

BIOGRAPHICAL SKETCH

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NAME MARC A. SCOTT	POSITION TITLE ASSOCIATE PROFESSOR, APPLIED STATISTICS		
eRA COMMONS USER NAME (credential, e.g., agency login) MS184.NYU			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	MM/YY	FIELD OF STUDY
Cornell University	BA	1982-1986	Mathematics
Columbia University		1986-1987	Computer Science (doctoral level)
Hunter College	MA	1993	Applied Math/ Statistics
New York University	M. Phil	1995-1996	Statistics
New York University	PhD	1996-1998	Statistics

A. Personal Statement

I am currently an Associate Professor of Applied Statistics at New York University's Steinhardt School of Culture, Education, and Human Development and co-direct the Center for the Promotion of Research Involving Innovative Statistical Methodology (PRIISM). My research primarily involves the development of statistical models for repeated measures data. This has been motivated through collaborations with policy researchers on topics such as wage inequality and immobility, educational attainment, child development and achievement, disease progression in respiratory illness and reliability of sleep studies. The evaluation of pathways to educational and economic attainment has been an important part of his research agenda, as evidenced by funded research in the National Assessment of Vocational Education (NAVE; 1999-2002), through grants from the Russell Sage and Casey Foundations (1999, 2002-2004) and recent collaborations with the Community College Research Center at Teachers College. I have published methodological papers in *Statistical Science*, *Sociological Methodology*, *Journal of Educational and Behavioral Statistics*, *Journal of the Royal Statistical Society – Series C*, and *Statistics in Medicine*. My applied work has appeared in *Journal of Labor Economics*, *Economics of Education Review*, *Sleep*, and *Research in Higher Education*. Most recently, I was chosen to be the lead editor for the SAGE Handbook of Multilevel Modeling, a forty-chapter compilation of innovations and best practices in the area of multilevel modeling, to be published in early 2012.

B. Positions and Honors

Positions and Employment

1988 – 1991	Analytic Director – New York City Board of Education, School Scorecard Unit
1991 – 1993	Manager/Developer – cfX Inc., New York, New York, Analytic Software Group
1993 – 1995	Research Assistant – New York University, Department of Statistics and Operations Research
1995 – 1997	Consultant – Institute on Education and Economy, Teachers College, Columbia University
1998 – 2000	Senior Research Associate – Institute on Education and the Economy, Teachers College, Columbia University
2000 – 2006	Assistant Professor, Educational Statistics, New York University, Steinhardt School of Education, Department of Humanities and Social Sciences
2007– 2008	Visiting Associate Professor, Statistics, Hunter College/C.U.N.Y., Department of Mathematics and Statistics

- 2006 – Present Associate Professor, Applied Statistics, New York University, Steinhardt School of Education, Department of Humanities and Social Sciences
- 2008 – Present Co-Director, Center for the Promotion of Research Involving Innovative Statistical Methodology (NYU)

Other Experience and Professional Memberships

- 2001 – Present Director, Interdepartmental Research Studies Program
- 2003 – Present Visiting Member, Working Group on Model-based Clustering, Univ. of Washington, Seattle
- 2004 – Present Fellow, Institute on Education and Social Policy, New York University
- 2005 – Present Core Course Director, Biostatistics. Faculty Governance Group of NYU's Master's Program in Global Public Health

Honors

- 1982-1986 IBM Watson Scholarship recipient, Cornell University
- 1986 Phi Beta Kappa, Cornell University
- 1991 Rose Sacks Scholarship, Hunter College
- 1992 Mazur Scholarship, Hunter College
- 1996-1997 Taggart Fellowship, New York University
- 1994, 1997 Deming Fellowship, New York University
- 1998 Distinguished Dissertation Award, New York University
- 2002 Richard A. Lester Prize for "Divergent Paths." Outstanding Book in Labor Economics and Industrial Relations of 2001, Princeton University
- 2003 Distinguished book award for "Divergent Paths" from Cornell University's Center for the Study of Inequality
- 2003-2004 Goddard Award, New York University

C. Selected Peer-reviewed Publications (Selected from 15 peer-reviewed publications)

Most relevant to the current application

1. **Marc Scott**, Robert Norman and Kenneth Berger. 2004. "Modelling Growth and Decline in Lung Function in Duchenne's Muscular Dystrophy with an Augmented Linear Mixed-Effects Model." *Journal of the Royal Statistical Society Series C - Applied Statistics* 53 (3).
2. **Marc Scott** and Benjamin Kennedy. 2005. "Pitfalls in Pathways: Some Perspectives on Competing Risks Event History Analysis in Education Research." *Journal of Educational and Behavioral Statistics* 30(4).
3. **Marc Scott** and Mark Handcock. 2005. "Persistent Inequality? Answers via Hybrid Models for Longitudinal Data." *Sociological Methods and Research* 34 (1).
4. Jennifer Hill and **Marc Scott**. 2009. "Discussion of 'The Essential Role of Pair Matching.'" *Statistical Science* 24(1), 54-58.
5. **Marc Scott**. 2011. "Affinity Models for Career Sequences." *Journal of the Royal Statistical Society Series C— Applied Statistics* 60 (4).

Additional recent publications of importance to the field (in chronological order)

1. **Marc Scott** and Annette Bernhardt. 1999. "Pathways to Educational Attainment and Their Effect on Early Career Development." MDS-1296. National Center for Research in Vocational Education, U.S. Dept. of Education.
2. Annette Bernhardt, Martina Morris, Mark Handcock, and **Marc Scott**. 1999. "Job Instability and Wage Inequality Among Young Men: A Comparison of Two NLS Cohorts." *Journal of Labor Economics* 17(4) part 2.
3. Annette Bernhardt, Martina Morris, Mark Handcock, and **Marc Scott**. 2000. "Trends in Job Instability and Wages for Young Adult Men." In *On the Job: Is Long-Term Employment a Thing of the Past?*, edited by David Neumark. New York: Russell Sage Press.
4. **Marc Scott** and Mark Handcock. 2001. "Longitudinal Data Models When Covariance Structure is the eature of Interest." *Sociological Methodology* 31(1).

5. Annette Bernhardt, Martina Morris, Mark Handcock, and **Marc Scott**. 2001. *Divergent Paths: Economic Mobility in the New American Labor Market*. New York: Russell Sage Press.
6. Mariana Alfonso, Tom Bailey, and **Marc Scott**. 2005. "The Educational Outcomes of Occupational Sub-baccalaureate Students: Evidence from the 1990s." *Economics of Education Review* 24 (2).
7. **Marc Scott**, Tom Bailey, and Greg Kienzl. 2006. "Institutions Afloat? Determinants of College Graduation Rates in Public and Private Colleges." *Research in Higher Education* 47(3).
8. Robert G. Norman, **Marc A. Scott**, Indu Ayappa, Benjamin H. Natelson and David M. Rapoport. 2006. "Sleep Continuity Measured By Survival Curve Analysis." *Sleep* 28 (12).
9. Noga Admon, Floyd Hammack and **Marc A. Scott**. 2010. "Social Capital, Financial Knowledge, and Hispanic Student College Choices." *Research in Higher Education* 51(3).
10. Matthew Zeidenberg and **Marc Scott**. 2011. "The Context of their Coursework: Understanding Student Course-Taking Patterns at Community Colleges Using Clustering of Student Transcripts." Community College Research Center Working Paper (forthcoming).

D. Research Support

Ongoing Research Support

Institute of Education Sciences
U.S. Department of Education

Hill (PI)

7/1/2011 – 6/30/2014

Statistical and Research Methodology in Education Program

Sensitivity Analysis -- If We Are Wrong, How Far Are We From Being Right?

Education researchers often find that available data are not well suited for answering the causal questions they are most interested in answering. Sensitivity analysis is an umbrella term that encapsulates any of a variety of different methods that assess the degree to which our inferences might be altered by changes in structural or parametric assumptions. This research will develop and extend sensitivity analysis strategies that address key issues faced by education researchers when attempting to make causal inferences.

Time/effort: 1 mo. (2011); 2 mo. (2012); 2 mo. (2013); 1 mo. (2014).

Role: co-PI

Total direct costs: \$928,537.

Overlap with proposed project: none

Pending Research Support

American Cancer Society Parekh (PI)

1/1/2012 – 12/31/2015

The Cancer, Insulin Resistance, and Lifestyle (CIRCLE) Study

The CIRCLE study will investigate the separate and combined impact of blood markers, genetic factors, and diet related to insulin and glucose metabolism in the development of obesity-related cancers using data collected by the Framingham Heart Study. The results of this research will provide important information about ways to target prevention of obesity-related cancers.

Time/effort: .75 mo. (2012); .75 mo. (2013); .75 mo. (2014); .75 mo. (2015).

Role: Statistical Methodologist

Total direct costs: \$35,473

Overlap with proposed project: none

Completed Research Support

Spencer Foundation

O'Connor (PI)

7/1/2007 – 12/31/2009

Examining Achievement and Social Skill Development among Elementary School Children: The Role of Child, Family and School Factors.

This study explores the role of conflict and closeness in mother-child and teacher-child dyads in social/emotional development and achievement longitudinally, using the NICHD dataset.

Role: Methodologist