Honorary Doctor of Laws, Colorado College, 2001.

Fellowships (Year Appointed)

Fellow, Econometric Society, 1980

Fellow, American Academy of Arts and Sciences, 1985

Senior Research Fellow, American Bar Foundation, 1991

Member, National Academy of Sciences, 1992

Fellow, American Statistical Association, 2001

Fellow, Journal of Econometrics, 2005

Fellow, Society of Labor Economics, 2004

Resident Member, American Philosophical Society, 2008

Fellow, International Statistical Institute, 2008

Fellow, American Association for the Advancement of Science, 2009

Lifetime Member, Irish Economic Association, 2009

Member, National Academy of Education, 2010

Honorary Academician, Academica Sinica, Republic of China/Taiwan, July, 2010

Corresponding Member, Brazilian Academy of Sciences, 2011

Fellow, The Society for Economic Measurement, 2013

Post Graduate Support for Released Time

John Simon Guggenheim Memorial Fellowship, 1978–1979.

Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford University, 1978–1979.

Social Science Research Council Training Fellow, 1977–78.

Harry Scherman Fellow, National Bureau of Economic Research, 1972–1973.

Professional Experience

University of Chicago

Henry Schultz Distinguished Service Professor, 1995– Henry Schultz Professor, 1985–1995 Professor of Economics, 1977– Associate Professor, 1973–1977 (tenured, 1974) Professor, Irving B. Harris School of Public Policy, 2011– Affiliated Faculty, Irving B. Harris School of Public Policy, 1990–2011 Director, Center for Social Program Evaluation, Harris School of Public Policy 1991–

Director, Economics Research Center, University of Chicago, 1998–

Director, Center for the Study of Childhood Development, Harris School of Public Policy, University of Chicago, 2009–

Professor of Law, University of Chicago School of Law, 2011-

Columbia University

Associate Professor 1973–1974 Assistant Professor, 1970–1973

New York University

Adjunct Assistant Professor, 1972

Council of Economic Advisors

Junior Economic Advisor, 1967

Previous Positions

Martin-Marietta Aerospace Systems Engineer, 1965

Other Professional Activities

- Director, Human Capital and Economic Opportunity Global Working Group, with Robert Dugger and Steven Durlauf (Sponsored by the Institute for New Economic Thinking), 2011–
- 2. Member, Research Council, Becker-Friedman Institute for Research in Economics, 2011–2017
- Member, Faculty Steering Committee for the University of Chicago Beijing Center, 2013– 2016
- 4. Member, Advisory Committee of the China Institute of Income Distribution Studies, Beijing Normal University, 2011–
- 5. Senior Advisor, China Development Research Foundation, October, 2012–
- 6. Past President, The Econometric Society, 2014 (Cycle: Second Vice-President, 2010-2011; First Vice-President, 2011-2012; President, 2013; Past President, 2014)
- 7. Member, Executive Committee, The Econometric Society, 2010–2014
- 8. Member, 1997 National Longitudinal Survey of Youth Advisory Panel, NORC, 2008–
- 9. IZA Journal of Labor Economics, Associate Editor, 2012–
- 10. Journal of Political Economy, Co-Editor, 2011–
- 11. Annual Review in Economics, Co-Editor, 2007–2011
- 12. Member, International Statistical Institute, 2007—
- 13. Advisory Board, *Journal of Applied Econometrics*, 2007–2013

- 14. President, Western Economics Association 2003 (Cycle: VP (2003–2004), President Elect (2004–2005), President (2005–2006))
- 15. Council, Econometric Society, 2000–2006
- 16. President, Midwest Economics Association, 1998.
- 17. Econometrics Reviews, Co-Editor; Associate Editor, 1987–
- 18. Handbook of Econometrics Vol. 5, Co-Editor with Ed Leamer
- 19. Handbook of Econometrics Vol. 6A, Co-Editor with Ed Leamer
- 20. Handbook of Econometrics Vol. 6B, Co-Editor with Ed Leamer
- 21. Vice President, American Economic Association, 2010
- 22. American Economics Association, Executive Committee Member, 2000–2003
- 23. Science, Technology and Economic Policy Board, National Research Council, Member 2000–
- 24. Evaluation Review, Associate Editor, 1991–1996
- 25. Journal of Economic Perspectives, Associate Editor, 1989–1996
- 26. Review of Economics and Statistics, Associate Editor, 1994–2002
- 27. Member, Advisory

- 39. London School of Economics, Visitor, Spring 1977, Center for Research on the Economics of Education
- 40. University of Wisconsin Institute for Research on Poverty, Visiting Professor, Fall 1977
- 41. *Annals of Economic and Social Measurement*, Editor of Volume 5, number 4, special issue on Discrete, Qualitative and Limited Dependent Variables, 1976
- 42. Social Science Council Research Committee on Research Methods for Longitudinal Data, 1976–1979, 1981–1982

Major Invited Lectures

12. "Investing in Education: A Conversation with an Economist and an Educator," First meeting of the Scientific Committee of the Reggio Emilia Foundation, Reggio Emilia, Italy. February

- 27. "The Skills Problem," Nebraska Chamber of Commerce and Industry 2013 Legislative Caucus and Annual Meeting, Lincoln, NE. February 7, 2013
- 28. "Creating and Measuring Capabilities," U.S. Government Action Plan on Children in Adversity, The White House, December 19, 2012.
- 29. "Noncognitive Skills and Socioemotional Learning," Research Symposium on Learning, Brookings Institution Center for Universal Education, Washington DC. December 6, 2012
- 30. Eunice Kennedy Shriver National Institute of Child Health and Human Development, "A Scientific Colloquium in Celebration of the Institutes 50th Anniversary 1962 2012: Research For A Lifetime," Masur Auditorium, NIH Bethesda Campus, Bethesda, MD. December 5, 2012
- 31. "Causal Analysis After Haavelmo: Definitions and a Unified Analysis of Identification of Causal Models," Keynote Address, European Seminar on Bayesian Econometrics, Vienna University of Economics and Business, Vienna, Austria. November 1-2, 2012
- 32. "The Skills Problem," Keynote Address, 2012 Kentucky Economic Association, Georgetown College, Georgetown KY. October 26, 2012
- 33. "The Skills Problem," Convocation, Berea College, Berea, KY. October 25, 2012
- 34. "The Skills Problem," Keynote Address, The Governors Office of Early Childhood Kentucky Chamber of Commerce and Prichard Committees Business Leaders for a Strong Start, Lousiville, KY. October 24, 2012
- 35. "Creating and Measuring Capabilities," Keynote Lecture, The Third International Conference on Poverty Alleviation and Child Development Child Development and Research Forum, Beijing, China, October 18, 2012
- 36. "Structural Estimation of Behavioral Models: A Conference in Honor of Kenneth I. Wolpin," University of Pennsylvania, University Park, PA. September 21-22, 2012
- 37. "Hard Evidence on Soft Skills," Keynote Address, 2012 Chinese Economists Society Annual Conference, Henan University, Kaifeng, China. June 24, 2012
- 38. "The Skills Problem," Lumen Christi Institutes Fourth Annual Conference on Economics and Catholic Social Thought, "Toward a Moral Economy", Chicago, IL. June 1, 2012
- 39. "Hard Evidence on Soft Skills," Robert (Bob) J. Lampman Memorial Lecture, Institute for Research on Poverty (IRP) at the University of Wisconsin-Madison, Madison, WI. May 16, 2012.
- 40. "Hard Evidence on Soft Skills," Frank Knight Lecture, Cornell University, Ithaca, NY. April 26, 2012.
- 41. "A Framework for Analyzing Human Development over the Life Cycle and across Generations," Presented at the TrygFonden symposium "Improving the Well-Being of Children and Youth," The Carlsberg Academy, Copenhagen. January 29th, 2012.

- 42. "The Case for Investing in Disadvantaged Young Children," Remarks at the White House Conference on "Race to the Top Early Learning Challenge Awards Announcement," Washington DC. December 16th, 2011.
- 43. "Hard Evidence on Soft Skills," The Development Economics Vice Presidency (DEC) Lecture, World Bank, Washington DC. December 15, 2011.
- 44. "The Developmental Origins of Health: Models and Evidence," Stephen Frankel Lecture, University of Bristol, November 16, 2011.
- 45. "Hard Evidence on Soft Skills," Adam Smith Lecture, 23rd Annual Conference, European Association of Labour Economists, Paphos, Cyprus, September 24, 2011.
- 46. "Understanding the Mechanisms Through Which an Influential Early Childhood Program Boosted Adult Outcomes," Asian Meeting of the Econometric Society, Seoul, Korea, August 12, 2011.
- 47. "Marschak's Maxim," Marschak Memorial Lecture, UCLA Anderson School of Manage-

- 56. "Policies to Foster Human Development," Developing Africa: an Opportunity for Europe, Italy and Sicily; Taormina, Italy. October 1, 2009.
- 57. "Investing in our Young People: Lessons from Economics and Psychology," Lectio Magistralis, Catholic University Milan. September 28, 2009.
- 58. "Estimating the Technology of Cognitive and Noncognitive Skill Formation," Plenary Lecture, Econometric Society. June 6, 2009.
- 59. "Estimating the Technology of Cognitive and Noncognitive Skill Formation," Vilfredo Pareto Lectures in Economics and Social Sciences, Collegio Carlo Alberto. June 9, 2009.
- 60. "The Economics and Psychology of Personality," Identity and the Global Crisis: Festival of the Economy, Trento, Italy. May 29, 2009.
- 61. DEW/ESR Guest Lecture, "The Economics and Psychology of Personality." Irish Economic Association 23rd Annual Conference, Blarney, County Cork, Ireland. April 26, 2009.
- 62. "The Economics and Psychology of Inequality and Human Development," The Jacob Marschak Interdisciplinary Colloquium on Mathematics in the Behavior Sciences at UCLA. October 6, 2008.
- 63. "The Economics and Psychology of Inequality and Human Development," Marshall Lecture, European Economics Association, Milan, Italy. August 29, 2008.
- 64. "How Viable is the Welfare State?" World Justice Forum, Vienna, Austria. July, 2008.
- 65. "The Option Value of Educational Choices and the Rate of Return to Educational Choices," Cowles Foundation Structural Conference, Yale University. June 13, 2008.
- 66. "Skills, Schools and Synapses," Coping with the Accident of Birth: The Case for Early Childhood Interventions. Den Haag, Netherlands. May 27, 2008.
- 67. "Noncognitive Skills: Acquisition and Economic Consequences," Plenary Lecture, Leibniz Network Conference, Mannheim, Germany. May 15, 2008.
- 68. "Understanding the GED," Albert Rees Memorial Lecture, Society of Labor Economists Annual Meetings, May 9, 2008.
- 69. "How Viable is the Welfare State?" and "The Technology of Skill Formation," King Saud University Lecture, Riyadh, Saudi Arabia. March 8-10, 2008.
- 70. Congress on Early Childhood Education: "Early Childhood Education–Educational Investments with Better Effects", "The Dynamism of Educational Investments in the Course of Life: Why Saving in Education is Expensive." Leipzig, Germany. March, 2008.
- 71. "The Economics of Investing in Children: The Role of Cognitive and Non-Cognitive Skills," George Seltzer Distinguished Memorial Lecture, Minneapolis, Minnesota, December 6, 2007.

- 72. "The Economics of Investing in Children: The Role of Cognitive and Non-Cognitive Skills," Bertha C. and Roy E. Leigh Distinguished Lecture in Economics, Pullman, Washington, November 29, 2007.
- 73. "The Technology of Skill Formation," Guinness Lecture, Coombe Women's Hospital, Dublin, Ireland, November 2, 2007.
- 74. "The Technology of Building Human Capacities: Lessons for Public Policy," Building Blocks Conference, Alberta, Canada, May 2007.
- 75. Keynote Address, "Investing in Disadvantaged Young Children Is Good Economics and Good Public Policy," National Summit on America's Children, Congressional Caucas, Washington D.C., May 2007.
- 76. "The Economics, Technology and Neuroscience of Human Capability Formation," Allostasis/Allostatic Load Conference, Princeton University, May 2007.
- 77. "Left Behind: the GED and America's Dropout Problem," Brookings Institution, Hamilton Project Forum: The Role of Education in Promoting Opportunity and Economic Growth, Washington D.C., March 2007.
- 78. Plenary Address, "The Evolution of Labor Earnings Risk in the U.S. Economy," 4th International Finance Conference in Collaboration with Université Cergy-Pontoise, REMEREG and ISC Paris, Diar el Medina, Tunisia, March 2007.
- 79. Theodore W. Schultz Lecture, "The New Economics of Child Quality," American Economic Association, January 2007.
- 80. Keynote Address, "What Lessons Should China Learn from European Welfare States?" WEAI Pacific Rim Conference, Beijing, China, January 2007.
- 81. Max Weber Lecture, "The Economics of Human Development," European University, Florence, Italy, October 2006.
- 82. Koopmans Lectures, "Cowles Commission Structural Models, Causal Effects and Treatment Effects: A Synthesis," "Instrumental Variables: Then and Now," and "The Evolution of Labor Earnings Risk in the US Economy," Cowles Foundation, Yale University, September 2006.
- 83. Marshall Lecture, Annual Meeting of the European Economic Association. August, 2006.
- 84. Michelson Memorial Lecture, "Skills, Schools and Synapses," US Naval Academy, September 2006.

- 87. Invited Lecture, "Understanding Instrumental Variables in Models with Essential Heterogeneity," "Econometric Evaluation of Public Policies: Methods and Applications" Conference, Center for Research in Economics and Statistics, Paris, December 2005.
- 88. Inaugural Lecture, "Credit Constraints, Family Constraints and Optimal Policies to Reduce Inequality and Promote Productivity," Geary Institute, University College Dublin, April 2005.
- 89. Richard Ely Distinguished Lecturer, Johns Hopkins University, April 2005. Talks: "Inequality in America: What Role for Human Capital Policies?" "Understanding Inequality: Separating Uncertainty from Heterogeneity in Life Cycle Earnings," "Match Bias and Economic Returns to the GED," "Understanding Instrumental Variables in Models with Essential Heterogeneity," "The Importance of Cognitive and Noncognitive Skills in Explaining a Variety of Socioeconomic Outcome Measures"
- 90. Hicks Lecture, Oxford University, April 2004.
- 91. Keynote Lecture, Great Hall of the People, Beijing, December 2003 (Major Lecture on China's Investment in Human Capital at Renmin University's Anniversary Celebration).
- 92. Nobel Symposium Lecturer, St. Petersburg, Russia, June 2003.
- 93. Munich Economic Summit, Munich, May 2003.
- 94. European Society for Population Economics, 2003.
- 95. Keynote Lecture, Tinbergen Centenary, Rotterdam, April 2003.
- 96. W.P. Carey Lecture, Colorado College, February 2002.
- 97. Miguel Sidrauski Lecture, Latin American Econometric Society Meetings, Sao Paulo, 2002.
- 98. Tinbergen Lecture, Royal Dutch Economics Association, October 2002.

- 138. Invited Major Guest Lecture, Joint Franco-Belgian Conference in Statistics, Toulouse, France, 1988.
- 139. Chung-Hua Distinguished Visitor and Academica Sinica Lectures, Taiwan, 1988.
- 140. Fish Lecture, Brigham Young University, 1987.
- 141. Harry Lyman Hooker Distinguished Visiting Professor, McMaster University, 1987.
- 142. Leif Johansen Lecture, University of Oslo, 1986.

- 20. Eric Gould
- 21. Carolyn Heinrich (Harris School, University of Chicago)
- 22. Bo Honoré

- 52. Rachel Soloveichik
- 53. Jora Stixrud
- 54. Suchanan Tambunlertchai
- 55. Chris Taber
- 56. Andrea Tiseno
- 57. Justin Tobias
- 58. Petra Todd
- 59. Grace Tsiang
- 60. Gabriel Ulyssea
- 61. J. H. Verkerke (Yale)
- 62. Edward Vytlacil
- 63. Jim Walker
- 64. Benjamin Williams

Publications

Books

- Longitudinal Analysis of Labor Market Data, (edited with Burton Singer). Cambridge: Cambridge University Press, 1985.
- Handbook of Econometrics, Vol 5 (edited with E. L. Leamer). New York: North-Holland, 2001.
- *Inequality in America: What Role for Human Capital Policy?.* J. Heckman and A. Krueger, eds., Cambridge, MA: MIT Press, 2003.
- Law and Employment: Lessons From Latin America and the Caribbean (edited with C. Pages). University of Chicago Press, for NBER, 2004.
- Handbook of Econometrics, Vol 6A (edited with E. L. Leamer). Amsterdam: North-Holland, 2007.
- Handbook of Econometrics, Vol 6B (edited with E. L. Leamer). Amsterdam: North-Holland, 2007.
- Global Perspectives on the Rule of Law, (edited with R. Nelson and L. Cabatingan). New York: Routledge, 2010.
- Giving Kids a Fair Chance. Cambridge, MA: MIT Press, 2012.
- The Myth of Achievement Tests: The GED and the Role of Character in American Life, (edited with J.E. Humphries and T. Kautz). Chicago: University of Chicago Press, 2014.

Book Reviews and Op-Ed Pieces

- 1. "Review of *Problems and Issues in Current Econometric Practices*," *Journal of Economic Literature*, (December, 1974).
- 2. " 'The Cracked Bell,' Review of Herrnstein and Murray, *The Bell Curve*," *Reason*, March, 1995.

- 8. "Estimating Labor Supply Functions," (with O. Ashenfelter), in G. Cain and H. Watts (eds.), Labor Supply and Income Maintenance, (Chicago: Markham Publishing Company, 1974).
- 9. "Measuring the Effect of an Antidiscrimination Program," (with O. Ashenfelter), July 1974 mimeo, in *Evaluating The Labor Market Effects of Social Programs*, (Princeton, N.J.: Princeton University Press, 1975). Presented at the American Economic Association Winter Meetings, 1972.
- 10. "Estimation of a Stochastic Model of Reproduction: An Econometric Approach," (with R. Willis), in N. Terleckyj (ed.), *Household Production and Consumption*, 40, 99-145, (New York: Columbia University Press, 1976). Presented at the Conference on Research in Income and Wealth, Washington, D.C., November 1973.
- 11. "Simultaneous Equation Models with both Continuous and Discrete Endogenous Variables With and Without Structural Shift in the Equations," in Goldfeld and Quandt (eds.), *Studies*

- 36. "Recent Theoretical and Empirical Studies of Labor Supply: A Partial Survey," with M. Killingsworth and T. MaCurdy, presented at Oxford, 1979, in Z. Hornstein (ed), *Studies of The Labor Market*, HMS Treasury, (1981).
- 37. "The Impact of the Minimum Wage on the Employment and Earnings of Workers in South Carolina," (with Sedlacek), in Vol. 5, *Report of the Minimum Wage Study Commission*, U.S. Government Printing Office, 225-272, (June 1981).
- 38. "Models for the Analysis of Labor Force Dynamics," (with C. Flinn), *Advances in Econometrics*, 1, 35-95, (New York: JAI Press, 1982).
- 39. "The Identification Problem in Econometric Models for Duration Data," in W. Hildenbrand (ed), *Advances in Econometrics, Proceedings of Fourth World Congress of Econometric Society*, (Cambridge University Press, 1982).
- 40. "Earnings and The Distribution of Income," (with R. Michael), in *Part II, Behavioral and Social Science Research, A National Resource*, (National Academy of Science Press, 1982).
- 41. "New Methods For Analyzing Individual Event Histories," (with C. Flinn), *Sociological Methodology*, 99-140, (Josey-Bass, 1982).
- 42. "New Methods for Analyzing Structural Models of Labor Force Dynamics," (with C. Flinn), *Journal of Econometrics*, 18 (1982): 115-68.

- 53. "A Test for Subadditivity of the Cost Function With An Application to the U.S. Bell System," (with D. Evans), *American Economic Review*, (September, 1984), 615-623.
- 54. "Introduction," (with B. Singer), *Longitudinal Analysis of Labor Market Data*, (Cambridge: Cambridge University Press, 1985).
- 55. "Social Science Duration Analysis," (with B. Singer), *Longitudinal Analysis of Labor Market Data*, (University Press, 1985).
- 56. "A Simultaneous Equations Linear Probability Model," (with T. MaCurdy), *Canadian Journal of Economics*, (January, 1985), XVIII(1), 28-37.
- 57. "Alternative Methods for Estimating The Impact of Interventions," (with R. Robb), presented at Social Science Research Council Conference, Mt. Kisco, N.Y., October, 1978. In J.

68. "Alternative Identifying Assumptions in Econometric Models of Selection Bias," (with R. Robb), in G. Rhodes, (ed), *Advances in Econometrics*

- 84. "Choosing Among Alternative Non-experimental Methods For Estimating The Impact of Social Programs: The Case of Manpower Training," (with V. J. Hotz). Symposium paper with invited discussion, featured invited paper, American Statistical Association meeting, *Journal of the American Statistical Association*, (December 1989), 84(408), 862-874.
- 85. "Forecasting Aggregate Period Specific Birth Rates: Time Series Properties of a Microdynamic Neoclassical Model of Fertility," (with J.Walker), *Journal of The American Statistical Association*, (December, 1989), 84(408), 958-965.
- 86. "The Empirical Content of the Roy Model," with Bo Honore, *Econometrica*, (September, 1990), 58(5), 1121-1149.
- 87. "Self Selection and The Distribution of Hourly Wage Rates," with (G. Sedlacek), *Journal of Labor Economics*, (January 1990), 8(1), Part 2, S329-S363.
- 88. "Causal Inference and Nonrandom Samples," *Symposium on Selection Bias Models, Journal of Educational Statistics*, 14(2), (Summer 1989), 159-168, reprinted in J. Schaeffer, (ed.), *The Role of Models in Non-experimental Social Science: Two Debates*, 1991.

- 99. "Varieties of Selection Bias," American Economic Review, (May 1990), 80(2), 313-318.
- 100. "Racial Disparity and Employment Discrimination Law: An Economic Perspective" and "Rejoinder," (with R. Verkerke), *Yale Law and Policy Review*, (Summer 1990), 8(2), 276-298.
- 101. "Accounting for the Economic Progress of Black Americans," in R. Cornwall and P.V. Wunnava, (eds.), *New Approaches to Economics and Social Analyses of Discrimination*, New York: Praeger, (1991), 331-337.
- 102. "Continuous vs. Episodic Change: The Impact of Affirmative Action and Civil Rights Policy on the Economic Status of Blacks," (with J.Donohue), *Journal of Economic Literature*, (December 1991), 29(4), 1603-1643.
- 103. "Reevaluating Federal Civil Rights Policy," (with J. Donohue), *Georgetown Law Journal*, (1991).
- 104. "Identifying the Hand Of The Past: Distinguishing State Dependence from Heterogeneity," *American Economic Review*, (May, 1991), 81(2), 75-79.
- 105. "A Nonparametric Method of Moments Estimator for the Mixtures of Exponentials Model and the Mixture of Geometrics Model," in W. Barnett, J. Powell and G. Tauchen, (eds.), Nonparametric and Semiparametric Methods in Econometrics and Statistics, (Cambridge University Press, 1991)
- 106. "Randomization and Social Policy Evaluation," paper presented at Institute For Research on Poverty conference at Arlie House in Charles Manski and Irwin Garfinkel, (eds.), *Evaluating Welfare and Training Programs*, (Harvard University Press, 1992), 201-230.
- 107. "Understanding Third Births in Sweden," in J. Trussell, R. Hankinson and J. Tilton, (eds.), Demographic Applications of Event History Analysis, (Oxford University Press, 1992).
- 108. "Haavelmo and the Birth of Modern Econometrics: A Review of The History of Econometric Ideas by Mary Morgan," *Journal of Economic Literature*, (June 1992), Vol. 30.
- 109. "Evaluating an Argument For Affirmative Action," (with T. Philipson), *Rationality and Society*, (July 1992).
- 110. "The Urban Institute Audit Studies: Their Methods and Findings," (with P. Siegelman), in M. Fix and R. Struyk, (eds.), *Clear and Convincing Evidence: Measurement of Discrimination in America*, Chapter 5, 187-258, (Urban Institute, Fall 1993).
- 111. "The Nonequivalence of High School Equivalents," (with S. Cameron), *Journal of Labor Economics*, (January 1993), 11(1), 1-47.
- 112. "What Has Been Learned About Labor Supply In The Past Twenty Years?," *AEA Papers and Proceedings*, (May 1993), 83(2), 116-121.
- 113. "Assessing The Case For Randomized Evaluation of Social Programs," in K. Jensen and P. Madsen, (eds), *Measuring Labor Market Program: Evaluating The Effects of Active Labor*

- 144. "The Effects of Government Policies on Human Capital Investment, Unemployment and Earnings Inequality," in *Publications of the GAAC, Symposia, Volume 5: Third Public GAAC Symposium Labor Markets in the USA and Germany*, German-American Academic Council Foundation, Bonn, Germany, (1998).
- 145. "The Sensitivity of Experimental Impact Estimates: Evidence From The JTPA Study," (with J. Smith), in R. Freeman, (ed), *Youth Unemployment*, August, 1993, revised, May, 1996 and presented at a conference on Youth Transitions, Konstanz, Germany, University of Chicago and NBER, 1998.

- 159. "The Economics and Econometrics of Active Labor Market Programs," (with R. LaLonde and J. Smith) in O. Ashenfelter and D. Card, (eds), *Handbook of Labor Economics*, (North Holland, Vol. 3, 1999), 1865-2086.
- 160. "Local Instrumental Variables and Latent Variable Models for Identifying an Bounding Treatment Effects," with (Edward Vytlacil), *Proceedings of the National Academy of Sciences*, (April 1999), 96, 4730-4734.
- 161. "The Pre-Programme Earnings Dip and the Determinants of Participation in A Social Programme Implications For Simple Programme Evaluation Strategies," (with Jeffrey A. Smith), *Economic Journal*, 109, 1-37, (July 1999), Won Prize as Best Paper Published in the journal in 1999.
- 162. "On Policies to Reward the Value Added by Educators," (with J. Cawley and E. Vytlacil), *Review of Economics and Statistics*, (November 1999), 81(4), 720-728.
- 163. "Micro Data and General Equilibrium Models," (with M. Browning and L. Hansen) in J. Taylor and M. Woodford (eds), *Handbook of Macroeconomics*, (Amsterdam: Elsevier. 1999), Chapter 8, 543-633.
- 164. "Understanding the Role of Cognitive Ability in Accounting For The Recent Rise In The Economic Return to Education," (with J. Cawley, L. Lochner and E. Vytlacil) in K. Arrow, S. Bowles, and S. Durlauf (eds.), *Meritocracy and Economic Inequality*, (Princeton University

- 172. "Understanding Black-White Wage Differentials 1960-1990," (with T. Lyons and P. Todd), *American Economic Review*, (May 2000).
- 173. "The Cost of Job Security Regulation: Evidence from the Latin American Labor Markets, (with Carmen Pages-Serra), *Journal of the Latin American and Caribbean Economic Association*, 1(1), (Fall 2000), 109-154.
- 174. "Accounting for Heterogeneity, Diversity and Social Policy Evaluation," *Economic Journal*, (2001).
- 175. "Identifying The Role of Cognitive Ability in Explaining The Level of and Change In the Return to Education," (with E. Vytlacil), *Review of Economics and Statistics*, (February, 2001), 83(1),1-12.

189. "The Performance of Performance Standards," (with C. Heinrich and J. Smith), *Journal of Human Resources*,

- 221. "Earnings Functions, Rates of Return and Treatment Effects: The Mincer Equation and Beyond," (with L. Lochner and P. Todd) in E. Hanushek and F. Welch, eds., *Handbook of the Economics of Education*, (North Holland: Amsterdam), pp. 307–458 (2006).
- 222. "Interpreting the Evidence on Life Cycle Skill Formation," (with F. Cunha, L. Lochner and D. Masterov) in E. Hanushek and F. Welch, eds., *Handbook of the Economics of Education*, (North Holland: Amsterdam), pp. 697–812 (2006).
- 223. "Dynamic Discrete Choice and Dynamic Treatment Effects," (with S. Navarro), *Journal of Econometrics*, **136**(2): 341-396, (February, 2007).
- 224. "Bias Corrected Estimates of GED Returns," (with P. LaFontaine), *Journal of Labor Economics*, **24**(3): 661-700, (July, 2006).
- 225. "The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior," (with J. Stixrud and S. Urzua), *Journal of Labor Economics*, **24**(3): 411-482, (July, 2006).
- 226. "Understanding Instrumental Variables in Models with Essential Heterogeneity," (with S. Urzua and E. Vytlacil), *Review of Economics and Statistics*, **88**(3): 389-432, (2006).
- 227. "Economic, Neurobiological and Behavioral Perspectives on Building America's Futureco-

- 235. "The Productivity Argument for Investing in Young Children," (with D. V. Masterov), *Review of Agricultural Economics*, **29**(3): 446-493, (2007).
- 236. "Identifying and Estimating the Distributions of *Ex Post* and *Ex Ante* Returns to Schooling," (with F. Cunha), *Labour Economics*, **14**(6): 870-893 (2007).
- 237. "The Identification and Economic Content of Ordered Choice Models with Stochastic Thresholds," (with F. Cunha and S. Navarro), *International Economic Review* **48**(4): 1273-1309 (2007).
- 238. "Use of Instrumental Variables in the Presence of Heterogeneity and Self-Selection: An Application to Treatments of Breast Cancer Patients," (with A. Basu, S. Navarro-Lozano and S. Urzua), *Health Economics*, **16**(11): 1133-1157 (2007).
- 239. "Earnings Functions and Rates of Return," (with L. Lochner and P. Todd), *Journal of Human Capital*, **2**(1): 1-31 (2008).
- 240. "Econometric Causality," International Statistical Review, **76**(1): 1-27 (2008).
- 241. "An Assessment of Causal Inference in Smoking Initiation Research and a Framework for Future Research," (with F. Flyer and C. Loughlin), *Economic Inquiry*, **46**(1): 37-44 (2008).
- 242. "The Roy Model," (with C. Taber), in S. N. Durlauf and L. E. Blume (eds.), *New Palgrave Dictionary of Economics* (2 ed.) Palgrave Macmillan. 2008.
- 243. "A New Framework for the Analysis of Inequality," (with F. Cunha), *Macroeconomic Dynamics*, **12**(Supplement 2), pp. 315-354. (2008).
- 244. "Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation," (with F. Cunha), *Journal of Human Resources*, 43(4): 738-782. (2008).
- 245. "The Economics and Psychology of Personality Traits," (with L. Borghans, A. L. Duckworth, and B. ter Weel), *Journal of Human Resources*, 43(4): 972-1059. (2008).
- 246. "Dynamic Policy Analysis," (with J. H. Abbring), *The Econometrics of Panel Data* (3rd ed.), edited by L. Matyas and P. Sevestre, (Dordrecht: Springer), 2008.
- 247. "Identification of Treatment Effects Using Control Functions in Models with Continuous, Endogenous Treatment and Heterogeneous Effects," (with J.P. Florens, C. Meghir and E. Vytlacil), *Econometrica*, **76**(5): 1191-1206, 2008.
- 248. "The Role of Income and Family Influence on Child Outcomes," *Annals of the New York Academy of Sciences*, 1136(Reducing the Impact of Poverty on Health and Human Development: Scientific Approaches): 307-323, 2008.
- 249. "Schools, Skills and Synapses," *Economic Inquiry*, **46**(3): 289-324, 2008.
- 250. "The Principles Underlying Evaluation Estimators with an Application to Matching." *Les Annales d'Economie et de Statistique*, **91-92**, pp. 9-74, (2008).
- 251. "Instrumental Variables in Models with Multiple Outcomes: The General Unordered Case," (with S. Urzua and E. Vytlacil). *Les Annales d'Economie et de Statistique*, **91-92**, pp. 151-174, (2008).

269. "Analyzing Social Experiments as Implemented: A Reexamination of the Evidence From the HighScope Perry Preschool Program," (with S. H. Moon, R. Pinto, P. A. Savelyev, and A. Q. Yavitz). *Quantitative Economics*, 1

- 283. "Editorial: The measurement of progress—some achievements and challenges." (with P. Anand and M. Durand). *Journal of the Royal Statistical Society, A*, 174(4):851-855. (2011).
- 284. "Effective Child Development Strategies," In E. Zigler, W. Gilliam, and W. S. Barnett, eds., The Pre-K Debates: Current Controversies and Issues. Baltimore MD: Paul H. Brookes Publishing Company, Inc. pp. 2-8. (2011).
- 285. "The Developmental Origins of Health." Health Economics. 21(1): 24-29. (2012).
- 286. "Hard Evidence on Soft Skills," (with T. Kautz). Adam Smith Lecture, *Labour Economics*, **19**(4): 451-464. (2012).
- 287. "Primate Evidence on the Late Health Effects of Early-Life Adversity," (with G. Conti, C. Hansman, M. Novak, A. Ruggiero, S. Suomi). *Proceedings of the National Academy of Sciences*, **109**(23): 8866-8871. (2012).
- 288. "Taking the Easy Way Out: How the GED Testing Program Induces Students to Drop Out." (with P. LaFontaine, P. Rodríguez, and J. E. Humphries), *Journal of Labor Economics*, **30**(3): 495-520.(2012).
- 289. "An Effective Strategy for Promoting Social aFontaine, P369(4M.eN4)]TJ sadaine,

298. "Introduction," (with J. E. Humphries and T. Kautz). In *The Myth of Achievement Tests: The GED and the Role of Character in American Life*

- 310. "Human Capital, Economic Growth, and Inequality in China," (with J. Yi). In *The Oxford Companion to the Economics of China on Human Capital*, Shenggen Fan, Ravi Kanbur, Shang-Jin Wei and Xiaobo Zhang, editors. Oxford, UK: Oxford University Press. pp. 459–464. (2014).
- 311. "Bayesian Exploratory Factor Analysis," (with G. Conti, S. Frühwirth-Schnatter, and R. Piatek). *Journal of Econometrics*, 183(1): 31–57. (2014).
- 312. "Econometric Mediation Analyses: Identifying the Sources of Treatment Effects from Experimentally Estimated Production Technologies with Unmeasured and Mismeasured Inputs," (with R. Pinto). *Econometric Reviews*, 34(1-2): 6-31. (2015).
- 313. "Causal Analysis After Haavelmo," (with R. Pinto). *Econometric Theory*, 31(01): 115-151 (2015).
- 314. "The Generalized Roy Model and the Cost-Benefit Analysis of Social Programs," (with P. Eisenhauer and E. Vytlacil). *Journal of Political Economy*, 123(2): 413-443. (2015).
- 315. "Introduction to

- 5. "The Long-Term Health Effects of Early Childhood Interventions," (with G. Conti, S. Moon, and R. Pinto). Under revision, *Economic Journal*. (2015).
- 6. "Matching on Proxy Variables," (with S. Schennach and B. Williams). Unpublished manuscript, University of Chicago, Department of Economics, 2011.
- 7. "Inference with Imperfect Randomization: The Case of the Perry Preschool Program," (with R. Pinto, A. M. Shaikh, and A. Yavitz). Unpublished manuscript, University of Chicago, Department of Economics, 2009. Under revision, *Econometrica*, 2011.
- 8. "Policies to Promote Growth and Economic Efficiency in Mexico," (with J. Arias, O. Azuara, and P. Bernal). NBER Working Paper No. w16554. (2010).
- 9. "Towards Greater Understanding of Early-Adult Risky Behaviors: Cognitive Ability, Personality, and Schooling Effects." (with G. Conti, H. Lopes, and R. Pinto). Unpublished manuscript, University of Chicago, Department of Economics, 2009.
- 10. "Understanding the GED," Albert Rees Memorial Lecture, Society of Labor Economists Annual Meetings, May 9, 2008.
- 11. "The Option Value of Educational Choices and the Rate of Return to Educational Choices," Cowles Foundation Structural Conference, Yale University. June 13, 2008. Under revision.
- 12. "The Productivity Argument for Investing in Young Children," (with D. Masterov), Early Childhood Research Collaborative Discussion Paper, August, 2006.
- 13. "The Evolution of Inequality, Heterogeneity and Uncertainty in Labor Earnings in the U.S. Economy," (with F. Cunha), NBER Working Paper No. 13526, October, 2007.
- 14. "Interpreting the Evidence of Family Influence on Child Development," (with P. Carneiro and F. Cunha), unpublished, 2004.
- 15. "Understanding The Contribution of Legislation, Social Activism, Markets and Choice To The Economic Progress of African Americans in the Twentieth Century," (with Petra Todd), unpublished manuscript, University of Chicago, 2003.
- 16. "The GED is a Mixed Signal: The Effect of Cognitive and Noncognitive Skills on Human Capital and Labor Market Outcomes," (with Y. Rubinstein and J.Hsee), June, 2001, Revised in April 2002.
- 17. "Using the EITC to Test Between Two Competing Models of Skill Formation," (with L. Lochner), unpublished manuscript, University of Chicago, 2000.
- 18. "Semiparametric Program Evaluation: Lessons From An Evaluation of a Norwegian Training Program," (with A. Aakvik and E. Vytlacil) unpublished manuscript, University of Chicago, 1999.
- 19. "The Case for Simple Estimators: Experimental Evidence From the National JTPA Study," unpublished manuscript, University of Chicago, November 1993.

- 20. "Alternative Approaches To The Evaluation of Social Programs: Econometric and Experimental Methods," Barcelona Lecture, Sixth World Meetings of The Econometric Society, 1990.
- 21. "A Sequential Model of Schooling," (with S. Cameron), Yale, 1990.
- 22. "The Empirical Content of Alternative Models of Labor Earnings," unpublished, 1978, revised 1982.
- 23. "Three State Search Models," (with T. Coleman), unpublished, April 1981.
- 24. "New Evidence on the Assertion that the Government has Shifted the Relative Demand Curve For Labor In Favor of Blacks," (with R. Butler), June 1978.
- 25. "Shadow Prices, Market Wages and Labor Supply Revisited: Some Corrections and Computational Simplifications," mimeo (June 1975).
- 26. "Dynamic Models of Female Labor Supply," unpublished, University of Chicago, March 1977.
- 27. "Internal Adjustment Costs And The Neoclassical Theory of the Firm," (with V. K. Chetty), 1971.