

Professor Roland G. Fryer  
Littauer 222 / EdLabs: 1280 Massachusetts Ave., 3<sup>rd</sup> Floor  
email: rolandfryer@edlabs.harvard.edu  
tel: 617-495-9592  
Office Hours: by appointment  
TA: Alex Bell [ambell@gmail.com](mailto:ambell@gmail.com)  
Office Hours: Tuesday 4pm-5pm in Littauer Basement or by appointment

## **SOCIAL ECONOMICS (Inequality, Education, and Social Interactions)**

**Room: Harvard Hall 103**

Tuesday, Thursday: 2:30 pm – 4:00 pm

This is a graduate course in labor economics and related topics, appropriate for graduate students in the Department of Economics and other students with advanced preparation in microeconomic theory and econometrics. This course applies the tools of economics to explore social issues including crime, discrimination, racial and gender differences, family structure, social interactions and peer effects, and intergenerational mobility.

The syllabus contains a reading list that is a broad guide to the literature. I will tell you which readings to focus on one week in advance. When possible, a draft of lecture notes will also be made available prior to class. However, lecture topics are subject to change without notice and notes are subject to updating after class.

Many comprehensive surveys of key topics in labor economics are available in the *Handbook of Labor Economics*, published by Elsevier Science and available on-line from Science Direct through the Harvard Libraries. Volumes 1 and 2 from 1986 are edited by Orley Ashenfelter and Richard Layard. Volume 3 (in three volumes) from 1999 and Volume 4 (in two volumes) from 2010 are edited by Orley Ashenfelter and David Card.

Preparation for research: Students are *strongly* encouraged to attend the weekly Labor Economics Workshop, which meets on Wednesday from 4:00 to 5:30 in Littauer M-16.

Grading: Students will prepare a midterm (40%), final examination (40%), and problem sets (20%).

The Midterm is October 3, 2017.

The final exam will take place in exam period at a mutually agreed upon time and date.

## **ECONOMICS 2811: Expected Lecture Schedule for Fall 2017 (subject to radical change)**

### **I. Economics of Discrimination**

<b>Aug 31:</b>	<b>Introduction to course, Becker's Theory of Discrimination</b>
<b>Sept 5:</b>	<b>Models of Discrimination</b>
<b>Sept 7:</b>	<b>Economics of Search, Search Models of Discrimination</b>

<b>Sept 12:</b>	<b>Testing for Discrimination I: Mincer, Audit Studies</b>
<b>Sept 14:</b>	<b>Testing for Discrimination II: Using Theory</b>
<b>Sept 19:</b>	<b>Anti-Discrimination Policy I: Theory</b>
<b>Sept 21:</b>	<b>Anti-Discrimination Policy II: Efficacy of Legal Interventions</b>

## **II. Economics of Education**

<b>Sept 26:</b>	<b>Basic Facts about Population Differences in Student Achievement</b>
<b>Sept 28:</b>	<b>Estimating Educational Production Functions: (Class Size and Competition)</b>
<b>Oct 3:</b>	<b>Midterm Exam</b>
<b>Oct 5:</b>	<b>Understanding Value-Add Models</b>
<b>Oct 10:</b>	<b>Agency Theory, Incentives, and Student Achievement</b>
<b>Oct 12:</b>	<b>Impact of Charter/Magnet Schools on Outcomes</b>
<b>Oct 17:</b>	<b>Understanding and Increasing Educational Efficiency</b>
<b>Oct 19:</b>	<b>Toward an Understanding of Non-Cognitive Skills and Outcomes</b>

## **III. Family Background, Neighborhoods, Social Connections, and Identity**

<b>Oct 24:</b>	<b>Models of Intergenerational Mobility</b>
<b>Oct 26:</b>	<b>Measurement of Intergenerational Mobility</b>
<b>Oct 31:</b>	<b>Segregation: Measurement and Impact on Outcomes</b>
<b>Nov 2:</b>	<b>Economic Models of Poverty</b>
<b>Nov 7:</b>	<b>Moving to Opportunity and other Programs to Alleviate Poverty</b>
<b>Nov 9:</b>	<b>Models of Social Interactions I: Herding, Networks, and Information</b>
<b>Nov 14:</b>	<b>Models of Social Interactions II: Conformity and Signalling</b>
<b>Nov 16:</b>	<b>Estimating Peer Effects</b>

## **IV. Economics of Crime**

<b>Nov 21/28:</b>	<b>Economics of Crime and Punishment</b>
<b>Nov 30:</b>	<b>Make up / Review</b>
<b>TBD:</b>	<b>Final Exam</b>

## **I. Economics of Discrimination**

Altonji and R. Blank (1999), "Race and Gender in the Labor Market," in O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, vol. 3C, North Holland, 3143-3259.

E. Phelps (1972), "The Statistical Theory of Racism and Sexism," *AER* 62 (Sept), 659-61.

Aigner and G. Cain (1977), "Statistical Theories of Discrimination," *Industrial and Labor Relations Review*, 30 (January), 175-87.

D. Black (1995), "Discrimination in an Equilibrium Search Model," *JOLE* 12 (April), 309-334.

P.A. Riach and J. Rich (2002), "Field Experiments of Discrimination in the Market Place," *Economic Journal*, 112 (November), F480-F518.

M. Bertrand and S. Mullainathan, "Are Emily and Greg More Employable than Latisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review* 94 (September 2004), 991-1013.

D. Pager (2007) "The Use of Field Experiments for Studies of Employment Discrimination: Contributions, Critiques, and Directions for the Future," *Annals of the American Academy of Political and Social Science* 609: 104-133.

D. Autor and D. Scarborough (2006), "Will Job Testing Harm Minority Workers? Evidence from the Retail Sector", MIT, December.

J. Altonji and C. Pierret (2001), "Employer Learning and Statistical Discrimination," *Quarterly Journal of Economics* 116 (February), 313-50.

G. Becker (1957), *The Economics of Discrimination*, University of Chicago Press.

K. Arrow (1973), "The Theory of Discrimination," in O. Ashenfelter and A. Rees, ed., *Discrimination in Labor Markets*, Princeton U. Press, 3-33.

G. Borjas and S. Bronars (1989), "Consumer Discrimination and Self-Employment," *Journal of Political Economy* 97, 581-605.

A. Goldberger (1984), "Reverse Regression and Salary Discrimination," *Journal of Human Resources*, 19 (Summer), 293-318.

C. Goldin and C. Rouse (2000), "Orchestrating Impartiality: The Impact of 'Blind' Auditions on Female Musicians," *American Economic Review* 90 (September), 715-41.

J. Hellerstein, D. Neumark and K. Troske (1999), "Wages, Productivity, and Worker Characteristics: Evidence from Plant-Level Production Functions and Wage Equations," *Journal of Labor Economics* 17 (July), 409-446.

C. Nardinelli and C. Simon (1990), "Customer Discrimination in the Market for Memorabilia: The Case of Baseball," *Quarterly Journal of Economics* 105 (August): 575-95.

H. Holzer and K. Ihlanfeldt (1998), "Customer Discrimination and Employment Outcomes for Minority Workers," *Quarterly Journal of Economics* 113 (August), 835-67.

D. Pager, B. Western, B. Bonikowski (2006), "Discrimination in Low-Wage Labor Markets," Princeton; [http://isites.harvard.edu/fs/docs/icb.topic93239.files/Pager\\_10-18-06\\_Paper.pdf](http://isites.harvard.edu/fs/docs/icb.topic93239.files/Pager_10-18-06_Paper.pdf)

D. Neumark et al. (1996), "Sex Discrimination in Restaurant Hiring: An Audit Study," *Quarterly Journal of Economics* 111 (August), 915-41.

C. Fershtman and U. Gneezy (2001), "Discrimination in a Segmented Society: An Experimental Approach," *Quarterly Journal of Economics* 116 (February), 351-77.

J. List (2004), "The Nature and Extent of Discrimination in the Marketplace: Evidence from the Field," *Quarterly Journal of Economics* 119 (February), 49-89.

D. Hamermesh and J. Biddle (1994), "Beauty and the Labor Market," *AER* 84 (December).

M. Mobius and T. Rosenblatt (2006), "Why Beauty Matters," *AER* 96 (March), 222-235.

N. Persico, A. Postlewaite, and D. Silverman (2004), "The Effect of Adolescent Experience on Labor Market Outcomes: The Case of Height," *Journal of Political Economy* 112 (October).

A. Case and C. Paxson (2006), "Stature and Status: Height, Ability and Labor Market Outcomes," Princeton; <http://www.nber.org/confer/2006/lfs06/case.pdf> ([Links to an external site.](#))[Links to an external site.](#)

G. A. Akerlof (1985), "Discriminatory, status-based wages among tradition-oriented, stochastically trading coconut producers". *The Journal of Political Economy*, 265-276.

J. E. Stiglitz (1973). "Approaches to the Economics of Discrimination". *The American Economic Review*, 287-295.

Lundberg, S. J., & Startz, R. (1983). Private discrimination and social intervention in competitive labor market. *The American Economic Review*, 340-347

Milgrom, P., & Oster, S. (1987). Job discrimination, market forces, and the invisibility hypothesis. *The Quarterly Journal of Economics*, 453-476

- Cornell, B., & Welch, I. (1996). Culture, information, and screening discrimination. *Journal of Political Economy*, 542-571.
- Lang, K. (1986). A language theory of discrimination. *The quarterly journal of economics*, 363-382
- Carroll, S. J., & Rolph, J. E. (1973). A stochastic model of discrimination in the labor market. *Econometrica: Journal of the Econometric Society*, 97-108
- Bowlus, A. J., & Eckstein, Z. (2002). Discrimination and Skill Differences in an Equilibrium Search Model\*. *International Economic Review*, 43(4), 1309-1345
- Fryer, R. G., Pager, D., & Spenkuch, J. L. (2013). Racial Disparities in Job Finding and Offered Wages. *Journal of Law and Economics*, 56(3), 633-689.

### **Black/White Differences**

- J. Donohue and J. Heckman (1991), "Continuous Versus Episodic Change: The Impact of Civil Rights Policy on the Economic Status of Blacks," *JEL* (December), 1603-42.
- D. Neal and W. Johnson (1996), "The Role of Premarket Factors in Black-White Wage Differences," *Journal of Political Economy* 104 (October), 869-95.
- G. Loury (2002), *The Anatomy of Racial Inequality*, Harvard University Press.
- G. Loury (2003), "Racial Stigma: Toward a New Paradigm for Discrimination Theory," *AER* (May), 334-7.
- K. Lang and M. Manove and W. Dickens (2005), "Racial Discrimination in Labor Markets with Announced Wages," *American Economic Review* 95 (September), 1327-40.
- D. Card and A. Krueger (1992), "School Quality and Black/White Relative Earnings: A Direct Assessment," *Quarterly Journal of Economics* 107 (February).
- C. Juhn (2003), "Labor Market Dropouts and Trends in Black and White Wages," *ILRR* 56 July.
- A. Chandra (2003), "Is the Convergence in the Racial Wage Gap Illusory?," NBER WP No. 9476.
- D. Neal (2004), "The Measured Black-White Wage Gap Among Women Is Too Small," *Journal of Political Economy* 112 (February, Part 2), S1-S28.
- J. Bound and R. Freeman (1992), "What Went Wrong? The Erosion of the Earnings and Employment of Young Black Men in the 1980s," *Quarterly Journal of Economics* 107 (February).
- W. Rodgers and W. Spriggs (1996), "What Does AFQT Really Measure: Race, Wages, Schooling and the AFQT Score," *Rev. of Black Political Economy* 24 (Spring).
- P. Carneiro, J. Heckman, and D. Masterov (2003), "Labor Market Discrimination and Racial Differences in Pre-Market Factors," NBER WP No. 10068, November.
- Charles, K. K., & Guryan, J. (2008). Prejudice and wages: an empirical assessment of Becker's The Economics of Discrimination. *Journal of Political Economy*, 116(5), 773-809

### **Male/Female Differences**

- F. Blau and L. Kahn (2000), "Gender Differences in Pay," *JEP* 14 (Fall), 75-99.
- C. Goldin (1986), "Monitoring Costs and Occupational Segregation by the Sexes: An Historical Analysis," *Journal of Labor Economics*.
- M. Niederle and L. Vesterlund (2007), "Do Women Shy Away from Competition? Do Men Compete Too Much?," *Quarterly Journal of Economics* 122 (August), forthcoming; <http://www.stanford.edu/~niederle/Women.Competition.pdf> (Links to an external site.)[Links to an external site.](#)

J. O'Neil (2003), "The Gender Gap in Wages, circa 2000," *AER* 93 (May), 309-14

C. Goldin (1990), *Understanding the Gender Gap*, Oxford U. Press, esp. ch. 3, 4, and 6.

C. Goldin (2006), "The Quiet Revolution that Transformed Women's Employment, Education and Family," *American Economic Review* (May).

C. Goldin (2002), "A Pollution Theory of Discrimination: Male and Female Differences in Occupations and Earnings," NBER WP No. 8985, June.

L. Babcock and S. Laschever (2003), *Women Don't Ask*, Princeton U. Press.

P. Loprest (1992), "Gender Differences in Wage Growth and Job Mobility," *AER*, May.

C. Brown and M. Corcoran (1997), "Sex-Based Differences in School Content and the Male/Female Wage Gap," *Journal of Labor Economics* 15, 431-65.

J. O'Neill and S. Polachek (1993), "Why the Gender Gap Narrowed in the 1980s," *Journal of Labor Economics* 11 (January, part 1), 205-228.

F. Blau and L. Kahn (1997), "Swimming Upstream: Trends in the Gender Wage Differential in the 1980s," *Journal of Labor Economics* 15 (January, Part 1), 1-42.

F. Blau and L. Kahn (2004), "The U.S. Gender Pay Gap in the 1990s: Slowing Convergence," NBER WP 10853, October.

F. Blau and L. Kahn (2003), "Understanding International Differences in the Gender Pay Gap," *Journal of Labor Economics* 21 (January).

C. Olivetti and B. Petrongolo (2006), "Unequal Pay or Unequal Employment? A Cross-Country Analysis of Gender Gaps?," Boston University, June;  
<http://www.nber.org/~confer/2006/si2006/ls/petrongolo.pdf> (Links to an external site.)Links to an external site.

D. McPherson and B. Hirsch (1995), "Wages and Gender Composition: Why Do Women's Jobs Pay Less?" *Journal of Labor Economics* 13 (July), 426-71.

D. Ellwood, T. Wilde, and L. Batchelder (2004), "The Impact of Childbearing on Wages of Women of Differing Skill Levels," Harvard University, March.

D. Ginther and S. Kahn (2004), "Women in Economics: Moving Up or Falling Off the Academic Career Ladder?" *Journal of Economic Perspectives* 18 (Summer), 193-214.

R. Wood, M. Corcoran, and P. Courant (1993), "Pay Differences among the Highly Paid: The Male-Female Earnings Gap in Lawyers' Salaries," *Journal of Labor Economics* 11 (July), 417-41.

Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International economic review*, 693-709

### **The Theory and Measurement of Anti-Discrimination Policies**

H. Holzer and D. Neumark (2000), "Assessing Affirmative Action," *JEL* 38 (Sept), 483-568.

J. Leonard (1984), "The Impact of Affirmative Action on Employment," *JOLE* 2 (October).

S. Coate and G. Loury (1993), "Will Affirmative Action Eliminate Negative Stereotypes?," *American Economic Review*, December, 1220-1240.

R. Fryer, G. Loury, and T. Yuret (forthcoming), "An Economic Analysis of Color-Blind Affirmative Action," <http://www.economics.harvard.edu/faculty/fryer/papers/cbaarevision.pdf>

J. McCrary (2007), "The Effect of Court-Ordered Hiring Quotas on the Composition and Quality of Police," *AER* (March); <http://www-personal.umich.edu/~jmccrary/mccrary2006.pdf> (Links to an external site.)Links to an external site.



D. Acemoglu and J. Angrist (2001), "Consequences of Employment Protection? The Case of the Americans with Disabilities Act," *Journal of Political Economy* 109, 915-57.

R. Fryer and G. Loury (2005), "Affirmative Action and Its Mythology," *Journal of Economic Perspectives* 19 (Summer), 147-62.

J. Leonard (1990), "The Impact of Affirmative Action Regulation and Equal Employment Law on Black Employment," *Journal of Economic Perspectives* 4 (Fall), 47-63.

J. Heckman and B. Payner (1989), "Determining the Impact of Federal Antidiscrimination Policy on the Economic Status of Blacks: A Study of South Carolina," *AER* 79 (March).

K. Chay (1998), "The Impact of Federal Civil Rights Policy on Black Economic Progress: Evidence from the Equal Employment Opportunity Act of 1972," *ILRR*, July.

P. Oyer and S. Schaefer (2002), "Sorting, Quotas and the Civil Rights Act of 1991: Who Hires When Its Hard to Fire," *Journal of Law and Economics* 45 (April), 41-68.

C. Jolls, and J.J. Prescott (2004), "Disaggregating Employment Protection: The Case of Disability Discrimination," NBER WP No. 10740, September.

A. Manning (1996), "The Equal Pay Act as an Experiment to Test Theories of the Labor Market," *Economica*, 63, pp. 191-212.

R. Fryer. and G. Loury. 2005. "Affirmative Action in Winner-take-all Markets" *Journal of Economic Inequality*, December.

L. M. Kahn (1991). "Customer discrimination and affirmative action", *Economic Inquiry*, 29(3), 555-571.

Fryer, R. G. (2007). Belief flipping in a dynamic model of statistical discrimination. *Journal of Public Economics*, 91(5), 1151-1166

Fryer, R. G., & Loury, G. C. (2013). Valuing diversity. *The journal of political economy*, 121(4), 747

Fryer R. G. (2011), "Racial inequality in the 21st century: the declining significance of discrimination", In: David Card and Orley Ashenfelter, Editor(s), *Handbook of Labor Economics*, Elsevier, 2011, Volume 4, Part B, Pages 855-971

## **II. Economics of Education**

R. Fryer and S. Levitt (2004), "Understanding the Black-White Test Score Gap in the First Two Years of School," *Review of Economics and Statistics* 86 (May), 447-61.

R. Fryer and S. Levitt (2007), "Testing for Racial Differences in the Mental Ability of Young Children." Available at: <http://www.economics.harvard.edu/faculty/fryer/papers.html>

W. Dickens and J. Flynn (2001), "Heritability Estimates versus Large Environmental Gains: The IQ Paradox Resolved," *Psychological Review*, Vol 108 (2), 346-369.

C.M. Steele and J. Aronson (1995), "Stereotype threat and the intellectual test performance of African-Americans," *Journal of Personality and Social Psychology* 69(5), 797-811.

S. Scarr, R. Weinberg, I.D. Waldman (1993), "IQ Correlations in Transracial Adoptive Families," *Intelligence* 17, 541-555.

R. Herrnstein and C. Murray (1994), *The Bell Curve*, Free Press.

C. Jencks and M. Phillips, Eds. (1998), *The Black-White Test Score Gap*, Brookings Institution.

D. Neal (2006), "Why Has Black-White Skill Convergence Stopped?" in E. Hanushek and F. Welch, eds., *Handbook of the Economics of Education*, Elsevier, 512-576.

W. Collins and R. Margo (2003), "Historical Perspectives on Racial Differences in Schooling in the United States," NBER WP No. 9770.

C. Hoxby (2000), "Does Competition Among Public Schools Benefit Students and Taxpayers?" *American Economic Review*, 90(5).

J. Rothstein (2007), "Does Competition Among Public Schools Benefit Students and Taxpayers? A Comment on Hoxby (2000)," *American Economic Review*, 97(5), December, pp. 2026-2037.

J. Rothstein (2010), "Teacher Quality in Educational Production: Tracking, Decay, and Student Achievement," *Quarterly Journal of Economics*, 125(1), February 2010, pp. 175-214.

R. Chetty, J. Friedman, and J. Rockoff, (2013) "Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates," NBER WP No. 19423.

R. Chetty, J. Friedman, and J. Rockoff, (2013) "Measuring the Impact of Teachers II: Teacher Value-Added and Student Outcomes in Adulthood," NBER WP No. 19424.

D. Deming (2011), "Better Schools, Less Crime?" *Quarterly Journal of Economics*, 126(4): 2063-2115.

S. Billings, D. Deming, and J. Rockoff, "School Resegregation, Educational Attainment and Crime: Evidence from the End of Busing in Charlotte-Mecklenburg," *Quarterly Journal of Economics*, forthcoming.

D. Deming, J. Hastings, T. Kane, and D. Staiger, (2011) "School Choice, School Quality and Postsecondary Attainment." NBER WP No. 17438. (forthcoming in the AER)

Fryer, R. G., & Levitt, S. D. (2010). An Empirical Analysis of the Gender Gap in Mathematics. *American Economic Journal. Applied Economics*, 2(2), 210

Krueger, A. B. (2003). Economic considerations and class size\*. *The Economic Journal*, 113(485), F34-F63

Krueger, A. B., & Whitmore, D. M. (2001). The effect of attending a small class in the early grades on college-test taking and middle school test results: Evidence from Project STAR. *The Economic Journal*, 111(468), 1-28

Angrist, J. D., & Lavy, V. (1999). Using Maimonides' Rule to Estimate the Effect of Class Size on Scholastic Achievement. *The Quarterly Journal of Economics*, 114(2), 533-575

Kane, T. J., & Staiger, D. O. (2012). Gathering Feedback for Teaching: Combining High-Quality Observations with Student Surveys and Achievement Gains. Research Paper. MET Project. *Bill & Melinda Gates Foundation*

Kane, T. J., & Staiger, D. O. (2008). *Estimating teacher impacts on student achievement: An experimental evaluation* (No. w14607). National Bureau of Economic Research

Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W., & Yagan, D. (2010). *How does your kindergarten classroom affect your earnings? Evidence from Project STAR* (No. w16381). National Bureau of Economic Research

Branch, G. F., Hanushek, E. A., & Rivkin, S. G. (2012). *Estimating the effect of leaders on public sector productivity: The case of school principals* (No. w17803). National Bureau of Economic Research

Fryer, R. G. (2013). Teacher Incentives and Student Achievement: Evidence from New York City Public Schools. *Journal of Labor Economics*, 31(2), 373-407

Fryer Jr, R. G., Levitt, S. D., List, J., & Sadoff, S. (2012). *Enhancing the efficacy of teacher incentives through loss aversion: A field experiment* (No. w18237). National Bureau of Economic Research

Fryer, Roland G. "Financial Incentives and Student Achievement: Evidence from Randomized Trials\*." *The Quarterly journal of economics* 126.4 (2011): 1755-1798

Fryer Jr, R. G., & Holden, R. T. (2012). *Multitasking, learning, and incentives: a cautionary tale* (No. w17752). National Bureau of Economic Research Center for Research on Education Outcomes. (2009). Multiple choice: Charter school performance in 16 states

Hoxby, C. M., & Murarka, S. (2009). *Charter schools in New York City: Who enrolls and how they affect their students' achievement* (No. w14852). National Bureau of Economic Research

Dobbie, W., & Fryer Jr, R. G. (2011). Are high-quality schools enough to increase achievement among the poor? Evidence from the Harlem Children's Zone. *American Economic Journal: Applied Economics*

Dobbie, W., & Fryer Jr, R. G. (2013). Getting beneath the Veil of Effective Schools: Evidence from New York City. *American Economic Journal: Applied Economics*, 5(4), 28-60

Abdulkadiroğlu, A., Angrist, J. D., Dynarski, S. M., Kane, T. J., & Pathak, P. A. (2011). Accountability and flexibility in public schools: Evidence from Boston's charters and pilots. *The Quarterly Journal of Economics*, 126(2), 699-748

Fryer, R. G. (2014). Injecting charter school best practices into traditional public schools: Evidence from field experiments. *The Quarterly Journal of Economics*, 129(3), 1355-1407

Rouse, C. E. (1998). Private School Vouchers and Student Achievement: An Evaluation of the Milwaukee Parental Choice Program. *The Quarterly Journal of Economics*, 113(2), 553-602

Cullen, J. B., Jacob, B. A., & Levitt, S. D. (2005). The impact of school choice on student outcomes: an analysis of the Chicago Public Schools. *Journal of Public Economics*, 89(5), 729-760

### **III. Family Background, Neighborhoods, Social Connections, and Identity**

#### **The Theory and Measurement of Intergenerational Mobility**

G. Solon (1999), "Intergenerational Mobility in the Labor Market," in O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, vol. 3A, 1761-1800.

G. Loury (1977), "A Dynamic Theory of Racial Income Differences" in A. Lamond and P. Wallace, eds., *Women, Minorities and Employment Discrimination*, D.C. Heath.

G. Becker and N. Tomes (1979), "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility," *Journal of Political Economy* 87 (6):1153-89.

G. Loury (1981), "Intergenerational Transfers and the Distribution of Earnings," *Econometrica* 49:843-67.

C. Mulligan (1999), "Galton vs. the Human Capital Approach to Inheritance," *Journal of Political Economy* 107 (Dec, part 2), S184-S224.

G. Borjas (1992), "Ethnic Capital and Intergenerational Mobility," *QJE* 107 (February).

S. Haider and G. Solon (2006), "Life-Cycle Variation in the Association between Current and Lifetime Earnings," *American Economic Review* 96 (Sept), 1308-20.

A. Björklund, M. Lindahl, and E. Plug (2006), "The Origins of Intergenerational Associations: Lessons from Swedish Adoption Data," *Quarterly Journal of Economics* 121 (Aug), 999-1028

G. Becker and N. Tomes (1986), "Human Capital and the Rise and Fall of Families," *Journal of Labor Economics* 4 (July), S1-S39.

T. Piketty (2000), "Theories of Persistent Inequality and Intergenerational Mobility," A. Atkinson and F. Bourguignon, eds., *Handbook of Income Distribution*, vol. 1, North Holland, 429-76.

S. Bowles and H. Gintis (2002), "The Inheritance of Inequality," *JEP* 16 (Summer), 3-30.

M. Kremer (1997), "How Much Does Sorting Increase Inequality," *QJE*, Feb., pp. 125-139.



- R. Fernandez and R. Rogerson (2001), "Sorting and Long-Run Inequality," *QJE* 116 (Nov).
- B. Sacerdote (2007), "How Large Are the Effects from Changes in Family Environment? A Study of Korean American Adoptees," *Quarterly Journal of Economics* 122 (February 2007).
- B. Mazumder (2005), "Fortunate Sons: New Estimates of Intergenerational Mobility in the U.S Using Social Security Data," *Review of Economics and Statistics* 87 (May), 235-55.
- D. Aaronson and B. Mazumder (2006), "Intergenerational Economic Mobility in the U.S., 1940 to 2000," Chicago Fed WP 2005-12, revised; [http://www.chicagofed.org/publications/workingpapers/wp2005\\_12.pdf](http://www.chicagofed.org/publications/workingpapers/wp2005_12.pdf) (Links to an external site.)Links to an external site.
- C. Lee and G. Solon (2006), "Trends in Intergenerational Income Mobility," Michigan, January; <http://www-personal.umich.edu/~gsolon/workingpapers/trends.pdf> (Links to an external site.)Links to an external site.
- J. Altonji and T. Dunn (1991), "Relationships among the Family Incomes and Labor Market Outcomes of Relatives," *Research in Labor Economics*, vol. 12, 269-310.
- J. Currie and E. Moretti (2003), "Mother's Education and the Intergenerational Transmission of Human Capital," *Quarterly Journal of Economics* 118 (November), 1495-1532.
- G. Solon (2002), "Cross-Country Differences in Intergenerational Earnings Mobility," *JEP* 16 (Summer), 59-66.
- D. Harding, C. Jencks, L. Lopoo, and S. Mayer (2003), "The Changing Effect of Family Background on the Incomes of American Adults," Kennedy School; [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=478461](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=478461) (Links to an external site.)Links to an external site.
- R. Benabou and E. Ok (2001), "Social Mobility and the Demand for Redistribution: The POUM Hypothesis," *QJE* 116 (May), 447-88.
- O. Galor and J. Ziera (1993), "Income Distribution and Macroeconomics," *Review of Economic Studies* 60:35-52.
- S. Durlauf (1996), "A Theory of Persistent Income Inequality," *Journal of Economic Growth* 1:75-94.
- A. Banerjee and A. Newman (1993), "Occupational Choice and the Process of Development," *Journal of Political Economy* 101: 274-98.
- D. Mookherjee and D. Ray (2006), "Occupational Diversity and Endogenous Inequality," Feb.
- J. Estaban and D. Ray (1994), "On the Measurement of Polarization," *Econometrica* 62, 819-51.
- R. Costrell and G. Loury (2004), "Distribution of Ability and of Wages in a Hierarchical Job Assignment Model." *Journal of Political Economy* 112 (December).

#### Economics of Social (Non-Market) Interactions

- E. Glaeser and J. Scheinkman (2000), "Non-Market Interactions," NBER WP No. 8053.
- T. Calvo-Armengol and M. Jackson (2004), "The Effects of Social Networks on Employment and Inequality," *American Economic Review* 94(3), 426-454.
- J. Montgomery (1991), "Social Networks and Labor Market Outcomes: Toward an Economic Analysis," *American Economic Review* 81(5):1408-18.
- A. Banerjee (1992), "A Simple Model of Herd Behavior," *QJE* 107 (August), 797-817.
- V. Bala, and S. Goyal (1998), "Learning from Neighbours," *Review of Economic Studies* 65, pp. 595-621.
- P. Bolton and C. Harris (1999), "Strategic Experimentation," *Econometrica* 67(2), 349-374.
- G. Becker and K. Murphy (2000), *Social Economics*, Belknap/Harvard University Press.

M. DeGroot (1970), *Optimal Statistical Decisions*. New York: McGraw Hill.

S. Kariv and D. Gale (2003), "Bayesian Learning in Social Networks," *Games and Economic Behavior* 45(2), pp. 329-346.

A. Banerjee and D. Fudenberg (2004), "Word of Mouth Learning," *Games and Economic Behavior* 46, 1-22.

E. Glaeser, D. Laibson, and B. Sacerdote (2002), "The Economic Approach to Social Capital," *Economic Journal* 112 (November), 437-58.

#### Theories and Evidence on Neighborhood and Peer Effects

R. Benabou (1993), "Workings of a City," *Quarterly Journal of Economics* 108, pp. 619-52.

C. Manski (2000), "Economic Analysis of Social Interactions," *Journal of Economic Perspectives* 14 (Summer 2000), 115-36.

C. Manski (1993), "Identification of Endogenous Social Effects: The Reflection Problem," *Review of Economic Studies* 60, 531-42.

J. Kling, J. Liebman and L. Katz (2007), "Experimental Analysis of Neighborhood Effects," *Econometrica* 75 (January 2007), 83-119.

L. Katz, J. Kling, and J. Liebman (2001), "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment," *Quarterly Journal of Economics* 116 (May), 607-54.

J. Kling, J. Ludwig, and L. Katz (2005) "Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Randomized Housing Mobility Experiment," *QJE* 120 (Feb), 87-130.

E. Duflo and E. Saez (2003), "The Role of Information and Social Interactions in Retirement Decisions: Evidence from a Randomized Experiment," *QJE* 118 (August), 815-42

S. Mayer and C. Jencks (1989), "Growing Up in a Poor Neighborhood: How Much Does it Matter?," *Science*, (March 17), pp. 1441-45.

D. Aaronson (1998), "Using Sibling Data to Estimate the Impact of Neighborhoods on Children's Educational Outcomes," *Journal of Human Resources* 33 (Fall), 915-46.

A. Case and L. Katz (1991), "The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths," NBER WP No. 3706, May.

B. Graham (2006), "Identifying Social Interactions through Conditional Variance Restrictions," unpublished paper, UC Berkeley, July;  
[http://www.econ.berkeley.edu/~bgraham/ExcessVarianceRevision\\_06jul06\\_Letter.pdf](http://www.econ.berkeley.edu/~bgraham/ExcessVarianceRevision_06jul06_Letter.pdf) (Links to an external site.)Links to an external site.

E. Glaeser, B. Sacerdote, and J. Scheinkman (2002), "The Social Multiplier," NBER WP 9153.

R. Benabou (1996), "Equity and Efficiency in Human Capital Investment: The Local Connection," *Review of Economic Studies* 63 (2): 237-64.

R. Fernandez and R. Rogerson, "Income Distribution, Communities and the Quality of Public Education," *Quarterly Journal of Economics* 111:135-64.

G. Borjas (1995) "Ethnicity, Neighborhoods, and Human-Capital Externalities," *American Economic Review*, pp. 365-390.

M. Bertrand, E. Luttmer, and S. Mullainathan, "Network Effects and Welfare Cultures," *Quarterly Journal of Economics* 115 (August 2000).

J. Rosenbaum (1995), "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program" *Housing Policy Review* 6, 231-69.

P. Oreopolous (2003), "The Long-Run Consequences of Living in a Poor Neighborhood," *Quarterly Journal of Economics* 118 (November), 1533-75.

B. Jacob (2004), "Public Housing, Housing Vouchers and Student Achievement: Evidence from Public Housing Demolitions in Chicago," *American Economic Review* 94 (March).

P. Bayer, R. Pintoff, and D. Pozen (2004), "Building Criminal Capital Behind Bars: Peer Effects in Juvenile Corrections," Yale; [http://www.econ.duke.edu/~pb29/CrimCap\\_March2004.pdf](http://www.econ.duke.edu/~pb29/CrimCap_March2004.pdf)

B. Sacerdote (2001), "Peer Effects with Random Assignment: Results for Dartmouth Roommates," *Quarterly Journal of Economics* 116 (May), 681-704.

C. Hoxby (2000), "Peer Effects in the Classroom: Learning from Gender and Race Variation," NBER WP No. 7867, August.

J. Angrist and K. Lang (2004), "How Important are Classroom Peer Effects? Evidence from Boston's Metco Program," *American Economic Review* 94 (December).

K. Munshi (2003), "Networks in the Modern Economy: Mexican Migrants in the U.S. Labor Market," *Quarterly Journal of Economics* 118 (May), 549-599.

P. Edin, P. Fredriksson, and O. Åslund (2003), "Ethnic Enclaves and the Economic Success of Immigrants – Evidence from a Natural Experiment," *QJE* 118 (February).

S. Jones (1990), "Worker Interdependence and Output: The Hawthorne Studies Revisited," *American Sociological Review* 55, 176-90.

P. Bayer, S. Ross, and G. Topa (2005), "Place of Work and Place of Residence: Informal Hiring Networks and Labor Market Outcomes," NBER WP No. 11019, January.

Y. Ioannides and L.D. Loury (2004), "Job Information Networks, Neighborhood Effects and Inequality," *Journal of Economic Literature* 47 (December), 1056-93.

B. Weinberg, P. Reagan, and J. Yankrow (2004), "Do Neighborhoods Affect Hours Worked?" *Journal of Labor Economics* 22 (October), 891-924.

W. J. Wilson (1987), *The Truly Disadvantaged*, U. of Chicago Press, esp. ch. 1, 2.

Chaudhuri, S., & Sethi, R. (2008). Statistical discrimination with peer effects: can integration eliminate negative stereotypes?. *The Review of Economic Studies*, 75(2), 579-596

Bowles, S., Loury, G. C., & Sethi, R. (2014). Group inequality. *Journal of the European Economic Association*, 12(1), 129-152

Carrell, S. E., Fullerton, R. L., & West, J. E. (2009). Does Your Cohort Matter? Measuring Peer Effects in College Achievement. *Journal of Labor Economics*, 27(3)

Boisjoly, J., Duncan, G. J., Kremer, M., Levy, D. M., & Eccles, J. (2006). Empathy or antipathy? The impact of diversity. *The American economic review*, 96(5), 1890-1905

#### Segregation

T.C. Schelling (1971), "Dynamic Models of Segregation." *Journal of Mathematical Sociology* 1:143-186.

D. Massey and N. Denton (1988), "The Dimensions of Residential Segregation," *Social Forces* 67, 281-315.

A. Atkinson (1970) "On the Measurement of Inequality," *Journal of Economic Theory* 2: 244-263.

D. Cutler and E. Glaeser (1997), "Are Ghettos Good or Bad?" *QJE* 112 (August), 827-872.

D. Cutler, E. Glaeser, and J. Vigdor (1999), "The Rise and Decline of the American Ghetto," *Journal of Political Economy*, 107 (3), 455-506.

F. Echenique and R. Fryer (2007), "A Measure of Segregation Based on Social Interactions," *Quarterly Journal of Economics* 122 (May); [http://www.economics.harvard.edu/faculty/fryer/papers/ech\\_fryer\\_qje.pdf](http://www.economics.harvard.edu/faculty/fryer/papers/ech_fryer_qje.pdf)

F. Echenique, R. Fryer, and A. Kaufman (2006), "Is School Segregation Good or Bad?," *American Economic Review*, May 2006.

W. Bell (1954), "A Probability Model for the Measurement of Ecological Segregation," *Social Forces*, 32, 357-364.

D. Cowgill and M. Cowgill (1951), "An Index of Segregation Based on Block Statistics," *American Sociological Review* 16, 825-831.

D. Cvetkovic and P. Rowlinson (1990), "The Largest Eigenvalue of a Graph: A Survey" *Linear and Multilinear Algebra*, Volume 28, pp. 3-33.

D. Frankel and O. Volij (2004), "Measuring Segregation," Iowa State University.

R. Hutchens (2001), "Numerical Measures of Segregation: Desirable Properties and Their Implications," *Mathematical Social Sciences* 42, 13-29

J. Kain (1968), "Housing Segregation, Negro Employment, and Metropolitan Decentralization," *Quarterly Journal of Economics*, LXXXII, 175-197.

D. Massey and N. Denton (1993), *American Apartheid: Segregation and the Making of the Underclass*, Cambridge, MA: Harvard University Press.

K. Tauber and A. Tauber (1965) *Negroes in Cities: Residential Segregation and Neighborhood Change*, Aldine.

Almond, D., Chay, K. Y., & Greenstone, M. (2006). Civil rights, the war on poverty, and black-white convergence in infant mortality in the rural South and Mississippi.

#### Economics and Identity

D. Austen-Smith and R. Fryer (2005), "An Economic Analysis of "Acting White," *Quarterly Journal of Economics* 120 (May), 551-583.

B.D. Bernheim (1994), "A Theory of Conformity," *Journal of Political Economy* 102(5):841-77

G. Akerlof and R. Kranton (2000), "Economics and Identity," *QJE* 115(August), 715-53

R. Fryer and M. Jackson (2007), "A Categorical Model of Cognition and Biased Decision Making"; [http://www.economics.harvard.edu/faculty/fryer/papers/fryer\\_jackson2007.pdf](http://www.economics.harvard.edu/faculty/fryer/papers/fryer_jackson2007.pdf)

R. Fryer and S. Levitt (2004), "The Causes and Consequences of Distinctively Black Names," *Quarterly Journal of Economics* 119 (August), 767-805.

H. Fang and G. Loury (2005), "'Dysfunctional Identities' Can Be Rational," *AER*, 95(2).

R. McAdams (1995), "Cooperation and Conflict: The Economics of Group Status Production and Race Discrimination," *Harvard Law Review*, 108:1005-1084.

E. Berman (2000), "Sect, Subsidy and Sacrifice: An Economist's View of Ultra-Orthodox Jews," *QJE* 115 (August), 905-53.

Fryer, R. G., & Torelli, P. (2010). An empirical analysis of 'acting white'. *Journal of Public Economics*, 94(5), 380-396

Cicala, S., Fryer Jr, R. G., & Spenkuch, J. L. (2011). *A Roy Model of Social Interactions* (No. w16880). National Bureau of Economic Research

#### **IV. Economics of Crime**

R. Freeman (1999), "The Economics of Crime," in O. Ashenfelter and D. Card, eds., *Handbook of Labor Economics*, vol. 3C, 3530-71.

G. Becker (1968), "Crime and Punishment: An Economic Approach," *JPE* 76, 169-217.

S. Levitt and S. Venkatesh (2000), "An Economic Analysis of a Drug-Selling Gang's Finances," *Quarterly Journal of Economics* 115 (August), 755-89.

S. Levitt (1996), "The Effect of Prison Population Size on Crime Rates: Evidence from Prison Overcrowding Legislation," *Quarterly Journal of Economics* 111 (May), 319-51.

J. Grogger (1998), "Market Wages and Youth Crime," *J. of Labor Economics* 16 (Oct), 756-91.

S. Levitt (2004), "Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six That Do Not," *J. of Economic Perspectives* 18 (Winter), 163-90.

J. Donohue and S. Levitt (2001), "The Impact of Legalized Abortion on Crime," *Quarterly Journal of Economics* 116 (May 2001): 379-420.

R. Fryer, P. Heaton, S. Levitt, and K. M. Murphy (2006), "Measuring Crack Cocaine and Its Impact"; [http://www.economics.harvard.edu/faculty/fryer/papers/fhlm\\_crack\\_cocaine.pdf](http://www.economics.harvard.edu/faculty/fryer/papers/fhlm_crack_cocaine.pdf)

L. Lochner (2003), "Individual Perceptions of the Criminal Justice System," NBER WP 9474.

S. Levitt (1998), "Juvenile Crime and Punishment," *JPE* 106 (December), 1156-85.

D. Lee and J. McCrary (2005), "Crime, Punishment and Myopia," NBER WP 11491, July.

J. Reyes (2006), "Environmental Policy as Social Policy? The Impact of Childhood Lead Exposure on Crime," Amherst; <http://www.amherst.edu/~jwreyes/papers/LeadCrime.pdf> ([Links to an external site.](#))[Links to an external site.](#)

S. Venkatesh (2006), *Off the Books: The Underground Economy of the Urban Poor*, Harvard.

J. Donohue and P. Siegelman (1998), "Allocating Resources among Prisons and Social Programs in the Battle Against Crime," *Journal of Legal Studies* 27, Jan., pp. 1-44.

R. Johnson and S. Raphael (2006), "How Much Crime Reduction Does the Marginal Prisoner Buy?," UC Berkeley, December.

I. Kuziemko (2006), "Going Off Parole: How the Elimination of Discretionary Prison Release Affects the Social Costs of Crime?" Harvard University, November; [http://www.people.fas.harvard.edu/~kuziemko/papers\\_files/paper\\_kuziemko\\_parole.pdf](http://www.people.fas.harvard.edu/~kuziemko/papers_files/paper_kuziemko_parole.pdf)

S. Levitt (1997), "Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime," *American Economic Review* 87 (June), 270-90.

M. Duggan (2001), "More Guns, More Crime," *Journal of Political Economy* 109 (October).

E. Glaeser, B. Sacerdote, and J. Scheinkman (1996), "Crime and Social Interactions," *QJE* 111 (May), 507-48.

J. Grogger (1995), "The Effects of Arrests on the Employment and Earnings of Young Men," *QJE* 110 (February), 51-72.

J. Kling (2006), "Incarceration Length, Employment and Earnings," 96 *AER* (June), 863-76.

I. Ayres and S. Levitt (1998), "Measuring Positive Externalities from Unobservable Victim Precaution: An Empirical Analysis of Lojack," *QJE* 113 (Feb).

J. Donohue and J. Wolfers (2006), "Uses and Abuses of Empirical Evidence in the Death Penalty Debate," *Stanford Law Review* 58, 791-846.

L. Katz, S. Levitt, and E. Shustorovich (2003), "Prison Conditions, Capital Punishment and Deterrence," *American Law and Economics Review* 5 (Fall), 318-43.

Becker, Gary S., Kevin M. Murphy, and Michael Grossman. "The Market for Illegal Goods: The Case of Drugs." *Journal of Political Economy* 114.1 (2006)