Job Creation among U.S. Entrepreneurs: Evidence from the Universe of Startups in the ILBD/LBD Data

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Proposal for: ENTs17app Small Grants for Entrepreneurship
April 26, 2017

Many policymakers and organizations around the world have called upon entrepreneurs to create new jobs (OECD 2014). Billions of dollars are spent each year by federal, state and local governments on incubators, training programs, loan programs, tax breaks, and investor incentives to encourage business creation with a primary goal of job creation. These expenditures, however, are generally done without measurement of the benefits in terms of number of jobs or total payroll created relative to the properly scaled up costs of these programs (i.e. in terms of the number of entrepreneurs created). Surprisingly, we do not even know the answer to the simple question of how many jobs does an entrepreneur create? But in spite of high failure rates and the limited empirical evidence on job creation by entrepreneurs the popularity of public policies to foster entrepreneurs continues to grow around the world.

Measuring job creation by entrepreneurs is also important for better understanding the fundamental nature of entrepreneurship. Is entrepreneurship about creating innovative products, services and jobs (i.e. Shumpeterian entrepreneurship)? Or, is it becoming increasingly about job independence (i.e. being one's own boss), contract/consulting work, schedule flexibility, or being part of the gig economy (Hamilton 2000; Levine and Rubinstein 2016; Hurst and Pugsley 2011).

The primary goal of the proposed research project is to provide one of the first measures of the number of jobs created by the average entrepreneur in the United States and to provide new evidence on the job creation dynamics of entrepreneurs. We will follow the recent approach taken in the academic literature and government reporting of using *new* businesses or business *startups* to measure entrepreneurship. As a starting point, we will examine job creation dynamics among all business startups in the United States. We will track job creation over time by *every* business startup in the U.S. economy by using administrative data on the universe of non-employer firms linked to the universe of employer firms in the Longitudinal Business Database (LBD). To create the necessary links between non-employer and employer definitions, we will update and expand the Integrated Longitudinal Business Database (iLBD). A beta version of the iLBD was first introduced by Davis et al (2007) to study transitions between non-employer and employer business units for a subset of industries.

Another goal of the proposed research project is to test the hypothesis that net job creation by startups dies out quickly over time. We will track net job creation from startup to seven years after startup in the administrative data. Extremely high exit rates could lead to large employment losses for a startup cohort in the first few years post-launch. The job losses from exits, however, might be offset or partially offset if many startups grow quickly and other startups begin hiring employees a few years after startup. Using the universe of U.S. startups we will measure exit rates over time and explore the rich heterogeneity in job creation dynamics across startups. We will also explore the question of how a startup cohort evolves over time in terms of the three primary competing risks related to job creation: no employment, employment,

or exit? Conditioning on hiring employees, we will then examine the distribution of employment size for all startups with employees to test whether the distribution is generally bimodal or uniform.

Another important question is whether startups are creating low-paying jobs? One measure of the benefits of job creation by entrepreneurs salient for welfare calculations is the net number of jobs created, but another measure is the total payroll generated by startups. What is the total payroll created by the average startup and what is the average pay for these jobs? Are startups paying less on average than older businesses?

The evidence is scarce on these important questions primarily because of data limitations. It is impossible, for example, to examine job creation per startup over time using cross-sectional data because only surviving businesses are included. Attrition with longitudinal data is also a serious concern when exploring entrepreneurial dynamics. Even low annual rates of attrition lead to high rates of long-term attrition. It is thus difficult to estimate job creation over time by a cohort of startups using survey data.

Entrepreneurship is also difficult to define and is often tailored to the dataset being used. Only recently the government started publishing data on the "number of firm startups" (U.S. Census Bureau 2016) and "entrepreneurship in the U.S. economy" (U.S. Bureau of Labor Statistics 2016), but these data only include new *employer* businesses or establishments.[1] Data on non-employer startups, however, are more difficult to find and are not reported by the government. This is an important conceptual limitation because the classic studies of entrepreneurship, such as Knight (1921), Schumpeter (1934) and more recently Evans and Jovanovic (1989), that have helped spawned a new field in the area do not limit the definition of entrepreneurship to include only business ventures with employees. Additionally, non-employer firms comprise the majority of both startups and total firms in the United States. To be sure, the exclusion of non-employer startups causes only a minor problem for calculating the total number of jobs created by startups in the United States. But, it does create a major problem for measuring the number of jobs per entrepreneur. In particular, estimates of jobs per entrepreneur will be too high if non-employer startups are excluded from the denominator. An additional problem is that the year of startup will be incorrectly identified for employer firms that originally started with no employees. The inclusion of non-employer startups is also very important for correctly measuring exit rates over time. In general, ignoring the non-employer history of firms might miss important early entrepreneurial dynamics that are crucial to understanding the relationships between entrepreneurship, job creation, and survival.

The analysis of the new administrative data on the universe of startups will shed light on several fundamental, and surprisingly previously unknown, questions regarding the job creation potential of entrepreneurs. Our paper also contributes more generally to the rapidly growing literature on entrepreneurship. We will create a new dataset that captures the universe of business startups in the United States. These longitudinal administrative data allow for the exploration of many questions around entrepreneurial job creation, survival and growth, and allow for substantial flexibility in defining entrepreneurship. Additionally, the massive number of observations – 5-6 million startups *each* year – allows for extremely detailed analyses of entrepreneurs. The findings from the proposed research project might inspire future research using the newly created startup data.

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[1] The previous research on job creation among businesses, however, focuses almost exclusively on employer firms (e.g. Haltiwanger, Jarmin and Miranda 2013; Kulick, Haltiwanger, Jarmin; Miranda 2016; Tracy 2011; Decker et al. 2014; Klenow 2016).

Budget Estimate

$10,000	Stanford RDC Access
$9,000	Research Assistance
$1,000	Travel Funds for Presenting Research
$20,000	Total Budget

Budget Items:
Access to Stanford RDC. The confidential and restricted-access administrative data can only be used at a Census Research Data Center. I checked with the director of the Stanford CRDC and he mentioned that I could use data at the center for 1 year, 1 day per week for $10,000. The CRDC at Stanford is 45 minutes from my office.

Research Assistance:
I would hire a research assistant to help with working with the data output, literature review, and analyzing related data. I will hire the research assistance for $9,000 of work.

Travel Funds for Presenting Research:
I plan on presenting the findings from the research project at a workshop or conference. It will be important to receive feedback on the project. I expect travel and registration fees to cost $1,000.

VITA
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EMPLOYMENT HISTORY

2007- Professor of Economics, University of California, Santa Cruz
2016- Visiting Scholar, Stanford University
2015- Member Board of Directors, Center for Innovation and Entrepreneurial Development
2013-16 Chair of Economics Department, University of California, Santa Cruz
2013 Director of Ph.D. Program in Economics, University of California, Santa Cruz
2011 Visiting Fellow, University of California, Berkeley
2000-10 Director of M.S. Program in Applied Economics and Finance, UC Santa Cruz
2009 Visiting Research Fellow, Institute for Study of Labor (IZA), Germany
2007-08 Visiting Fellow, Australian National University
2003 Visiting Fellow, Yale University
2000-07 Associate Professor of Economics, University of California, Santa Cruz
1994-00 Assistant Professor of Economics, University of California, Santa Cruz
1987-89 Research Assistant, Lewin/ICF, San Francisco, California

EDUCATION

1994 Northwestern University, Ph.D. in Economics
1993 Northwestern University, M.A. in Economics
1987 Stanford University, B.A. in Economics, with honors

RESEARCH FIELDS

Entrepreneurship, Education, Labor, Information Technology, Public Policy

PROFESSIONAL AFFILIATIONS

Research Associate, National Bureau of Economics Research (NBER)

CITATIONS

Google Scholar Citations 8,, h-index=47; REPEC Rankings: overall top 2%; entrepreneurship top 0.1% (#30); information technology top 0.1% (#22)

AWARDS

2014 California Assembly and Senate Joint Resolution #1066 from Assemblymember Luis A. Alejo and Senator William W. Monning
2010 Choice Outstanding Academic Title Award for *Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States*, (with Alicia Robb), Cambridge: MIT Press.
1995 Dissertation Award Finalist, W.E. Upjohn Institute for Employment Research
1991-94 National Science Foundation Research Fellowship, Northwestern University
1989-90 University Fellowship, Northwestern University
1987 Anna Laura Myers Award for Honors Thesis, Stanford University

GRANTS

2016 U.S. Small Business Administration, "Latino Business Ownership: Contributions and Barriers for U.S. Born and Immigrant Latino Entrepreneurs"

2016 Kauffman Foundation, "Kauffman Index: Startup Activity and Main Street Entrepreneurship"

2015 Kauffman Foundation, "Kauffman Index: Startup Activity"

2015-16 Association for Enterprise Opportunity and Kellogg Foundation, "U.S. Born and Immigrant Black Business in America "

2004-14 Kauffman Foundation, "Entrepreneurship in the United States - the Kauffman Index of Entrepreneurial Activity," Annual Award

2012-13 U.S. Small Business Administration, "Crossing the Employer Threshold: Evidence on the Determinants of Firms Hiring their First Employee from the Kauffman Firm Survey and the GATE Experiment"

2012 New American Economy Research Fund, "The Economic Contributions of Immigrant Entrepreneurs and Small Business Owners" .

2010-11 U.S. Small Business Administration, "Access to Capital among Immigrant Entrepreneurs and Small Business Owners"

2010-11 RAND/Kauffman Center for Entrepreneurship and Policy, "Economic Conditions, the Housing Market, and Entrepreneurship."

2010-11 UC MEXUS, "The Effects of Home Computers on the Educational Outcomes of Low-Income Latino Children: A Proposal for a Randomized Field Experiment in California."

2011 The Networks, Electronic Commerce and Telecommunications ("NET") Institute, New York University, " The Effects of Home Computers on the Educational Outcomes of Low-Income Children: A Randomized-Control Trial in California," (with Jonathan Robinson).

2009 Minority Business Development Agency, U.S. Department of Commerce, "Capital Access among Minority-Owned Businesses"

2008-11 ZeroDivide Foundation, "The Effects of Home Computers on Educational Outcomes for Teenagers." (with Jonathan Robinson)

2008-09 UCACCORD, "Does Improving Access to Computers Help Community College Students on Financial Aid: Evidence from a Field Experiment in Rural Northern California."

2008 The Networks, Electronic Commerce and Telecommunications ("NET") Institute, New York University, "High-Technology Entrepreneurship in Silicon Valley."

2007-08 U.S. Small Business Administration, "Immigrant Entrepreneurship: Estimating the Contribution of Immigrant Entrepreneurs using Census and Matched Current Population Survey Data."

2007 Ford Foundation and National Economic Development and Law Center, "Affirmative Action Programs and Self Employment Rates among Minorities and Women," (with Justin Marion).

2007-08 Kauffman/RAND Center for Entrepreneurship and Public Policy, "Health Insurance and Entrepreneurship," (with Kanika Kapur and Susan Gates) $140,000.

2007-08 New York City Economic Development Corporation, "Community Development Finance Study." (with Lisa Servon, Greg Stanton, Jason Friedman, and Blaise Rastello), $250,000.

2006-09 Kauffman Foundation, "Mexican-American and Immigrant Entrepreneurship," (with Chris Woodruff) $96,000.

2006 The Networks, Electronic Commerce and Telecommunications ("NET") Institute, New York University, "ICT Use in the Developing World: Implications of the Global Digital Divide," (with Menzie Chinn).

2005-06 U.S. Small Business Administration, "Entrepreneurship in Silicon Valley during the Boom and Bust."

2004-06 Russell Sage Foundation and Kauffman Foundation, "Race, Families and Success in Small Business: A Comparison of African American-, Asian-, and White-Owned Businesses" (with Alicia Robb).

2004-05 U.S. Small Business Administration, "Minority Entrepreneurship."

2003-04 U.S. Small Business Administration, "Technology, Entrepreneurship, and Firm Size Dynamics: A Cross-Industry Analysis of Access to Technology and Business Startups."

2004-06 Community Technology Foundation of California, "Immigrant Youth and the Digital Divide in California," Co-Principal Investigator (with Rebecca London), $110,000.

2004-05 U.S. Department of Labor, "The Dynamics of Health Insurance Coverage: Factors Correlated with Insurance Gain and Loss among Adults."

2004-05 Employment Policies Institute, "An Analysis of the Dynamics of Health Insurance Coverage and Implications for Employer-Mandated Insurance."

2003-06 W.T. Grant Foundation, "Race, Youth, and the Digital Divide: A Research and Policy Initiative," Co-Principal Investigator (with Manuel Pastor), $250,000.

2003 University of California, Latino Policy Institute, "Latinos and the Digital Divide."

2001-03 Russell Sage Foundation, "Family Resources, Race, and Small Business Outcomes."

2001-02 Institute for Labor and Employment, University of California, "Self-Employment and Economic Advancement among Disadvantaged Minorities."

2001-02 University of California Institute for Mexico and the United States, "Latino Flight from Public Schools to Private Schools."

2000-01 U.S. Small Business Administration, "Earnings Growth among Disadvantaged Business Owners."

2000-01 Spencer Foundation, "Race, Socioeconomic Status, and Flight from Public Schools into Private Schools."

1998-00 National Science Foundation, "Drug Dealing, Incarceration, and Self-Employment."

1997-01 Public Policy Institute of California, "Immigrants, Natives and the Choice Between Public and Private Schools," Co-Principal Investigator (with Julian R. Betts).

1995-96 U.S. Department of Labor, Office of the Assistant Secretary for Policy, "Worker Adjustments to Job Loss: Evidence from the NLSY," (with Lori G. Kletzer).

PUBLICATIONS

Books

2008 *Race and Entrepreneurial Success: Black-, Asian-, and White-Owned Businesses in the United States*, (with Alicia Robb), Cambridge: MIT Press.

1996 *Ethnic and Racial Entrepreneurship: A Study of Historical and Contemporary Differences*, New York: Garland Publishing Inc.

Selected Articles in Professional Journals

2016 "The Effects of Computers on Children's Social Development and School Participation: Evidence from a Randomized Control Experiment," (with Ariel Kalil), *Economics of Education Review* (forthcoming).

2014 "A Community College Instructor like Me: Race and Ethnicity Interactions in the Classroom," (with Florian Hoffman and Phil Oreopoulos), *American Economic Review*. 104(8): 2567-2591.

2015 "Behind the GATE Experiment: Evidence on Effects of and Rationales for Subsidized Entrepreneurship Training" (with Dean Karlan and Jonathan Zinman), *American Economic Journal: Economic Policy*, 7(2): 125-61.

2017 "Taking the Leap: The Determinants of Entrepreneurs Hiring their First Employee" (with Javier Miranda), *Journal of Economics and Management Strategy*, 26(1): 3–34. (Lead Article)

2016 "Racial Differences in Labor Market Transitions during the Great Recession" (with Ken Couch and Huanan Xu), *Research in Labor Economics* (forthcoming).

2016 "Job-Lock: Evidence from a Regression Discontinuity Design" (with Susan Gates and Kanika Kapur) *Industrial Relations*, 55(1): 92–121.

2014 "The Impact of City Contracting Set-Asides on Black Self-Employment and Employment," (with Ronnie Chatterji and Kenneth Y. Chay). *Journal of Labor Economics*, 32(3): 507-561.

2013 "Experimental Evidence on the Effects of Home Computers on Academic Achievement among Schoolchildren" (with Jon Robinson), *American Economic Journal: Applied Economics*, 5(3): 211-240.

2015 "Do Boys and Girls Use Computers Differently, and Does It Contribute to Why Boys do Worse in School Than Girls?" *The Berkeley Electronic Journal of Economic Analysis & Policy*, (*Contributions*), 94: 1-38.

2014 "Access to Technology and the Transfer Function of Community Colleges: Evidence from a Field Experiment," (with Samantha Grunberg), *Economic Inquiry*, 52(3): 1040–1059.

2012 "The Effects of Home Computers on Educational Outcomes: Evidence from a Field Experiment with Community College Students," (with Rebecca London), *The Economic Journal*, 122(561): 727–753.

2013 "Entrepreneurship, Economic Conditions, and the Great Recession," *Journal of Economics and Management Strategy*, 22(2): 207-231. (Lead Article).

2013 "High-Technology Entrepreneurship in Silicon Valley," (with Aaron Chatterji), *Journal of Economics and Management Strategy*, 22(2): 365-389.

2012 "Academic Achievement, Technology and Race: Experimental Evidence," *Economics of Education Review*, 31(5): 663-679.

2012 "Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited," (with Harry Krashinsky), *Review of Income and Wealth*, 58(2): 279-306.

2012 "Little Effect of Insurance Status or Socioeconomic Condition on Disparities in Minority Appendicitis Perforation Rates," (with Edward Livingston), *Journal of the American Medical Association (JAMA): Surgery*, 147(1): 11-17.

2011 "Is Employer-Based Health Insurance a Barrier to Entrepreneurship?," (with Kanika Kapur and Susan Gates), *Journal of Health Economics*, 30(1): 146–162.

2012 "Indian Entrepreneurial Success in the United States, Canada and the United Kingdom" (with Harry Krashinsky, Julie Zissimopoulos and Krishna Kumar), *Research in Labor Economics*, 36: 285-314.

2012 "The Effects of Home Access to Technology on Computer Skills: Evidence from a Field Experiment," *Information Economics and Policy*, 24(3–4): 243–253.

2012 "Entrepreneurship Training, Risk Aversion and Other Personality Traits: Evidence from a Random Experiment" (with William Holleran), *Journal of Economic Psychology*, 33, 366-378.

2012 "Affirmative Action Programs and Business Ownership among Minorities and Women," (with Justin Marion), *Small Business Economics*, 39(2): 319-339.

2010 "Mexican-American Entrepreneurship," (with Chris Woodruff), *The Berkeley Electronic Journal of Economic Analysis & Policy*, (*Contributions*), 10(1): 1-42, Article 10.

2010 "The Five Gaps Facing Small and Microbusiness Owners: Evidence from New York City," *Economic Development Quarterly* (with Lisa Servon, Blaise Rastello and Amber Seely), 24(2): 126-142.

2010 "Last Hired, First Fired? Black-White Unemployment and the Business Cycle," (with Ken Couch), *Demography*, 47(1): 227-247.

2010 "ICT Use in the Developing World: An Analysis of Differences in Computer and Internet Penetration," (with Menzie Chinn), *Review of International Economics*, 18(1): 153-167.

2010 "Home Computers and Educational Outcomes: Evidence from the NLSY97 and CPS" (with Daniel Beltran and Kuntal Das), *Economic Inquiry*, 48(3): 771-792.

2009 "Race, Ethnicity and the Dynamics of Health Insurance Coverage," (with Rebecca London), *Research in Labor Economics*, 29: 335-373.

Winner Outstanding Author Contribution 2010, Emerald Group Publishing Limited

2009 "Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey," (with Alicia Robb), *Small Business Economics*, 33(4): 375-395.

2009 "Determinants of Business Success: An Examination of Asian-Owned Businesses in the United States," (with Alicia Robb), *Journal of Population Economics*, 22(4): 827-858

2009 "Who Is at Risk of Losing and Gaining Health Insurance?," *Industrial Relations*, (with Rebecca A. London), 48(2): 287-310.

2009 "Can the "One-Drop Rule" Tell Us Anything about Racial Discrimination? New Evidence from the Multiple Race Question on the 2000 Census." *Labour Economics*, 16 (4): 451-460.

2007 "Why are Black-Owned Businesses Less Successful than White-Owned Businesses: The Role of Families, Inheritances, and Business Human Capital," (with Alicia Robb), *Journal of Labor Economics*, 25(2): 289-323.

2007 "Families, Human Capital, and Small Business: Evidence from the Characteristics of Business Owners Survey," (with Alicia Robb), *Industrial and Labor Relations Review*, 60(2): 225-245.

Emerald Citations of Excellence Award Winner, Top 50 Papers

2007 "The Determinants of the Global Digital Divide: A Cross-Country Analysis of Computer and Internet Penetration," (with Menzie Chinn), *Oxford Economic Papers*, 59(1): 16-44.

2007 "Access to Financial Capital among U.S Businesses: The Case of African-American Firms," (with Alicia Robb), *The Annals of the American Academy of Political and Social Science*, 613: 47-72.

2007 "Explaining Differences in Access to Home Computers and the Internet: A Comparison of Latino Groups to Other Ethnic and Racial Groups," *Electronic Commerce Research*, 7 (3-4): 265–291.

2006 "The Personal Computer and Entrepreneurship," *Management Science*, 52 (2): 187-203.

2005 "Entrepreneurship and Earnings among Young Adults from Disadvantaged Families." *Small Business Economics,* 25(3): 223-236.

2005 "An Extension of the Blinder-Oaxaca Decomposition Technique to Logit and Probit Models," *Journal of Economic and Social Measurement*, 30(4): 305-316.

2005 "Self-Employment, Entrepreneurship and the National Longitudinal Survey of Youth," *Monthly Labor Review, Special Issue Commemorating the 25th Anniversary of the NLSY79*, 128(2): 40-47.

2005 "The Effects of Home Computers on School Enrollment," *Economics of Education Review*, 24(5): 533-547.

2004 "Race and the Digital Divide," *Berkeley Electronic Journals, Contributions to Economic Analysis & Policy*. 3(1), Article 15: 1-38.

2004 "Earnings Growth among Less-Educated Business Owners," *Industrial Relations*, 43 (3): 634-659.

2004 "Do Family Caps Reduce Out-of-Wedlock Births? Evidence from Arkansas, Georgia, Indiana, New Jersey and Virginia," (with Wendy T. Dyer), *Population Research and Policy Review* 23: 441-473.

2004 "Recent Trends in Ethnic and Racial Business Ownership." *Small Business Economics*, 23: 203-218.

2003 "Private Schools and "Latino Flight" from Black Schoolchildren." *Demography*, 39(4): 655-674.

2003 "The Effect of Immigration on Native Self-Employment," (with Bruce D. Meyer), *Journal of Labor Economics*. 21(3): 619-650.

2003 "Does Immigration Induce "Native Flight" from Public Schools into Private Schools," (with Julian R. Betts), *Journal of Public Economics*. 87(5-6): 987-1012.

2003 "The Long-Term Costs of Job Displacement among Young Workers," (with Lori G. Kletzer)," *Industrial and Labor Relations Review*, 56(4): 682-698.

2002 "Drug Dealing and Legitimate Self-Employment," *Journal of Labor Economics* 20(3): 538-567.

2002 "Is There White Flight into Private Schools? Evidence from the National Educational Longitudinal Survey," (with Alexandra M. Resch), *Review of Economics & Statistics*, 84(1): 21-33.

2001 "Explaining Ethnic, Racial, and Immigrant Differences in Private School Attendance" (with Julian R. Betts), *Journal of Urban Economics*, 50, 26-51.

2000 "Trends in Self-Employment among White and Black Men: 1910-1990," (with Bruce D. Meyer), *Journal of Human Resources*, 35(4): 643-669.

1999 "The Absence of the African-American Owned Business: An Analysis of the Dynamics of Self-Employment," *Journal of Labor Economics*, 17(1): 80-108.

1999 "The Emergence, Persistence, and Recent Widening of the Racial Unemployment Gap," (with William A. Sundstrom), *Industrial and Labor Relations Review*, 52(2): 252-270.

1998 "Jobs Lost, Jobs Regained: An Analysis of Black/White Differences in Job Displacement in the 1980s" (with Lori G. Kletzer), *Industrial Relations*, 37(4): 460-477.

1997 "The Racial Unemployment Gap in Long-Run Perspective" (with William A. Sundstrom), *American Economic Review*, 87(2): 306-310.

1997 "The Effect of Incremental Benefit Levels on Births to AFDC Recipients" (with Rebecca A. London), *Journal of Policy Analysis & Management*, 16(4): 575-597.

1996 "Ethnic and Racial Self-Employment Differences and Possible Explanations" (with Bruce D. Meyer), *Journal of Human Resources*, 31(4): 757-793.

Reprinted in *The Economics of Migration, Volume III*, eds., Klaus Zimmermann and Thomas Bauer, Cheltenham, UK: Edward Elgar Publishing Limited.

1996 "Race and the Shifting Burden of Job Displacement: 1982-93," (with Lori G. Kletzer), *Monthly Labor Review*, 119(9): 13-23.

Selected Chapters in Books

2016 "Technology and Education: Computers, Software, and the Internet" (with George Bulman) in the *Handbook of the Economics of Education, Volume 5*, eds. Eric Hanushek, Steve Machin, and Ludger Woessmann, North-Holland, Chapter 6: 239-280.

2015 "Immigration and Entrepreneurship" (with Magnus Lofstrom) in the *Handbook of the Economics of International Migration*, eds. Barry R. Chiswick and Paul W. Miller, Elsevier, 877-911.

2014 "Using Random Experiments to Measure the Impact of Computers, the Internet and Broadband on Educational Outcomes," Chapter for Research Roundtable on Broadband Evaluation (forthcoming).

2013 "Minority and Immigrant Entrepreneurs: Access to Financial Capital," in the *International Handbook on the Economics of Migration*, eds. Klaus F. Zimmermann and Amelie Constant, Edward Elgar Publishing, 153-175.

2012 “Financial Capital among Minority-Owned Businesses” (with Alicia Robb) in *The Oxford Handbook of Entrepreneurial Finance*, ed. Douglas Cumming, Oxford University Press: 687-718.

2010 “Mexican-American Entrepreneurs and their Contribution to the U.S. Economy” *Open for Business: Migrant Entrepreneurship in OECD Countries*, OECD Publishing, 213-225.

2010 "The International Asian Business Success Story? A Comparison of Chinese, Indian and Other Asian Businesses in the United States, Canada and United Kingdom," (with Julie Zissimopoulos and Harry Krashinsky) in *International Differences in Entrepreneurship*, eds. Josh Lerner and Antoinette Schoar, Chicago: University of Chicago Press and National Bureau of Economic Research, 179-208.

2010 "Asian and Other Immigrant Entrepreneurs in the United States," in *Managing Cultural Diversity in Asia: A Research Companion*, eds. Jawad Syed and Mustafa F. Ozbilgin, Cheltenham, UK: Edward Elgar, 453-481.

2007 "Mexican Immigrants and the Entrepreneurship Gap," (with Christopher Woodruff) in *Overcoming Barriers to Entrepreneurship*, ed. Diana Furchtgott-Roth, Lexington Books Rowman & Littlefield Publishers, Inc.

2007 "Mexican Entrepreneurship: A Comparison of Self-Employment in Mexico and the United States" (with Christopher Woodruff), *Mexican Immigration*, ed. George Borjas, Chicago: University of Chicago Press and National Bureau of Economic Research.

2005 "Minority Entrepreneurship," in *The Small Business Economy 2005: A Report to the President*, U.S. Small Business Administration, Washington, D.C.: U.S. Government Printing Office.

2006 "Entrepreneurship among Disadvantaged Groups: Women, Minorities and the Less Educated," in *The Life Cycle of Entrepreneurial Ventures: International Handbook Series on Entrepreneurship, Vol. 3*, ed. Simon C. Parker, New York, NY : Springer, pp. 437-475.

2006 "Economic Conditions, Parental Job Loss, and Children's Living Arrangements" (with Rebecca London), for *Economic Challenges, Policy Changes, and Poverty*, eds. Rebecca Blank, Sheldon Danzinger, and Robert Schoeni, New York: Russell Sage Foundation.

2006 "The Expanding Use of Technology among Latina Girls," (with Rebecca London). Latina Girls: Voices of Adolescent Strength in the United States, eds. Jill Denner and Bianca Guzman, New York: New York University Press.

2004 "Does Business Ownership Provide a Source of Upward Mobility for Blacks and Hispanics?," *Entrepreneurship and Public Policy* , ed., Doug Holtz-Eakin, Cambridge: MIT Press.

1998 "Does Immigration Hurt African-American Self-Employment?," (with Bruce D. Meyer), *Help or Hindrance? The Economic Implications of Immigration for African-Americans*, eds., Daniel S. Hamermesh and Frank D. Bean, New York: Russell Sage Foundation.

Book Reviews

2011 *Journal of Economic History*, review of "Hispanics in the United States: A Demographic, Social, and Economic History, 1980–2005. By Laird Bergad and Herbert Klein. New York: Cambridge University Press, 2010.

Selected Government Reports

2013 *Crossing the Employer Threshold: Determinants of Firms Hiring their First Employee*, U.S. Small Business Administration Report.

2012 *Immigrant Entrepreneurs and Small Business Owners, and their Access to Financial Capital*, U.S. Small Business Administration Report

2010 *Disparities in Capital Access between Minority and Non-Minority-Owned Businesses:*

The Troubling Reality of Capital Limitations Faced by MBEs, Minority Business Development Agency, U.S. Department of Commerce Report.

2008 *Estimating the Contribution of Immigrant Business Owners to the U.S. Economy*, U.S. Small Business Administration Report

2008 *Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization*, Report for the San Mateo County Transit District and the Peninsula Corridor Joint Powers Board (with Mark Berkman and Matthew Johnson)

2007 *Entrepreneurship in Silicon Valley during the Boom and Bust*, U.S. Small Business Administration Report

2007 *Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization Final Report*, Report for the Santa Clara Valley Transportation Authority (with Mark Berkman and Matthew Johnson)

2005 *The Dynamics of Health Insurance Coverage: Factors Correlated with Insurance Gain and Loss among Adults*, U.S. Department of Labor Report.

2005 *Technology and Entrepreneurship: A Cross-Industry Analysis of Access to Computers and Self-Employment*, U.S. Small Business Administration Report.

2004 *Self-Employed Business Ownership Rates in the United States: 1979-2003*, U.S. Small Business Administration Report.

2004 *Entrepreneurship in the 21st Century, Conference Proceedings*, U.S. Small Business Administration and the Ewing Marion Kauffman Foundation.

2001 *Earnings Growth among Disadvantaged Business Owners*, U.S. Small Business Administration Report.

1996 *The Incidence and Costs of Job Displacement among Young Workers*, (with Lori G. Kletzer), U.S. Department of Labor Report.

Selected Other Publications

2015 *The Kauffman Index: Startup Activity / National Trends*. (with Arnobio Morelix, E.J. Reedy, and Joshua Russell). Ewing Marion Kauffman Foundation.

2014 *Kauffman Index of Entrepreneurial Activity 1996-2013*. Ewing Marion Kauffman Foundation.

2013 *Kauffman Index of Entrepreneurial Activity 1996-2012*. Ewing Marion Kauffman Foundation.

2012 *Open for Business: How Immigrants are Driving Small Business Creation in the United States*, Partnership for a New American Economy Report.

2012 *Kauffman Index of Entrepreneurial Activity 1996-2011*. Ewing Marion Kauffman Foundation.

2011 *Kauffman Index of Entrepreneurial Activity 1996-2010*. Ewing Marion Kauffman Foundation.

2010 *Kauffman Index of Entrepreneurial Activity 1996-2009*. Ewing Marion Kauffman Foundation.

2009 *The Butte College Computer Giveaway Experiment: How Does Access to Home Computers Affect Financial Aid Students' Educational Outcomes?*, Policy Brief, John W. Gardner Center for Youth and their Communities, Stanford University

2009 *Kauffman Index of Entrepreneurial Activity 1996-2008*. Ewing Marion Kauffman Foundation.

2008 *The Causes of Racial Disparities in Business Performance*, Policy Brief #12, National Poverty Center, University of Michigan.

2008 *Kauffman Index of Entrepreneurial Activity 1996-2007*. Ewing Marion Kauffman Foundation.

2007 *Kauffman Index of Entrepreneurial Activity, National Report 1996-2006*. Ewing Marion Kauffman Foundation.

2006 *Kauffman Index of Entrepreneurial Activity, State Report 2006*. Ewing Marion Kauffman Foundation.

2006 *Kauffman Index of Entrepreneurial Activity, National Report 1996-2005*. Ewing Marion Kauffman Foundation.

2006 *Kauffman Index of Entrepreneurial Activity, State Report 2005*. Ewing Marion Kauffman Foundation.

2006 "Racial Segregation and the Private/Public School Choice," Research Publication Series, National Center for the Study of Privatization in Education, Teachers College, Columbia University.

2006 *An Analysis of the Dynamics of Health Insurance Coverage and Implications for Employer-Mandated Insurance*, Employment Policies Institute: Washington, D.C. (with Rebecca London).

2005 *Kauffman Index of Entrepreneurial Activity*, Ewing Marion Kauffman Foundation.

2005 "Assessing the Global Digital Divide," *La Follette Policy Report*, University of Wisconsin, 15 (1), Spring.

2001 "Self-Employment as a Route to Economic Mobility among Less-Educated Youth," *Joint Center for Poverty Research Policy Brief*, Vol. 3; No. 2.

1999 "Drug Dealing and Legitimate Self-Employment," *Joint Center for Poverty Research Policy Brief*, Vol. 1; No. 7.

WORK IN PROGRESS

2016 "The Labor Market Returns to Computer Skills: Evidence from a Field Experiment and California UI Earnings Records" (with Peter Bahr)

2016 "Parental Income and College Outcomes: Evidence from Lottery Wins" (with George Bulman, Sarena Goodman, Adam Isen)

2016 "The Two Components of Business Creation: Opportunity versus Necessity Entrepreneurship" (with Frank Fossen)

2016 "The Self-Employment Training Demonstration" for U.S. Department of Labor (with Mathematica)

2015 "Black and White: Access to Capital among Minority-Owned Startups," (with Alicia Robb and David Robinson).

2015 "Addressing Path Dependence and Incorporating Sample Weights in the Nonlinear Blinder-Oaxaca Decomposition Technique for Logit, Probit and Other Nonlinear Models"

2014 "Course Availability and College Enrollment: Evidence from Administrative Data and Enrollment Discontinuities," (with Thomas Barrios and Silvia Robles)

RESEARCH AFFILIATIONS

2012- CESifo, Munich, research professor
2006-11 RAND Corporation, adjunct researcher
2004- National Poverty Center, University of Michigan
2004- IZA, Institute for the Study of Labor, Germany
1999-03 Joint Center for Poverty Research, Northwestern University and University of Chicago

PROFESSIONAL ACTIVITIES

Member: American Economic Association, Society of Labor Economists, Association for Public Policy Analysis and Management, Academy of Management

Participant: National Bureau of Economic Research Working Group on Entrepreneurship

Instructional: National Bureau of Economic Research, Entrepreneurship Research Bootcamp, Minority Entrepreneurship Bootcamp, University of North Carolina, Max Planck Institute School on Entrepreneurship Research, IZA, CESifo, Wellesley College Economics Student Association, UC Sacramento Center

Advisory Board: Center for Entrepreneurship, Enterprise Economic Impact Council, Center for Innovative Entrepreneurship, vFinance

Referee: *American Economic Journal: Applied Economics, American Economic Journal: Economic Policy*, *American Economic Review, Annals of Finance, B.E. Journals in Economic Analysis & Policy*, *Canadian Journal of Economics*, *Contemporary Economic Policy*, *Demography*, *Developmental Psychology, Economic Development and Cultural Change, Economic Inquiry, Economic Journal, Economics of Education Review, Education Economics*, *Education Finance and Policy, Edward Elgar Press,* Employment Policies Institute*, Environment and Planning C: Government and Policy, European Economic Review, Handbook of Entrepreneurship,* Research Grants Council of Hong Kong*, Industrial & Labor Relations Review*, *Industrial Relations, Information Economics and Policy, International Monetary Fund*, *IZA Journal of Labor Economics*, IZA/Department for International Development Grants, *Journal of Business, Journal of Business Venturing, Journal of Development Studies, Journal of Development Entrepreneurship, Journal of Economic Geography, Journal of Economic Literature, Journal of Economics and Management Strategy, Journal of Economic Psychology*, *Journal of Health Economics*, *Journal of Human Resources*, *Journal of Labor Economics, Journal of Law and Economics, Journal of Money, Credit, and Banking, Journal of Policy Analysis & Management*, *Journal of Political Economy*, *Journal of Population Economics*, *Journal of Regional Science,* Kauffman Foundation, *Labour Economics*, *Management Science*, National Science Foundation, *National Tax Journal*, *Pacific Economic Review*, *Pediatrics*, *Oxford Bulletin of Economics and Statistics*, Public Policy Institute of California, *Quarterly Journal of Economics, Quarterly Review of Economics and Finance*, RAND, *Research in Labor Economics, Research on Aging, Review of Economics and Statistics,* Russell Sage Foundation, *Small Business Economics,* Smith Richardson Foundation, *Social Science Research, Southern Economic Journal, Stanford University Press, Yale University Press*

GOVERNMENT TESTIMONY

2013 California State Testimony for the California State Senate Appropriations Committee, California State Assembly, "The California Minimum Wage, Inflation and the Poverty Line"

2011 U.S. Congressional Testimony, U.S. Senate Committee on Small Business and Entrepreneurship, "Closing the Gap: Exploring Minority Access to Capital and Contracting Opportunities"

2010 U.S. Congressional Testimony, U.S. Senate Committee on Small Business and Entrepreneurship, "Assessing Access: Obstacles and Opportunities for Minority Small Business Owners in Today's Capital Markets"

2010 U.S. Congressional Briefing, U.S. House of Representatives, "The Troubling Reality of Capital Limitations Faced by Minority Firms"

2005 U.S. Congressional Briefing, U.S. House of Representatives, "Access to Technology in the United States"

2005 California State Testimony on "Proposed Merger of SBC Communications Inc. and AT&T Corp." for the California Public Utilities Commission.

2003 California State Testimony on AB 855 (Firebaugh) to the California State Assembly, Committee on Utilities and Commerce regarding inequality in access to technology.

SELECTED OTHER GOVERNMENT SERVICE

2014 Consultation on "Immigrant Entrepreneurship" to the National Academy of Sciences Panel on the Economic and Fiscal Impact of Immigration

2013 Contribution to report by U.S. Senate Committee on Small Business and Entrepreneurship, *Wealth Gap Report*

2009 Minority Enterprise Development Week presentation for U.S. Department of Commerce

2005 Consultation to the National Academy of Sciences Panel on Measuring Business Formation, Dynamics and Performance.

2004 Consultant on digital divide in California for Governor's California Performance Review.

1998 U.S. Department of the Treasury, President's Initiative on Race, consultation regarding policies designed to promote minority business ownership in the United States.

SOFTWARE

2006 FAIRLIE module in Stata to generate nonlinear decomposition of binary outcome differentials, which is an extension of the Blinder-Oaxaca Decomposition Technique to Logit and Probit Models.

CONSULTING ACTIVITIES

2011- Mathematica, research consultant

2012- Brattle Group, academic advisor

2009 Berkeley Economic Consulting, consultant

2006 Kauffman Foundation, advisory panel for entrepreneurship policy brief

2005-06 Center for Innovative Entrepreneurship, vFinance, research consultant

2004-05 The Children's Partnership, Digital Opportunities Measuring Stick Project, research

2004-09 Charles River Associates, consultant

2001-02 Deloitte & Touche, Economic Consulting Group, consultant

2000- Research, consultation, estimation and expert witness on projects for: disadvantaged, minority and female business enterprise programs, wage differentials in labor markets, housing prices, consequences of Mello-Roos taxes, economic damages, marketing response data for credit cards, financial models, stock market data, financial models for valuing stock and option-based compensation, and success rate data for telecommunications installations and repairs.

1999-00 Women's Initiative for Self-Employment, research consultant

PRESENTATIONS

2017 Stanford University (Economics)
Latino Entrepreneurship Initiative, Stanford University
Stanford University (FSI International Institute/Education)
Stanford University (Inequality)
University of Nevada, Reno
"InNEVation" Center, University of Nevada, Reno
American Economic Association Annual Meetings
American Financial Association Annual Meetings (Panel)

2016 U.S. Small Business Administration
Arizona State University
National Academy of Sciences
The Research Institute of Industrial Economics (IFN), Stockholm
Stockholm University
Keynote address for 72nd Annual Congress of the International Institute of Public Finance
Public Policy Institute of California
Contra Costa Community College District
Chicano Latino Research Center Workshop
University of Southern California
Annual African American Male Educational Network and Development Summit
UC Berkeley
Columbia University
Northeastern University
Tufts University
Louisiana Tech

2015 University of Arizona
Faculty Diversity Summit, California Community College System
Association for Public Policy Analysis and Management Meetings, Miami, FL
IZA/Kauffman Entrepreneurship Conference, Georgetown University
Keynote, CESifo Entrepreneurship Conference, Venice, Italy
University of Munich
CES/ifo Institute
University of Bristol
London School of Economics
University of California, Sacramento Center
Santa Clara University

2014 Annual Meetings of Economics of Risky Behaviors, IZA, Medellin, Colombia
Harvard Business School
Cornell University
National Academy of Sciences
Business and Economic Development Center Workshop, University of Washington
Claremont McKenna College
Chicano Latino Research Center Workshop, University of California, Santa Cruz
University of Toronto
Wellesley College
Association for Public Policy Analysis and Management Meetings, Albuquerque, NM

2013 Hispanic Leadership Summit, University of Texas, Austin

Research Frontiers Day Conference, University of California, Santa Cruz
Business and Economic Development Center Workshop, University of Washington
Keynote address for IZA/Kauffman Entrepreneurship Conference, San Francisco
Tinbergen Institute, Amsterdam
Copenhagen Business School

2012 De Anza College, Bay Area Regional Community College Researchers' Meetings
MacArthur Foundation, Research Roundtable on Broadband Evaluation
HEC Paris Workshop on Entrepreneurship, Paris
HEC Paris University, Workshop on Entrepreneurship
CESifo Institute, Munich
UC Berkeley
CESifo Institute, Munich
Society of Labor Economists, Chicago, Illinois
Society of Labor Economists, Chicago, Illinois
Management and Economics of ICT Conference, Munich

2011 University of British Columbia
UC Berkeley
National Bureau of Economic Research, Working Group in Entrepreneurship
Harvard/IZA Conference on Evaluation
De Anza College Presidential and Academic Senate Leadership Conference
International Computer Refurbisher Summit, Austin TX
UC Berkeley
University of Montreal, National Conference on Equity in Procurement and Contracting
Macroeconomics and Entrepreneurship CIRPEE-IVEY Conference, Montreal
UC Berkeley
Duke University and Kauffman Foundation Entrepreneurship Conference
U.S. Small Business Administration
Western Economic Association Meetings, San Diego, California
Western Economic Association Meetings, San Diego, California

2010 Case Western Reserve University
Atlanta Federal Reserve Bank, Small Business, Entrepreneurship and Economic Recovery Conference
OECD Conference on Entrepreneurship and Employment Creation of Immigrants in OECD Countries
DIW/IZA Workshop on Entrepreneurship Research, Bonn, Germany.
University of Rome

2009 Equal Justice Society, San Francisco, California.
HEC Paris University
IZA, Germany
Max Planck Institute, Jena, Germany.
IZA, Germany
University of California, Irvine
University of Wisconsin, Institute for Research on Poverty
Federal Reserve Bank of San Francisco
University College Dublin.
Santa Clara University, California State’s Bankruptcy and its Economic Future Conference

Federal Reserve Bank of Cleveland and Kauffman Foundation Entrepreneurial Finance Conference
RAND Policy Breakfast
Hudson Institute
Urban Institute
University of Wisconsin
University of California, Sacramento Center
Wisconsin Entrepreneurs' Network
University of Wisconsin, LaFollette School of Public Affairs
Association for Public Policy Analysis and Management Meetings, Washington, D.C.
International Conference on Panel Data, Bonn Germany.

2008 Annual Lecture on Science, Technology and Society, Center for Human Potential and Public Policy, University of Chicago.
The Diversity in Business Conference, CJTC, University of California, Santa Cruz
Western New England College, Law & Business Center for Advancing Entrepreneurship
Minority Business Development Agency, U.S. Department of Commerce, and U.S. Small Business Administration.
Silicon Valley Center, University of California, Santa Cruz
UC Berkeley.
UCLA, UCACCORD Workshop
Stanford University, West Coast Research Symposium on Technology Entrepreneurship
Hitotsubashi University, Japan
University of North Carolina, Research Conference on Entrepreneurship among Minorities and Women
University of Washington, National Diversity in Business Research Conference
NBER Entrepreneurship Research Bootcamp.
University of California, Berkeley
Australian National University
University of Melbourne
Adoption of ICT Enabled Information Systems for Agricultural Development Conference, Tokyo, Japan
Association of Public Policy and Management Meetings, Los Angeles, California.
Association of Public Policy Management Meetings, Los Angeles, California.
Academy of Management Meetings, Anaheim, California
Academy of Management Meetings, Anaheim, California

2007 Australian National University
Kauffman Symposium on Entrepreneurship and Innovation Data
Impact 209 Conference, UCLA
Harvard Business School
RAND
University of Sydney
University of New South Wales
Australian National University, Faculty of Economics and Business
National Bureau of Economic Research
U.S. Small Business Administration
IZA/SOLE Transatlantic Meetings, Munich, Germany
Academy of Management Meetings, Philadelphia, PA
Academy of Management Meetings, Philadelphia, PA

Society of Labor Economists Annual Meetings, Chicago, IL
Society of Labor Economists Annual Meetings, Chicago, IL

2006 Consulate General of Sweden, Swedish Office of Science and Technology at the University of Southern California.
San Francisco Federal Reserve Bank
Business Diversity Conference, University of Washington
Health Insurance Transitions Workshop, University of Michigan
Entrepreneurship and Human Capital Conference, University of Amsterdam
Research Conference on Entrepreneurship among Minorities and Women, University of North Carolina, Chapel Hill.
University of Victoria
National Bureau of Economic Research Working Group on Entrepreneurship
University of Arizona
United States Association for Small Business and Entrepreneurship Annual Meetings, Tucson, AZ

2005 Panel on Measuring Business Formation, Dynamics and Performance, the National Academy of Sciences
Moss Landing Marine Laboratories, the California State University.
Kauffman Foundation Entrepreneurship Bootcamp, University of North Carolina, Chapel Hill
Dartmouth College
University of North Carolina, Chapel Hill
CJTC
Stanford University
University of Connecticut
Society of Labor Economists Annual Meetings, San Francisco, CA.
Working and Poor: How Economic and Policy Changes Are Affecting Low-Wage Workers Conference, Georgetown University
Social Policy Evaluation Annual Conference, Australian National University

2004 W.T. Grant Foundation Economics and Technology Workshop
Kauffman Foundation Entrepreneurship Data Conference, the University of Chicago
Entrepreneurship Conference, Case Western Reserve University
National Bureau of Economic Research
Kauffman Foundation Entrepreneurship Bootcamp, University of North Carolina, Chapel Hill.
Entrepreneurship in the 21st Century, Office of Advocacy, Small Business Administration and Kauffman Foundation.
National Bureau of Economic Research, Working Group in Entrepreneurship.
World Bank.
CJTC Focus Group, University of California, Santa Cruz Extension.
Community Technology Centers' Network Annual Conference, Seattle, WA.
Society of Labor Economists Annual Meetings, San Antonio, TX.
American Economic Association Annual Meetings, San Diego, CA.

2003 Bay Area Labor Economists Workshop, University of California, San Francisco, Columbia University
SUNY Albany
Yale University
U.S. Small Business Administration

	Board of Governors of the Federal Reserve System
	University of Maryland
	University of California, Santa Barbara
	Yale University
	Urban Institute
	Baruch College.
	National University of Singapore.
2002	Society of Labor Economists Annual Meetings, Baltimore, MD.
	United States Association for Small Business and Entrepreneurship Annual Meetings, Reno, NV.
2001	University of California, Berkeley
	University of California, San Diego
	Bay Area Labor Economists Workshop, Stanford University.
	Labor and Capital in the Global Economy Workshop, Santa Cruz Center for International Economics
	Entrepreneurship and Public Policy Workshop, Syracuse University
	United States Association for Small Business and Entrepreneurship Annual Meetings, Orlando, FL
2000	Columbia University
	Association for Public Policy Analysis and Management Meetings, Seattle, WA.
	Association for Public Policy Analysis and Management Meetings, Seattle, WA.
1999	Bay Area Labor Economists Workshop, Santa Clara University
	McMaster University
	University of Toronto
	University of California, Berkeley
	Symposium on Race and Economic Progress, Rutgers University
	Association for Public Policy Analysis and Management Meetings, Washington, D.C.
	National Bureau of Economic Research Summer Institute, Labor Studies, Cambridge, MA.
	American Economic Association Annual Meetings, New York, NY
	Association for Public Policy Analysis and Management Meetings, Washington, D.C.
1998-99	Yale University
	Federal Reserve Bank of New York
	Russell Sage Foundation
	University of California, Davis
	Public Policy Institute of California
	University of California, Berkeley
1998	Conference on Labour Market Transitions and Income Dynamics, Canadian Employment Research Forum, University of Ottawa.
	University of California, Berkeley
	Presentation for the President's Initiative on Race at the U.S. Department of the Treasury.
	European Association of Labour Economists Annual Conference, Blankenberge, Belgium.
	Population Association of America, Annual Meetings, Chicago, IL
	Western Economic Association International, Annual Meetings, Lake Tahoe, CA.
1997	Bay Area Labor Economists Workshop, San Francisco State University
	All-UC Group in Economic History Conference, University of California, Davis.
	Portland State University.

	Population Association of America, Annual Meetings, Washington D.C.
	Population Association of America, Annual Meetings, Washington D.C.
	Econometric Society Winter Meetings, New Orleans, LA.
1996-97	University of Texas, Austin
	Urban Institute
	Bay Area Labor Economists Workshop, Public Policy Institute of California
	George Washington University
	Bureau of Labor Statistics
	University of Maryland
	Stanford University
1996	National Association for Welfare Research and Statistics Annual Workshop, San Francisco, CA.
	Western Economic Association International Annual Meetings, San Francisco, CA.
	Econometric Society Winter Meetings, San Francisco, CA.
	Econometric Society Winter Meetings, San Francisco, CA.
1995-96	University of California, Santa Barbara
	Public Policy Institute of California, San Francisco
1995	Econometric Society Winter Meetings, Washington, D.C.
1994	Federal Reserve Bank of Chicago
	University of Chicago
	University of California, Santa Cruz
	UCLA
	Milken Institute
	Syracuse University.
1993	Northwestern University
1992	University of Chicago