Michael Kremer

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EDUCATION

Harvard University. Ph.D. in Economics, 1992.

Harvard College. A.B. in Social Studies, magna cum laude, Phi Beta Kappa, 1985.

EXPERIENCE

University Professor in Economics, the College, and the Harris School of Public Policy, University of Chicago, 2020 – present.

President of the Board, WorldTeach, 2020 – present.

Research Fellow, Center for Economic Research in Pakistan, 2017 – present.

Counselor to the Administrator on Open Innovation and Scientific Director, Development Innovation Ventures, US Agency for International Development, 2010 – present.

Gates Professor of Developing Societies, Harvard University, 2003 – 2020.

Professor of Economics, Harvard University, 1999 – 2003.

Research Associate, National Bureau of Economic Research, 1999 – present.

Senior Fellow, The Brookings Institution, 1998 – 2009.

Faculty Fellow, Center for International Development, Harvard Kennedy School, 1998 – present.

Faculty Associate, Harvard Institute for International Development, 1997 – 2000.

Professor of Economics, MIT, 1998 – 1999.

Pentti Kouri Career Development Associate Professor of Economics, MIT, 1996 – 1998.

Research Associate, Harvard Institute for International Development, 1995 – 1997.

Pentti Kouri Career Development Assistant Professor of Economics, MIT, 1994 – 1996.

Faculty Research Fellow, National Bureau of Economic Research, 1993 – 1999.

Assistant Professor of Economics, MIT, 1993 – 1994.

Visiting Assistant Professor, University of Chicago, Spring 1993.

Postdoctoral Fellow, MIT, 1992 – 1993.

President of the Board, WorldTeach, 1990 – 2017.

Executive Director, WorldTeach, 1986 – 1989. Founded and directed non-profit organization placing three hundred volunteer teachers annually in developing countries.

Teacher and Administrator, Eshisiru Secondary School, Kakamega District, Kenya, 1985 – 1986.

HONORS AND AWARDS

Honorary Goodwill Ambassador for Sustainable Development, IICA, 2020.

Member, National Academy of Sciences, 2020.

Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, 2019.

Juan Luis Londoño Prize for the best paper on social policy presented at the Latin American and Caribbean Economic Association (LACEA) Annual Conference, October 2015.

Katherine Hampson Bessell Fellow, Radcliffe Institute for Advanced Study, Harvard University, 2013 – 2014.

Theodore W. Schultz Prize Lecture, Agriculture and Applied Economics Association, 2014.

Scientific American 50 Award. Named one of the 50 researchers of the year, 2006.

Kenneth J. Arrow Award for Best Paper in Health Economics in 2004 by the International Health Economics Association, 2005.

Association of American Publishers Award for the Best Professional/Scholarly Book in Medical Science for *Strong Medicine,* 2004.

Young Global Leader, the World Economic Forum, 2004.

Fellow, American Academy of Arts and Sciences, 2003.

MacArthur Fellowship, 1997.

Presidential Early Career Award for Scientists and Engineers, 1996.

Health and Aging Fellow, National Bureau of Economic Research, 1996 – 1997.

National Fellow, Hoover Institution, Stanford University, 1994 – 1995.

Review of Economic Studies dissertation award recipient, 1992.

David A. Wells Prize for economics dissertation, Harvard University, 1992.

National Science Foundation Fellowship, 1989 – 1992.

OTHER ACTIVITIES

Co-chair, Co-founder, BREAD (The Bureau for Research and Economic Analysis of Development), 2001 – 2004. BREAD organizes conferences in development economics, focusing on microeconomic issues.

Non-resident Fellow, Center for Global Development, 2002 – present.

Associate Editor, *Journal of Development Economics,* 1999 – 2004.

Associate Editor, *Quarterly Journal of Economics,* 1998 – 2008.

Member, Board of Editors, *American Economic Journal: Applied Economics*, 2007 – 2016.

Consultant, Development Economics Research Group (DECRG), The World Bank.

PUBLICATIONS

ACADEMIC ARTICLES AND BOOK CHAPTERS

"Experimentation, Innovation, and Economics," American Economic Review, 110:7 (July 2020): 1974-1994. Revised version of 2019 Nobel Lecture.

"Advance Market Commitments: Insights from Theory and Experience," with Jonathan Levin and Christopher M. Snyder, *American Economic Association Papers and Proceedings*, 110 (May 2020): 269-273.

"Realizing the Potential of Digital Development: The Case of Agricultural Advice," with Raissa Fabregas and Frank Schilbach, *Science*, 366:6471 (December 13, 2019). DOI: 10.1126/science.aay3038.

"Using Randomized Controlled Trials to Estimate Long-Run Impacts in Development Economics," with Adrien Bouguen, Yue Huang, and Edward Miguel, *Annual Review of Economics,* 11 (2019): 523-561. (NBER Working Paper 25356, 2018).

"Behavioral Development Economics," with Gautam Rao and Frank Schilbach in Douglas Bernheim, Stefano DellaVigna, and David Laibson (eds.) *Handbook of Behavioral Economics*: *Foundations and Applications 2,* Volume 2. Amsterdam: North-Holland, 2019.

"Preventives versus Treatments Redux: Tighter Bounds on Distortions in Innovation Incentives with an Application to the Global Demand for HIV Pharmaceuticals," with Christopher M. Snyder, *Review of Industrial Organization*, 53:1 (August 2018): 235-273. DOI: 10.1007/s11151-018-9621-9624.

"There is No Place Like Home: Theory and Evidence on Decentralization and Politician Preferences" with Vivian Hoffman, Pamela Jakiela, and Ryan Sheely, (March 2017),

"Economics of Mass Deworming Programs," with Amrita Ahuja, Sarah Baird, Joan Hamory Hicks, and Edward Miguel in "Bundy, Donald A. P.; de Silva, Nilanthi; Horton, Susan; Jamison, Dean T.; Patton, George C. (eds.) *Disease Control Priorities,* Third Edition: Volume 8. *Child and Adolescent Health and Development*, Chapter 29: 413-422. Washington, DC: World Bank (2017).

"Should the WHO Withdraw Support for Mass Deworming?" with Kevin Croke, Joan Hamory Hicks, Eric Hsu, and Edward Miguel, *PLoS Neglected Tropical Diseases*, 11:6 e0005481 (June 8, 2017). DOI: 10.1371/journal.pntd.0005481.

"More Evidence on the Effects of Deworming: What Lessons Can We Learn?" with Kevin Croke and Eric Hsu, *The American Journal of Tropical Medicine and Hygiene*, 96:6 (2017): 1265-1266.

"Success in Entrepreneurship: Doing the Math," with Jonathan Robinson and Olga Rostapshova in Sebastian Edwards, Simon Johnson, and David N. Weil (eds.) *African Successes*, Volume II, *Human Capital,* Chapter 9. Chicago: University of Chicago Press, 2016.

"Contract Farming and Agricultural Productivity in Western Kenya," with Lorenzo Casaburi and Sendhil Mullainathan in Sebastian Edwards, Simon Johnson, and David N. Weil (eds.) *African Successes, Volume IV: Sustainable Growth*, Chapter 4. Chicago: University of Chicago Press, 2016.

"Targeting Health Subsidies Through a Non-Price Mechanism: A Randomized Controlled Trial in Rural Kenya," with Pascaline Dupas, Vivian Hoffmann, and Alix Peterson Zwane, *Science,* 353:6302 (August 26, 2016): 889-895. DOI: 10.1126/science.aaf6288.

"Worms at Work: Long-Run Impacts of a Child Health Investment," with Sarah Baird, Joan Hamory Hicks, and Edward Miguel, *Quarterly Journal of Economics*, 131:4 (November 2016): 1637-1680. DOI: 10.1093/qje/qjw022. (NBER Working Paper 21428, 2018).

"Commentary: Assessing Long-Run Deworming Impacts on Education and Economic Outcomes: A Comment on Jullien, Sinclair and Garner," with Sarah Baird, Joan Hamory Hicks, and Edward Miguel, *International Journal of Epidemiology*, 45:6 (2016): 2153-2156.

"Guns, Latrines and Land Reform: Private Expectations and Public Policy," with Jack Willis, *American Economic Review Papers and Proceedings*, 106:5 (May 2016): 83-88. DOI: 10.1257/aer.p20161096. (NBER Working Paper 21915, 2016).

"Education as Liberation?" with Willa Friedman, Edward Miguel, and Rebecca Thornton, *Economica*, 83:329 (2016): 1-30. DOI: 10.111/ecca.12168. Published online November 11, 2015. (NBER Working Paper 16939, 2011).

"The New Role of the World Bank," with Michael Clemens, *Journal of Economic Perspectives*, 30:1 (Winter 2016): 53-76. (Center for Global Development Working Paper 421).

"Self-Control at Work," with Supreet Kaur and Sendhil Mullainathan, *Journal of Political Economy*, 123:6 (December 2015): 1227-1277.

"The Case for Mass Treatment of Intestinal Helminths in Endemic Areas," with Joan Hamory Hicks and Edward Miguel, *PLoS Neglected Tropical Diseases*, 9:10 (October 22, 2015): e0004214. DOI: 10.1371/journal.pntd.0004214.

"Education, HIV, and Early Fertility: Experimental Evidence from Kenya," with Esther Duflo and Pascaline Dupas, *American Economic Review*, 105:9 (September 2015): 2757-2797. (CEPR Discussion Paper 10338, 2014; NBER Working Paper 20784, 2014).

"When Should Governments Subsidize Health? The Case of Mass Deworming," with Amrita Ahuja, Sarah Baird, Joan Hamory Hicks, Edward Miguel, and Shawn Powers, *World Bank Economic Review Papers and Proceedings*, 29 (Supplement 2015): S9-S24. (NBER Working Paper 21148, 2015).

"Preventives versus Treatments," with Christopher M. Snyder, *Quarterly Journal of Economics*, 130:3 (August 2015): 1167-1239. (CEPR Discussion Paper 12751, 2015; NBER Working Paper 21012, 2015).

"Commentary: Deworming Externalities and Schooling Impacts in Kenya: A Comment on Aiken *et al.* (2015) and Davey *et al.* (2015)," with Joan Hamory Hicks and Edward Miguel, *International Journal of Epidemiology*, 44:5 (October 2015): 1593-1596. DOI: 10.1093/ije/dyv129. Published online July 22, 2015.

"School Governance, Teacher Incentives, and Pupil-Teacher Ratios: Experimental Evidence from Kenyan Primary Schools," with Esther Duflo and Pascaline Dupas, *Journal of Public Economics*, 123 (March 2015): 92-110. (NBER Working Paper 17939, 2012).

"Behavioral Biases and Firm Behavior: Evidence from Kenyan Retail Shops," with Jean Lee, Jonathan Robinson, and Olga Rostapshova, *American Economic Review Papers and Proceedings*, 103:3 (May 2013): 362-368.

"The Challenge of Education and Learning in the Developing World," with Conner Brannen and Rachel Glennerster, *Science*, 340:6130 (April 19, 2013): 297-300.

"Improving Health in Developing Countries: Evidence from Randomized Evaluations," with Rachel Glennerster in Mark V. Pauly, Thomas G. McGuire, and Pedro Pita Barros (eds.) *Handbook of Health Economics*, Volume 2. North Holland: Elsevier, 2012.

"Nudging Farmers to Use Fertilizer: Theory and Experimental Evidence from Kenya," with Esther Duflo and Jonathan Robinson, *American Economic Review,* 101:6 (October 2011): 2350-2390.

"Peer Effects and the Impacts of Tracking: Evidence from a Randomized Evaluation in Kenya," with Esther Duflo and Pascaline Dupas, *American Economic Review*, 101:5 (August 2011): 1739-1774. (CEPR Working Paper 7043, 2008; NBER Working Paper 14475, 2008).

"The Economics of International Refugee Law," with Ryan Bubb and David Levine, *Journal of Legal Studies*, 40:2 (June 2011): 367-404.

"Spring Cleaning: Rural Water Impacts, Valuation and Property Rights Institutions," with Jessica Leino, Edward Miguel, and Alix Peterson Zwane, *Quarterly Journal of Economics*, 126:1 (February 2011): 145-205. (NBER Working Paper 15280, 2009).

"The Risk of Asking: Being Surveyed Can Affect Later Behavior," with Alix Peterson Zwane, Jonathan Zinman, Eric Van Dusen, William Pariente, Clair Null, Edward Miguel, Michael Kremer, Dean Karlan, Richard Hornbeck, Xavier Ginéj, Esther Duflo, Florencia Devoto, Bruno Crepon, and Abhijit Banerjee, *Proceedings of the National Academy of Sciences of the United States of America*, 108:5 (February 1, 2011): 1821-1826.

"Providing Safe Water: Evidence from Randomized Evaluations," with Amrita Ahuja and Alix Peterson Zwane, *Annual Review of Resource Economics,* Volume 2, (October 2010): 237-256. DOI: 10.1146/annurev.resource.012809.103919.

"Are Educational Vouchers Only Redistributive?" with Eric Bettinger and Juan E. Saavedra, *The Economic Journal*, 120 (August 2010): F204–F228. DOI: 10.1111/j.1468-0297.2010.02374.x

"Teacher Incentives," with Paul Glewwe and Nauman Ilias, *American Economic Journal: Applied Economics*, 2:3 (July 2010): 205-227. (NBER Working Paper 9671, 2003).

"Self-Control and the Development of Work Arrangements," with Supreet Kaur and Sendhil Mullainathan, *American Economic Review*, 100:2 (May 2010): 624-628.

"Early-Life Malaria Exposure and Adult Outcomes: Evidence from Malaria Eradication in India," with David Cutler, Winnie Fung, Monica Singhal, and Tom Vogl, *American Economic Journal: Applied Economics*, 2:2 (April 2010): 72-94. ("Mosquitoes: The Long-term Effects of Malaria Eradication in India," NBER Working Paper 13539, 2007).

"Incentivizing Education: Adding to the Toolkit," with Heidi Williams, in Josh Lerner and Scott Stern (eds.) *Innovation Policy and the Economy*, 10 (2010): 1-17.

"Economic Transformation, Population Growth and the Long-Run World Income Distribution," with Marcos Chamon, *Journal of International Economics*, 79:1 (September 2009): 20-30. (IMF Working Papers: 06/21; NBER Working Paper 12038, 2006).

"Pricing and Access: Lessons from Randomized Evaluations in Education and Health," with Alaka Holla in Jessica Cohen and William Easterly (eds.) *What Works in Development? Thinking Big and Thinking Small*. Washington, DC: Brookings Institution Press, 2009.

"Improving Education in the Developing World: What Have We Learned from Randomized Evaluations?" with Alaka Holla in Kenneth J. Arrow and Timothy F. Bresnahan (eds.) *Annual Review of Economics,* Volume 1, (September 2009): 513-542. DOI: 10.1146/annurev.economics.050708.143323.

"Public-Private Schools in Rural India," with Karthik Muralidharan in Rajashri Chakrabarti and Paul E. Peterson (eds.) *School-Choice International: Exploring Public-Private Partnerships.* Cambridge, Mass: The MIT Press, 2009.

"Estimating the Impact of the Hajj: Religion and Tolerance in Islam's Global Gathering," with David Clingingsmith and Asim Ijaz Khwaja, *Quarterly Journal of Economics*, 124:3 (August 2009): 1133-1170. (John F. Kennedy School of Government, Working Paper Series, 2008 and Weatherhead Center for International Development Working Paper Series 159).

"Teacher Incentives in the Developing World," with Paul Glewwe and Alaka Holla in Springer, Matthew (ed.) *Performance Incentives: Their Growing Impact on American K-12 Education*. Washington, DC: Brookings Institution Press, 2009.

"Incentives to Learn," with Edward Miguel and Rebecca Thornton, *Review of Economics and Statistics* (lead article), 91:3 (August 2009): 437-456. (NBER Working Paper 10971, 2004).

"A Biological Model of Unions," with Ben Olken, *American Economic Journal: Applied Economics*, 1:2 (April 2009): 150-175. (NBER Working Paper 8257, 2001).

"Deworming and Development: Asking the Right Questions, Asking the Questions Right," with Donald Bundy, Hoyt Bleakley, Matthew Jukes, and Edward Miguel, *PLoS Neglected Tropical Diseases*, 3:1 (January 2009): e362. DOI:10.1371/journal.pntd.0000362.

"Many Children Left Behind? Textbooks and Test Scores in Kenya," with Paul Glewwe and Sylvie Moulin, *American Economic Journal: Applied Economics*, 1:1 (January 2009): 112-135. (NBER Working Paper 13300, 2007).

"Cambios en los hábitos y los sistemas sanitarios: algunas evidencias a partir de evaluaciones aleatorizadas" in José García Montalvo (ed.) *El análisis experimental de la ayuda al desarrollo.* Bilbao: Fundación BBVA, 2008.

"Incentives in Markets, Firms, and Governments," with Daron Acemoglu and Atif Mian, *Journal of Law, Economics, and Organization*, 24:2 (October 2008): 273-306. (NBER Working Paper 9802, 2000).

"Outside Funding and the Dynamics of Participation in Community Associations," with Mary Kay Gugerty, *American Journal of Political Science*, 52:3 (July 2008): 585-602. ("Outside Funding of Community Organizations: Benefiting or Displacing the Poor?" with Mary Kay Gugerty, NBER Working Paper 7896, 2000).

"Peer Effects and Alcohol Use among College Students," with Dan Levy, *Journal of Economic Perspectives*, 22:3 (Summer 2008): 189-206. (NBER Working Paper 9876, 2003).

"How High Are Rates of Return to Fertilizer? Evidence from Field Experiments in Kenya," with Esther Duflo and Jonathan Robinson, *American Economic Review Papers and Proceedings*, 98:2 (May 2008): 482-488.

"Using Randomization in Development Economics Research: A Toolkit," with Esther Duflo and Rachel Glennerster, in T. Schultz and John Strauss (eds.) *Handbook of Development Economics,* Volume 4. Amsterdam and New York: North-Holland, 2008. (CEPR Discussion Paper 6059, 2006; NBER Working Paper 333, 2006).

"Making Vaccines Pay," in William Easterly (ed.) *Reinventing Foreign Aid*. Cambridge, Mass.: The MIT Press, 2008.

"Use of Randomization in the Evaluation of Development," with Esther Duflo, in William Easterly (ed.) *Reinventing Foreign Aid*. Cambridge, Mass.: The MIT Press, 2008.

"Globalisation and Inequality within Countries," *Poverty in Focus: The Challenge of Inequality,* Brasilia: International Poverty Center, (June 2007): 10-11.

"What Works in Fighting Diarrheal Diseases in Developing Countries? A Critical Review," with Alix Peterson Zwane, *World Bank Research Observer*, 22:1, (Spring 2007): 1-24. (NBER Working Paper 13539, 2007).

"Cost-Effective Prevention of Diarrheal Diseases: A Critical Review," with Alix Peterson Zwane, Center for Global Development Working Paper 117 (2007).

"Advance Market Commitments for Vaccines against Neglected Diseases: Estimating Costs and Effectiveness," with Ernst Berndt, Rachel Glennerster, Jean Lee, Ruth Levine, Georg Weizsäcker, and Heidi Williams, *Health Economics*, 16:5 (May 2007): 491-511. (Center for Global Development Working Paper 98).

"The Illusion of Sustainability," with Edward Miguel, *Quarterly Journal of Economics*, 122:3 (August 2007): 1007-1065. Reprinted in William Easterly (ed.) *Reinventing Foreign Aid*. Cambridge, Mass.: The MIT Press, 2008. (NBER Working Paper 10324, 2004).

"The Political Economy of Education in Kenya," in Mark Gradstein and Kai A. Konrad (eds.) *Institutions and Norms in Economic Development*. Cambridge, Mass.: The MIT Press, 2006.

"Globalization of Labor Markets and Inequality," in Susan M. Collins and Carol Graham (eds.) *Global Labor Markets, Brookings Trade Forum, 2006*, Washington, D.C.: Brookings Institution Press, 2006.

"Schools, Teachers, and Education Outcomes in Developing Countries," with Paul Glewwe in Eric Alan Hanushek and Finis Welch (eds.) *The Handbook on the Economics of Education*, Volume 2. Amsterdam and London: North-Holland, 2006.

"Long-Term Educational Consequences of Secondary School Vouchers: Evidence from Administrative Records in Colombia," with Joshua Angrist and Eric Bettinger, *American Economic Review*, 96:3 (June 2006): 847-62. (NBER Working Paper 10713, 2004).

"Odious Debt," with Seema Jayachandran, in Jochnick and Preston (eds.) *Sovereign Debt at the Crossroads*. New York: Oxford University Press, 2006.

"Empathy or Antipathy? The Consequences of Racially and Socially Diverse Peers on Attitudes and Behaviors," with Greg Duncan, Johanne Boisjoly, Dan Levy, and Jacque Eccles, *American Economic Review*, 96:5 (December 2006): 1890-1906.

"The Missing Mandate: Global Public Goods," in Nancy Birdsall (ed.) *Rescuing the World Bank: A CGD Working Group Report and Selected Essays*. Washington DC: Center for Global Development, 2006.

"Global Public Goods in Communicable Disease Control," *Infectious Disease, Expert Paper One*, Stockholm: International Task Force on Global Public Goods, 2006.

"Creating Markets for Vaccines," with Rachel Glennerster and Heidi Williams, *Innovations: Technology, Governance, Globalization,* 1:1 (Winter 2006): 67-79.

"Odious Debt," with Seema Jayachandran, in Ashoka Mody and Catherine Patillo (eds.) *Macroeconomic Policies and Poverty Reduction.* New York: Routledge, 2006.

"Odious Debt," with Seema Jayachandran, *American Economic Review*, 96:1 (March 2006):82-92 (NBER Working Paper 8953, 2002). Reprinted in Paul Collier and Jan Willlem Gunning (eds.) *Globalization and Poverty*. Cheltenham: Edward Elgar, 2008.

"Asian Growth and African Development," with Marcos de Carvalho Chamon, *American Economic Review Papers and Proceedings*, 96:2 (May 2006): 400-404.

"Why Are Teachers Absent? Probing Service Delivery in Peruvian Primary Schools," with Lorena Alcazar, F. Halsey Rogers; Nazmul Chaudhury, Jeffrey Hammer, Karthik Muralidharan, *International Journal of Educational Research*, 45:3 (2006): 117-136.

"Public Policies to Stimulate Development of Vaccines for Neglected Diseases," in Abhijit Banerjee, Roland Benabou, and Dilip Mookherjee (eds.) *Understanding Poverty*. New York: Oxford University Press, 2006.

"Creating Incentives For Private Sector Involvement In Poverty Reduction: Purchase Commitments For Agricultural Innovation," with Alix Peterson Zwane in Inge Kaul and Pedro Conceição, eds., *The New Public Finance Responding To Global Challenges*, New York: Oxford University Press, 2006.

"Missing in Action: Teacher and Health Worker Absence in Developing Countries" with Nazmul Chaudhury, Jeffrey Hammer, Karthik Muralidharan, and F. Halsey Rogers, *Journal of Economic Perspectives*, 20:1 (Winter 2006): 91-116.

"Advance Market Commitments: A Policy to Stimulate Investment in Vaccines for Neglected Diseases," with Owen Barder and Heidi Williams, *The Economists' Voice*, 3:3 (2006).

"Motivation Matters: Merit Scholarships and Student Achievements," *Innovation in Education: Proceedings of a Conference held in Cleveland, Ohio, November 17-18, 2005.*

"Teacher Absence in India: A Snapshot," with Nazmul Chaudhury, Jeffrey Hammer, Karthik Muralidharan, and F. Halsey Rogers, *Journal of the European Economic Association*, 3:2-3 (April-May 2005): 658-667.

"Incentives to Learn," with Edward Miguel and Rebecca Thornton, *Education Next: a Journal of Opinion and Research*, 5:2 (Spring 2005): 57-64.

"Peer Effects in Drug Use and Sex Among College Students," with Greg J. Duncan, Johanne Boisjoly, Dan M. Levy, and Jacque Eccles, *Journal of Abnormal Child Psychology*, 33:3 (June 2005): 375–385.

"The Price of Life," with Rachel Glennerster and Heidi Williams, *Foreign Policy,* (May/June 2005): 26-27.

"Incentives for Research on Neglected Diseases," with Rachel Glennerster, Letter to the Editor, *The Lancet* (365), (February 26, 2005): 753-754.

" 'Measuring Poverty': Discussion," *The Review of Economics & Statistics*, 87:1 (February 1, 2005): 23-25.

"Use of Randomization in the Evaluation of Development Effectiveness," with Esther Duflo, in George Keith Pitman, Osvaldo N. Feinstein, and Gregory K. Ingram, (eds.) *Evaluating Development Effectiveness*, Vol. 7 of *World Bank Series on Evaluation and Development*. New Brunswick, New Jersey, and London, U.K.: Transaction Publishers, 2005.

"Encouraging Private Sector Research for Tropical Agriculture," with Alix Peterson Zwane, *World Development,* 33:1 (January 2005): 87-105.

"On How To Improve World Health," *Daedalus*, Summer 2004: 120-123.

"Comment on Jeffrey Sachs' 'Ending Africa's Poverty,'" in William C. Brainard and George L. Perry (eds.) *Brookings Papers on Economic Activity*, 2004:1: 217-231. Washington, D.C.: Brookings Institution Press, 2004.

"Regional Public Goods and Health in Latin America," with Jessica Leino, in Antoni Estevadeordal, Brian Frantz, Tam Robert Nguyen (eds.) *Regional Public Goods: From Theory to Practice*. Washington, D.C.: Inter-American Development Bank and Asian Development Bank, 2004.

"Comments on 'Assessing the Impact of Globalization on Poverty and Inequality: A New Lens on an Old Puzzle' (Carol Graham) and on 'Poverty and the Organization of Political Violence: A Review and Some Conjectures' (Nicholas Sambanis)" in Susan M. Collins and Carol Graham (eds.) *Brookings Trade Forum 2004: Globalization, Poverty and Inequality*. Washington, DC: Brookings Institution Press, 2004.

"Statist Quo Bias: Rejoinder to De Alessi," *Econ Journal Watch*, 1:2 (August 2004): 277-278. http://www.econjournalwatch.org

"An Ivory-Tower Take on the Ivory Trade: Response to De Alessi," *Econ Journal Watch*, 1:1 (April 2004): 55-57. http://www.econjournalwatch.org

"Retrospective vs. Prospective Analyses of School Inputs: The Case of Flip Charts in Kenya," with Paul Glewwe, Sylvie Moulin and Eric Zitzewitz, *Journal of Development Economics*, 74:1 (June 2004): 251-268. (NBER Working Paper 8018, 2000).

"Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities," with Edward Miguel, *Econometrica*, 72:1 (January 2004):159-217. (NBER Working Paper 8481, 2001).

"Elephants: Reply," with Charles Morcom, *American Economic Review*, 93:4 (September 2003): 1446-1448.

"Randomized Evaluations of Educational Programs in Developing Countries: Some Lessons," *American Economic Review*, 93:2 (May 2003): 102-106.

"A Purchase Commitment for Vaccines," a contribution to "Beyond Communicable Disease Control: Health in the Age of Globalization," by Dyna Arhin-Tenkorang and Pedro Conceição, in Inge Kaul, Pedro Conceição, Katell Le Goulven, and Ronald U. Mendoza (eds.) *Providing Global Public Goods: Managing Globalization.* Oxford University Press, 2003.

"Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment," with Joshua Angrist, Eric Bettinger, Erik Bloom, and Elizabeth King, *American Economic Review*, 92:5 (December 2002): 1535-1558. (NBER Working Paper 8343, 2001).

"Pharmaceuticals and the Developing World," *Journal of Economic Perspectives*, 16:4, (Fall 2002): 67-90.

"Income Distribution Dynamics with Endogenous Fertility," with Daniel Chen, *Journal of Economic Growth*, 7:3 (September 2002):227-258. (NBER Working Paper 7530, 2000).

"The Impact of Development Assistance on Social Capital: Evidence from Kenya," with Mary Kay Gugerty, in Christian Grootaert and Thierry van Bastelaer (eds.) *The Role of Social Capital in Development: An Empirical Assessment*. Cambridge (UK): Cambridge University Press, April 2002.

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"Does Favorable Tax-Treatment of Housing Reduce Equipment Investment?" with Ben Broadbent, *Journal of Public Economics*, 81:3 (September 2001): 369-391. (NBER Working Paper 6161, 1997).

"Creating Markets for New Vaccines: Part I: Rationale," in Adam B. Jaffe, Josh Lerner, and Scott Stern (eds.) *Innovation Policy and the Economy*, Volume 1. MIT Press. 2001.

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"Searching for Prosperity," with Alexei Onatski and James Stock, *Carnegie-Rochester Conference Series on Public Policy*, 55 (2001): 275-303.

"A Commitment for Vaccines," with Jessica Leino, translated into French as "Un engagement pour les vaccins," *Biofutu*, 217 (December 2001).

"Epidemiology of single and multiple species of helminth infections among school children in Busia District, Kenya" with S Booker, EA Miguel, S Moulin, A I Luoba, and D A Bundy

"Elephants," with Charles Morcom, *American Economic Review*, 90:1 (March 2000): 212-234. (NBER Working Paper 5674, 1996).

"Improving School Quality in Developing Countries," in Anne O. Krueger (ed.) *Economic Policy Reform: The Second Stage*,. University of Chicago Press, 2000.

"Income Distribution Dynamics with Endogenous Fertility," with Daniel Chen, *American Economic Review Papers and Proceedings*, 89:2 (May 1999): 155-160. (NBER Working Paper 7530, 2000).

"AIDS: The Economic Rationale for Public Intervention," in Martha Ainsworth, Lieve Fransen, and Mead Over (eds.) *Confronting AIDS: Evidence from the Developing World,* The European Commission and the World Bank, 1998.

"Patent Buyouts: A Mechanism for Encouraging Innovation," *Quarterly Journal of Economics*, 113:4 (November 1998): 1137-1167. (NBER Working Paper 6304, 1997). Reprinted in Alexander Tabarrok (ed.) *Entrepreneurial Economics: Bright Ideas from the Dismal Science.* Oxford University Press, 2002.

"On the Effect of Changing Sexual Activity on HIV Prevalence," with Charles Morcom, *Mathematical Biosciences*, 151:1 (July 1998): 99-122.

"Why Isn't Convergence Instantaneous? Young Workers, Old Workers, and Gradual Adjustment," with James Thomson, *Journal of Economic Growth*, 3:1 (March 1998): 5-28. (NBER Working Paper 4827, 1994).

"Disorganization," with Olivier Blanchard, *Quarterly Journal of Economics,* 112:4 (November 1997): 1091-1126.

"AIDS, Behavioral Choice, and the Composition of the Pool of Available Partners," *Advances in Mathematical Population Dynamics: Molecules, Cells and Man*, Part II, Chapter 8, World Scientific Publishing Co., 1997, 487-510.

"How Much Does Sorting Increase Inequality?" *Quarterly Journal of Economics*, 112:1 (February 1997): 115-139. (NBER Working Paper 5566, 1996).

"Integrating Behavioral Choice into Epidemiological Models of the AIDS Epidemic," *Quarterly Journal of Economics*, 111:2 (May 1996): 549-573. (NBER Working Paper 5428, 1996).

"Research on Schooling: What We Know and What We Don't: A Comment on Hanushek," *The World Bank Research Observer,* 10 (August 1995): 247-254.

"Saving and Growth: A Comment," *Carnegie-Rochester Conference Series on Public Policy*, 40 (June 1994): 193-197.

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