

CHARLOTTE C. GARD, Ph.D., M.B.A.

Department of Economics, Applied Statistics, and International Business
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EDUCATION

2011	Ph.D., Biostatistics, University of Washington, Seattle, WA.
2000	M.S., Experimental Statistics, New Mexico State University, Las Cruces, NM.
1994	M.B.A., University of Texas at Austin, Austin, TX.
1992	B.S. (<i>magna cum laude</i>), Applied Mathematics, University of Alabama, Tuscaloosa, AL.

PROFESSIONAL POSITIONS

2024-present	<i>Professor</i> Department of Economics, Applied Statistics, and International Business, New Mexico State University, Las Cruces, NM.
2024-present	<i>Director</i> Data Science Core, New Mexico IDeA Networks of Biomedical Research Excellence (INBRE).
2023-present	<i>Director</i> PhD in Applied Statistics Program, Department of Economics, Applied Statistics, and International Business, New Mexico State University, Las Cruces, NM.
2011-present	<i>Consultant</i> Statistical Coordinating Center for the Breast Cancer Surveillance Consortium, Kaiser Permanente Washington Health Research Institute (formerly Group Health Research Institute), Seattle, WA.
2023-2024	<i>Associate Director</i> Faculty Mentoring Unit, Professional Development Core, Mountain West Clinical and Translational Research Infrastructure Network.
2019-2024	<i>Biostatistician</i> Biostatistics, Epidemiology, and Research Design Core, Mountain West Clinical and Translational Research Infrastructure Network.
2018-2024	<i>Associate Professor</i> Department of Economics, Applied Statistics, and International Business, New Mexico State University, Las Cruces, NM.

2012-2018	<i>Assistant Professor</i> Department of Economics, Applied Statistics, and International Business, New Mexico State University, Las Cruces, NM.
2012	<i>Temporary College Assistant Professor</i> Department of Economics, Applied Statistics, and International Business, New Mexico State University, Las Cruces, NM.
2007-2011	<i>Research Assistant</i> Statistical Coordinating Center for the Breast Cancer Surveillance Consortium, Group Health Research Institute, Seattle, WA.
2006-2007	<i>Teaching Assistant</i> Department of Biostatistics, University of Washington, Seattle, WA.
2004-2006, 2007	<i>Research Assistant</i> Statistical Center for HIV/AIDS Research and Prevention, Fred Hutchinson Cancer Research Center, Seattle, WA.
2002-2004	<i>Research Statistician I</i> Statistics Research Division, RTI International, Rockville, MD.
2000-2002	<i>Statistician III</i> Statistics Research Division, RTI International, Rockville, MD.
1998-2000	<i>Teaching Assistant</i> University Statistics Center, New Mexico State University, Las Cruces, NM.
1997-1998	<i>Operations Research Analyst</i> Command Analysis Directorate, United States Army Aviation and Missile Command, Redstone Arsenal, AL.
1994-1997	<i>Program Management Intern</i> Multiple Launch Rocket System Project Office, Program Executive Office Tactical Missiles, Redstone Arsenal, AL.

HONORS, AWARDS, AND SCHOLARSHIPS

Stan Fulton Endowed Chair in Business, 2021-2025.
Faculty Award for Scholarly Research, College of Business, New Mexico State University, 2024
Donald C. Roush Award for Teaching Excellence, New Mexico State University, 2019
Junior Scholarly Research Award, College of Business, New Mexico State University, 2016.
Fulton Faculty Research Award, College of Business, New Mexico State University, 2015.
Patricia Christmore Faculty Teaching Award, New Mexico State University, 2014.
Travel award, CBMS/NSF Regional Conference on Bayesian Nonparametric Statistical Methods: Theory and Applications, Santa Cruz, CA, 2010.
Runner-up (Written), Western North American Region of the International Biometric Society Student Paper Competition, 2010.

Predoctoral Traineeship Award, Department of Defense Breast Cancer Research Program, 2008.
Phi Beta Kappa, 1992.
Barry M. Goldwater Scholar, 1990.

PROFESSIONAL ACTIVITIES

Service:

Awards Committee, Western North American Region of the International Biometric Society, 2024-present.
Mail Reviewer, TMD Collaborative for Improving Patient-Centered Translational Research (TMD IMPACT) U54, Musculoskeletal, Skin, and Oral Sciences Review Branch, NIH Center for Scientific Review, 2025.
Temporary Member, Analytics and Statistics for Population Research Panel B Study Section, Population Sciences and Epidemiology Integrated Review Group, NIH Center for Scientific Review, 2024.
Reviewer, Mountain West Clinical and Translational Research Infrastructure Network Pilot Grants Program, 2021-2024.
Chair, Student Paper Award Committee, Western North American Region of the International Biometric Society, 2023.
Representative at Large, Western North American Region of the International Biometric Society, 2021-2023.
Advisory Committee, Southwest Institute for Health Disparities Research, 2015-2023.
Reviewer, Fred Hutchinson Cancer Research Center/New Mexico State University Partnership for the Advancement of Cancer Research, 2022.
Chair, Western North American Region of the International Biometric Society Regional Advisory Board, 2019-2020.
Regional Advisory Board Member, Western North American Region of the International Biometric Society, 2018-2020.
Student Paper Award Committee, Western North American Region of the International Biometric Society, 2018-2020.
Founding Advisor, New Mexico State University American Statistical Association Student Chapter, 2015-2019.
Program Chair, Western North American Region of the International Biometric Society Meeting, 2017.
Speaker, Breast Cancer Support Group of the Community Foundation of Southern New Mexico, 2016.

Professional Memberships:

American Statistical Association
Western North American Region of the International Biometric Society

Referee:

Journal of the American Statistical Association (Applications and Case Studies)
ecancermedicalscience
European Journal of Radiology Open
Women's Health Issues
Preventive Medicine Reports
Statistics
Health Affairs

TEACHING EXPERIENCE

Instructor:

Department of Economics, Applied Statistics, and International Business, New Mexico State University

Semester	Enrollment			
	A ST 311 Statistical Applications (3 credits)	A ST 505 Statistical Inference I (4 credits)	A ST 555 Applied Multivariate Analysis (3 credits)	MGT 512/A ST 512 Quantitative Analysis for Business Decisions (3 credits)
Fall 2012	46	28		
Spring 2013		32	13	
Fall 2013	45	33		
Spring 2014		24	22	
Fall 2014	44	25		
Spring 2015		25	9	
Fall 2015	48	31		
Spring 2016		26	16	
Fall 2016		49 (2 sections)		
Spring 2017		24	24	
Fall 2017		56 (2 sections)		
Spring 2018		24		25
Fall 2018		26		44 (2 sections)
Spring 2019			27	
Fall 2019		Sabbatical		
Spring 2020			11	
Fall 2020				48
Spring 2021			18	
Fall 2021				41
Spring 2022			12	
Fall 2022				42
Spring 2023			10	
Fall 2023				25
Spring 2024			18	
Fall 2024				
Spring 2025			19	
Fall 2025				
Spring 2026			14	

Semester	Enrollment				
	A ST 554 Practicum in Statistics (3 credits)	A ST 550/A ST 511 Statistical Methods for Data Analytics (3 credits)	A ST 665 Bayesian Theory (3 credits)	A ST 503 SAS Basics (3 credits)	A ST 609 Linear Model Theory (3 credits)
Spring 2020	3				
Fall 2020		13 (Online)			
Spring 2021	13				
Fall 2021		11 (Online)			
Spring 2022	6				
Fall 2022		35 (Online)			
Spring 2023	3				
Fall 2023		37 (Online)			
Spring 2024	2				
Fall 2024		47 (Online)	9		
Spring 2025	6				
Fall 2025		51 (Online)		26	
Spring 2026					7

Co-Instructor:

Statistics with R Bootcamp, Maximizing Access to Research Careers Program, New Mexico State University (Summer 2022)

Introduction to Research Course, Maximizing Access to Research Careers Program, New Mexico State University (Summer 2020, Summer 2021)

Research Skills Workshop, Southwest Institute for Health Disparities Research, New Mexico State University (Spring 2019, Fall 2019)

Guest Speaker:

ECON 432V Economics of Health Care, New Mexico State University (Fall 2016, Fall 2017)

HNRS 421 Preparation for Careers in Biomedical Science, New Mexico State University (Fall 2020, Spring 2021, Fall 2021, Spring 2022, Spring 2023)

BCIS 338 Business Information Systems I, New Mexico State University (Spring 2025)

HNRS 4110 Undergraduate Research Training Initiative for Student Enhancement (U-RISE) Seminar, New Mexico State University (Spring 2026)

Teaching Assistant:

Department of Biostatistics, University of Washington

BIOST/EPI 536 Categorical Data Analysis in Epidemiology (Autumn 2006, Autumn 2007)

BIOST/EPI 537 Survival Data Analysis in Epidemiology (Winter 2007)

University Statistics Center, New Mexico State University

A ST 311 Statistical Applications (Fall 1998, Spring 1999)

A ST 503 SAS Basics (Fall 1999, Spring 2000)

ADVISING AND FORMAL MENTORING

Master's Committee Chair:

(Research project option unless otherwise indicated)

P. Amuhaya, Applied Statistics, Fall 2013
S. Gao, Applied Statistics, Fall 2013
H. Nguyen, Applied Statistics, Fall 2014
X. Wei, Applied Statistics, Fall 2014
Y. H. Chan (Co-advisor, Course only option), Applied Statistics, Spring 2015
M. Gill, Applied Statistics, Summer 2015
W. Wei, Applied Statistics, Fall 2015
E. Torabzadehkhosravan, Applied Statistics, Summer 2016
X. Ye, Applied Statistics, Summer 2017
J. Sigala (Course only option), Applied Statistics, Spring 2018
J. Huang, Applied Statistics, Summer 2018
B. Adedokun, Applied Statistics, Fall 2019
S. Valenzuela (Co-advisor, Thesis option), Applied Statistics, Fall 2019
B. Ahmadlou (Course only option), Applied Statistics, Fall 2020
M. Sharifi (Course only option), Applied Statistics, Spring 2021
J. Audu, Applied Statistics, Fall 2022
L. Mahama, Applied Statistics, Fall 2022
G. Darkoa, Applied Statistics, Spring 2023
R. Treminio (Course-only option), Applied Statistics, Fall 2025

Capstone Experience Advisor:

M. Sium, Data Analytics, Spring 2021
S. Mohamed, Data Analytics, Summer 2022
A. Hristian, Data Analytics, Summer 2022
A. Hristian, Data Analytics, Fall 2022
A. V. Sagi, Data Analytics, Summer 2023
S. Dharba, Data Analytics, Spring 2024
J. Rochefort, Data Analytics, Fall 2025

Additionally, I have served on the graduate committees of 97 NMSU students across the Colleges of Business; Agricultural, Consumer and Environmental Sciences; Arts and Sciences; Engineering; and Health, Education and Social Transformation.

REFEREED RESEARCH ARTICLES

1. Irish W, Sherrill B, Cole B, **Gard C**, Glendenning GA, Mouridsen H. Quality-adjusted survival in a crossover trial of letrozole versus tamoxifen in postmenopausal women with advanced breast cancer. *Annals of Oncology* 16:1458-1462, 2005.
2. Bada HS, Das A, Bauer CR, Shankaran S, Lester BM, **Gard CC**, Wright LL, LaGasse L, Higgins R. Low birth weight and preterm births: etiologic fraction attributable to prenatal drug exposure. *Journal of Perinatology* 25:631-637, 2005.

3. Morris BH, **Gard CC**, Kennedy K, for the NICHD Neonatal Research Network. Rehospitalization of extremely low birth weight (ELBW) infants: are there racial/ethnic disparities? *Journal of Perinatology* 25:656-663, 2005.
4. Blake SM, Kiely M, **Gard CC**, El-Mohandes AAE, El-Khorazaty MN, the NIH-DC Initiative. Pregnancy intentions and happiness among pregnant black women at high risk for adverse infant health outcomes. *Perspectives on Sexual and Reproductive Health* 39:194-205, 2007.
5. **Gard CC**, Brown ER. A coarsened multinomial regression model for perinatal mother to child transmission of HIV. *BMC Medical Research Methodology* 8:46, 2008.
6. Miglioretti DL, **Gard CC**, Carney PA, Onega T, Buist DSM, Sickles EA, Kerlikowske K, Rosenberg RD, Yankaskas BC, Geller BM, Elmore JG. When radiologists perform best: The learning curve in screening mammogram interpretation. *Radiology* 253:632-640, 2009.
7. Jensen A, Geller BM, **Gard CC**, Miglioretti DL, Yankaskas B, Carney PA, Rosenberg RD, Vejborg I, Lynge E. Performance of diagnostic mammography differs in the United States and Denmark. *International Journal of Cancer* 127:1905-1912, 2010.
8. Spayne MC, **Gard CC**, Skelly J, Miglioretti DL, Vacek PM, Geller BM. Reproducibility of BI-RADS breast density measures among community radiologists: a prospective cohort study. *The Breast Journal* 18:326-333, 2012.
9. Harvey JA, **Gard CC**, Miglioretti DL, Yankaskas BC, Kerlikowske K, Buist DSM, Geller B, Onega TL. Reported mammographic density: film-screen versus digital acquisition. *Radiology* 266:752-758, 2013.
10. Kerlikowske K, **Gard CC**, Sprague BL, Tice JA, Miglioretti DL. One versus two breast density measures to predict 5- and 10- year breast cancer risk. *Cancer Epidemiology, Biomarkers & Prevention* 24:889-897, 2015.
11. **Gard CC**, Brown ER. A Bayesian hierarchical model for estimating and partitioning Bernstein polynomial density functions. *Computational Statistics and Data Analysis* 87:73-83, 2015.
12. **Gard CC**, Aiello Bowles EJ, Miglioretti DL, Taplin SH, Rutter CM. Misclassification of Breast Imaging Reporting and Data System (BI-RADS) mammographic density and implications for breast density reporting legislation. *The Breast Journal* 21:481-489, 2015.
13. Tice JA, Miglioretti DL, Li C-S, Vachon CM, **Gard CC**, Kerlikowske K. Breast density and benign breast disease: Risk assessment to identify women at high risk of breast cancer. *Journal of Clinical Oncology* 33:3137-3143, 2015.
14. Small BA, Frey JK, **Gard CC**. Livestock grazing limits beaver restoration in northern New Mexico. *Restoration Ecology* 24:646-655, 2016.
15. Shieh Y, Hu D, Ma L, Huntsman S, **Gard CC**, Leung JWT, Tice JA, Vachon CM, Cummings SR, Kerlikowske K, Ziv E. Breast cancer risk prediction using a clinical risk model and polygenic risk score. *Breast Cancer Research and Treatment* 159:513-525, 2016.

16. Zamani-Sabzi H, King JP, **Gard CC**, Abudu S. Statistical and analytical comparison of multi-criteria decision-making techniques under fuzzy environment. *Operations Research Perspectives* 3:92-117, 2016.
17. Kerlikowske K, **Gard CC**, Tice JA, Ziv E, Cummings SR, Miglioretti DL. Risk factors that increase risk of estrogen receptor-positive and -negative breast cancer. *Journal of the National Cancer Institute* 109:djw276, 2017.
18. Shieh Y, Hu D, Ma L, Huntsman S, **Gard CC**, Leung JWT, Tice JA, Ziv E, Kerlikowske K, Cummings SR. Joint relative risks for estrogen receptor-positive breast cancer from a clinical model, polygenic risk score, and sex hormones. *Breast Cancer Research and Treatment* 166:603-612, 2017.
19. Indacochea A, **Gard CC**, Hansen IA, Pierce J, Romero A. Short-range responses of the kissing bug *Triatoma rubida* (Hemiptera: Reduviidae) to carbon dioxide, moisture, and artificial light. *Insects* 8:90, 2017.
20. Ozturk OF, Shukla MK, Stringam B, Picchioni GA, **Gard C**. Irrigation with brackish water changes evapotranspiration, growth and ion uptake of halophytes. *Agricultural Water Management* 195:142–153, 2018.
21. McDonald JA, Amatya A, **Gard CC**, Sigala J. Trends in Hispanic and non-Hispanic white cesarean delivery rates on the US-Mexico border, 2000-2015. *PLoS ONE* 13:e0203550, 2018.
22. Campbell MC, Caldwell CA, Lewis TD, Wilson WD, **Gard CC**. Nonlethal Detection of Asian Fish Tapeworm in the Federally Endangered Humpback Chub Using a Molecular Screening Tool. *Transactions of the American Fisheries Society* 148:832-842, 2019.
23. Zaied AJ, Geli HME, Holechek JL, Cibils AF, Sawalhah MN, **Gard CC**. An Evaluation of Historical Trends in New Mexico Beef Cattle Production in Relation to Climate and Energy. *Sustainability* 11:6840, 2019.
24. Ozturk OF, Shukla MK, Stringam B, **Gard C**. Irrigation Water Salinity Effects On Germination and Emergence of Six Halophytes. *Irrigation and Drainage Systems Engineering* 8:240, 2019.
25. McDonald JA, Amatya A, **Gard CC**, Sigala J. In States That Border Mexico, Cesarean Rates Were Highest For Hispanic Women Living in Border Counties In 2015. *Health Affairs* 38:276-286, 2019.
26. Tice JA, Bissell MCS, Miglioretti DL, **Gard CC**, Rauscher GH, Dabbous FM, Kerlikowske K. Validation of the Breast Cancer Surveillance Consortium model of breast cancer risk. *Breast Cancer Research and Treatment* 175:519-523, 2019.
27. Pittz TG, Intindola ML, Adler T, Rogers S, **Gard C**. Collaborating Smartly: The Role of Open Strategy in Absorptive Capacity. *Journal of Small Business Management* 57:1595-1615, 2019.
28. McDonald JA, Amatya A, **Gard CC**. Multi-level Drivers of Disparities in Hispanic Cesarean Delivery Rates in US-Mexico Border States. *Journal of Racial and Ethnic Health Disparities* 7:238-250, 2020.
29. Zaied AJ, Geli HM, Sawalhah MN, Holechek J, Cibils AF, **Gard C**. Historical Trends in New Mexico Forage Crop Production in Relation to Climate, Energy, and Rangelands. *Sustainability* 12:2051, 2020.
30. Taylor ZD, McLeod E, **Gard CC**, Wood ME. Testicular Cancer Incidence and Mortality in New Mexico. *Ethnicity & Disease* 30:357-364, 2020.

31. Bissell MCS, Kerlikowske K, Sprague BL, Tice JA, **Gard CC**, Tossas KY, Rauscher GH, Trentham-Dietz A, Henderson LM, Onega T, Keegan THM, Miglioretti DL. Breast Cancer Population Attributable Risk Proportions Associated with Body Mass Index and Breast Density by Race/Ethnicity and Menopausal Status. *Cancer Epidemiology, Biomarkers & Prevention* 29:2048-2056, 2020.
32. Ben Ali A, Shukla MK, Schutte BJ, **Gard CC**. Irrigation with RO concentrate and brackish groundwater impacts pecan tree growth and physiology. *Agricultural Water Management* 240:106328, 2020.
33. Taylor Z, Chory K, Wright M, Amatya A, **Gard C**, Woods ME. Incidence and Survival for Common Cancers Are Lower in New Mexico and Along the US-Mexico Border Than Elsewhere in the United States. *Cureus* 12:e11234, 2020.
34. Zaied AJ, Geli HME, Cibils AF, Sawalhah MN, Holechek J, **Gard CC**, Idhirij SA, Gedefaw MG, Torell GL. Beef Cattle Price and Production Patterns in Relation to Drought in New Mexico. *Sustainability* 13:10420, 2021.
35. Canton MC, Holguin FO, **Gard CC**, Boeing WJ. Allelochemical effect of gramine under temperature stress and impact on fat transesterification. *Chemistry and Ecology* 37:481-492, 2021.
36. de la Rosa IA, Huang J, **Gard CC**, McDonald JA. Examining the Prevalence of Peripartum Depressive Symptoms in a Border Community. *Women's Health Reports* 2:210-218, 2021.
37. Tice JA, **Gard CC**, Miglioretti DL, Sprague BL, Tosteson ANA, Joe BN, Ho T-Q H, Kerlikowske K. Comparing Mammographic Density Assessed by Digital Breast Tomosynthesis or Digital Mammography: The Breast Cancer Surveillance Consortium. *Radiology* 302:286-292, 2022.
38. Kerlikowske K, Chen S, Golmakani MK, Sprague BL, Tice JA, Tosteson ANA, Rauscher GH, Henderson LM, Buist DSM, Lee JM, **Gard CC**, Miglioretti DL. Cumulative Advanced Breast Cancer Risk Prediction Model Developed in a Screening Mammography Population. *Journal of the National Cancer Institute* 114:676-685, 2022.
39. Ryser MD, Lange J, Inoue LYT, O'Meara ES, **Gard C**, Miglioretti DL, Bulliard J-L, Brouwer AF, Hwang ES, Etzioni RB. Estimation of Breast Cancer Overdiagnosis in a U.S. Breast Screening Cohort. *Annals of Internal Medicine* 175:471-478, 2022.
40. Taylor ZD, Chew L, Tumey T, **Gard CC**, Woods ME. Differences in Incidence, Staging, and Survival of Urologic Cancers in Patients Under 65 Living in the US-Mexico Border Region. *Current Urology* 10.1097, 2022.
41. Lawson MB, Bissell MCS, Miglioretti DL, Eavey J, Chapman CH, Mandelblatt JS, Onega T, Henderson LM, Rauscher GH, Kerlikowske K, Sprague BL, Bowles EJA, **Gard CC**, Parsian S, Lee CI. Multilevel Factors Associated With Time to Biopsy After Abnormal Screening Mammography Results by Race and Ethnicity. *JAMA Oncology* 8,1115-1126, 2022.
42. Sprague BL, Chen S, Miglioretti DL, **Gard CC**, Tice JA, Hubbard RA, Bowles EJA, Kaufman PA, Kerlikowske K. Cumulative six-year risk of screen-detected ductal carcinoma in situ by screening frequency: a cohort study. *JAMA Network Open* 6, 2023.
43. Blakely BN, Agnew J, **Gard C**, Romero A. Effects of blood meal source on blood consumption and reproductive success of cat fleas, *Ctenocephalides felis*. *PLOS Neglected Tropical Diseases* 17:e0011233, 2023.

44. Lange J, Zhao Y, Gogebakan KC, Olivas-Martinez A, Ryser MD, **Gard CC**, Etzioni R. Test sensitivity in a prospective cancer screening program: A critique of a common proxy measure. *Statistical Methods in Medical Research* 32:1053-1063, 2023.
45. **Gard CC**, Lange J (Co-First Author), Miglioretti DL, O'Meara ES, Lee CI, Etzioni R. Risk of cancer versus risk of cancer diagnosis? Accounting for diagnostic bias in predictions of breast cancer risk by race and ethnicity. *Journal of Medical Screening* 9691413231180028, 2023. doi:10.1177/09691413231180028.
46. Rahman HH, Akinjobi Z, Morales JB, Munson-McGee SH, **Gard C**. Prevalence of associated factors on depression during COVID 19 in students in a minority serving institution: A cross sectional study. *Journal of Affective Disorders Reports*, 13:100605, 2023.
47. Iglesias A, Mahama L, **Gard C**, Schirmer T. Pursuing academic librarianship: factors affecting job attainment. *The Journal of Academic Librarianship* 49:102751, 2023.
48. Rahman HH, Akinjobi Z, **Gard C**, Munson-McGee SH. Sleeping behavior and associated factors during COVID-19 in students at a Hispanic serving institution in the US southwestern border region. *Scientific Reports* 13:11620, 2023.
49. Iglesias A, **Gard C**. Pursuing academic librarianship: gender identity and factors affecting job attainment. *The Journal of Academic Librarianship* 49, 102806, 2023.
50. Krashin JW, Black P, Brannen E, **Gard CC**, Lin Y, Greenwood-Ericksen M, Trujillo VY, Burkhardt G, Schreiber CA. Geographic access to early pregnancy loss management. *Obstetrics & Gynecology* 143, 435-439, 2024.
51. **Gard CC**, Tice J (Co-First Author), Miglioretti DL, Sprague BL, Bissell MC, Henderson LM, Kerlikowske K. Extending the Breast Cancer Surveillance Consortium Model of Invasive Breast Cancer. *Journal of Clinical Oncology* 42, 779-789, 2024.
52. Iglesias A, Mahama L, **Gard C**. Pursuing academic librarianship: pathways to librarian positions. *Practical Academic Librarianship* 14, 2024.
53. Arije D, Ghimire R, Bista P, Angadi SV, **Gard CC**. Soil organic carbon recovery and soil health in semi-arid drylands with years of transition to perennial grasses. *Journal of Arid Environments* 225, 2024.
54. Lange JM, **Gard CC**, O'Meara ES, Miglioretti DL, Etzioni R. Breast density and risk of breast cancer: masking and detection bias. *American Journal of Epidemiology* 194, 441-448, 2025.
55. Varela M, **Gard CC**, Boeing WJ. Cannabidiol on aggression in betta fish (*Betta splendens*). *Behavioural Pharmacology* 36, 226-233, 2025.
56. Sprague BL, **Gard CC**, Chen S, Tice JA, Tosteson ANA, Perry H, Lee CI, Miglioretti DL, Kerlikowske K. Advanced Versus Invasive Breast Cancer Risk in a Screening Population: Implications for Risk-based Prevention and Screening Strategies. *Journal of General Internal Medicine* 10.1007/s11606-026-10237-5. doi: 10.1007/s11606-026-10237-5. Online ahead of print, 2026.

57. Chen S, Kerlikowske K, Su YR, Hubbard RA, **Gard CC**, Tice JA, Sprague BL, Ahern TP, Miglioretti DL. Performance of Statistical and Machine Learning Risk Prediction Models for Advanced Breast Cancer. *Cancer Epidemiology, Biomarkers & Prevention* <https://doi.org/10.1158/1055-9965.EPI-25-2052>, 2026.

NON-REFEREED SCHOLARLY PUBLICATIONS

1. **Gard C**. Conversion of SUDAAN output into publication-quality tables—a simplified approach. *Proceedings of the Southern SAS Users Group Conference*, 2001, pp. 693-698.
2. **Gard CC**, Das A, Bada HS, Poole WK. Sequential estimation of adjusted attributable risk in a cross-sectional study: a bootstrap approach. *Proceedings of the American Statistical Association, Biometrics Section* [CD-ROM], Alexandria, VA, 2003, pp. 3335-3341.

TECHNICAL REPORTS

1. McDonald J, **Gard C**. Methods and Results of the PCI CoIIN Hospital Survey. Submitted to PCI (Project Concern International), San Diego, CA, 2020.

CONFERENCES AND MEETINGS

1. Duara S, Stoll BJ, Wright LL, **Gard C**, Oh W, Fanaroff AA, Poole K, Goldberg RN, Laptook AR for the NICHD Neonatal Research Network (2002). “Early death in extremely low birthweight infants: a changing profile over the past decade.” Poster presented at the Pediatric Academic Societies’ Annual Meeting, Baltimore, MD.
2. Irish W, Sherrill E, **Gard C**, Cole B (2002). “Quality-adjusted survival of letrozole versus tamoxifen in postmenopausal women with advanced breast cancer.” Poster presented at the 25th Annual San Antonio Breast Cancer Symposium, San Antonio, TX.
3. Bada HS, Das A, Bauer CR, Shankaran S, Lester BM, **Gard C**, Wright LL, Smeriglio V, LaGasse L (2003). “Intrauterine growth restriction: legal and illegal drug use and population attributable risk.” Poster presented at the Pediatric Academic Societies’ Annual Meeting, Seattle, WA.
4. Morris BH, **Gard CC**, Neonatal Research Network (Sponsored by Jon Tyson, MD) (2003). “Rehospitalization of extremely low birth weight (ELBW) infants: are there racial disparities?” Presented at the Pediatric Academic Societies’ Annual Meeting, Seattle, WA.
5. Sherrill B, **Gard C**, Irish W (2003). “Evaluating the trade-off between clinical benefit and toxicity: an application of the Q-TWiST method.” Podium presentation at the 19th International Conference on Pharmacoepidemiology and 1st International Conference on Therapeutic Risk Management, Philadelphia, PA.
6. Bradt P, O’Shea M, **Gard C**, Tyson J, Vohr B, Wright L (2004). “Developing simpler methods to diagnose cerebral palsy: use of functional motor skills in extremely low birth weight (ELBW) infants at 18-22 months.” Poster presented at the Pediatric Academic Societies’ Annual Meeting, San Francisco, CA.
7. Blake S, Kiely M, **Gard C**, El-Mohandes A, El-Khorazaty N, Walker L, Milligan R, White D (2004). “Pregnancy intendedness, happiness, maternal risk and their correlates during the first and second trimesters of pregnancy.” Presented at the Pediatric Academic Societies’ Annual Meeting, San Francisco, CA.

8. Bada HS, Bauer CR, Shankaran S, Lester B, LaGasse L, Das A, Hammond J, **Gard C**, Wright L, Smeriglio V, Higgins R (2004). "Long-term effects of prenatal exposure to cocaine, opiates, and other drugs on childhood behavior problems (the Maternal Lifestyle Study)." Presented at the Pediatric Academic Societies' Annual Meeting, San Francisco, CA.
9. Das A, **Gard C**, Bada H, Poole WK (2004). "Simultaneous modeling of multiple outcomes over time: a hierarchical modeling approach." Presented in topic contributed session at the Joint Statistical Meetings, Toronto, Ontario, Canada.
10. Burdett AN, **Gard CC**, Longo CJ, Raskin J, Gilsenan A, Hopkins J, Miller DP (2004). "Prevalence and costs of difficult-to-treat depression in a Canadian claims database." Poster presented at the 20th International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Bordeaux, France.
11. Burdett AN, **Gard CC**, Gilsenan A, Hirji Z, Raskin J, Miller DP (2005). "Prevalence and costs associated with treating depression with painful physical symptoms in a Canadian administrative health services database." Poster presented at the 21st International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Nashville, TN.
12. **Gard CC**, Brown ER (2008). "Using Bernstein polynomials to model misclassification in BI-RADS breast density measurements." Presented in regular contributed session at the Joint Statistical Meetings, Denver, CO.
13. Barlow W, **Gard C** (2009). "Benefit of longitudinal data for prediction of breast cancer in women undergoing screening mammography." Presented at Banff International Research Station Risk Prediction Workshop (sponsored by the National Cancer Institute), Banff, Alberta, Canada.
14. **Gard CC** (2009). "Inter- and intra-radiologist agreement in assessment of BI-RADS breast density: results from the R2 and AIM studies." Presented at the Breast Cancer Surveillance Consortium Meeting, San Francisco, CA.
15. **Gard CC**, Brown ER (2009). "A Bayesian hierarchical model for clustering Bernstein polynomial density estimates." Presented in regular contributed session at the Joint Statistical Meetings, Washington DC.
16. **Gard CC**, Brown ER (2010). "A study of Bayesian density estimation using Bernstein polynomials." Poster presented at the Eastern North American Region of the International Biometric Society Spring Meeting, New Orleans, LA.
17. **Gard CC**, Brown ER (2010). "Modeling distributions of data across a population: a Bayesian approach using Bernstein polynomials." Presented in student paper competition at the Western North American Region of the International Biometric Society Annual Meeting, Seattle, WA.
18. **Gard CC** (2012). "Project 1 – prototype for risk models." Presented at the Breast Cancer Surveillance Consortium-P01 Risk-Based Breast Cancer Screening in Community Settings Meeting, Seattle, WA.
19. **Gard CC**, Brown ER (2012). "A Bayesian hierarchical model for estimating and partitioning Bernstein polynomial density functions." Presented in invited session at the Western North American Region of the International Biometric Society – Graybill Conference, Fort Collins, CO.

20. Small BA, Frey J, **Gard C** (2015). "Evaluation of habitat suitability for dam-building beaver in northern New Mexico." Presented in wildlife student paper competition at the 48th Joint Annual Meeting of the New Mexico and Arizona Chapters of the Wildlife Society and the Arizona/New Mexico Chapter of the American Fisheries Society, Las Cruces, NM.
21. Shieh Y, Hu D, Ma L, **Gard CC**, Leung J, Tice JA, Vachon CM, Cummings SR, Kerlikowske K, Ziv E (2016). "Breast Cancer Risk Prediction using a Combined Clinical Risk Calculator and Polygenic Risk Score." Poster presented at the Society of General Internal Medicine Annual Meeting, Hollywood, FL.
22. Torabzadeh E, McDonald J, Amatya A, **Gard C** (2016). "Repeat Births Among Hispanic Adolescents in the United States-Mexico Border Region: Risk Factors and Outcomes." Presented in student poster competition at the Southwest Institute for Health Disparities Research Conference, Las Cruces, NM.
23. Scott MA, **Gard C** (2016). "Promising Binational Research Opportunities: Best Practices for Faculty Mentors and Students." Presented in roundtable at the Southwest Institute for Health Disparities Research Conference, Las Cruces, NM.
24. Scott MA, **Gard C**, Palma Y, Uribe F, Sobin C (2016). "Building an Interdisciplinary Pipeline for Binational Research." Presented in breakout session at the Southwest Institute for Health Disparities Research Conference, Las Cruces, NM.
25. Ozturk O, Shukla MK, Stringam B, **Gard C** (2016). "Irrigation Water Salinity Effects on Germination, Emergence and Growth of Halophytes." Poster presented at the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America International Annual Meetings, Phoenix, AZ.
26. Shieh Y, Hu D, Huntsman S, Ma L, **Gard CC**, Leung JWT, Tice JA, Cummings SR, Kerlikowske K, Ziv E (2016). "A Model with Polygenic Risk Score and Mammographic Density Predicts Interval Cancers." Poster presented at the San Antonio Breast Cancer Symposium, San Antonio, TX.
27. **Gard C** (2017). "Use of secondary data sources to investigate health disparities in the border region." Presented at the Southwest Institute for Health Disparities Research Border Health Breakfast, Las Cruces, NM.
28. Miglioretti DL, Sprague B, **Gard C**, Rauscher G, Tice J, Kerlikowske K (2018). "Risk-based strategies for supplemental breast cancer screening." Presented at the Annual Meeting of the European Society of Radiology, Vienna, Austria.
29. Sigala J, McDonald J, Amatya A, **Gard C** (2018). "Trends in Cesarean Delivery in the US-Mexico Border States." Poster presented at the New Mexico Public Health Association Annual Conference, Albuquerque, NM.
30. Stone K, McDonald J, Amatya A, **Gard C**, Sigala J (2018). "Trends in Trial of Labor and Repeat Cesarean Delivery in the Border Region." Presented at the New Mexico Public Health Association Annual Conference, Albuquerque, NM.
31. Sigala J, McDonald J, Amatya A, **Gard C** (2018). "Trends in Cesarean Delivery in the US-Mexico Border States." Poster presented at the Southwest Institute for Health Disparities Research Student Forum: Innovations to Address Border Health Disparities in Changing Times, Las Cruces, NM.

32. McDonald JA, Amatya A, **Gard CC**, Sigala J (2018). "Trends in cesarean delivery on the US-Mexico border, 2000-2015." Poster presented at the 31st Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research, Baltimore, MD.
33. **Gard CC**, Amatya A, Sigala J, Stone K, McDonald JA (2018). "Explaining county-level variation in cesarean delivery rates in US-Mexico border states." Presented at the CityMatCH Leadership and MCH Epidemiology Conference, Portland, OR.
34. Amatya A, McDonald J, **Gard C**, Sigala J, Stone K (2018). "Segmented regression analysis of the trends of cesarean delivery in the US-Mexico border states." Presented at the American Public Health Association Annual Meeting and Expo, San Diego, CA.
35. **Gard C** (2018). "Cesarean Delivery in the Border Region: Peeling the Onion." Presented at the Southwest Institute for Health Disparities Research Faculty Journal Club, Las Cruces, NM.
36. **Gard CC**, Huang J, de la Rosa IA, McDonald JA (2019). "Perinatal depression risk in a New Mexico Healthy Start population, 2009-2017." Presented at the New Mexico Public Health Association Annual Conference, Las Cruces, NM.
37. McDonald JA, **Gard CC** (2019). "Multi-level drivers of disparities in Hispanic cesarean delivery rates in US-Mexico border states." Presented at the New Mexico Public Health Association Annual Conference, Las Cruces, NM.
38. Valenzuela S, **Gard CC**, Sroka CJ (2019). "Racial/Ethnic Differences in Breast Cancer Incidence in the US-Mexico Border Region." Poster presented at the Southwest Institute for Health Disparities Mini-Conference, Las Cruces, NM.
39. Sharifi M, McDonald JA, **Gard CC** (2019). "Prenatal Lead Exposure Risk in a New Mexico Healthy Start Population, 2009-2017." Poster presented at the Southwest Institute for Health Disparities Mini-Conference, Las Cruces, NM.
40. **Gard CC**, Lange JM, Etzioni R (2019). "Racial/ethnic differences in mammography utilization in the Breast Cancer Surveillance Consortium." Poster presented at the NIH NCI Center to Reduce Cancer Health Disparities Professional Development Workshop and Mock Review, Bethesda, MD.
41. McLeod E, Taylor Z, **Gard C**, Woods ME (2019). "Testicular cancer in New Mexico and the United States-Mexico border." Poster presented at the New Mexico Medical Society Convention, Albuquerque, NM.
42. **Gard CC** (2019). "Updating the version 2 BCSC risk model." Presented at the Breast Cancer Surveillance Consortium Annual Meeting, Seattle, WA.
43. Ben Ali AR, Schutte BJ, Shukla MK, **Gard C** (2019). "Irrigation with RO Concentrate and Brackish Groundwater Impacts on Pecan Trees Growth and Physiology." Poster presented at USCID's 12th International Conference on Irrigation and Drainage, Reno, NV.
44. McDonald J, **Gard C** (2019), "Individual and county-level determinants of disparities in Hispanic cesarean delivery rates in US-Mexico border states." Presented at the American Public Health Association Annual Meeting and Expo, Philadelphia, PA.

45. Mandall N, McDonald J, **Gard C**, Wilson S (2020). "Intimate Partner Violence in a US-Mexico Border Community, 2015-2017." Poster presented at the New Mexico Public Health Association Annual Conference, Virtual.
46. Ryser MD, Lange J, Inoue L, O'Meara ES, **Gard C**, Miglioretti DL, Bulliard J-L, Brouwer AF, Hwang ES, Etzioni RB (2021). "Estimation of breast cancer overdiagnosis in a US breast screening cohort." Presented at the San Antonio Breast Cancer Symposium, San Antonio, TX and Online.
47. Lawson MB, Bissell MCS, Miglioretti DL, Eavey J, Chapman CH, Mandelblatt JS, Onega T, Henderson LM, Rauscher GH, Kerlikowske K, Sprague BL, Bowles EJA, **Gard CC**, Parsian S, Lee CI (2022). "Multilevel Factors Associated with Time to Biopsy after Abnormal Screening Mammogram." Presented at the SBI/ACR Breast Imaging Symposium, Savannah, GA/Hybrid.
48. Lange JM, **Gard C**, O'Meara E, Etzioni R (2022). "Elevated risk of breast cancer diagnosis in women with dense breasts reflects similarly elevated risk of breast cancer onset that is robust to the effect of density on mammography sensitivity." Poster presented at the San Antonio Breast Cancer Symposium, San Antonio, TX.
49. **Gard CC**, Lange J, Miglioretti D, O'Meara E, Lee C, Etzioni R (2023). "Identifying and addressing detection bias due to race and ethnicity in the estimation of breast cancer risk." Presented in contributed session at the International Conference on Health Policy Statistics, Scottsdale, AZ.
50. Krashin JW, Black P, Brannen E, Lin Y, **Gard C**, Schreiber CA (2023), "Geospatial analysis of access to evidence-based early pregnancy loss management in New Mexico." Poster presented at the ACOG Annual Clinical & Scientific Meeting, Baltimore, MD.
51. **Gard C**, Lange J (2023). "Identifying and addressing detection bias in the estimation of breast cancer risk: case studies in race/ethnicity and breast density." Presented at the UC Davis Biostatistics Seminar Series, Virtual.
52. Sprague BL, **Gard CC**, Chen S, Tice JA, Tosteson ANA, Perry H, Lee CI, Miglioretti DL, Kerlikowske K (2025). "Population distribution of invasive and advanced breast cancer risk by breast density." Presented as abstract proffered talk at the 11th International Breast Density & Cancer Risk Assessment Workshop, Lihue, HI.
53. Tice JA, Arasu VA, **Gard CC**, Sieh W, Rothstein JH, Gadgil T, Achacoso NS, Alexeeff SE, Bhattacharya A, Cord JB, Esserman LJ, Galbraith W, Gerstley LD, Head ST, Hylton NM, Kushi LH, Lee C, Leimpeter AD, Lewis DA, Liu VX, Marafino BJ, Margolies LR, Navarro DA, Pu A, Sakoda LC, Shan J, Shieh Y, Sistig A, van't Veer L, Villasenor M, Westley M, Wisner DJ, Kerlikowske K, Shen L, Habel LA (2025). "Performance of breast cancer risk models in a large population-based cohort." Poster presented at the 11th International Breast Density & Cancer Risk Assessment Workshop, Lihue, HI.
54. Tavira J, Li A, Gonzalez N, Olivera M, Ibarra G, Moore K, Galvan A, Mecham S, Carosso E, **Gard CC**, Dejan M, Mendoza J (2025). "Impacts of H-Pace Program: Changes in Self-Efficacy and Outcome Expectations." Poster presented at ABRCMS 2025, San Antonio, TX.

GRANTS/CONTRACTS

NIH/NIGMS P20GM103451 (Lusetti)

04/01/24-03/31/29

New Mexico IDEa Networks of Biomedical Research Excellence (INBRE)

Role: Key Personnel

NIH/NIGMS T34GM153567 (Unguez) <i>U-RISE at NMSU</i> Role: Key Personnel	04/01/24-03/31/29
NIH/NIGMS R16GM154680 (Rahman) <i>Arsenic Exposure and its Association with Cancers Among Residents with Wells in New Mexico's Border Counties</i> Role: Co-Investigator	07/15/24-06/30/28
NIH/NCATS KL2TR001448 (Cannon) <i>Institutional Career Development Core, KL2 Scholars Program</i> Role: PI Subaward	06/01/23-05/31/25
NIH/NIGMS U54GM104944 (Kumar) <i>Clinical and Translational Research Infrastructure Network (MW-CTR-IN)</i> Role: Co-PI Subaward	08/08/18-06/30/24
NIH/NCI U54CA132383 (Unguez) <i>2/2 Partnership for the Advancement of Cancer Research: NMSU & Fred Hutch</i> Role: Project Lead	09/15/18-08/31/23
NIH/NCI R01CA242735 (Etzioni) <i>Modeling to Minimize Detection Bias in Cancer Risk Prediction Studies</i> Role: PI Subaward	09/19/19-08/31/22
NIH/NIGMS T34GM007667 (Unguez) <i>Biomedical Research Training MARC U-STAR</i> Role: Faculty	06/01/20-05/31/21
Cowboys for Cancer Research (Gard) <i>Improving the Breast Cancer Surveillance Consortium Risk Prediction Model</i> Role: Principal Investigator	11/01/17-10/31/18
HRSA R40MC30756 (McDonald) <i>Linked Dataset Analysis of Disparities in Cesarean Delivery Rates on the U.S.-Mexican Border</i> Role: Co-Investigator	04/01/17-09/30/18 (NCE)

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