation grant SES 0820361 for 2008-2010

National Science Foundation grant SES 0452590 for 2005-2008

GEA Distinguished Teaching Award, Econ. Dept, UC Berkeley, 2002/3

National Science Foundation grant SES 0136789 for 2002-2005

Fellow, Econometric Society, 2002.

2001 Mitchell Prize for a paper in Bayesian Analysis for "Estimating the Effect of Flu Shots in a Randomized" Encouragement Design", Biostatistics, 2000.

National Science Foundation grant SBR 9818644 for 1999-2002

National Science Foundation grant SBR 9812057 for 1998-1999 (with Don Rubin).

Research Associate, National Bureau of Economic Research, 1998 – present.

National Science Foundation grant SBR 9511718 for 1995/96

Alfred P. Sloan Research Fellowship, 1995–98.

National Science Foundation grant SBR 9423018 for 1995-1997 (with Don Rubin).

Runner-up, Galbraith Teaching Award, Department of Economics, Harvard University, 1994–95.

Grant from the Institute for Research on Poverty, University of Wisconsin, Madison, 1994.

Milton Fund (Harvard University) grant for 1994

Clark Fund (Harvard University) grant for 1993/1994

Faculty Research Fellow, National Bureau of Economic Research, 1992 - 1998.

National Science Foundation grant No. 9122477 for 1992–1993 (with Tony Lancaster).

Invited Lectures: Laffont Lecture Econometric Society European Meetings, Barcelona, August, 2009

Econometric Society American Meetings, Boston, May 2009.

Otis Dudley Duncan Memorial Lecture, Annual Meetings of the American Sociological Association, Boston, August 2008.

Econometric Society World Congress, London, July 2005.

Short Courses:

- "What's New in Cross-section Econometrics," NBER, Cambridge, July 2007 (430 participants)
- "Applied Microeconometrics Workshop," Institute for Research on Poverty, Madison, Wisconsin, August 2008 (250 participants).
- "Cross-section Econometrics," Continuing Education Program, American Economic Association, January 2009 (180 participants).
- "Cross-section Econometrics,"
 Bureau of Economic Analysis, May 2009 (100 participants).
- "Cross-section Econometrics," CEMMAP Course, University College London, June 2009 (280 participants).
- "Cross-section Econometrics," Continuing Education Program, American Economic Association, January 2009 (150 participants).

Professional Activities:

Organizing Committee, Econometric Society World Congress, 2005.

Associate Editor, Econometrica, 2002 – Present.

Organizing Committee, Econometric Society Winter Meetings, 2004.

Organizing Committee, Econometric Society European Meetings, 2003.

NSF Panel for Economics, 2002 – 2003.

Organizing Committee, Econometric Society Winter Meetings, Boston, 2000.

Foreign Editor, Review of Economic Studies, 1998 – 2001.

Organizing Committee, Econometric Society Summer Meetings, Montreal, 1998.

Associate Editor, Journal of Econometrics, 1995 – 1998.

Member of Arnold Zellner thesis award committee, 1995.

Associate Editor, Journal of Business and Economic Statistics, 1995 – 2000.

Organizing Committee, Econometric Society Summer Meetings, Boston, 1993.

Publications: forthcoming

- "Optimal Bandwidth Choice for the Regression Discontinuity Estimator," with K. Kalyanaraman, forthcoming, *Review of Economic Studies*.
- "A Martingale Representation for Matching Estimators," with Alberto Abadie, forthcoming, *Journal of the American Statistical Association*.
- "Clustering, Spatial Correlations and Randomization Inference," with Thomas Barrios, Rebecca Diamond, and Michal Kolesar, forthcoming, *Journal of the American Statistical Association*.
- 2011 "Bias-Corrected Matching Estimators for Average Treatment Effects," with Alberto Abadie, *Journal of Business and Economic Statistics*, Vol 29 (1): 1-11.
- 2010 "Better LATE Than Nothing: Some Comments on Deaton (2009) and Heckman and Urzua (2009)," Journal of Economic Literature, Vol 48(2): 399-423.

- "An Economist's Perspective on Shadish (2010) and West and Thoemmes (2010)," *Psychological Methods*, Vol. 15(1): 47-55.
- "Estimation of the Conditional Variance in Paired Experiments," with Alberto Abadie, *Annales d'Economie et de Statistique*.
- 2009
- "Recent Developments in the Econometrics of Program Evaluation," with Jeffrey Wooldridge, *Journal of Economic Literature*, Vol 47(1), 5-86.
- "Dealing with limited overlap in estimation of average treatment effects," with Richard Crump, V. Joseph Hotz, and Oscar Mitnik, Biometrika Vol 96(1): 187-199.
- "Choosing instrumental variables in conditional moment restriction models," with Stephen Donald and Whitney Newey,

 Journal of Econometrics Vol. 152(1): 28-36.
- "Identification and Estimation of Triangular Simultaneous Equations Models Without Additivity,", with Whitney Newey, *Econometrica* Vol 77(5): 1481-15129.
- 2008
- "On the Failure of the Bootstrap for Matching Estimators," with Alberto Abadie, *Econometrica*, Vol 76(6), 1537-1557.
- "Nonparametric tests for treatment effect heterogeneity," with Richard Crump, V. Joseph Hotz, and Oscar Mitnik, Review of Economics and Statistics Vol 90(3): 389-405.
- "Special issue editors' introduction: The regression discontinuity design Theory and applications," with Thomas Lemieux,

 Journal of Econometrics Vol 142(2): 611-614.
- "Regression discontinuity designs: A guide to practice," with Thomas Lemieux, *Journal of Econometrics* Vol 142(2): 615-635.
- 2007
- "Discrete Choice Models with Multiple Unobserved Choice Characteristics," with Susan Athey, *International Economic Review*, Vol 48(4): 1159-1192.
- "Nonadditive Models with Endogenous Regressors," in Blundell, Newey and Persson (eds.), *Advances in Economics and Econometrics*, Ninth World Congress of the Econometric Socieity, Vol. III, Chapter 2.
- "Instrumental variable estimation of nonseparable models," with Victor Chernozhukov and Whitney Newey,

 Journal of Econometrics Vol 139(1): 4-14.
- 2006
- "Identification and Inference in Nonlinear Difference-In-Differences Models," with Susan Athey, *Econometrica*, Vol 74(2), 431-497.
- "Large Sample Properties of Matching Estimators for Average Treatment Effects," with Alberto Abadie, *Econometrica* Vol 74(1) 235-267.
- "Re-employment probabilities over the business cycle," with Lisa Lynch, *Portuguese Economic Journal* Vol 5(2): 111-134.

"Evaluating the differential effects of alternative welfare-to-work training components: A reanalysis of the California GAIN program," with V. Joseph Hotz and Jacob Klerman, *Journal of Labor Economics* Vol 24(3): 521-566.

2005

- "Predicting the Efficacy of Future Training Programs Using Past Experiences", with J. Hotz and J. Mortimer, *Journal of Econometrics*, vol 125(1-2), 241-270.
- "The Performance of Empirical Likelihood and its Generalizations," with Richard Spady, in Andrews and Stock (eds.), *Identification and Inference for Econometric Models*, Essays in Honor of Thomas Rothenberg, Cambridge University Press.
- "Randomization Inference with an Instrumental Variable," with Paul Rosenbaum, Journal of the Royal Statistical Society, Series A, vol 168(1), 109-126.

2004

- "Confidence Intervals for Partially Identified Parameters," with Charles Manski, *Econometrica*, Vol 72, No. 6, 1845-1857.
- "Random Effects Estimators with Many Instrumental Variables", with Gary Chamberlain, *Econometrica*, Vol 72, No. 1, 295-306.
- "Implementing Matching Estimators for Average Treatment Effects in Stata", with A. Abadie, D. Drukker, and J. Herr, *The STATA Journal*, vol 4(3) 290-311.
- "Analyzing a Randomized Trial on Breast Self-examination with Noncompliance and Missing Outcomes", with Mealli, Ferro and Biggeri, Biostatistics, 5(2), 207-222.
- "The Propensity Score with Continuous Treatments," with Keisuke Hirano, Applied Bayesian Modelling and Causal Inference from Missing Data Perspectives, Gelman and Meng (eds.), Wiley.
- "Nonparametric Estimation of Average Treatment Effects under Exogeneity: A Review," *Review of Economics and Statistics*, Vol 86, 4-30.

2003

- "Empirical Likelihood Estimation and Consistent Tests with Conditional Moment Restrictions," with S. Donald and W. Newey, Journal of Econometrics, Vol 117, No. 1, 55-93.
- "Nonparametric Applications of Bayesian Inference", with Gary Chamberlain, *Journal of Business* and *Economic Statistics*, Vol 21, No 1, 12-18.
- "Efficient Estimation of Average Treatment Effects Using the Estimated Propensity Score", with Kei Hirano and Geert Ridder, *Econometrica*, Vol. 71, No. 4, 1161-1189.
- "Sensitivity to Exogeneity Assumptions in Program Evaluation," American Economic Review, Papers and Proceedings, 93(2), 126-132.

2002

"Confidence Intervals in Generalized Method of Moments Models" with Richard Spady, *Journal of Econometrics*, vol 107, No. 1-2, 87-98.

- "Comment on: 'Covariance Adjustment in Randomized Experiments and Observational Studies', by Paul Rosenbaum," with Joshua Angrist, Statistical Science, Vol 17, No 3, August, 304-307.
- "Generalized Method of Moments and Empirical Likelihood," Journal of Business and Economic Statistics, Vol. 20, No. 4, 493-506.
- "Instrumental Variables Estimation of Quantile Treatment Effects" with A. Abadie and J. Angrist, *Econometrica*, Vol. 70, No 1, 91-117.
- 2001 "Combining Panels with Attrition and Refreshment Samples, with Keisuke Hirano, Geert Ridder and Donald Rubin, Econometrica, Vol. 69, No. 6, 1645-1659.
 - "Estimation of Causal Effects Using Propensity Score Weighting: An Application of Data on Right Hear Catherization," with Keisuke Hirano, Health Services and Outcomes Research Methodology, 2:259-278.
 - "Bias from Classical and Other Forms of Measurement Error", with D. Hyslop, Journal of Business and Economic Statistics October, Vol. 19, No. 4, 475-481.
 - "Estimating the Effect of Unearned Income on Labor Supply, Earnings, Savings and Consumption: Evidence from a Sample of Lottery Players", with Donald Rubin and Bruce Sacerdote, American Economic Review, Vol. 91, No. 4, 778-794.
 - "Comment on: 'Estimation of limited-dependent variable models with dummy endogenous regressors: Simple strategies for empirical practice'," by Joshua Angrist," Journal of Business and Economic Statistics.
 - "Some Remarks on Instrumental Variables," in: Econometric Evaluations of Labour Market Policies, Lechner and Pfeiffer (eds.), Spring Verlag.
 - "The Interpretation of Instrumental Variables Estimators in Simultaneous Equations Models with an Application to the Demand for Fish", with J. Angrist and K. Graddy, Review of Economic Studies, 67, July, 499-527.
 - "The Role of the Propensity Score in Estimating Dose–Response Functions", Biometrika, Vol. 87, No. 3, 706-710.
 - "Estimating the Effect of Flu Shots in a Randomized Encouragement Design", with K. Hirano, D. Rubin and A. Zhou, *Biostatistics*, Vol. 1, No. 1, p. 69-88.
- 1999 "Comment on: "Instrumental Variables: A Study of Implicit Behavioral Assumptions Used in Making Program Evaluations", by J. Heckman", with J. Angrist, Journal of Human Resources.
 - "Imposing Moment Restrictions by Weighting", with J. Hellerstein, Review of Economics and Statistics, LXXXI, 1-14.
 - "Jackknife Instrumental Variables Estimation", with Joshua Angrist and Alan Krueger, Journal of Applied Econometrics, Vol. 14, 57-67.

2000

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1998 "Information Theoretic Approaches to Inference in Moment Condition Models," with Richard Spady and Philip Johnson, Econometrica, Vol. 66, 333–357. 1997 "Estimating Outcome Distributions for Compliers in Instrumental Variable Models", with Donald Rubin, Review of Economic Studies, October. "One-step Estimators for Over-identified Generalized Method of Moments Models", Review of Economic Studies, July. "Bayesian Inference for Causal Effects in Randomized Experiments with Noncompliance", with Donald Rubin, Annals of Statistics, Vol. 25, No. 1, 305–327. Book Review of "The Foundations of Econometric Analysis", by David Hendry and Mary Morgan, Journal of Applied Econometrics, Vol. 12, 91–94. 1996 "Efficient Estimation and Stratified Sampling", with T. Lancaster, Journal of Econometrics, Vol 74, No 2, 289–318. "Identification of Causal Effects Using Instrumental Variables", with J. Angrist and D. Rubin, (with discussion), Journal of the American Statistical Association, Vol. 91, No. 434, 444–472. "Case-Control Studies with Contaminated Controls", with T. Lancaster, Journal of Econometrics, Vol 71, no 1–2, 145–160. 1995 "Comment on: "Causal Diagrams in Empirical Research" by Judea Pearl", with D. Rubin, *Biometrika* Vol. 82, No. 4, 694–695. "Two-Stage Least Squares Estimation of Average Causal Effects in Models with Variable Treatment Intensity", with J. Angrist, Journal of the American Statistical Association, Vol. 90, No 430, 431–442. "Evaluating the Cost of Conscription in The Netherlands", with W. VanderKlaauw, Journal of Business and Economic Statistics, Vol. 13, No. 2, 72–80, April 1995. "Optimal Stock/Flow Panels", with T. Lancaster, Journal of Econometrics, Vol. 66, No 1-2, 325-348. 1994 "Transition Models in a Non-Stationary Environment", Review of Economics and Statistics, Vol. LXXVI, No. 4, p 703–720. "Combining Micro and Macro data in Microeconometric Models", with T. Lancaster, Review of Economic Studies, Vol. 61, No. 4, 655-680. "Identification and Estimation of Local Average Treatment Effects", with J. Angrist, Econometrica, Vol. 62, No. 2, 467–476.

- 1990 "Choice—Based Sampling of Dynamic Populations", with T. Lancaster, in *Panel Data and Labor Market Studies*, Hartog, Theeuwes and Ridder, eds.
- "Job Separation and Job Matching", with T. Lancaster and P. Dolton, in *The Practice of Econometrics*, Heymans and Neudecker (eds).

Working Papers:

- "Social Networks and the Identification of Peer Effects," with Paul Goldsmith-Pinkham, JBES Lecture.
- "Identification and Inference with Many Invalid Instruments," with Michal Kolesar, Raj Chetty, John Friedman, and Ed Glaeser, NBER Working Paper 17519, October 2011.
- "Robust Inference for Misspecified Models Conditional on Covariates," with Alberto Abadie and Fanying Zheng,
 NBER Working Paper 17442, September 2011.
- "Matching on the Estimated Propensity Score," with Alberto Abadie,
 NBER Working Paper 15301, August 2009.
- "An Empirical Model for Strategic Network Formation," with Nicholas Christakis, James Fowler, and Karthik Kalyanaraman, NBER Working Paper 16039, May 2010.
- "Estimation and Inference for Generalized Full and Partial Means and Derivatives," with Geert Ridder, (2009).
- "Mean-Squared-Error Calculations for Average Treatment Effects," with Whitney Newey and Geert Ridder, (2006).
- "Complementarity and Aggregate Implications of Assortative Matching: A Nonparametric Analysis," with Bryan Graham and Geert Ridder, (2009).
- "Measuring the average outcome and inequality effects of segregation in the presence of social spillovers," with Bryan Graham and Geert Ridder, NBER Working Paper 14860, May 2009.
- "The Analysis of Randomized Experiments with Missing Data, with William Pizer (1998).
- "Sources of Identification in Evaluation Models", with J. Angrist, NBER Technical Working Paper 117, 1991
- "Choice—Based Sampling Inference and Optimality", with T. Lancaster, Brown University Working Paper, 1991.