Deborah H. Glueck, Ph.D.

Assistant Professor Current Position

Department of Biostatistics

Colorado School of Public Health University of Colorado Denver

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Education

Undergraduate A.B. cum laude, 1989.

Harvard College.

Cambridge, Massachusetts.

Major: Mathematics.

Senior Honors Thesis: Penrose Tiling of the Plane.

Graduate M.S. in Biostatistics, 1991.

University of North Carolina at Chapel Hill.

Chapel Hill, North Carolina

Masters Thesis:

Maximum Likelihood Estimation of Genetic Linkage.

Ph.D. in Biostatistics, May, 1996.

University of North Carolina at Chapel Hill.

Title of dissertation: Power for a Generalization of the General Linear Multivariate Model Allowing for both Fixed and Random

Predictors.

Post-Doctoral Post-doctoral Fellowship in Health Services Research

Agency for Health Care Policy and Research

Grant Number T32HS00058-04.

Robert Wood Johnson Medical School

University of Medicine and Dentistry of New Jersey

Piscataway, New Jersey. September 1996 - June, 1998.

Academic Appointments

Teaching Assistant. Introductory Linear Models. Taught weekly lab session. Presented two lectures for the main class. Provided review sections and homework assistance. Prepared grading keys and coordinated grading. University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

1990-1991 Graduate Research Assistant. Performed Linkage analysis and managed pedigree data for the Genetic Markers for Hypercholesterolemia Study: Sandoz Pharmaceuticals. University of North Carolina at Chapel Hill, Chapel Hill North Carolina.

Trainee and Graduate Research Assistant. Public Health Service Training Grant in Environmental Biostatistics. University of North Carolina at Chapel Hill. Chapel Hill, North Carolina.

1994-1996 Graduate Research Assistant. Medical Imaging Project (NCI/NIH P01).

University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

Analyzed studies on mammographic image processing methods for improving breast cancer detection. Responsible for study design, power analysis, data analysis, graphics preparation, research data management, archiving, and writing papers.

Sept 1996 - Post-doctoral Fellow (Agency for Health Care Policy and Research Grant June, 1998 Number T32HS00058-04). See Education section for details.

1999-Present Assistant Professor of Biometrics. Department of Biostatistics and Informatics. University of Colorado Denver.

Principal investigator of four NIH funded grants on power and sample size methods for cancer screening, bias correction for cancer screening, software for power and sample size selection, and oral cancer screening.

Professional Positions

1998 Phillips Academy (Andover) summer session. Math and science for Minorities, Instructor. Taught algebra and calculus to high school students. Andover, Massachusetts.

1990, 1991 AT&T Business Operations Analysis. Statistics Division. Summer intern and statistical consultant. Worked on strategies for marketing PRO WATTS. Modeled demand for Business long distance based on size and type of company. Analyzed 800 services customer satisfaction surveys. AT&T headquarters, Basking Ridge, New Jersey.

Honors, special recognitions and awards

1989-1992 Joseph E. Pogue Fellowship. University of North Carolina at Chapel Hill.

The fellowship is one of a group of privately funded named University Fellowships offered to exceptional new graduate doctoral students. The Pogue Fellowship offers mentoring by senior faculty, interdisciplinary

learning and leadership development opportunities.

2008-2009 Colorado School of Public Health Excellence in Faculty Mentoring

Award. In recognition of outstanding commitment to student learning and professional development through advising and mentoring that have clearly contributed to the outstanding development of a Colorado School

of Public Health Graduate.

Membership in professional organizations

1993-Present Member, American Statistical Association

2006-Present Member, American Society of Preventive Oncology

2007-Present Member, Program Committee of the American Society of Preventive

Oncology

Major committee and service responsibilities

<u>Department of Preventive Medicine and Biometrics</u> <u>Department of Biostatistics, Colorado School of Public</u> Health

2007-Present Admissions and Faculty Affairs Committee for Biometrics 2008-Present Coordinator of first year theory exam for comprehensive exams

2008 Mentor John Brinton in consulting class, spring semester.

2007-2008 Organized recruiting for Masters and Ph.D. program in Biostatistics

Colorado School of Public Health Initiative

2007-2008 School of Public Health Faculty Affairs Committee (responsible for

drafting the School of Public Health Faculty Handbook)

Colorado School of Public Health

2008-Present School of Public Health Scholarship and Awards Committee

2009-Present Faculty Council Member

School of Medicine

2006 School of Medicine Women in Medicine Committee

2005-2008 Senator, School of Medicine Faculty Senate

<u>University</u>

2007 Faculty Council Women's Committee

2008-2009 Colorado School of Public Heath representative on Women's Issues

2009 Ad-Hoc Honor Code Committee

National

1998 Organizer: American Statistical Association Section on Statistical

Consulting. Invited Paper Session: Practical Power Analyses for Statistical Consulting. Speakers were Jonathan Shuster, Ralph O'Brien, Guanghan Liu, and Deborah Glueck. American Statistical Association,

Joint Statistical Meetings, August, 1998.

2008 Co-Organizer (with Mira Katz, Ph.D., MPH): Career Development

Session for Junior Faculty, Junior Researchers and Trainees. "It's All About Grants", covering top 10 tips for writing a successful grant proposal, writing successful career awards (with examples), and interdisciplinary collaboration: opportunities and challenges. American

Society of Preventive Oncology. March 17, 2008.

2008 Co-Organizer (with Mary Reid, Ph.D.): Symposium- Lessons from Three

Diseases: What Evidence is Needed for Guidelines? Speakers Debbie Saslow, American Cancer Society, Tim Byers, UCHSC, Claudia

Henschke, Cornell, Peter Lance, University of Arizona. March 17, 2008.

2008 Session Chair: Session 520. Joint Statistical Meetings. American

Statistical Association. Denver, CO. July 8, 2008.

2009 Co-Organizer (with Shannon Lemrow, Shagufta Yasmeen, Michael

Sheurer, Brenda Birman) NCI Cancer Prevention and Control Workshop. Moderator: Financing your research career: obtaining money from all

types of sources. Mary Reid and Ed Trapido, speakers.

2009 Moderator: Advice on overcoming the challenges of institutional policy,

NIH policy, and receiving good career advice and mentoring. Steve

Taplin, Jonathan Wiest, and Keith Muller, speakers.

2010 Organizer and Discussant: Symposium. Oral Cancer Screening. Speakers

Henrietta Logan, University of Florida, and Mark Lingen, University of Chicago, Speakers. Bethesda North Hotel Bethesda, Maryland. March 21-

23, 2010

2011 Co-Organizer, with Polly Newcomb

Review and Referee Work

Peer Journal Review

2008-Present Reviewer: Annals of Behavioral Medicine

2008-Present Reviewer: Communications in Statistics, Theory and Methods

2008-Present Reviewer: The International Journal of Biostatistics

2008-Present Reviewer: The American Statistician

2007-Present Reviewer: Academic Radiology

2008-Present Reviewer: Medical Decision Making

2008-Present Reviewer: Annals of Behavioral Medicine

2007-Present Book Reviewer: Biometrics

Grant Review: National Institutes of Health Study Section

2008 Ad Hoc Reviewer: Subcommittee J- Population and Patient-Oriented

Training, National Cancer Institute Initial Review Group. Bethesda,

Maryland. February 13, 2008. June 27, 2008.

Invited extramural lectures

- 1. Glueck DH. <u>Penrose tilings of the plane</u>. Invited paper. Japan-America Mathematical Society Seminar. Komagane, Japan. Summer (1989).
- 2. Glueck DH. <u>Confidence intervals for multivariate power</u>. Invited Seminar. Air Force Academy, October 19 (2000).
- 3. Glueck DH, Muller KE, Karimpour-Fard A, and Hunter L. Exact power under independence for the false discovery rate in gene expression array experiments. Invited Talk. Graybill Conference on Microarrays, Bioinformatics and Related Topics, June 18-20 (2003). http://www.stat.colostate.edu/graybillconference2003/Speakers.html
- 4. Glueck DH, Muller KE, Karimpour-Fard, A, and Hunter, L. <u>Exact power under independence for the false discovery rate in gene expression array experiments</u>. Invited Talk. Biostatistics-Epidemiology Seminar Series. Dartmouth-Hitchcock Medical Center, July 2 (2003).
- 5. Bodkin AW, Carollo JJ, Glueck DH. <u>Home-based treadmill training in ambulatory children with cerebral palsy: A randomized controlled trial</u>. 19th Annual Jerome W. Gersten MD Memorial Lectureship. University of Colorado School of Medicine Department of Physical Medicine and Rehabilitation. Denver, Colorado. June 16 (2006).
- 6. Glueck DH, Lamb MM, Lewin JM and Muller KE. Why two mammograms may be better than one: The science and the statistics. Invited lecture. Division of Biostatistics, Department of Epidemiology and Health Policy Research, University of Florida. Gainesville, Florida. March 12 (2008).
- 7. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. Department of Statistics, Colorado State University. Fort Collins, Colorado. October 28 (2008).
- 8. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. National Cancer Institute, Bethesda, Maryland. November 3 (2008).
- 9. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. Moffitt Cancer Center, Tampa, Florida. March 10 (2009).
- 10. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. University of Florida, Gainesville, Florida. March 12 (2009).

- 11. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. University of Arizona, Tucson, Arizona. March 25 (2009).
- 12. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. Colorado/Wyoming American Statistical Association Chapter, Boulder, Colorado. April 24 (2009).
- 13. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. University of California San Francisco. Biostatistics Seminar Series. October 28 (2009).
- 14. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited lecture. Stanford University. October 2009 Meeting of the San Francisco Bay Area Chapter of the American Statistical Association (ASA). October 29 (2009).

Teaching record

Course name	Course Number	Date	Number of students	Role in course
Statistical	BIOM 6613	Spring 1999	10	Course director
Methods III				
Statistical	BIOM 6613	Spring 2000	12	Course director
Methods III				
Statistical	BIOM 6613	Spring 2001	11	Course director
Methods III				
Statistical	BIOM 6613	Spring 2005	12	Course director
Methods III				
Statistical	BIOS 6631	Fall 2006	8	Course director
Theory I				
Statistical	BIOS 6631	Fall 2007	9	Course director
Theory I				
Independent	BIOS 7899	Spring 2008	2 enrolled	Course director
study in			1 audit	
biostatistics				
Statistical	BIOS 6631	Fall 2009	9	Course director
Theory I				
Statistical	BIOS 6631	Fall 2010	10	Course Director
Theory I				

BIOM 6613 was a one quarter required course for first year **masters** students in biostatistics which covered linear mixed models. It was part of a one year applied sequence which included hypothesis testing and linear regression. I developed a new curriculum and set of course notes involving applied programming and theoretical exercises for mixed model.

BIOS 6631 is an introductory one semester required course in probability and statistical theory for first year **masters** students in biostatistics. I developed a new curriculum and set of course notes.

7798 is an advanced statistical theory seminar for **doctoral** students. We covered multiple comparisons methods.

I am the proud mother of three children. Gap years in my teaching history reflect maternity leave in 2002 and 2004. In 2005 I taught while on maternity leave. In 2003, I was released from teaching during one year of my mentored career award.

Mentoring

Primary Mentor				
2001	Lening Zhang. Masters in Biostatistics 2001. <u>Power and death: sample size calculations and survival after potentially toxic treatment</u> . Dr. Zhang is now Assistant Professor, Department of Biostatistics, National Jewish			
	Medical and Research Center.			
2002	Dongmei Pan. Masters in Biostatistics 2002. <u>Choosing sample sizes for mammography studies with multiple readers</u> . Ms. Pan is now a biostatistician, Infants in Foster and Kinship Care program, The Kempe Center for the Prevention and Treatment of Child Abuse and Neglect.			
2007	Andrea Masias. Masters in Biostatistics 2007. <u>Using Newcombe's confidence interval provides a better comparison of digital versus film mammography for the detection of breast cancer</u> . Ms. Masias is now a biostatistician, University of Colorado Cancer Center.			
2007	Colin O'Donnell. Masters in Biostatistics 2007. A likelihood model that accounts for censoring due to fetal loss can accurately test the effects of maternal and fetal genotype on the probability of miscarriage. Mr. O'Donnell is now a professional research assistant with the Colorado Tobacco Prevention project.			
2008	William Feser. Masters in Biostatistics 2008. Calculating exact average power for the Benjamini-Hochberg false discovery rate procedure for χ^2 tests and general linear multivariate models. Mr. Feser is now a biostatistician at the University of Colorado Cancer Center.			
2009	Brandy Ringham. Masters in Biostatistics August 2009. "Estimates of observed sensitivity and specificity must be corrected when reporting the results of the final test in a screening trial conducted in series". Ms. Ringham now works as a biostatistician for the Colorado Biostatistics Consortium.			
2010	Sarah Kreidler. Masters in Biostatistics June 2009. "GLIMMPSE: Online Power Computation for Linear Models with and without a Baseline Covariate". Dr. Kreidler now works as director of the software effort for the Mixed Model Power and Sample Size Grant.			

Committee Member

2003	Timothy S. Webb, Ph.D. in Biometrics
2006	Amy Bodkin, Ph.D. in Clinical Science
2006	Elizabeth Regan, Ph.D. Clinical Science
2007	Patrick Blatchford, Ph.D. in Biometrics
2007	Teresa Aly, Ph.D. in Human Medical Genetics
2010	(Chair), Betsy Siewart, Ph.D. in Biostatistics

Grant Support

Active

Title: Multilevel and Longitudinal Study Sample Size Tools for

Behavioral Scientists

PI: Keith Muller UC Denver site PI Deborah Glueck

Funding Source: National Institute of Dental and Cranio-Facial Research, NIH

Grant Number: 1 R01 DE020832-01A1 **Project Dates**: 12/09/2010 – 11/30/2011

Total Costs: \$ 2,212,987

The research involves development of statistical methods for finding power and sample size for multilevel and longitudinal designs for behavioral scientists, including new statistical methods, new software, and new training courses.

Title: Power and sample size methods for mammography trials

PI: Deborah Glueck

Funding Source: National Cancer Institute, NIH

Grant Number: 5K07CA088811-05 **Project Dates**: 7/1/2001- 8/31/2011

Total Costs: \$679,853

The research involves development of statistical methods for finding power and sample size for mammography trials, and by extension, for all cancer screening trials.

Title: Power and sample size methods for mammography trials

American reconstruction and recovery act supplement Easy-to-use free software for sample size selection

PI: Deborah Glueck

Funding Source: National Cancer Institute **Grant Number:** 3K07CA088811-06S1 **Project Dates**: 09/01/2009 – 02/31/2011

Total Costs: \$54,000

The research involves development of a web-based system. The software will allow clinicians to use a web-based, graphical interface to calculate power and sample size for screening trials. The software will be based on our published methods for power and sample size determination (Glueck, 2003).

Title: Bias correction optimizes the choice of screening test for early

cancer detection

PI: Deborah Glueck (with Todd Alonzo, co-PI)

Funding Source: National Cancer Institute

Grant Number: R 03 CA136048 **Project Dates:** 9/1/09-8/31/11 **Total Costs:** \$171.167

The research will define study designs that control bias for comparing the new and existing cancer screening tests. The study designs will enable researchers to choose the best screening tests for early cancer detection.

Title: Evaluation of the efficacy of oral cancer screening adjunctive

techniques

PI: Mark Lingen UCD PI: Deborah Glueck

Funding Source: National Institute of Dental and Craniofacial Research

Grant Number: RC2DE020779-01 **Project Dates:** 9/1/09-8/31/11 **Total Costs:** \$947,648

The funding is to plan a 33,000 patient, 200 dentist, three arm randomized controlled trial that will compare the diagnostic accuracy of standard oral and tactile examination to a standard examination + auto-fluorescence, and to standard examination + tissue reflectance.

Completed

Title: Novel Mechanism for tamoxifen induced endometrial atypia

PI: Kimberly Leslie Role: Statistician

Funding Source: NIH

Grant Number: NIH R21 CA76508 1998-2001

Project Dates: 7/1/98 - 6/30/01

Percent Effort: 14%
Direct Costs \$200,000

The goals of this grant were to perform a prospective trial in women taking tamoxifen for breast cancer. These patients underwent endometrial biopsies and ultrasonographic evaluation of the endometrium. These results were correlated with pathologic and molecular markers for endometrial growth disorders.

Title: Adult Clinical Research Center

PI: Richard Krugman

Role: General Clinical Research Center Statistician

Funding Source: NIH

Grant Number: 3 M01 RR00051-39S1 **Project Dates:** 12/1/98 – 11/30/01 **Work Dates:** 1/1/00 – 9/30/01

Percent Effort: 17%

Direct Costs: \$3,017,001

This grant provided funding and research infrastructure to many research projects at UCHSC, National Jewish, and Boulder.

Title: University of Colorado Cancer Center Biostatistics Core

PI: Paul Bunn Role: Statistician

Funding Source: NIH

Grant Number: 5 P30 CA46934-13 **Project Dates:** 3/1/98 -5/30/00 **Work dates:** 2/1/00 - 5/30/00

Percent Effort: 17%

Directs: \$105,266.43

This grant provides funding to the University of Colorado Cancer Center. I served as a statistical reviewer for cancer center protocols.

Title: University of Colorado Cancer Seed Grant

PI: Deborah Glueck

Funding Source: University of Colorado Cancer Center

Project dates: 1/1/00-12/31/00

Percent effort: 20%

This grant provided funding for initial work on power and sample size methods for covariates, and led to the funding of my mentored career award.

Bibliography

A grey background indicates a publication with a student for whom I was a mentor, either formally and academically, or as an employer, or both.

Peer Reviewed Journal Articles

- 1. Shugars DC, Smith MS, **Glueck DH**, Nantermet PV, Seillier-Moiseiwitsch F, Swanstrom R. <u>Analysis of human immunodeficiency virus type 1 nef gene sequences present in vivo</u>. Journal of Virology, Volume 67, Number 8, p. 4639-4650, August (1993) PMID: 8043040.
- 2. Beard DV, Molina PL, Muller KE, Denelsbeck KM, Hemminger BM, Perry JR, Braeuning MP, **Glueck DH**, Bidgood WD, Mauro M, Semelka RC, Willms AS, Warshauer D, Pisano ED. <u>Interpretation time of serial chest CT examinations with stacked-metaphor workstation versus film alternator</u>. Radiology. 197(3): 753-8, December (1995) PMID:7480751.
- 3. Pisano ED, Chandramouli J, Hemminger BM, DeLuca M, **Glueck DH**, Johnston RE, Muller K, Braeuning MP, Pizer S. <u>Does intensity windowing improve the detection of simulated calcifications in dense mammograms</u>? Journal of Digital Imaging 10(2): 79-84, (1997).
- 4. Pisano ED, Chandramouli J, Hemminger BM, **Glueck DH**, Johnston RE, Muller K, Braeuning MP, Puff D, Garrett W, Pizer S. <u>The effect of intensity windowing on the detection of simulated masses embedded in dense portions of digitized mammograms in a laboratory setting</u>. Journal of Digital Imaging. 10(4):174-182, November (1997).
- 5. **Glueck DH** and Muller KE. On the trace of a wishart. Communications in Statistics: Theory and Methods, 27, 2137-2141 (1998)
- 5A **Glueck DH** and Muller KE. <u>Correction to: 'On the trace of a Wishart,'</u> Communications in Statistics: Theory and Methods, 31(1),159-160, (2002).
- 6. Rich DQ, Yiin L-M, Rhoads GG, Glueck DH, Weisel C, Lioy PJ. A field comparison of two methods for sampling lead in household dust: the LWW sampler and the HUD dust wipe. Journal of Exposure Analysis and Environmental Epidemiology. 9(2):106-12, Mar-Apr; (1999) PMID:10321350.
- 7. **Glueck DH** and Muller KE. On the expected values of sequences of functions. Communications in Statistics: Theory and Methods, 30(2), 363-369 (2001).
- 8. Kosmiski LA, Kuritzkes DR, Lichtenstein KA, **Glueck DH**, Gourley PJ, Stamm ER, Scherzinger AL, Eckel RH. <u>Fat distribution and metabolic changes are strongly</u>

- correlated and energy expenditure is increased in the HIV lipodystrophy syndrome. *AIDS* 15:1993-2000, (2001) PMID: 11600828.
- 9. Horton TJ, Miller EM, **Glueck DH**, and Tench K. No effect of menstrual cycle phase on glucose kinetics and fuel oxidation during moderate-intensity exercise, American Journal of Physiology, Endocrinology and Metabolism, 282:E752-E762, (2002).
- 10. Donato AJ, Tench K, **Glueck DH**, Seals DR, Eskurza I and Tanaka H. <u>Declines in physiological functional capacity with age: a longitudinal study in peak swimming performance</u>, Journal of Applied Physiology, 94: 764-769, (2003) PMID: 12391125.
- 11. **Glueck DH** and Muller KE. <u>Adjusting power for a baseline covariate in linear models.</u> Volume 22, pages 2535-2551, Statistics in Medicine (2003) PMID: 12898543.
- 12. Fortna A, Kim Y, MacLaren E, Marshall K, Hahn G, Meltesen L, Brenton M, Hink R, Burgers S, Hernandez-Boussard T, Karimpour-Fard A, **Glueck DH**, McGavran L, Berry R, Pollack J, Sikela J. <u>Lineage-specific gene duplication and loss in human and great ape evolution</u>, PLOS Biology, Volume 2, Issue 7, 0937-0954, July (2004).
- 13. Regan E, Flannelly J, Bowler R, Tran K, Nicks M, Duda Carbone B, **Glueck DH**, Heijnen H, Mason R, Crapo J. Extracellular superoxide dismutase and oxidant damage in osteoarthritis. Arthritis and Rheumatism. Volume 52, No. 11, pp 3479-3491, November (2005).
- Leslie KK, Stein M-P, Kumar NS, Dai D, Stephens J, Wandinger-Ness A, Glueck
 DH. Progesterone receptor isoform identification and subcellular localization in endometrial cancer, Gynecologic Oncology, 96, 32-41, (2005) PMID: 15589577.
- 15. Bodkin AW, Carollo JJ, **Glueck DH**. Home-based treadmill training in ambulatory children with cerebral palsy: a randomized controlled trial. *Dev Med Child Neurol*. 48 (Suppl 106): 22; (2006).
- 16. Thams M and Glueck DH. <u>Business needs and graduate school offerings in marketing</u>. 2007 marketing educators association conference proceedings. Building Knowledge and Skills in the 21st century: fulfilling the mission of marketing education. Volume 31. pages 126-129, (2007).
- 17. **Glueck DH**, Lamb MM, Lewin JM, Pisano ED. <u>Two-modality mammography may confer an advantage over either full-field digital mammography or screen-film mammography</u>. Acad Radiol. 14(6):670-6, June (2007) PMID: 17502256.

- 18. **Glueck DH**, Karimpour-Fard A, Mandel J, Hunter L, Muller KE. <u>Fast computation</u> by block permanents of cumulative distribution functions of order statistics from <u>several populations</u>. Communications in Statistics- Theory and Methods. Volume 37 Issue 18 2815-2824, (2008) PMID: 19865590.
- 19. **Glueck DH**, Muller KE, Karimpour-Fard A, Hunter L. <u>Expected power for the false discovery rate with independence</u>. Communications in Statistics- Theory and Methods, Volume 37, Issue 12, 1855-1866, (2008) PMID: 20975846.
- 20. **Glueck DH**, Mandel J, Karimpour-Fard A, Hunter L, and Muller, KE. Exact calculations of average power for the Benjamini-Hochberg procedure, *The International Journal of Biostatistics*: Vol. 4: Iss. 1, Article 1, (2008) PMID: 21243075.
- 21. O'Donnell CI, Glueck CJ, Fingerlin TE, **Glueck DH**. A likelihood model that accounts for censoring due to fetal loss can accurately test the effects of maternal and fetal genotype on the probability of miscarriage. Human Heredity, 17;67(1):57-65, Oct (2008) PMID:18931510.
- 22. **Glueck DH**. Review of the book *Sample size calculations in clinical research*, *Second Edition* Biometrics 64: 1307-8, (2008).
- 23. **Glueck DH**, Lamb MM, O'Donnell, Ringham BM, Brinton JT, Muller KE, Lewin JM, Alonzo TA, Pisano ED. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. BMC Medical Research Methodology. 9(4), (2009) PMID: 19154609.
- 24. Feser WJ, Fingerlin TE, Strand MJ, **Glueck DH**. <u>Calculating average power for the Benjamini and Hochberg procedure</u>. Journal of Applied Statistical Science, Volume 8, Number 3, 325-352, (2009) *PMID in submission*.
- 25. **Glueck DH**, Karimpour-Fard A, Mandel J, Muller KE. <u>Probabilities for separating sets of order statistics</u>. Statistics: A Journal of Theoretical and Applied Statistics, Volume 44, Number 2, 145-153, (2010) PMID: 21243084.
- 26. Ringham BM, Alonzo TA, Grunwald GK, Glueck DH. Estimates of sensitivity and specificity can be biased when reporting the results of the second test in a screening trial conducted in series. BMC Medical Research Methodology. 10(3), 2010 PMID: 20064254.
- 27. Alonzo TA, Brinton JT, Ringham BM, Glueck DH. Bias in estimating accuracy of a binary screening test with differential disease verification. Statistics in Medicine (In Press) 2011.
- 28. Brinton JT, Barke LD, Freivogel ME, Jackson S, O'Donnell CI, Glueck DH. Breast Cancer Risk Assessment in 64,659 Women at a Single High-Volume Mammography Clinic. Academic Radiology (in press) 2011.

Published, Peer Reviewed Abstracts

1. Glueck DH, Lamb MM, Lewin JM, Pisano ED. Two-modality mammography may confer an advantage over either full-field digital mammography or screen film mammography. in Abstracts of the 31st Annual Meeting: American Society of Preventive Oncology, Houston Texas, March 2-4, 2007. Cancer Epidemiology Biomarkers and Prevention; 16(2), 359, February (2007). Selected on the basis of being one of the 20 highest scoring abstracts of those submitted for presentation.

Presentations at scientific meetings

Competitive International Presentations

- 1. Glueck DH, Karimpour-Fard A, Hunter L, Mandel J, Muller KE. Exact calculations of expected power for the Benjamini-Hochberg procedure. Podium presentation at the Fifth International Conference on Multiple Comparisons. Vienna, Austria. July 8-11 (2007).
- 2. O'Donnell CI, Glueck CJ, Fingerlin TE, Glueck DH. A likelihood model that accounts for censoring due to fetal loss can accurately test the effects of maternal and fetal genotype on the probability of miscarriage. Thursday, July 17: Session 14e: Analysis of Genetic Data. XXIVth International Biometric Conference. University College Dublin Ireland. July 13-July 18 (2008).
- 3. Glueck DH. <u>Bias in trials comparing paired continuous tests can cause researchers to choose the wrong screening modality</u>. Invited podium presentation.4th International Verification Methods Workshop, Helsinki, Finland. June 10 (2009).

Competitive National Presentations

- 1. **Glueck DH**, Lamb MM, Lewin JM, Pisano, ED. <u>Two-modality mammography</u> may confer an advantage over either full-field digital mammography or screen-film mammography. Competitive Podium Presentation. American Society of Preventive Oncology. Houston, Texas. March 2-4 (2007).
- 2. Thams M and Glueck DH. <u>Business needs and graduate school offerings in marketing</u>. Podium presentation, Marketing Educators Association Meeting, Houston, Texas, April 26-28. (2007)

Contributed, Peer-Reviewed National Presentations

1. **Glueck DH**, Muller KE. Contributed Poster. <u>Sample size issues in measuring compliance with guidelines</u>. Association for Health Services Research. June (1997).

- 2. **Glueck DH**, Muller KE and Poretz R. Contributed Paper. <u>Power for the full model in every cell</u>. Eastern North American Region of the International Biometric Society. March (1997).
- 3. **Glueck DH** and Muller KE. Contributed Paper. <u>Unconditional power for a general linear model with fixed and random predictors: an example from a clinical trial on bone density</u>. Eastern North American Region of the American Statistical Association. March (1996).
- 4. **Glueck DH** and Muller KE. Contributed Paper. <u>Power for tests of Gaussian predictors in general linear multivariate models</u>. American Statistical Association. Health Policy Statistics Section. International Conference on Health Policy Research. December 5-7 (1997).
- 5. **Glueck DH** and Muller KE. Contributed Paper. <u>Confidence bounds for power in the general linear multivariate model</u>. Eastern North American Region of the American Statistical Association. March (1998).
- 6. Zhang L, Webb T, **Glueck DH**, Baron A, Murphy J, Cagnoni P. Contributed Paper Death and power: calculating sample size for trials where the treatment can be fatal. Eastern North American Region of the International Biometrics Society, March 19-22 (2000).
- 7. **Glueck DH**, Glueck CJ. Contributed Paper. <u>Maternal and fetal heritable</u> thombophilia and their effect on first trimester miscarriages. Eastern North American Region of the International Biometrics Society, March 19-22 (2000).
- 8. Webb TS, **Glueck DH**, Baron A. Contributed Paper. Exact test size and power for small samples using an internal pilot study for binary outcome case-control data. Eastern North American Region of the International Biometrics Society, March 19-22 (2001).
- 9. **Glueck DH**, Muller KE, Hunter L. Contributed Paper. Exact power under independence for the false discovery rate in gene expression array experiments. 2003 Western North American Region of the International Biometrics Society, June 22-June 25 (2003).
- Glueck DH, Muller KE, Hunter L. Contributed Paper. <u>Exact power under independence for the false discovery rate in gene expression array experiments</u>.
 Eastern North American Region of the International Biometrics Society, March 30-April 2 (2003).
- 11. Bodkin AW, Carollo JJ, **Glueck DH**. <u>Home-based treadmill training in ambulatory children with cerebral palsy: a randomized controlled trial</u>. 2006 Clinical Translational Research Center Annual Spring Pediatrics Poster Session.

- Contributed Poster. Department of Pediatrics, University of Colorado School of Medicine. May (2006).
- 12. O'Donnell CI, Glueck CJ, Glueck DH. Contributed Talk. A Mendelian model for miscarriage. Western North American Region of the International Biometric Society. Flagstaff Arizona. June 30 (2006).
- 13. **Glueck DH**, Karimpour-Fard A, Hunter L, Muller KE, Mandel J. <u>The joint cumulative distribution function of arbitrary sets of order statistics</u>. Western North American Region of the International Biometric Society. Contributed Talk. Flagstaff Arizona. June 30 (2006).
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- 16. **Glueck DH**, Karimpour-Fard A, Hunter L, Mandel J, Muller KE. <u>Exact</u> <u>calculations of expected power for the Benjamin-Hochberg procedure.</u> Fifth annual rocky mountain bioinformatics conference. Contributed Paper. Snowmass, Colorado. November 30-December 2 (2007).
- 17. **Glueck DH**, Lamb MM, O'Donnell CI, Muller KE, Lewin JM. Contributed Poster. Extreme verification bias in paired continuous tests may mask the magnitude of the difference between the diagnostic accuracies of screening modalities. Contributed Poster. Eastern North American Region of the International Biometric Society. Arlington, Virginia. March 16-19 (2008).
- 18. Feser WJ, Fingerlin TE, Strand MJ, **Glueck DH**. <u>Calculating average power for the Benjamini-Hochberg procedure</u>. Western North American Region of the International Biometric Society. University of California Davis, California. June 22-25 (2008).
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- 20. **Glueck DH,** Karimpour-Fard A, Muller KE. <u>A two-stage adaptive design can increase power for multiple comparisons</u>. Sixth Annual Rocky Mountain Bioinformatics Conference. Snowmass, Colorado. December 5-7, (2008).
- 21. Ringham BM, Glueck DH. Estimates of observed sensitivity and specificity must be corrected when reporting the results of the final test in a screening trial conducted in series. Eastern North American Region of the International Biometric Society. San Antonio, Texas. March 15-18 (2009).
- 22. Brinton JT, Glueck DH. Animated graphics and visual metaphors help explain complex mathematical relationships. Eastern North American Region of the International Biometric Society. San Antonio, Texas. March 15-18 (2009).
- 23. Brinton JT, Freivogel M, Barke L, Jackson S, O'Donnell CI, Glueck DH. Women Are Rarely Screened in Accordance with American Cancer Society Guidelines:

 Only One in Seven Women at High Risk for Breast Cancer Get an MRI as an Adjunct to Mammography. Podium Presentation. ISP: Health Services, Policty and Research (Evidence-based imaging and guidelines). Radiological Society of North America. Chicago. November 28-December 3. 2010.
- 24. Brinton JT, Freivogel M, Barke L, Jackson S, O'Donnell CI, **Glueck DH**. <u>Adjunct Breast MRI screening in women with an increased risk for breast cancer: only one in six women comply with American Cancer Society Guidelines when recommendations are made</u>. Poster presentation. The 16th Annual Multidisciplinary Symposium on Breast Disease. Amelia Island, Florida. February 10-13, 2011.