

## **CURRICULUM VITAE**

**SUE M. MARCUS**

### **ACADEMIC APPOINTMENTS**

Research Associate; Policy Research, Evaluation and Measurement; Graduate School of Education, University of Pennsylvania, Philadelphia, 1994-95.

Instructor of Medicine; Biostatistics Section, Division of Clinical Pharmacology; Jefferson Medical College, Thomas Jefferson University, Philadelphia, 1995-97.

Assistant Professor of Medicine; Biostatistics Section, Division of Clinical Pharmacology; Jefferson Medical College, Thomas Jefferson University, Philadelphia, 1997-98.

Assistant Professor of Biostatistics; Department of Biostatistics and Epidemiology; University of Pennsylvania School of Medicine, 1998-2002.

Assistant Professor of Psychiatry and Biomathematics, Mount Sinai School of Medicine, 2002- present.

### **HOSPITAL APPOINTMENTS**

None

### **EDUCATION**

B.A. in Mathematics and Philosophy, Wellesley College, Wellesley MA, 1972.

A.M. in Mathematics, Clark University, Worcester MA, 1974.

M.S. in Biostatistics, Harvard University, School of Public Health, 1979.

Ph.D. in Statistics, University of Pennsylvania, The Wharton School Department of Statistics, 1992.

### **POSTDOCTORAL TRAINING**

None

### **CERTIFICATION**

None

## **LICENSURE**

None

## **HONORS/AWARDS/PATENTS**

Wellesley Scholar, Wellesley College, 1972

University Fellow, University of Pennsylvania, 1989-92

Student Scholarship, Paper Competition, Annual Meeting of the Society for Clinical Trials, Belgium, 1992

## **OTHER PROFESSIONAL APPOINTMENTS**

Research Scientist, Center for Health Statistics, University of Chicago at Illinois (Director: Robert Gibbons)

Statistical Consultant, Multimodal Treatment for Attention Deficit Hyperactivity Disorder (MTA) Study

Scientific Advisory Board, Child and Adolescent Trauma Treatment and Services Project (CATS)

Scientific Advisor to NIMH multisite trial, Treatment of Adolescent Depression Study (TADS), 2002-present

Statistical Consultant, Effectiveness of PTSD Treatment: PE versus Zoloft

NIMH Statistical Reviewer: Health Services, Translational Centers, Child Mental Health Services, Adult and Adolescent Interventions

Reviewer for Statistics in Medicine, Psychological Methods, Biostatistics, American Journal of Psychiatry, Anesthesia and Analgesia

## **TRAINING RECORD**

None

## **TEACHING ACTIVITIES**

Teaching Assistant, Lecturer in Statistics (undergraduate), Department of Statistics, The Wharton School of the University of Pennsylvania, 1987-91.

Regression and Correlation, Introduction to Educational Statistics (graduate), Division of Policy Research, Evaluation & Measurement, Graduate School of Education, University of Pennsylvania, 1993-95.

Introduction to Clinical Trials (graduate, fellows), Division of Clinical Pharmacology, Jefferson Medical School, 1995-98.

Introduction to Mathematical Statistics (undergraduate), Department of Statistics, The Wharton School of the University of Pennsylvania, 1999.

Member, Dissertation Committee for Kewei Ming, Department of Statistics, The Wharton School of the University of Pennsylvania, 1999.

Member, Dissertation Committee for Christine Leow, Graduate School of Education, University of Pennsylvania, 2000.

Member, Dissertation Committee for Nathan Wang, Department of Statistics, The Wharton School of the University of Pennsylvania, 2000.

Introduction to Statistics (undergraduate), Department of Statistics, The Wharton School of the University of Pennsylvania, 2000.

Independent Study in Ordinal Logistic Regression (graduate), Department of Biostatistics and Epidemiology, University of Pennsylvania School of Medicine, 2001.

Independent Study in Advanced Generalized Linear Models (graduate), Department of Biostatistics and Epidemiology, University of Pennsylvania School of Medicine, 2001.

Member, Dissertation Committee for Bo Lu, Department of Statistics, The Wharton School of the University of Pennsylvania, 2002.

Psychiatry Fellowship Core Curriculum, Mt. Sinai School of Medicine/Bronx VA, 2002-present.

K-award Statistical Mentor for

Marlys Staudt, Ph.D., Assistant Professor, College of Social Work, University of Tennessee, Knoxville, TN.

Katharine Loeb, Ph.D., Assistant Professor, Department of Psychiatry, Mount Sinai School of Medicine, New York.

Jeffrey Weiss, Ph.D., Assistant Professor, Department of Psychiatry, Mount Sinai School of Medicine, New York.

Faculty, Career Development Institute for Bipolar Disorder Research, 2005.

## GRANT SUPPORT

### Past Grants

University of Pennsylvania Research Foundation (PI: S. Marcus) 7/2000-7/2001  
\$3000  
Random Effects Response-Surface Extrapolation

### Current Grants

Subcontract(S. Marcus) 2/01-present 23%  
NIMH/University of Illinois at Chicago  
**Multimodal Treatment Study for Children with ADHD-Follow-up**

R01 MH63875 L. Siever (PI) 8/02-7/06  
**5HTT&5HT2a in Impulsive Aggression**  
\$283,147  
Role: Statistician 10%

OMH-SPUE Contract #C00-5350 S. Essock (PI) 7/00-6/03  
**Evaluation of the Implementation & Impact of the NYSOMH Single Point of Entry Initiatives**  
Role: Statistician 18%

R01AA11745 J. Morgenstern (PI) 9/98-6/03  
**Cognitive Behavioral Risk Reduction Treatment**  
Role: Statistician 8%

P50MH066392 K. Davis (PI) 9/02-7/06  
**Conte Center: White Matter Abnormalities in Schizophrenia (Data & Statistics Core)**  
Role: Statistician 10%

NIMH MH 63116 P.Harvey (PI) 4/03-3/08  
**Course of Functional Deficits in Elderly Schizophrenics**  
Role: Statistician 8%

NIMH M. McKay (PI) 4/04-3/08  
**Community Partnerships to Prevent Urban Health Risk**  
Role: Statistician 8%

R01 MH63622 M. McKay (PI) 4/04-9/05  
**Community Partnerships to Prevent Urban Youth HIV Risk**  
Role: Statistician 8%

**Creating a Collaborative Field Research Organization**

Role: Statistician 8%

**PUBLICATIONS****Original peer-reviewed articles**

1. Spanos WJ Jr, Perez CA, Marcus S, Poulter CA, Doggett RL, Steinfeld AD, Grigsby PW: Effect of rest interval on tumor and normal tissue response: report of phase III study of accelerated split course palliative radiation for advanced pelvic malignancies (RTOG 8502). *International Journal of Radiation Oncology, Biology, Physics*, 25(3): 399-403, 1993.
2. Marcus S: Using omitted variable bias to assess uncertainty in an AIDS education treatment effect. *Journal of Educational and Behavioral Statistics*, Vol. 22, No. 2, 193-201, Summer 1997.
3. Fantuzzo J, Boruch R, Beriama A, Atkins M, Marcus S: Domestic violence and children: prevalence and risk in five major US cities. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36:1, January 1997.
4. Hauck W, Anderson S, Marcus S: Should we adjust for covariates in nonlinear regression analyses of randomized trials? *Controlled Clinical Trials*, 19:249-256, 1998.
5. Marcus S: Assessing Non-consent Bias with Parallel Randomized and Nonrandomized Clinical Trials. *Journal of Clinical Epidemiology*, Vol. 50, No. 7, 823-828, 1997.
6. Corn B, Marcus S, Topham A, Hauck W, Curran W: Will primary central nervous system lymphoma be the most frequent brain tumor diagnosed in the year 2000?, *Cancer*, 79:12, June 15, 1997.
7. Lochan S, Adeniyi-Jones S, Farahnak A, Frey B, Marcus S, Baumgart S: Co-administration of Theophylline Enhances Diuretic Response to Furosemide in Infants on Extracorporeal Membrane Oxygenation (ECMO): a randomized controlled pilot study. *Journal of Pediatrics*, 133:1, July 1998.
8. Garber B, Marcus S: Does surgical approach affect the incidence of inflatable penile prosthesis infection? *Urology* 52:291-293, 1998.
9. Humphreys TR, Malhotra R, Scharf MJ, Marcus SM, Starkus L, Calegari K: Treatment of superficial basal cell carcinoma and squamous cell carcinoma in situ with a high-energy pulsed carbon dioxide laser. *Archives of Dermatology*, 134(10):1247-1252, 1998.

10. Myers RE, Chodak GW, Wolf TA, Burgh DY, McGrory GT, Marcus SM, Diehl JA, Williams M: Adherence by African American men to prostate cancer education and early detection. *Cancer*, 86(1):88-104, July 1999.
11. Gitlin LN, Corcoran M, Winter L, Boyce A, Marcus S: Predicting Participation and Adherence to a Home Environmental Intervention Among Family Caregivers of Dementia Patients. *Family Relations*, 48(4):363-372, October 1999.
12. Turner BJ, Newschaffer CJ, Cocroft J, Fanning TR, Marcus S, Hauck WW: Improved Birth Outcomes Among HIV-Infected Women with Enhanced Medicaid Prenatal Care. *American Journal of Public Health*, 90(1):85-91, 2000.
13. Tichansky D, Cagir B, Yoo E, Marcus SM, Fry RD: Strictureplasty for Crohn's Disease: meta-analysis. *Diseases of the Colon and Rectum*, 43(7):911-919, 2000.
14. Marcus SM: A sensitivity analysis for subverting randomization in controlled trials. *Statistics in Medicine*, 20:545-555, 2001.
15. Gitlin LN, Marin W, Tomit M, Marcus SM: Factors associated with home environmental problems among community-living older people. *Disabilities and Rehabilitation*, Nov. 20, 23(17):777-787, 2001.
16. Hennessy S, Berlin JA, Kinman JL, Margolis DJ, Marcus SM, Strom BL: Risk of Venous Thromboembolism from Oral Contraceptives Containing Gestodene and Desogestrel Versus Levonorgestrel: A Meta-Analysis and Formal Sensitivity Analysis. *Contraception*, 64(2):125-133, 2001.
17. Feldman H, Santanna J, Guo W, Furst H, Franklin E, Joffe M, Marcus S, Faich G: Iron Administration and Clinical Outcomes in Hemodialysis Patients. *Journal of the American Society of Nephrology*, 13:734-744, 2002.
18. Marcus S, Gibbons R: Estimating the Efficacy of Receiving Treatment in Randomized Clinical Trials with Noncompliance. *Health Services and Outcomes Research Methodology*, 2:247-258, 2002.
19. Marenberg M, Edwards W, Newton R, Stineman M, Marcus S, Weber A, Coimbra A, Bradway C & Strumpf N (2002). IADL dependence among urban fallers presenting to the ER, *The Gerontologist*, 42:174-175.
20. Belle SH, Coon DW, Marcus SM, Ory MG, Burgio L, Burns R, Schulz R, and Wisniewski SR. The Resources for Enhancing Alzheimer's Caregiver Health (REACH): Project Design and Baseline Characteristics. *Psychology and Aging*, 2003, 18:3.

21. Schonlau M, Zapert K, Simon L, Sanstad K, Marcus S, Adams J, Spranca M, Kan H, Turner R, Berry S. A Comparison Between Responses from a Propensity Weighted Web Survey and an Identical RDD Survey, *Social Science Computer Review*, in press.
22. Harvey P, Bertisch H, Friedman J, Marcus S, Parrella M, White L, and Davis K. The Course of Functional Decline in Geriatric Patients with Schizophrenia: Cognitive Functional and Clinical Symptoms as Determinants of Change, *American Journal of Geriatric Psychiatry*, 2003, Vol. 11, No. 6, 610-620.
23. Weissman E, Kushner M, Marcus S, and Davis D. Increase in PTSD Patient Volume in the VA – New York/New Jersey Metropolitan Area Following the September 11 Terrorist Attacks, *Psychiatric Services*, 2003, 54:1641-1643.
24. Roll D, Ray SE, Marcus SM, Passarelli V, Money R, Barlow DH, Woods SW, Shear MK, Gorman JM. Independent Evaluator Knowledge of Treatment in a Multicenter Treatment Study of Panic Disorder, *Neuropsychopharmacology*, 2004, 612-618.
25. Dracheva S, Elhakem SL, Marcus SM, Siever LJ, McGurk SR, and Haroutunian V. RNA Editing and Alternative Splicing of Human Serotonin 2C Receptor in Schizophrenia. *Journal of Neurochemistry*, 2003, 87:1402-1412.
26. Leow C, Boruch R, Marcus S, Zanutto E. Effects of advanced course-taking on math and science achievement: Addressing selection bias using propensity scores. *American Journal of Evaluation*, 25/4:461-478.
27. Yehuda R, Brand S, Engel S, Seckl J, Marcus S, Berkowitz G. Transgenerational effects of posttraumatic stress disorder in babies of mothers exposed to the world trade center attacks during pregnancy, *Journal of Clinical Endocrinology and Metabolism*, in press.

### **Case Reports**

None

### **Invited Contributions (i.e. review articles, non-peer reviewed articles, etc.)**

1. Marcus SM: Causal Inference for the new millenium: a discussion of the joint statistical meetings session on causal inference in epidemiology. *Proceedings of the American Statistical Association, Section on Statistics in Epidemiology*, August 2000.

2. Hennessy S, Berlin JA, Kinman JL, Margolis DJ, Marcus SM, Strom BL: Venous Thromboembolism and Oral Contraceptives Containing Desogestrel and Gestodene: A Meta-Analysis and Formal Sensitivity Analysis. *American Journal of Epidemiology*, 153:11:S99, 2001.

### **Books and Chapters in Books**

Marcus SM: Estimating the Long-Term Effects of Head Start. In Oden S, Schweinhart LJ, & Weikart DP with Marcus SM & Xie Y: (1999) *Into Adulthood: A Study of the Effects of Head Start*. Ypsilanti, MI: High Scope Press.

Oden S, Schweinhart LJ, & Weikart DP, with Marcus SM & Xie Y: (1999) *Into Adulthood: A Study of the Effects of Head Start*. Ypsilanti, MI: High Scope Press.

### **INVITED LECTURES/PRESENTATIONS**

Alternative Statistical Models for the Long-Term Benefits of Head Start Study, Head Start's Third National Research Conference, District of Columbia, June 1996.

Statistics for Physicians, The Bryn Mawr Hospital Bi-Monthly Lunch Conference, Pennsylvania, December 1997.

Evaluating Selection Bias for Dichotomous Response Data, University of Pennsylvania School of Medicine, Biostatistics Research Forum, Pennsylvania, February 1998.

Parallel Randomized and Nonrandomized Clinical Trials, Center for Epidemiology and Biostatistics, University of Pennsylvania School of Medicine, Pennsylvania, October 1998.

A Sensitivity Analysis for Subverting Randomization in Controlled Trials, The Annual Meeting of the Biometric Society, Eastern North American Region, Georgia, March 1999.

Using Parallel Randomized and Nonrandomized Clinical Trials to Assess Non-consent Bias, University of Memphis, Department of Psychology, Tennessee, April 1999.

Causal Inference for the New Millennium, Annual Meeting of the Joint Statistical Societies, August 2000.

Estimating the Efficacy of Receiving Treatment in Randomized Clinical Trials with Noncompliance, 3<sup>rd</sup> Annual Columbia-Penn Forum on Statistics in Psychiatry, New York, April 2001.

Estimating the Efficacy of Receiving Treatment in Randomized Clinical Trials with Noncompliance: The MTA Study, 2001 International Conference on Health Policy Research, Boston, December 2001.

A Sensitivity Analysis for Subverting Randomization in Controlled Trials, Swarthmore College, Pennsylvania, January 2002.

Estimating the Efficacy of Receiving Treatment with Noncompliance in the MTA Study, Mental Illness Research Consortium for Children and Youth, New York, July 2002.

Comparison of Propensity-Score Adjusted Instrumental Variable Estimate with Intent-to-Treat Analysis in Randomized Clinical Trials with Noncompliance, 2002 Joint Statistical Meetings, New York, August 2002.

A Sensitivity Analysis for Subverting Randomization in Controlled Trials, National Cancer Institute, Maryland, April 2003.

New Statistical Methods to Mine Clinical Insights from Long-term Follow-ups, American Association for Child and Adolescent Psychiatry, Florida, October 2003.

Estimating Treatment Efficacy in RCTs with Noncompliance, Department of Health Policy, Mount Sinai School of Medicine, New York, April 2004.

## **MEDIA RESOURCE EDUCATIONAL MATERIALS**

None