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**CURRICULUM VITAE****Karen Bandeen-Roche****PERSONAL DATA**

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**EDUCATION AND TRAINING**

1990	Ph.D., Operations Research and Industrial Engineering Cornell University Ithaca, New York
1988	M.S., Operations Research Cornell University Ithaca, New York
1985	B.S., Mathematics Conferred with Academic Distinction and Honors Andrews University Berrien Springs, MI

**PROFESSIONAL EXPERIENCE**

December 2008 -	Hurley Dorrier Professor and Chair Department of Biostatistics Johns Hopkins Bloomberg School of Public Health Baltimore, Maryland 21205
July 2008 - December 2008	Interim Chair Department of Biostatistics Johns Hopkins Bloomberg School of Public Health Baltimore, Maryland 21205
April 1, 2008 -	Director Epidemiology and Biostatistics of Aging Training Program The Johns Hopkins Bloomberg School of Public Health Baltimore, MD 21205

**PROFESSIONAL EXPERIENCE (continued)**

April 2008 - January 2012	Interim Director Johns Hopkins Center on Aging and Health Johns Hopkins Medical Institutions Baltimore, MD 21205
September 2007- January 2008	Acting Director Johns Hopkins Center on Aging and Health Johns Hopkins Medical Institutions Baltimore, MD 21205
October 2002-	Professor Department of Biostatistics The Johns Hopkins Bloomberg School of Public Health Baltimore, Maryland 21205
December 1996- October 2002	Associate Professor Department of Biostatistics The Johns Hopkins University Baltimore, Maryland 21205
August 1996 – April 2008	Co-Director Epidemiology and Biostatistics of Aging Training Program The Johns Hopkins Bloomberg School of Public Health Baltimore, MD 21205
August 1990- December 1996	Assistant Professor Department of Biostatistics School of Hygiene and Public Health The Johns Hopkins University Baltimore, Maryland 21205
1987	Statistician Laboratory of Statistical Methodology Division of Computer Research and Technology National Institutes of Health
1985-1990	Teaching Assistant Operations Research and Industrial Engineering Cornell University
1984-1985	Assistant Office of Institutional Research Andrews University

**PROFESSIONAL EXPERIENCE (continued)**

1983-1984            Assistant  
Marketing  
Andrews University

**PROFESSIONAL ACTIVITIES**POSITIONS HELD

President, The International Biometrics Society/Eastern North American Region, 2012  
(Executive Committee 2011-2013)  
Chair, Caucus on Academic Representatives, American Statistical Association (ASA), 2011  
(Executive Committee, 2010-2013)  
Member, Regional Committee (RECOM), The International Biometrics Society/Eastern North  
American Region (IBS/ENAR), 2007-2009  
Member, Committee on Finance, American Statistical Association, 2009-  
Chair, Methods in Biostatistics and Research Design Study Section (NIH), 2006-2008  
Chair, Biometrics Section, American Statistical Association, 2006  
Principal Investigator, Biomarkers Initiative, Alliance for Aging Research, 2005-present  
Member, Committee on Nominations, AAAS Statistics Section, 2005-2007  
Secretary, Council of Presidents of Statistical Societies (COPSS), 2004-2006  
Member, Methods in Biostatistics and Research Design Study Section (NIH), 2003-2006  
Student Paper Award Committee Member, IBS/ENAR, 2005-present; 2001  
Representative to AAAS Medical Science Section, IBS/ENAR, 2003-2005  
Secretary, IBS/ENAR, 2001-2002  
Program Committee Member, 2003 Spring Meeting of IBS/ENAR  
Snedecor Award Committee, COPSS, 2001-3 (Chair, 2003)  
Consultant to FDA Advisory Panel on Ophthalmic Devices, 1997-present  
Representative to the IBS/ENAR Regional Advisory Board, 1996-98  
Biometrics Representative to Council on Sections, American Statistical Association, 1995-97  
Publications Officer, Biometrics Section, American Statistical Association, 1993-94

SESSIONS ORGANIZED

American Association for the Advancement of Science, 2004  
Joint Statistical Meetings; 1996, 2000, 2003, 2006, 2011  
IBS/ENAR; 2000, 2003  
Gerontological Society of America; 1995, 1996, 1998, 2000, 2001  
Society for Prevention Research; 2002

EDITORSHIPS

Statistical Consultant, *Journal of Gerontology, Medical Sciences*, 2006-present  
Associate Editor, *Biometrics*, 2002-2005  
Associate Editor, *Journal of the American Statistical Association*, 2002-2003

PEER REVIEW (selected)

*American Journal of Epidemiology, Annals of Internal Medicine, Archives of Ophthalmology, Archives of Psychiatry, Biometrics, Biometrika, Biostatistics, Journal of the American Geriatrics Association, Journal of the American Statistical Association, Journal of Clinical Epidemiology, Journal of Epidemiology and Biostatistics, Journals of Gerontology, Journal of the Royal Statistical Society, Lifetime Data Analysis, Optometry and Vision Science, Statistics in Medicine, The American Statistician, The Gerontologist*

PROFESSIONAL AFFILIATIONS

American Statistical Association  
 The International Biometrics Society  
 The Gerontological Society of America  
 Institute of Mathematical Statistics

**HONORS AND AWARDS**

- 2014            Yale Visiting Professor on Aging
- 2010            Golden Apple Award for Excellence in Teaching Award  
 Bloomberg School of Public Health, The Johns Hopkins University
- Advising, Mentoring, and Teaching Recognition Award  
 Bloomberg School of Public Health, The Johns Hopkins University
- 2005            Advising, Mentoring, and Teaching Recognition Award  
 Bloomberg School of Public Health, The Johns Hopkins University
- 2001            Fellow, American Statistical Association
- 2001            Advising, Mentoring, and Teaching Recognition Award  
 School of Public Health, The Johns Hopkins University
- 1999            Garland Clay Award,  
 American Academy of Optometry,  
 For co-authoring flagship journal's most cited paper in the preceding five years.
- 1998            Election to Delta Omega
- 1997            Brookdale National Fellow, for Outstanding Research on Aging
- 1989            Election to Phi Kappa Phi
- 1987            Citation in Recognition and Appreciation of Special Achievement,  
 U.S. Department of Health and Human Services, National Institutes of Health.

## PUBLICATIONS

### Journal Articles

\*Primary mentorship of a trainee in the work

1. **Bandeen-Roche K** and Ruppert D (1991). Source apportionment with one source unknown. Chemometrics and Intelligent Laboratory Systems 10:164-184.
2. Hart J, Jeffery PJ, Lesser RP, Fisher RS, Monsein LH, Schwerdt P, **Bandeen-Roche KJ**, and Gordon B (1993). Anatomic Correlates of Memory from Intracarotid Amobarbital Injections with Tc-99m HMPAO SPECT. Archives of Neurology 50:745-750.
3. Stewart WF, Gordon B, Selnes O, **Bandeen-Roche K**, Zeger S, Tusa RJ, Celentano DD, Shechter A, Lieberman J, Hall C, Lesser R, Randall RD (1994). A Prospective Study of CNS Function in US Amateur Boxers. American Journal of Epidemiology 139:573-588.
4. Scott IU, Schein OD, West S, **Bandeen-Roche K**, Enger C, and Folstein MF (1994). Measurement of Functional Status and Quality of Life Among Patients with Ocular Disease. Archives of Ophthalmology 112:329-335.
5. Arroyo S, Lesser RP, Fisher RS, Vining EP, Krauss GL, **Bandeen-Roche K**, Hart J, Gordon B, Uematsu S, Webber R (1994). Sites of Origin of Seizures with the Diffuse Electrodecremental Pattern. Epilepsia 35:974-987.
6. Rubin GS, **Bandeen-Roche K**, Prasada-Rao P, and Fried LP (1994) Visual Impairment and Disability in Older Adults. Optometry and Vision Science 71:750-760.
7. **Bandeen-Roche KJ** (1994). Resolution of Additive Mixtures into Source Components and Contributions: A Compositional Approach. Journal of American Statistical Association 89:1450-1458.
8. Liang K-Y, Self SG, **Bandeen-Roche K**, and Zeger SL (1995). Some Recent Developments for Regression Analysis of Multivariate Failure Time Data (1995). Lifetime Data Analysis 1:403-415.
9. **Bandeen-Roche K**, Liang KY (1996). Modeling Failure-time Associations in Data with Multiple Levels of Clustering. Biometrika 83:29-39.
10. \*Hall C, Zeger SL, and **Bandeen-Roche K** (1996). Added Variable Plots for Cox's Proportional Hazards Model. Lifetime Data Analysis 2:73-90.
11. Ferrucci L, Guralnik JM, Salive ME, Fried LP, **Bandeen-Roche K**, Brock DB, Simonsick EM, Corti MC, and Zeger SL. (1996). Effect of Age and Severity of Disability on Short Term Variation in Walking Speed. Journal of Clinical Epidemiology 49:1089-1096.

Journal Articles (continued)

12. Fried LP, **Bandeem-Roche K**, Williamson JD, Prasada-Rao P, Chee E, Tepper S and Rubin GS (1996). Functional Decline in Older Adults: Expanding Methods of Ascertainment. Journal of Gerontology, Medical Sciences 51A:M206-214.
13. West SK, Munoz B, Rubin GS, Schein OD, **Bandeem-Roche K**, Zeger S, German PS, Fried LP, and SEE Project Team (1997). Function and Vision in a Population-based Study of Older Adults: SEE Project. Investigative Ophthalmology and Vision Science 38(1):72-82.
14. Rubin GS, West SK, Munoz B, **Bandeem-Roche K**, Zeger SL, Schein OD, Fried LP and SEE Project Team (1997). A Comprehensive Assessment of Visual Impairment in an Older American Population: SEE Study. Investigative Ophthalmology and Vision Science 38(3):557-558.
15. Duncan DD, Munoz B, **Bandeem-Roche K**, West KJ, Wilson L, West SK, and the SEE Project Team (1997). Visible and Ultraviolet-B Ocular-Ambient Exposure Ratios for a General Population. Investigative Ophthalmology and Vision Science 38(5):1003-1011.
16. Schein OD, Tielsch JM, Munoz B, **Bandeem-Roche K**, and West S (1997). Relation Between Signs and Symptoms of Dry Eye in the Elderly: A Population-based Perspective. Ophthalmology 104:1395-1401.
17. **Bandeem-Roche K**, Munoz B, Tielsch JM, West SK, and Schein OD (1997). Self-Reported Assessment of Dry Eye in a Population-Based Setting. Investigative Ophthalmology 38(12):2469-2475.
18. **Bandeem-Roche K**, Miglioretti D, Zeger SL, and Rathouz P (1997). Latent Variable Regression for Multiple Discrete Outcomes. Journal of the American Statistical Association 92(440):1375-1386.
19. Schein OD, Munoz B, Tielsch JM, **Bandeem-Roche K** and West S (1997). Prevalence of Dry Eye Among the Elderly. American Journal of Ophthalmology 134(6):723-728.
20. Duncan DD, Munoz B, **Bandeem-Roche K**, West SK (1997). Assessment of Ocular Exposure to Ultraviolet-B for Population Studies. Photochem and Photobiol 66(5):701-709.
21. Ferrucci L, Guralnik JM, Buchner D, Kasper J, Lamb SE, Simonsick EM, Corti MC, **Bandeem-Roche K**, and Fried LP (1997). Departures from Linearity in the Relationship Between Measures of Muscular Strength and Physical Performance in the Lower Extremities: The Women's Health and Aging Study. Journal of Gerontology: Medical Sciences 2A:M275-M285.

Journal Articles (continued)

22. Hochberg MC, Tielsch J, Munoz B, **Bandeem-Roche K**, West SK and Schein OD (1998). Prevalence of Symptoms of Dry Mouth and Their Relationship to Saliva Production in Community Dwelling Elderly: The SEE Project. Journal of Rheumatology 25:486-491.
23. \*Rathouz PJ, Kasper JD, Zeger SL, Ferrucci L, **Bandeem-Roche K**, Miglioretti DL, and Fried LP (1998). Short-term Consistency in Self-reported Physical Functioning Among Elderly Women: The Women's Health and Aging Study. American Journal of Epidemiology 147(8):764-773.
24. Gerring JP, Brady KD, Chen A, Vasa R, Grados M, Christensen JR, **Bandeem-Roche KJ**, Bryan RN, and Denckla MB (1998). Premorbid Prevalence of Attention-Deficit Hyperactivity Disorder and Development of Secondary Attention-Deficit Hyperactivity Disorder After Closed Head Injury. J Amer Acad Child and Adolescent Psych 37(6):647-654.
25. West SK, Duncan DD, Munoz B, **Bandeem-Roche K**, et al. (1998). Sunlight Exposure and Risk of Lens Opacities in a Population Based Study. JAMA 280:714-718.
26. Fried LP, **Bandeem-Roche K**, Kasper JD, and Guralnik JM (1999). Association of Comorbidity with Disability in Older Women: The Women's Health and Aging Study. Journal of Clinical Epidemiology 52:27-37.
27. \*Valbuena M, **Bandeem-Roche K**, Rubsin GS, Munoz B, and West SK (1999). Self-Reported Assessment of Visual Function in a Population-Based Setting. Investigative Ophthalmology and Vision Science 40:280-288.
28. Friedman SM, Munoz B, Rubin GS, West SK, **Bandeem-Roche K**, Fried LP, and the SEE Project Team (1999). Characteristics Associated with Discrepancy Between Self-reported Visual Function and Measured Reading Speed. Invest Ophthalmol Vis Sci 40:858-864.
29. Munoz B, West S, Rubin GS, Schein OD, Fried LP, **Bandeem-Roche K** (1999). Who Participates in Population Based Studies of Visual Impairment? The Salisbury Eye Evaluation Project Experience. Ann Epidemiol 9(1):53-59.
30. Punjabi NM, O'hearn DJ, Neubauer DN, Nieto FJ, Schwartz AR, Smith PL, **Bandeem-Roche K** (1999). Modeling Hypersomnolence in Sleep-Disordered Breathing: A Novel Approach Using Survival Analysis. Am J Respir Crit Care Med 159(6):1703-1709.
31. Schein OD, Hochberg MC, Munoz B, Tielsch JM, **Bandeem-Roche K**, Provost T, Anhalt GJ and West S. (1999). Dry Eye and Dry Mouth in the Elderly: A Population-Based Assessment. Archives of Internal Medicine 159:1359-1363.

Journal Articles (continued)

32. **Bandeem-Roche K**, Hall C, Stewart WF, Zeger SL (1999). Modeling Disease Progression in Terms of Exposure History. Statistics in Medicine 18:2899-2916.
33. Journal Articles (continued)
34. **Bandeem-Roche K**, Huang G-H, Munoz B, and Rubin GS (1999). On Determining Risk Factor Associations with Questionnaire Outcomes: A Methods Case Study. Am J Epidemiol 150:1165-1178.
35. Guralnik JM, Ferrucci L, Penninx BWJH, Kasper JD, Leveille SG, **Bandeem-Roche K**, and Fried LP (1999). New and Worsening Conditions and Change in Physical and Cognitive Performance During Weekly Evaluations Over Six Months: The Women's Health and Aging Study. J Gerontol A Biol Sci Med Sci 54:M410-M422.
36. Kasper JD, Shapiro S, Guralnik JM, **Bandeem-Roche KJ**, and Fried LP (1999). Designing a Community Study of Moderately to Severely Disabled Older Women: the Women's Health and Aging Study. Ann Epidemiology 9(8):498-507.
37. Carlson MC, Fried LP, Xue QL, **Bandeem-Roche K**, Zeger SL and Brandt J. (1999). Association Between Executive Attention and Physical Functional Performance in Community-Dwelling Older Women. J Gerontol B Psychol Sci Soc Sci 54(5):S262-S270.
38. Hirsch R, Guralnik GM, Geveille SG, Simonsick EM, Ling S, **Bandeem-Roche K**, Rantanen T, Pahor M, Fried LP, and Hochberg MC (1999). Severity of Hand Osteoarthritis and its Association with Upper Extremity Function in a Population of Disabled Older Women: The Women's Health and Aging Study. Aging 11:253-61.
39. Fried LP, **Bandeem-Roche K**, Chaves PM, Johnson B (2000). Preclinical Mobility Disability Predicts Incident Mobility Disability in Older Women. J Gerontol Med Sci 55:M43-M52.
40. West SK, Munoz B, Istre J, Rubin GS, Friedman SM, Fried LP, **Bandeem-Roche K**, and Schein OD (2000). Mixed lens opacities and subsequent mortality. Arch Ophthalmol 118:393-397.
41. Gerring J, Brady K, Chen A, Quinn C, Herskovits E, **Bandeem-Roche K**, Denckla MB, and Bryan RN (2000). Neuroimaging variables related to development of Secondary Attention Deficit Hyperactivity Disorder after closed head injury in children and adolescents. Brain Injury 14:205-218.
42. Munoz B, West SK, Rubin GS, Schein OD, Quigley HA, Bressler SB, and **Bandeem-Roche K** (2000). Causes of blindness and visual impairment in a population of older Americans: The Salisbury Eye Evaluation Study. Archives of Ophthalmology 118:819-825.



Journal Articles (continued)

43. Rubin GS, Munoz B, **Bandeem-Roche K**, and West SK (2000). Monocular versus binocular visual acuity as measures of vision impairment and predictors of visual disability. Investigative Ophthalmology and Vision Science 41:3327-3334.
44. Penninx BW, Guralnik JM, **Bandeem-Roche K**, Kasper JD, Simonsick EM, Ferrucci L, Fried LP (2000). The Protective Effect of Emotional Vitality on Adverse Health Outcomes in Disabled Older Women. Journal of the American Geriatrics Society 48:1359-1366.
45. Schwartz BS, Stewart WF, Bolla KI, Simon PD, **Bandeem-Roche K**, Gordon PB, Links JM, Todd AC (2000). Past Adult Lead Exposure is Associated with Longitudinal Decline in Cognitive Function. Neurology 55:1144-1150.
46. Rubin GS, **Bandeem-Roche K**, Huang GH, Munoz B, Schein OD, Fried LP, West SK (2001). The Association of Multiple Visual Impairments with Self-Reported Visual Disability. Investigative Ophthalmology and Visual Science 42(1):64-72.
47. Simonsick EM, Kasper JD, Guralnik JM, **Bandeem-Roche K**, Ferrucci L, Hirsch R, Leveille S, Rantanen T, Fried LP. (2001). Severity of Upper and Lower Extremity Functional Limitation: Scale Development and Validation with Self-Report and Performance-Based Measures of Physical Function. WHAS Research Group. Women's Health and Aging Study. Journal of Gerontology Series B Psychological Sciences and Social Sciences 56(1):S10-19.
48. Links JM, Schwartz BS, Simon D, **Bandeem-Roche K**, Stewart WF (2001). Characterization of Toxicokinetics and Toxicodynamics with Linear Systems Theory: Application to Lead-Associated Cognitive Decline. Environmental Health Perspectives 109(4):361-368.
49. Scott IU, Schein OD, Beuer WJ, Folstein MF, **Bandeem-Roche K** (2001). Emotional Distress in Patients with Retinal Disease. American Journal of Ophthalmology 131(5):584-589.
50. Fried LP, Young Y, Rubin G, **Bandeem-Roche K** (2001). Self-Reported Preclinical Disability Identifies Older Women with Early Declines in Performance and Early Disease. Journal of Clinical Epidemiology 54(9):889-901.
51. Cappola AR, **Bandeem-Roche K**, Wand GS, Volpato S, Fried LP. Association of IGF-I Levels with Muscle Strength and Mobility of Older Women. Journal of Clinical Endocrinology and Metabolism 86(9):4139-4146.
52. Leveille SG, Ling S, Hochberg M, Resnick HE, **Bandeem-Roche K**, Won A, and Guralnik JM (2001). Widespread Musculoskeletal Pain and the Progression of Disability in Older Women. Annals of Internal Medicine 135(12):1038-1046.

Journal Articles (continued)

53. \*Huang GH, **Bandeen-Roche K**, Rubin GS (2002). Building Marginal Models for Multiple Ordinal Measurements. Applied Statistics 51(1):1-21.
54. \*Xue Q-L, **Bandeen-Roche K** (2002). Combining Complete Multivariate Outcomes with Incomplete Covariate Information: A Latent Class Approach. Biometrics 58(1):110-120.
55. Leveille SG, Bean J, Hochberg M, **Bandeen-Roche K**, Jones R, and Guralnik JM (2002). Musculoskeletal Pain and Risk for Falls in Older Women with Disabilities. Journal of the American Geriatrics Society 50(4):671-678.
56. Punjabi NM, **Bandeen-Roche K**, Marx JJ, Neubauer DN, Smith PL, and Schwartz AR (2002). The Association Between Daytime Sleepiness and Sleep-Disordered Breathing in NREM and REM Sleep. Sleep 25(3):307-314.
57. **Bandeen-Roche K**, Liang K-Y (2002). Modelling Multivariate Failure Time Associations in the Presence of a Competing Risk. Biometrika 89(2):299-314.
58. Friedman DS, Munoz B, Massof RW, **Bandeen-Roche K**, West SK (2002). Grating Visual Acuity Using the Preferential Looking Method in Elderly Nursing Home Residents. Investigative Ophthalmology and Vision Science 43(8):2572-2578.
59. Mendes de Leon CF, Guralnik JM, **Bandeen-Roche K** (2002). Short-Term Change in Physical Function and Disability: The Women's Health and Aging Study (WHAS). Journal of Gerontology: Social Sciences 57(B):S355-S365.
60. Ferrucci L, Penninx BW, Volpato S, Harris TB, **Bandeen-Roche K**, Balfour J, Leveille SG, Fried LP, Guralnik JM (2002). Change in Muscle Strength Explains Accelerated Decline of Physical Function in Older Women with High Interleukin-6 Serum Levels. Journal of the American Geriatric Society 50(12):1947-1954.
61. Punjabi NM, **Bandeen-Roche K**, Young T (2003). Predictors of Objective Sleep Tendency in the General Population. Sleep 26(6):678-683.
62. West SK, Friedman D, Munoz B, **Bandeen-Roche K**, Park W, Deremeik J, Massof R, Frick K, Broman A, McGill W, and German, P (2003). A Randomized Trial of Visual Impairment Interventions for Nursing Home Residents: Study Design, Baseline Characteristics and Visual Loss. Ophthalmic Epidemiology 10(3):193-209.
63. Schwartz BS, Glass TA, Bolla KI, Stewart WF, Glass G, Rasmussen M, Bressler J, Shi W, **Bandeen-Roche K** (2004). Disparities in Cognitive Functioning by Race/Ethnicity in the Baltimore Memory Study. Environmental Health Perspectives 112(3):314-320.

Journal Articles (continued)

64. Turano KA, Broman AT, **Bandeem-Roche K**, Munoz B, Rubin GS, West S, SEE Project Team (2004). Association of Visual Field Loss and Mobility Performance in Older Adults: Salisbury Eye Evaluation Study. Optometry and Vision Science 81(5):298-307.
65. Frick KD, Scanlon DP, **Bandeem-Roche K**, Kasper JD, and Simonsick, EM (2004). Influenza Vaccination by Race Among Disabled Community Dwelling Older Women. Journal of Health Care for the Poor and Underserved 15(2):220-236.
66. Broman AT, West SK, Munoz B, **Bandeem-Roche K**, Rubin GS, Turano KA (2004). Divided Visual Attention as a Predictor of Bumping While Walking: The Salisbury Eye Evaluation. Investigative Ophthalmology and Vision Science 45(9):2955-2960.
67. \*Menard CB, **Bandeem-Roche KJ**, Chilcoat HD (2004). Epidemiology of Multiple Childhood Traumatic Events: Child Abuse, Parental Psychopathology, and Other Family-Level Stressors. Social Psychiatry and Psychiatric Epidemiology 39(11):857-865.
68. \*Huang G-H, **Bandeem-Roche K** (2004). Latent Class Regression with Covariate Effects on Underlying and Measured Variables. Psychometrika 69(1):5-32.
69. Roche KM, Mekos D, Alexander CS, Astone NM, **Bandeem-Roche K**, Ensminger ME (2005). Parenting Influences on Early Sex Initiation Among Adolescents: How Neighborhood Matters. Journal of Family Issues 26:32-54.
70. Clayman ML, Roter D, Wissow LS, **Bandeem-Roche K** (2005). Autonomy-related Behaviors of Patient Companions and Their Effect on Decision-making Activity in Geriatric Primary Care Visits. Social Science and Medicine 60(7):1583-1591.
71. Leng S, Xue Q-L, Huang Y, Semba R, Chaves P, **Bandeem-Roche K**, Fried LP, Walston, J. (2005). Total and Differential White Blood Cell Counts and Their Associations with Circulating Interleukin-6 Levels in Community-dwelling Older Women. Journal of Gerontology, Medical Sciences 60(2):195-199.
72. Han B, Phillips C, Ferrucci L, **Bandeem-Roche K**, Jylha M, Kasper J, Guralnik JM (2005). Change in Self-rated Health and Mortality among Community-dwelling Disabled Older Women. The Gerontologist 45 (2): 216-221.
73. \*Chen M-C, **Bandeem-Roche K** (2005). Diagnostics for Association in Bivariate Survival Models. Lifetime Data Analysis 11(2):245-264.
74. Wang C-P, Brown CH, **Bandeem-Roche K** (2005). Residual Diagnostics for Growth Mixture Models: Examining the Impact of a Preventive Intervention on Multiple Trajectories of Aggressive Behavior. Journal of the American Statistical Association 100(3):1054-1076.

Journal Articles (continued)

75. West SK, Munoz B, Rubin GS, **Bandeem-Roche K**, Broman AT, Turano KA (2005). Compensatory strategy use identifies risk of incident disability for the visually impaired. Archives of Ophthalmology 123(9):1242-1247.
76. Friedman DS, Munoz B, **Bandeem-Roche K**, Massof R, Broman A, West SK (2005). Poor Uptake of Cataract Surgery in Nursing Home Residents: The Salisbury Eye Evaluation in Nursing Home Groups Study. Archives of Ophthalmology 123:1581-1587.
77. Freeman EE, Egleston BL, West SK, **Bandeem-Roche K**, Rubin G (2005). Visual acuity change and mortality in older adults. Investigative Ophthalmology and Vision Science 46(11):4040-4045.
78. Patel I, Turano KA, Broman AT, **Bandeem-Roche K**, Munoz B, West SK (2006). Measures of visual function and percentage of preferred walking speed in older adults: the Salisbury eye evaluation project. Investigative Ophthalmology and Vision Science 47(1):65-71.
79. Martin D, Glass TA, **Bandeem-Roche K**, Todd AC, Shi W, Schwartz BS (2006). Association of blood lead and tibia lead are associated with blood pressure and hypertension in a community sample of older adults. American Journal of Epidemiology 163(5):467-468.
80. Ling SM, Xue QL, Simonsick EM, Tian J, **Bandeem-Roche K**, Fried LP, Bathon JM (2006). Transitions to mobility difficulty associated with lower extremity osteoarthritis in high functioning older women: Longitudinal data from the Women's Health and Aging Study II. Arthritis and Rheumatism 55(2):256-263.
81. **Bandeem-Roche K**, Xue Q-L, Ferrucci L, Walston J, Guralnik JM, Chaves P, Zeger SL, Fried LP (2006). Phenotype of frailty: Characterization and validation in the Women's Health and Aging Studies. Journal of Gerontology Series A 61(3):262-266.
82. Congdon NG, Broman AT, **Bandeem-Roche K**, Grover D, Quigley HA (2006). Central corneal thickness and corneal hysteresis associated with glaucoma damage. American Journal of Ophthalmology 141(5):868-75.
83. Asao K, Kao WH, Baptiste-Roberts K, **Bandeem-Roche K**, Erlinger TP, Brancati FL (2006). Short stature and the risk of adiposity, insulin resistance, and type 2 diabetes in middle age: the third National Health and Nutrition Examination Survey (NHANES III), 1988-1994. Diabetes Care 29(7):1632-7, 2006.
84. Glenn BS, **Bandeem-Roche K**, Lee B-K, Weaver VM, Todd AC, Schwartz BS (2006). Changes in systolic blood pressure associated with lead in blood and bone. Epidemiology 17(5):538-44.

Journal Articles (continued)

85. Shih RA, Glass TA, **Bandeem-Roche K**, Carlson MC, Bolla KI, Todd AC, Schwartz BS (2006). Environmental lead exposure and cognitive function in community-dwelling older adults. Neurology 67(9):1556-62.
86. Rao KD, Peters DH, **Bandeem-Roche K** (2006). Towards patient-centered health services in India—a scale to measure patient perceptions of quality. International Journal for Quality in Health Care 18(6):414-21.
87. Rubin GS, Ng ES, **Bandeem-Roche K**, Keyl PM, Freeman EE, West SK (2007). A prospective, population-based study of the role of visual impairment in motor vehicle crashes among older drivers: the SEE Study. Investigative Ophthalmology and Visual Science 48(4):483-91.
88. Weiss CO, Fried LP, **Bandeem-Roche K** (2007). Exploring the hierarchy of mobility performance in high-functioning older women. Journal of Gerontology: A Biological Sciences and Medical Sciences 62(2):167-73.
89. Lee BK, Glass TA, McAtee MJ, Wand GS, **Bandeem-Roche K**, Bolla KI, Schwartz BS (2007). Associations of salivary cortisol with cognitive function in the Baltimore Memory Study. Archives of General Psychiatry 64(7):810-8.
90. Broman AT, Congdon NG, **Bandeem-Roche K**, Quigley HA (2007). Influence of corneal structure, corneal responsiveness, and other ocular parameters on tonometric measurement of intraocular pressure. Journal of Glaucoma Oct-Nov;16(7):581-8.
91. Zhang L, Baldwin K, Munoz B, Munro C, Turano K, Hassan S, Lyketsos C, **Bandeem-Roche K**, West SK (2007). Visual and cognitive predictors of performance on brake reaction test: Salisbury eye evaluation driving study. Ophthalmic Epidemiology 14(4):216-22.
92. Alley DE, Crimmins E, **Bandeem-Roche K**, Guralnik J, Ferrucci (2007). Three-year change in inflammatory markers in elderly people and mortality: the Invecchiare in Chianti study. Journal of the American Geriatric Society 55(11):1801-7.
93. Broman AT, Quigley HA, West SK, Katz J, Munoz B, **Bandeem-Roche K**, Tielsch JM, Friedman DS, Crowston J, Taylor HR, Varma R, Leske MC, Bengtsson B, Heijl A, He M, Foster PJ (2008). Estimating the rate of progressive visual field damage in those with open-angle glaucoma, from cross-sectional data. Investigative Ophthalmology and Visual Science 49(1):66-76, 2008.
94. **Bandeem-Roche K**, Ning J (2008). Nonparametric Estimation of Bivariate Failure-Time Associations in the Presence of a Competing Risk. Biometrika; 95(1):221-32.

Journal Articles (continued)

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96. Swihart B, Caffo B, **Bandeem-Roche K**, Punjabi N (2008). Characterizing Sleep Structure Using the Hypnogram. Journal of Clinical Sleep Medicine 4(4):349-355.
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### Peer-reviewed Chapters

1. Rohde C, Zeger SL, Thomas KK, Bandeen-Roche K (2013). Johns Hopkins University Department of Biostatistics in Agresti A and Meng XL (eds.). Strength in Numbers: The Rising of Academic Statistics Departments in the U. S., New York: Springer Science+Business Media, 129-141.
2. Bandeen-Roche K (2014). Familial studies in Handbook of Survival Analysis by John P. Klein, Hans C. van Houwelingen, Joseph G. Ibrahim, Thomas H. Scheike CRC Press/Taylor & Francis Group, LLC, 549-570.

### Chapters

1. Guralnik JM, Fried LP, Simonsick EM, Bandeen-Roche K, and Zeger SL (1995). Screening the Community-Dwelling Population for Disability. In The Women's Health and Aging Study: Health and Social Characteristics of Older Women with Disability, pp 9-18, National Institutes of Health/National Institute on Aging #95-4009.

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2. Ferrucci L, Guralnik JM, Bandeen-Roche K, Lafferty ME, Pahor M, and Fried L (1995). Physical Performance Measures. In The Women's Health and Aging Study: Health and Social Characteristics of Older Women with Disability, pp 9-18, National Institute of Health/National Institute on Aging #95-4009.
3. Chu A, Maffeo CE, Lo A, Morganstein D, Bandeen-Roche K, Kasper J, Brock DB (1995). In The Women's Health and Aging Study: Health and Social Characteristics of Older Women with Disability, pp 9-18, National Institutes of Health/National Institute on Aging #95-4009.

### Book Review

1. Bandeen-Roche K. Review of Quality Control in Analytical Chemistry, 2nd. Ed., G. Kateman and L. Buydens, Authors, Wiley: New York 1993. Technometrics 37(1):115-116 (1995).

### Other Articles

1. Atlas D and Bandeen-Roche K (2004). William Reid Bandeen: 1926-2004. Bulletin of the American Meteorological Society 85(10):1604-1604.
2. Newmyer T, and Bandeen, K. A Statistical Analysis of Attitudes toward S.D.A. Education in Southwestern Michigan, Andrews University, 1985.
3. Rabin D, Bandeen K, Meier D and Luckey M: Ultrasonic Velocity in the Patella-a new Technique to diagnose Osteoporosis, National Institutes of Health. Presented at the 1988 American Fertility Society Meeting, October 10, 1988, in Atlanta.

June 4, 2014

**CURRICULUM VITAE****Karen Bandeen-Roche****Part II****TEACHING**Departmental Oral Examinations

Yutaka Yasui, Biostatistics, 1991  
John J. Hanfelt, Biostatistics, 1992  
Charles Hall, Biostatistics, 1992  
Sterling Hilton, Biostatistics, 1992  
Shu-Hui Chang, Biostatistics, 1992  
Min-Chi Chen, Biostatistics, 1994  
Xiongwei Ju, Biostatistics, 1995

Preliminary School Oral Examinations

Charlotte Gaydos, Dr.PH., Immunology & Infectious Diseases, 1990  
Hank Gardner, Sc.D., Environmental Health Science, 1991  
Sandra Cassard, Sc.D., Health Policy & Management, 1991  
Altrena Mukuria, Sc.D., International Health, 1991  
Omar Ben Ahmad, Sc.D., Population Dynamics, 1992  
Manuel Gomez, Dr.PH., Environmental Health Science, 1992  
Shu-Hui Chang, Ph.D., Biostatistics, 1992  
Sterling Hilton, Ph.D., Biostatistics, 1992  
Jerald Fagliano, Ph.D., Epidemiology, 1992  
Craig Newschaffer, Ph.D., Epidemiology, 1992  
Gabriella Newes, Sc.D., International Health, 1993  
Nga Tran, Dr.PH., Environmental Health Science, 1993  
Mary Lou Gutierrez-Mohamed, Sc.D., Health Policy & Management, 1993  
Sohail Agha, Ph.D., Population Dynamics, 1994  
Christine Nelson, Ph.D., Epidemiology, 1994  
Gwendolyn Hammer, Dr.PH., Health Policy & Management, 1994  
Carolyn Dewa, Ph.D., Health Policy & Management, 1995  
Joshua Liberman, Ph.D., Epidemiology, 1995  
Michele Dreyfus, Sc.D., International Health, 1995  
Barbara Glenn, Ph.D., Epidemiology, 1995  
Kathryn Yount, Ph.D., Population Dynamics, 1995  
Ginny Hsieh, Ph.D., Health Policy & Management, 1995  
Priya Nanda, Ph.D., International Health, 1995  
Peter J. Ashley, Dr.PH., Environmental Health Sciences, 1996

Preliminary School Oral Examinations (continued)

Barbara K. Martin, Ph.D., Epidemiology, 1996  
Marguerite Ro, Dr. PH., Health Policy & Management, 1996  
Allyson Hall, Ph.D., Health Policy & Management, 1996  
Shou-En Lu, Ph.D., Biostatistics, 1996  
Richard Jones, Sc.D., Mental Hygiene, 1996  
Elizabeth Garrett, Ph.D., Biostatistics, 1997  
Diana McDonnell, Ph.D., Population Dynamics, 1997  
Chantal Worzala, Ph.D., Health Policy & Management, 1997  
Kathleen Roche-Salyers, Ph.D., Maternal & Child Health, 1997  
Li-Hui Chen, Ph.D., Health Policy & Management, 1997  
Javier Cid Ruzafa, Ph.D., Epidemiology, 1997  
Guan-Hua Huang, Ph.D., Biostatistics, 1997  
Naresh Punjabi, Ph.D., Clinical Investigations, 1998  
Huey-Fan Sun, Mental Hygiene, 1998  
Fang-Chi Hsu, Ph.D., Biostatistics, 1998  
Rebecca Robert, Ph.D., International Health, 1998  
Kim Sydnor, Ph.D., Health Policy & Management, 1999  
Patrica Paluzzi, Dr. P.H., Maternal & Child Health, 1999  
Akane Miyazawa, Ph.D., Health Policy & Management, 2000  
Erin Sullivan, Ph.D., Health Policy & Management, 2000  
ByungKwang Yoo, Ph.D., Health Policy & Management, 2000  
Elizabeth Mumford, Ph.D., Population Dynamics, 2001  
Annette Amey, Ph.D., Population Dynamics, 2001  
Gregory Breeden, Ph.D., Health Policy & Management, 2001  
Nicole Rolley, Ph.D., Health Policy & Management, 2001  
Anita Bercovitz, Ph.D., Health Policy & Management, 2001  
Valerie Forman, Ph.D., Mental Hygiene, 2001  
Holly Wilcox, Ph.D., Mental Hygiene, 2001  
Christian Menard, Ph.D., Mental Hygiene, 2001  
Jennifer Wolff, Ph.D., Health Policy & Management, 2001  
Amani Nuru-Jeter, Ph.D., Health Policy & Management, 2001  
Hongfei Guo, Ph.D., Biostatistics, 2001  
Allegra Kim, Ph.D., Health Policy & Management, 2002  
Laura Pritchett, Ph.D., Health Policy & Management, 2002  
Susan Higman, Ph.D., Health Policy & Management, 2002  
Margaret Weden, Ph.D., Population & Family Health Sciences, 2002  
Sophia Kazakova, Ph.D., Health Policy & Management, 2002  
Krishna Rao, Ph.D., International Health, 2002  
Marlene Niefeld, Ph.D., Health Policy & Management, 2002  
Charles Reuland, Ph.D., Health Policy & Management, 2002  
Michelle Shardell, Ph.D., Biostatistics, 2002  
Yi Huang, Ph.D., Biostatistics, 2003  
Varduhi Petrosyan, Ph.D., Health Policy & Management, 2003  
Michelle Mielke, Ph.D., Mental Hygiene, 2003



Preliminary School Oral Examinations (continued)

Farin Kamangar, Ph.D., Epidemiology, 2003  
Brian Egleston, Ph.D., Biostatistics, 2003  
Oyelola Yomi Faparusi, Ph.D., Mental Health, 2003  
Kathleen Haddad, Ph.D., Health Policy & Management, 2004  
Jennifer Lincoln, Ph.D., Health Policy & Management, 2004  
Keshia M. Pollack, Ph.D., Health Policy & Management, 2004  
Margaret F. Haynes, Ph.D., Health Policy & Management, 2004  
Jessica Gill, Ph.D., Nursing, 2004  
Kristen Hurley, Ph.D., International Health, 2004  
Jing Ning, Ph.D., Biostatistics, 2005  
Peter Hansen, Ph.D., International Health, 2005  
Aaron Alford, Ph.D., Mental Health, 2005  
April Zeoli, Ph.D., Health Policy & Management, 2005  
Amy Matteini Mahoney, Ph.D., Epidemiology, 2005  
Jonathan Brown, Ph.D., Health Policy & Management, 2005  
Jason Farley, Ph.D., Nursing, 2005  
Wadih Maalouf, Ph.D., Mental Health, 2005  
Lora Iannotti, Ph.D., International Health, 2005  
Onyemaechi Nweke, DrPH, Environmental Health Sciences, 2005  
Briana Mezuk, Ph.D., Mental Health, 2005  
Shu-Chih Su, Ph.D., Biostatistics, 2005  
Amanda Kalaydjian, Ph.D., Mental Health, 2005  
Marjorie Opuni-Akuamo, Ph.D., Population and Family Health Sciences, 2005  
Renan Castillo, Ph.D., Health Policy and Management, 2005  
Jessica Langbaum, Ph.D., Mental Health, 2006  
Jeannie-Marie Sheppard, Ph.D., Mental Health, 2006  
Hossein Bahrami, Ph.D., Epidemiology, 2006  
Kelly Benke, Ph.D., Epidemiology, 2006  
Sandhya Sundaram, Ph.D., International Health, 2006  
Alison Laffan, Ph.D., Epidemiology, 2006  
Chongzhi Di, Ph.D., Biostatistics, 2006  
Lilian Ghandour, Ph.D., Mental Health, 2007  
Bryan James, Ph.D., Epidemiology, 2007  
Brent Mancha, Ph.D., Epidemiology, 2007  
Sandrah Eckel, Ph.D., Biostatistics, 2007  
Brian Lee, Ph.D., Epidemiology, 2007  
Laura Steinhardt, Ph.D., International Health, 2007  
Sachiko Ozawa, Ph.D., International Health, 2007  
Roxanne Jensen, Ph.D., Health Policy and Management, 2008  
Michal Engelman, Ph.D., Population and Family Health Sciences, 2008  
Jean Ko, Ph.D., Mental Health, 2008  
Hong Zhu, Ph.D., Biostatistics, 2008  
Jennifer Schrack, Ph.D., Epidemiology, 2009  
Jennifer Deal, Ph.D., Epidemiology, 2009

Preliminary School Oral Examinations (continued)

Ann Zenobia Moore, Ph.D., Epidemiology, 2010  
 Sachiko Kuwabara, Ph.D., Mental Health, 2010  
 Pei-Hsin Lin, Ph.D., Health Policy and Management, 2011  
 Joan Casey, Ph.D., Environmental Health Sciences, 2011  
 Alison Turnbull, Ph.D. Epidemiology, 2011  
 Eva Dugoff, Ph.D., Health Policy and Management, 2011  
 Saman Nazarian, Ph.D., Epidemiology, 2011  
 Matthew Gribble, Ph.D., Epidemiology, 2011  
 Priya Palta, Ph.D., Epidemiology, 2011  
 David Swedler, Ph.D., Health Policy and Management, 2012  
 Bonnie Scurman Swenor, Ph.D., Epidemiology, 2012  
 Laura Zheng, Ph.D., Environmental Health Sciences, 2013  
 Trang Nguyen, Ph.D., Health Behavior and Society, 2013  
 Dolly Chang, Ph.D., Epidemiology, 2012  
 Jeongyong Kim, Ph.D., Biostatistics, 2013  
 Ruben Miozzo, Ph.D. Graduate Training Program in Clinical Investigation, 2013  
 Samuel Shilcutt, Ph.D., International Health, 2013  
 Christopher Kaufmann, Ph.D. Mental Health, 2013  
 Therri Usher, Ph.D., Biostatistics, 2014  
 Amber Willink, Ph.D., Health Policy and Management, 2014

Final Oral Examinations/Thesis Reader

Beth A. Melton, Sc.M., Biostatistics, 1992  
 Elizabeth Y. Attias, Sc.D., Maternal & Child Health, 1992  
 Mary E. Cogswell, Dr.PH., International Health, 1992  
 Sandra Cassard, Sc.D., Health Policy & Management, 1992  
 Vincent Carey, Ph.D., Biostatistics, 1992  
 Barbara McKinney, Sc.D., Population Dynamics, 1992  
 Omar Ben Ahmad, MD, Sc.D., Population Dynamics, 1993  
 Lawrence Magder, Ph.D., Biostatistics, 1994  
 Camara Jones, Ph.D., Epidemiology, 1994  
 Nga Tran, Dr.PH., Environmental Health Sciences, 1994  
 Manuel Gomez, Dr.PH., Environmental Health Sciences, 1994  
 Shu-Hui Chang, Biostatistics, 1995  
 Mary Lou Gutierrez-Mohamed, Sc.D. Health Policy & Management, 1995  
 Jean M. Lawrence, Sc.D., Maternal and Child Health, 1995  
 Ana V. Diez Roux, Ph.D., Health Policy & Management, 1995  
 Charles B. Hall, Ph.D., Biostatistics, 1995  
 Sohail Agha, Ph.D., Population Dynamics, 1995  
 Peter J. Ashley, Dr. PH., Environmental Health Sciences, 1996  
 Diana Miglioretti, Sc.M., Biostatistics, 1996  
 Sterling Hilton, Ph.D., Biostatistics, 1996  
 Farid Midhet, Dr. PH., Population Dynamics, 1996

Final Oral Examinations/Thesis Reader (continued)

Jonathan D. Mosley, Sc.M., Epidemiology, 1997  
Gwendolyn Hammer, Ph.D., Health Policy & Management, 1997  
Altrena Mukuria, Dr. P.H., International Health, 1997  
Patricia Risica, Dr. P.H., International Health, 1997  
Allyson D. Hall, Ph.D., Health Policy & Management, 1997  
Yukihiro Shiroishi, Ph.D., International Health, 1997  
Min-Chi Chen, Ph.D., Biostatistics, 1997  
Gina D'Angelo, Sc.M., Biostatistics, 1998  
Kathleen Anne Cagney, Health Policy & Management, 1998  
Michael Paglia, Health Policy & Management, 1998  
Kathleen Roche-Salyers, Maternal and Child Health, 1998  
Christine Huang, Health Policy & Management, 1998  
Altrena Mukuria, Ph.D., International Health, 1998  
Chingchaw Huang, Ph.D., Health Policy & Management, 1998  
Chia-Yih Wang, Ph.D., International Health, 1999  
Sveta Weiner, Sc.M., Biostatistics, 1999  
Kathryn Yount, Ph.D., Population & Family Health Sciences, 1999  
Chantal Worzala, Ph.D., Health Policy & Management, 1999  
Marc Debay, Ph.D., Population & Family Health Sciences, 1999  
Anita Chen, Sc.M., Biostatistics, 2000  
Guan-Hua Huang, Ph.D., Biostatistics, 2000  
Steven Holden, Ph.D., Economics, 2000  
Erin Sullivan, Ph.D., Health Policy & Management, 2000  
Qian-Li Xue, Ph.D., Biostatistics, 2000  
Anne Cappola, Sc.M., Epidemiology, 2001  
Zhong Zhao, Ph.D., Economics, 2001  
Akane Miyazawa, Ph.D., Health Policy & Management, 2001  
Darius Sivin, Ph.D., Health Policy & Management, 2002  
Byung-Kwang Yoo, Ph.D., Health Policy & Management, 2002  
Thomas Trivison, Ph.D., Biostatistics, 2002  
Nicole Rolley, Ph.D., Health Policy & Management, 2002  
Lara Trifiletti, Ph.D., Health Policy & Management, 2002  
Anita Bercovitz, Ph.D., Health Policy & Management, 2002  
Yingyao Hu, Ph.D., Economics, 2003  
Holly Wilcox, Ph.D., Mental Health, 2003  
Christian Menard, Ph.D., Mental Hygiene, 2003  
Joanna Grieg, Ph.D., Epidemiology, 2003  
Anita Roth Bercovitz, Ph.D., Health Policy & Management, 2003  
Marla Clayman, Ph.D., Health Policy & Management, 2003  
Sophia Kazakova, Ph.D., Health Policy & Management, 2003  
Ya-Pei Liu, Ph.D., Epidemiology  
Charles Reuland, Sc.D., Health Policy & Management, 2004  
Kathryn Laughon, Ph.D. School of Nursing, 2004  
Allegra Kim, Ph.D., Health Policy & Management, 2004

Final Oral Examinations/Thesis Reader (continued)

Gregory Breeden, Ph.D., Health Policy & Management, 2004  
Margaret M. Weden, Ph.D., Population Dynamics, 2004  
Krishna Rao, Ph.D., International Health, 2004  
Oyelola Faparusi, Ph.D., Mental Health, 2005  
JeanHee Moon, Ph.D., Health Policy & Management, 2005  
Min Tseng, Sc.M., Epidemiology, 2005  
Keshia Pollack, Ph.D., Health Policy and Management, 2005  
Margaret Haynes, Ph.D., Health Policy and Management, 2005  
Hongfei Guo, Ph.D., Biostatistics, 2006  
Sharon Kozachik, Ph.D., Nursing, 2006  
Brian Egleston, Ph.D., Biostatistics, 2006  
Keiko Asao, Ph.D., Epidemiology, 2006  
Snaebjorn Gunnsteinsson, Sc.M., Biostatistics, 2006  
Onyemaechi Nweke, Dr.PH, Environmental Health Sciences, 2006  
Amanda Kalaydjian, Ph.D., Mental Health, 2006  
Yi Huang, Ph.D., Biostatistics, 2007  
Chun-Ju Hsiao, PhD, Health Policy & Management, 2007  
Lora Iannotti, PhD, International Health, 2007  
April M. Zeoli, PhD, Health Policy & Management, 2007  
Michiyo Yamazaki, Population and Family Health Science, 2007  
Peter Hansen, International Health, 2007  
Jeannie-Marie Sheppard Leoutsakos, Ph.D., Mental Health, 2007  
Jing Ning, Ph.D., Biostatistics, 2007  
Jason Farley, Ph.D., Nursing, 2007  
Aneesa Arur, Ph.D., International Health, 2007  
Renan Castillo, Ph.D., Health Policy and Management, 2008  
Shu-Chih Su, Ph.D., Biostatistics, 2008  
Lilian Ghandour, Ph.D., Mental Health, 2008  
Alden Gross, Ph.D., Mental Health, 2009  
Kelly Benke, Ph.D., Epidemiology, 2009  
Chongzhi Di, Ph.D., Biostatistics, 2009  
Joanna Famadas, Ph.D., Health Policy and Management, 2010  
Laura Steinhardt, Ph.D., International Health, 2010  
Sachiko Ozawa, Ph.D., International Health, 2010  
Jean Ko, Ph.D., Mental Health, 2010  
Hong Zhu, Ph.D., Biostatistics, 2010  
Michal Engelman, Ph.D., Population, Family, and Reproductive Health, 2010  
Alden Gross, Ph.D., Mental Health, 2010  
Erika Hedderick, Sc.M., Graduate Training Program in Clinical Investigation, 2011  
Sachiko Kuwabara, Ph.D., Mental Health, 2012  
Ann Zenobia Moore, Ph.D., Epidemiology, 2012  
Megan Salter, Ph.D., Epidemiology, 2012  
Lamprea-Montealegre, Epidemiology, 2012  
Jennifer Deal, Ph.D., Epidemiology, 2013

Final Oral Examinations/Thesis Reader (continued)

Dolly Chang, Ph.D., Epidemiology, 2013  
 Bonnie Scurman Swenor, Ph.D., Epidemiology, 2013  
 Morgan Grams, Ph.D., Epidemiology, 2013  
 Katia Reinert, Ph.D., Nursing, 2014

Primary Thesis Advisor/Co-Advisor

Jennifer Schroeder, Sc.M., Biostatistics, 1995  
 Charles Hall, Ph.D., Biostatistics, 1995 (secondary; jointly with Scott Zeger)  
 Diana Miglioretti, Sc.M., Biostatistics, 1996  
 Min-Chi Chen, Ph.D., Biostatistics, 1997 (primary; jointly with Kung-Yee Liang)  
 Gina D'Angelo, Sc.M., Biostatistics, 1998  
 Sveta Weiner, Sc.M., Biostatistics, 1999  
 Anita Chen, Sc.M., Biostatistics, 2000  
 Guan-Hua Huang, Ph.D., Biostatistics, 2000  
 Qian-Li Xue, Ph.D., Biostatistics, 2000  
 Hongfei Guo, Ph.D., Biostatistics, 2006  
 Yi Huang, Ph.D., Biostatistics, 2007  
 Jeannie-Marie Sheppard, Ph.D., Mental Health, 2007 (jointly with Peter Zandi)  
 Susan Warren, Ph.D., Biostatistics, George Washington University, 2010  
 Jeongyong Kim, Ph.D., Biostatistics, In progress

Primary Advisor

Brian Eggleston, Doctoral student, Biostatistics, 2001-2004  
 Sandrah Eckel, Doctoral student, Biostatistics, 2004-2006  
 Bruce Swihart, Doctoral student, Biostatistics, 2006-2007  
 Taki Shinohara, Doctoral student, Biostatistics, 2007-2009  
 Vivienne Thairu, Doctoral student, Biostatistics, 2008-2010  
 Sarah Khasawinah, Doctoral student, Biostatistics, 2009-2011  
 Elizabeth Sweeney, Doctoral student, Biostatistics, 2010-2011  
 John Tillinghast, Post-doctoral fellow, Biostatistics, 2007-2010  
 Michal Engelman, Post-doctoral fellow, Biostatistics, 2010-2011  
 Minsun Park, Master degree student, Biostatistics, 2013-present

Classroom Instruction1990-1991

Biostatistics 140.643                    - Applied Multivariate Statistics I

1991-1992

Biostatistics 140.650                    - Methods in Biostatistics I  
 Biostatistics 140.651                    - Methods in Biostatistics II

Classroom Instruction (continued)1992-1993

Biostatistics 140.650	- Methods in Biostatistics I
Biostatistics 140.651	- Methods in Biostatistics II

1993-1994

Biostatistics 140.651	- Methods in Biostatistics I
Biostatistics 140.652	- Methods in Biostatistics II
Biostatistics 140.603	- Statistical Modelling (University of Helsinki)

1994-1995

Biostatistics 140.651	- Methods in Biostatistics I
Biostatistics 140.652	- Methods in Biostatistics II

1995-1996

Biostatistics 140.653	- Methods in Biostatistics III
Biostatistics 140.654	- Methods in Biostatistics IV

1996-1997

Biostatistics 140.653	- Methods in Biostatistics III
Biostatistics 140.654	- Methods in Biostatistics IV

1997-1998

Biostatistics 140.653	- Methods in Biostatistics III
Biostatistics 140.654	- Methods in Biostatistics IV

1998-1999

Mental Hygiene 330.657	- Statistics for Psychosocial Research I
Biostatistics 140.658	- Statistics for Psychosocial Research II

1999-2000

Mental Hygiene 330.657	- Statistics for Psychosocial Research I
Biostatistics 140.658	- Statistics for Psychosocial Research II

Classroom Instruction (continued)2000-2001

Biostatistics 140.653 - Methods in Biostatistics III  
Biostatistics 140.654 - Methods in Biostatistics IV

2001-2002

Biostatistics 140.653 - Methods in Biostatistics III  
Biostatistics 140.654 - Methods in Biostatistics IV

2002-2003

Biostatistics 140.621 - Statistical Methods in Public Health I  
Biostatistics 140.622 - Statistical Methods in Public Health II

2003-2004

Biostatistics 140.621 - Statistical Methods in Public Health I  
Biostatistics 140.622 - Statistical Methods in Public Health II  
Biostatistics 140.623 - Statistical Methods in Public Health III

2004-2005

Biostatistics 140.621 - Statistical Methods in Public Health I  
Biostatistics 140.622 - Statistical Methods in Public Health II  
Biostatistics 140.623 - Statistical Methods in Public Health III

2005-2006

Biostatistics 140.653 - Methods in Biostatistics III  
Biostatistics 140.654 - Methods in Biostatistics IV

2006-2007

Biostatistics 140.653 - Methods in Biostatistics III  
Biostatistics 140.654 - Methods in Biostatistics IV

2007-2008

Biostatistics 140.653 - Methods in Biostatistics III  
Biostatistics 140.654 - Methods in Biostatistics IV

Classroom Instruction (continued)2008-2009

Biostatistics 140.621	- Statistical Methods in Public Health I
Biostatistics 140.622	- Statistical Methods in Public Health II
Biostatistics 140.623	- Statistical Methods in Public Health III

2009-2010

Biostatistics 140.621	- Statistical Methods in Public Health I
Biostatistics 140.622	- Statistical Methods in Public Health II
Biostatistics 140.623	- Statistical Methods in Public Health III

2010-2011

Biostatistics 140.621	- Statistical Methods in Public Health I
Biostatistics 140.622	- Statistical Methods in Public Health II
Biostatistics 140.623	- Statistical Methods in Public Health III

2011-2012

Biostatistics 140.621	- Statistical Methods in Public Health I
Biostatistics 140.622	- Statistical Methods in Public Health II

2012-2013

Biostatistics 140.621	- Statistical Methods in Public Health I
Biostatistics 140.622	- Statistical Methods in Public Health II

2013-2014

Biostatistics 140.621	- Statistical Methods in Public Health I
Biostatistics 140.622	- Statistical Methods in Public Health II

**RESEARCH GRANT PARTICIPATION – CURRENT**

“Older Americans Independence Center,” 07/01/13 – 06/30/18

NIH/NIA

Jeremy Walston/Karen Bandeen-Roche, 18%

The Center is dedicated to developing the next generation of research to determine the causes and treatments for frailty in older adults.

Other roles: Director and Co-Investigator of the Biostatistics Core



Research Grant Participation – Current (continued)

“Johns Hopkins Alzheimer’s Disease Research Center (ADRC),” 04/01/10 – 03/31/15

NIH/NIA

Marilyn Albert, 9.5%

The aims are to coordinate and integrate all aspects of data management for ADRC, to provide statistical support and expert statistical consultation for all projects associated with ADRC, and to develop novel methods of analysis for studying progressive cognitive decline and dementia among old individuals.

Role: Co-Investigator

“Memorandum of Understanding: For a Joint Initiative Between the Parties,” 10/01/06-06/30/14

Geisinger Health Systems

Brian Schwartz, 5%

This project seeks to delineate BMI trajectories with children’s growth from ages 3 to 18, and to study the physiological and environmental determinants of variation in these, using comprehensive electronic health record data from the Geisinger Health Care System.

Role: Co-Investigator

“Advancing stated-preference methods for measuring the preferences of patients with type 2 diabetes,” 07/01/13-06/30/16

PCORI

John Bridges, 5%

This project aims to advance and disseminate methods for patient and stakeholder engagement in patient-centered outcomes research. Applying the principles of community-based participatory research, we address several methodological gaps associated with stated-preferences methods in a project that it focused at understanding the priorities and preferences of patients with type 2 diabetes.

Role: Co-Investigator

“Institutional Clinical and Translation Science Award,” 09/26/13 – 04/30/18

NIH/NCRR

Daniel Ford, 5%

The purpose of this application is to enhance both the process and benefits of clinical and translational research by bringing together the diverse resources of the Johns Hopkins Medical Institutions (JHMI) and creating a new model for carrying out scientific research.

Role: Co-Investigator

“1 of 5 ARIC Neurocognitive Study (ARIC-NCS),” 07/07/10-04/30/15

NIH/NHLBI

Coresh, 10%

Dementia has a high prevalence in the U.S., particularly in African-Americans. The Atherosclerosis Risk in Communities Neurocognitive Study (ARIC-NCS) will add a neurocognitive assessment 24 years following the ARIC baseline exam conducted on 15,792 African-American and white residents aged 45-64. We aim to help elucidate factors underlying ethnic disparities in dementia burden and provide the scientific basis for prevention strategies by identifying vascular therapeutic targets, optimal timing for interventions and useful intermediate outcomes.

Role: Co-Investigator

## RESEARCH GRANT PARTICIPATION – COMPLETED

“Comparative Effectiveness Studies to Improve Patient Outcomes in End Stage Renal Disease (ESRD),” 07/20/10 – 07/19/13  
AHRQ (ARRA), 10%

This goal of the proposed research is to address the comparative effectiveness of strategies to improve cardiovascular disease outcomes among patients with End Stage Renal Disease (ESRD).  
Role: Co-Investigator

“National Study of Disability Trends and Dynamics,” 09/30/08 – 09/29/13  
NIH/NIA

Kasper Hansen, 5%

Study to design, test, field and disseminate a new National Study of Disability Trends and Dynamics. The new study will be a platform for scientific inquiry to guide efforts to reduce disability, maximize functioning, and enhance older adults’ quality of life.

Role: Co – Investigator

“Drug Abuse and Crime across the Life Course in an African American Population,” 03/15/08 – 12/31/11

NIH

Margaret Ensminger, 5%

The major goals of this is how substance use in adolescence and early adulthood relates to the risk of being arrested and incarcerated and, conversely, how early arrests and incarceration influence later drug use and criminal behaviors.

Role: Co-Investigator

“NFkB Related Genetic Influences on Inflammation and Poor Health in Older Adults,” – 09/01/06 - 08/31/11

NIA

Jeremy Walston, 6%

The long-term goal of this study is to identify genes and biologic pathways related to inflammation that influence rapid decline in function and influence frailty and mortality in a subset of older adults.

Role: Co-investigator

“Pathogenesis of Disability in Aging Women,” 09/01/08 – 08/31/11

Subcontract - Columbia University

Bandeem-Roche, 10%

The project proposes to evaluate evidence as to the pathogenesis of physical disability in older women, assessing the independent and joint contributions to disability of blood-based measures of inflammation, hormonal and hematologic status, and micronutrient deficiencies, and heart rate variability as a marker of biologic vulnerability. Its goal will be accomplished through analyses of already collected data and, in some cases, banked blood, in the Women’s Health and Aging Study I.

Role: Co - Investigator

Research Grant Participation – Completed (continued)

“Alzheimer's Disease Research Center, Data Core C (ADRC),” 04/01/05 – 03/31/10

NIH/NIA

Marilyn Albert/Karen Bandeen-Roche, 5%

The aims are to coordinate and integrate all aspects of data management for ADRC, to provide statistical support and expert statistical consultation for all projects associated with ADRC, and to develop novel methods of analysis for studying progressive cognitive decline and dementia among old individuals.

Role: Core Leader

“Low Vision Devices and Rehabilitation Services: Effects of Third Party Payment,” 01/01/08 / 12/31/09

NEI

Massof, 2%

The major goals of the project are to complete developmental work necessary to design a multicenter, randomized controlled trial to measure patient-centered effectiveness, cost-effectiveness, and treatment plan effects of a low vision rehabilitation intervention.

Role: Co – Investigator

“Who Drives Safely? Visual/Cognitive Predictors in Elders,” 09/30/04 – 7/31/09

NIA

Sheila West, 10%

This study will provide critical data on the interactive role of vision, visual attention, and cognition in changing older persons driving behaviors, and the resulting effect on driver errors and risk of crashes.

Role: Co-investigator

“Epidemiology of Personality Disorders,” 05/01/05 – 02/28/09 NIMH

Gerald Nestadt, 7%

The overall goal of the project is to enhance knowledge about the structure of different conceptualizations of personality, their relationships to normal personality and psychopathology, and their association with measures of disability, and selected risk factors, including genetic polymorphisms.

Role: Co-investigator

“Intratesticular Testosterone and Spermatogenesis in Man,” 12/01/04 – 11/30/08

NIH/NICHD

Barry Zirkin, 8%

The major objectives of this project are to identify and quantify the androgen content of the human testis, to assess the bioavailability of intratesticular androgens, to experimentally determine the relationship between bioavailable intratesticular androgen concentration and spermatogenesis, and to examine the effect of testosterone replacement modalities on intratesticular bioavailable androgen concentration and on spermatogenesis in subfertile men.

Role: Co-investigator

Research Grant Participation – Completed (continued)

“Age, Lead Exposure and Neurobehavioral Decline,” 07/01/06 – 06/30/08

NIA

Brian Schwartz, 5%

The major goal of this project is to examine longitudinal relations amount tibia lead levels, volumetric measures by MRI of specific brain structures, white matter lesions as assessed by DTI and FLAIR imaging, and neurobehavioral function in a longitudinal study of former organolead manufacturing workers and matched community controls.

Role: Co-Investigator

“Older Americans Independence Center,” 05/01/03 – 05/31/08

NIH/NIA

Linda Fried, 20%

The Center is dedicated to developing the next generation of research to determine the causes and treatments for frailty in older adults.

Role: Director and Co-investigator of the Biostatistics Core

“Explaining Disparities in Cognitive Function in Seniors (On Campus),” 10/01/00-08/31/06

NIA

Brian Schwartz, 10%

To evaluate the role of lead exposure in mediating the effect of racial and residential disparities on adverse cognitive outcomes.

Role: Co-Investigator

“Risk Factors for Physical Disability in Aging Women,” 07/01/91-06/30/06

NIA

Linda Fried, 10%

Identify early decrements in physical functioning and to demonstrate whether these changes identify those at high risk of becoming disabled and/or predictive of future disability.

Role: Co-Principal Investigator

“Statistical Methods for Genetic Epidemiology,” 09/01/98-11/30/05

NIGMS

Karl Broman, 10%

The objective of this grant is to develop and implement new statistical methodology useful for genetic epidemiologic studies of complex chronic diseases such as cancer, coronary heart disease, allergy, as well as psychiatric illness

Role: Co-Investigator

“Statistics for Longitudinal Studies of Mental Health,” 07/01/97-07/31/03

NIMH

Scott Zeger, 15%

Supports a team of statisticians and mental health scientists to collaborate on the development of regression methods for outcomes collected in longitudinal studies of mental health services.

Role: Co-Investigator

Research Grant Participation – Completed (continued)

"Visual Impairment and Physical Disability in Older Persons," 12/15/98-11/30/03

NIA

Sheila West, 20%

To extend the Salisbury Eye Evaluation Study (SEE) by including two dynamic measures of visual function which laboratory studies suggest may be more closely related to certain aspects of physical disability, particularly those related to mobility.

Role: Co-Investigator

"Age, Lead, Exposure, and Neurobehavioral Decline," 09/01/00-08/31/03

NIH/NIA

W. Stewart, 10%

To study exposure to organic and inorganic lead over a 5-year period in order to assess risk factors and determine effects of lead on cognitive function, and on the nervous system.

Role: Co-Investigator

"Interventions for Visual Loss in Nursing Home Residents," 05/01/99-04/30/03

NIA

Sheila West, 5%

Comprises an intervention trial on visual impairment among nursing home residents. Control and intervention in nursing homes will be compared to determine the effectiveness of infraction cataract surgery and low visual aid provisions.

Role: Co-Investigator

"New Quantitative Methods for the Study of Changing Health in Older Adults," 04/01/97 – 03/31/99

The Brookdale Foundation

Karen Bandeen-Roche, 80%

To develop and validate regression methods for statistical analysis of multiple functioning measures collected in longitudinal studies of disability in older persons.

Role: Principal Investigator

## **ACADEMIC SERVICE**

### Department of Biostatistics

Fall Seminar Series	-1991
Fall Seminar Series	-1997
Admissions Committee	-1997-1998
Admissions Committee	-1999-2000
Subcommittee on Public Health Education	- 2003-present
Grand Rounds Seminars	- 2004-2005
Faculty Search Committee (Chair)	- 2006-2007

### The Johns Hopkins Bloomberg School of Public Health

Committee on Affirmative Action Program, 1991-1996  
 Dean's Working Group on Aging, 1997  
 Ad Hoc Subcommittee on Student Environment, 2000  
 Ad Hoc Committee on Behavioral Sciences, 2000-2001  
 Ad Hoc Committee on the M.H.S. Program, 2001  
 Search Committee, Cognitive Health and Aging Program, Department of Mental Hygiene, 2002  
 Search Committee, Chair, Population & Family Health Sciences, 2002-2003  
 Academic Ethics Committee, 2004-2007  
 Faculty Senate, 1994-1996; 2005-2007  
 Dr. P.H. Subcommittee, 1997-2003; 2005-2007  
 Appointments and Promotions Committee, 2007-2008  
 Advisory Board, 2008-present  
 Committee of the Whole, 2008-present  
 Management Committee, 2008-present  
 Committee to Review the Department of Health Policy and Management (Chair), 2011-2012

### The Johns Hopkins University

Provost's Committee on the Status of Women Academic Issues Subcommittee, 1993-1994  
 Search Committee, Dean, School for Advanced International Studies, 2011-2012

### External

External Advisory Board, Older Americans Independence Center, Duke University, 2007-present  
 External Review, Proposal for Graduate Program in Biostatistics, Vanderbilt University, 2010  
 External Review, Department of Statistics, University of Kentucky, 2012  
 External Advisory Board, Older Americans Independence Center, University of Maryland, 2012-present  
 External Advisory Board, Clinical and Translational Sciences Institute, The Pennsylvania State University, 2012-present  
 External Review, Department of Biostatistics, University of Washington, 2013  
 External Review, Department of Biostatistics & Informatics, University of Colorado, 2013  
 External Review (Chair), Department of Biological Statistics and Computational Biology, Cornell University, 2014

### **PRESENTATIONS INVITED**

"Source Apportionment with one Source Unknown." Mathematics in Chemistry Conference, College Station, Texas, October, 1989.

"Source Apportionment with one Source Unknown." The Joint Statistical Meetings, Washington, D.C., August 7, 1989.

Presentations Invited (continued)

"A Mixture Model for Compositional Aggregates." Bell Communications Research, Morristown, NJ, May 20, 1991.

Discussion, Ecosystem Assessment and Monitoring Session. Joint Meeting of the Biometric Society (ENAR), The Institute of Mathematical Statistics, and the American Statistical Association, Cincinnati, Ohio, March 24, 1992.

"Amateur Boxing and Changes in CNS Function: An Application of Spline Regression Modeling with Corrections for Errors in Reported Exposures." Meeting of the American Public Health Association (APHA), Washington, DC, November 9, 1992

"An Application of Spline Regression Modeling with Correction for Errors in Reported Exposures". EPA Conference on Statistics, Baltimore, MD, March 2, 1993.

"Modeling Multivariate Failure-Time Data, allowing for Multiple Levels of Clustering." Hershey Medical Center, Hershey, PA, April 26, 1993.

"Modeling Multivariate Failure-Time Data, allowing for Multiple Levels of Clustering." The Pennsylvania State University, State College, PA, April 27, 1993.

"Modeling Failure-time Associations in Data with Multiple Levels of Clustering." The Joint Statistical Meetings, San Francisco, August 12, 1993.

"Exposures and Disease Progression: A Generalized Functional Model with Regression Spline Fitting". The University of Iowa, Iowa City, IA, April 4, 1994.

"Exposures and Disease Progression: A Generalized Functional Model with Regression Spline Fitting". The University of Helsinki, Helsinki, Finland, May 16, 1994.

"Modeling Association in Multivariate Survival Models." Meetings of the East/North American Region of the Biometric Society, Birmingham, Alabama, March 27, 1995.

"Studying Association in Multivariate Failure-Time Data." Southern Regional Council on Statistics Summer Research Conference, Melbourne, Florida, June 12, 1995.

"Data Summary: Before, During, or After Analysis? Challenges to Tracking Multiple Measurements Over Time." Joint Meetings of the Institute of Mathematical Statistics and the Statistical Society of Canada, Montreal Canada, July 11, 1995.

"Design to Diagnosis: A Model Based Approach to Analyzing Multiple Indicator Outcomes." Spring Meeting of the Eastern North American Region of the Biometric Society, Richmond, Virginia, March 20, 1996.

"Association Modelling in Multivariate Failure Time Data, With Marginal Regression Specification." University of Minnesota, Minneapolis, MN, April 2, 1996.

Presentations Invited (continued)

- "Association Modelling in Multivariate Failure Time Data, With Marginal Regression Specification." Rice University, Houston, Texas, April 8, 1996.
- "Association Modelling in Multivariate Failure Time Data, With Marginal Regression Specification." Annual Meeting of the Statistical Society of Canada, Waterloo, Ontario, June 4, 1996.
- Discussion, Multivariate Survival Analysis session, The Joint Statistical Meetings, Chicago, IL, August 7, 1996.
- "Multivariate Failure-Time Analysis with Marginal Regression Specification." Fourth World Congress of the Bernoulli Society, Vienna, Austria, August 26-31, 1996.
- "Longitudinal Latent Variable Regression for Multiple Disability Outcomes: The Women's Health and Aging Study." The Gerontological Society of America, 49th Annual Scientific Meeting, Washington, D.C., November 18, 1996.
- "Toward Alleviating Disability: New Quantitative Methods for the Study of Changing Health in Older Adults." Brookdale National Fellowship Retreat, Teaneck, New Jersey, April 26, 1997.
- "Quantitative Methods for Analyzing Multiple Indicators of Functioning in Older Adults." Clinical, Social, and Scientific Foundations of Geriatric Medicine, Johns Hopkins Bayview Medical Center, August 19, 1997.
- "New Quantitative Methods for the Study of Changing Health in Older Adults." Center for Policy Research, Syracuse University, October 9, 1997.
- "On Analyzing Longitudinal Changes in Multiple Measurements." Brown University, October 27, 1997.
- "On Analyzing Longitudinal Changes in Multiple Measurements." University of Connecticut, October 29, 1997.
- "On Measuring Early Disability in Older Women." Gerontological Society of America, Cincinnati, Ohio, November 16, 1997.
- "Data Summary Before, During and After: A Methods Case Study." Gerontological Society of American, November 16, 1997
- "How Do Risk Factors Affect Self-repeated Functioning? A Methods Case Study." Brookdale National Fellowship Retreat, Teaneck, New Jersey, April 25, 1998.



Presentations Invited (continued)

- “Analyzing Longitudinal Changes in Multiple Measurements: A Latent Structure Approach.”  
Conference on Integrating Statistical Methods with Prevention Research and Programs,  
Johns Hopkins University, May 14, 1998.
- “Analyzing Longitudinal Changes in Multiple Measurements.” University of Maryland, October  
8, 1998.
- “Phenotype of Frailty: Characterization in the Women’s Health and Aging Studies.” Meeting of  
the Gerontologic Society of America. Philadelphia, Pennsylvania, November 22, 1998.
- “Modeling Multivariate Failure Time Associations in the Presence of Competing Risk.” Spring  
meeting of the Eastern North American Region of the Biometric Society (ENAR),  
Atlanta, Georgia, March 29, 1999.
- “Toward Alleviating Disability: New Quantitative Methods for the Study of Changing Health in  
Older Adults.” Brown University, December 9, 1999.
- “Using Self-Reported Outcomes to Assess the Determinants of Health: Challenges and  
Proposals.” Albert Einstein College of Medicine, December 18, 2000.
- “Distinguishing Longitudinal Changes in Underlying Status from Changes in Measured Status.”  
Spring meeting of the Eastern North American Region of the Biometric Society (ENAR),  
Charlotte, North Carolina, March 26, 2001.
- “Distinguishing Variation in Underlying Status from Variation in Measured Status.” Department  
of Biostatistics and Epidemiology, University of Pennsylvania, Philadelphia,  
Pennsylvania, May 30, 2001.
- “Diagnosing Hierarchical Models for Violations of Underlying Assumptions.” Division of  
Biostatistics, Department of Epidemiology and Public Health, Yale University, New  
Haven, Connecticut, September 18, 2001.
- “Latent Variable Analysis of the Association Between IGF-1 Levels and Functioning.” Meeting  
of the Gerontologic Society of America, Chicago, Illinois, November 15, 2001.
- “Methods to Dissect the Role of Comorbidity Risk Factors in the Disablement Process.”  
Meeting of the Gerontologic Society of America, Chicago, Illinois, November 15, 2001.
- “Assessment of Post-Traumatic Distress Disorder.” Biostatistics Grand Rounds, Department of  
Biostatistics, The Johns Hopkins Bloomberg School of Public Health, Baltimore,  
Maryland, May 1, 2002.
- “Empirical Latent Variable Modeling: Illuminating Interpretation with Literal Variables.”  
Meeting of the Society for Prevention Research, Seattle, Washington, May 30, 2002.

Presentations Invited (continued)

- “Empirical Latent Variable Modeling.” Joint Statistical Meetings, New York, New York, August 12, 2002.
- “Dissecting the Role of Comorbidity Risk Factors in the Disablement Process.” Clinical, Social, and Scientific Foundations of Geriatric Medicine, Division of Geriatrics, Johns Hopkins Medical Institutions, Baltimore, Maryland, August 27, 2002.
- “On Diagnosing the Assumptions of Latent Variable Models.” Department of Measurement and Statistics, University of Maryland, College Park, MD, February 10, 2003.
- Discussion, “Random Effects, Priors and Graphs: A 360-Degree View of Hierarchical Models.” Spring Meeting of the International Biometric Society, Eastern North American Region (ENAR), Tampa, FL, April 1, 2003.
- “On the Specification of Latent Variable Models.” Department of Biostatistics, Harvard School of Public Health, Harvard University, Boston, MA, April 10, 2003.
- “On the Specification of Latent Variable Models.” Department of Biostatistics, University of Wisconsin, Madison, WI, May 9, 2003.
- “On the Measurement of Hypothetical Health Constructs.” ACISR Meeting, Department of Psychiatry, University of Pennsylvania, PA, September 13, 2004.
- “Strengths, Value and Pitfalls with the Use of Modern Statistical Procedures.” ITV Best Practices Meeting, Washington, DC, October 12, 2004.
- “On the Next Generation of Frailty Measures: Unification of Physiologic and Clinical Manifestations.” Meeting of the Gerontological Society of America, Washington, DC, November 20, 2004.
- “Delineating the Possible Mechanisms Underlying Longitudinal Associations in Observational Studies on Aging.” Meeting of the Gerontological Society of America, Washington, DC, November 22, 2004.
- “On tracking self-reported disability: Distinguishing Changes in Underlying Status from Changes in Measured Status.” Dementia Consortium, The Johns Hopkins Medical Institutions, Baltimore, MD, January 10, 2005.
- “On the Targets of Latent Variable Estimation.” Department of Biostatistics, Medical College of Wisconsin, Milwaukee, WI, April 19, 2005.
- “Geronmetrics: Advancing the Next Generation of Discovery.” Gerontology Program, Miami University, Oxford, OH, December 8, 2005.

Presentations Invited (continued)

- “On the Targets of Latent Variable Estimation.” Department of Mathematics and Statistics, Miami University, Oxford, OH, December 8, 2005.
- “Alliance for Aging Research: Biomarkers of Aging Initiative.” Kronos Science Laboratories, Phoenix, AZ, December 21, 2005.
- “Geronmetrics: Advancing the Next Generation of Discovery.” Geriatrics Center and Institute of Gerontology, University of Michigan, Ann Arbor, MI, January 12, 2006.
- “What Analysis Can’t Fix: Why Retention is So Critically Important.” 2<sup>nd</sup> International Conference on Frailty, Montreal, QC, March 18, 2006.
- “Discussion: Recent Advances in Analysis for Multivariate Failure-time Data.” International Biometric Society, Eastern North American Region (ENAR), Annual Spring Meeting, Tampa, FL, March 27, 2006.
- “Latent Variables: Truth, Lies, and Everything Between.” Department of Biostatistics, Johns Hopkins University, Baltimore, MD, April 21, 2006.
- “Alliance for Aging Research: Biomarkers of Aging Initiative.” Milken Institute Pre-Conference on Aging, Santa Monica, CA, April 22, 2006.
- “Measuring Aging: How will we know when Interventions Work?” Huffington Center on Aging, Baylor College of Medicine, Houston, TX, May 1, 2006.
- “Longitudinal Analysis—Better than Ezra: Using Nehemiah as his own Control.” Older Americans Independence Center, University of Michigan, Ann Arbor, MI, June 1, 2006.
- “Measuring Aging: How will we know when Interventions Work?” Biomarkers Briefing, Boston, MA, July 21, 2006.
- “Latent Class Measurement of Frailty and Dysregulation in Older Adults.” Joint Statistical Meetings, Seattle, WA, August 9, 2006.
- “An Introduction to Latent Variable Models.” ABACUS Seminar Series, National Institute on Aging, Baltimore, MD, December 6, 2006.
- “Longitudinal Analysis—Better than Ezra: Using Nehemiah as his own Control.” Center on Aging and Health, Johns Hopkins University, Baltimore, MD, December 11, 2006.
- “The Role of Assumptions in Latent Variable Model Estimation : Elucidation and Tuning.” Department of Epidemiology and Biostatistics, Memorial Sloan-Kettering Cancer Center, New York, NY, May 30, 2007.

Presentations Invited (continued)

"Hybrid Latent Class Measurement of Health States Lacking a Gold Standard." International Biometric Society, Eastern North American Region (ENAR), Annual Spring Meeting, Atlanta, GA, March 13, 2007.

"Longitudinal Analysis Better than Ezra: Using Nehemiah as his own Control." Center on Aging and Health Biostatistics Grand Rounds, Johns Hopkins Medical Institutions, Baltimore, MD, May 10, 2007

"The Role of Assumptions in Latent Variable Model Estimation: Elucidation and Tuning." Memorial Sloan-Kettering Cancer Center, New York NY, May 30, 2007.

"Meta-Analysis at the Individual Level: Synthesis of Inferences Across Multiple Gerontological Databases." Joint Statistical Meetings, Salt Lake City, UT, July 29, 2007.

"Measuring Aging: How will we know when Interventions Work?" AFAR Grantee Conference, New York, NY, October 1, 2007.

"The Role of Assumptions in Latent Variable Model Estimation: Elucidation and Tuning." New England Research Institutes, Boston, MA, October 31, 2007.

"An Introduction to Latent Variable Models." ABACUS Seminar Series, National Institute on Aging, Baltimore, MD, November 28, 2007

"Statistical Challenges in the Study of Aging and Dementia." Seminar in Aging, Cognition and Neurodegenerative Disorders, The Johns Hopkins Medical Institutions, Baltimore, MD, December 11, 2007

"Measuring Aging: How will we know when Interventions Work?" Glaxo Smith, Kline, Durham, NC, December 18, 2007.

"Improved Measurement Modeling and Regression with Latent Variables" Department of Biostatistics and Computational Biology, University of Rochester, April 3, 2008.

"Measuring Aging: How Will We Know When Interventions Work?" Clinical Research Grand Rounds, Welch Center, JHU, Baltimore, MD, May 28, 2008.

"A Tale of Two Cores: Biostatistics in Aging at JHU" Joint Statistical Meetings, Denver, Colorado, August 4, 2008.

"Latent Variables in Science: Three Vignettes" Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, September 17, 2008.

Presentations Invited (continued)

- “Latent Variable-Based Study of Gerontological Constructs: Advancing the Next Generation of Discovery in Aging” Annual Meeting of the Gerontological Society of America National Harbor, MD, November 24, 2008.
- “Latent Variable Modeling to Predict Frailty in Older Women’s Health Research Symposium” Johns Hopkins Medical Institutions, Baltimore, MD, May 6, 2009.
- “Latent Variable-Based Study of Gerontological Constructs: Advancing the Next Generation of Discovery in Aging” Geriatrics Grand Rounds, Department of Medicine, Johns Hopkins University, Baltimore MD, July 2, 2009.
- “Meta-Analysis at the Individual Level: *Synthesis of Inferences across Multiple Gerontological Databases*” Geriatrics Grand Rounds, Department of Medicine, Johns Hopkins University, Baltimore MD, April 8, 2010.
- “Introduction to Causal Inference in Clinical Research.” Johns Hopkins University / University of Maryland Pepper Centers Symposium: Clinical and Comparative Effectiveness Research. University of Maryland, Baltimore MD, May 24, 2010.
- “Getting a Job in Academia: How to Find One, How to Apply, and How to Interview” (joint with Lance A. Waller). Webinar, International Biometric Society/Eastern North American Region (ENAR), November 15, 2010.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” University of Michigan, Ann Arbor, MI, March 31, 2011.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” University of Maryland, School of Medicine, Baltimore, MD, April 5, 2011.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” Research in Progress Grand Rounds, Johns Hopkins University, Asthma and Allergy Center, Baltimore, MD, April 7, 2011.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” Department of Statistical Sciences, Cornell University, Ithaca, NY, October 19, 2011.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” Division of Cancer Epidemiology & Genetics, National Cancer Institute, Gaithersburg, MD, December 9, 2011.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” Fred Hutchinson Cancer Research Center, Seattle, WA, May 9, 2012.
- “Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” Department of Biostatistics, University of Washington, Seattle, WA, May 10, 2012.

Presentations Invited (continued)

- “Latent Variables in Science: Three Vignettes. Keynote lecture, 10th Anniversary of Applied Statistics.” West Chester University of Pennsylvania, West Chester, PA, May 18, 2012.
- “Differential Item Functioning: When Does it Matter?” Joint Statistical Meetings, San Diego, CA, July 29, 2012.
- “Meta-Analysis at the Individual Level: Combining Inferences across Multiple Gerontological Databases. Keynote Lecture, Measurement and Statistics Interest Group.” Annual Meeting of the Gerontological Society of America, San Diego, CA, November 16, 2012.
- “On the Accommodation of Differential Item Functioning in Latent Class Regression.” Universita Bocconi, Milan, Italy, April 11, 2013.
- “The Prevention and Detection of Differential Measurement Biases in Analyses of Multiply Measured Outcomes.” Joint Statistical Meetings, Montreal, QC, Canada, August 5, 2013.
- “A New View on Frailty Phenotype Refinement: Can Simplification Be Achieved without Loss of Syndrome Measurement Validity?” Annual Meeting of the Gerontological Society of America, New Orleans, LA, November 23, 2013.
- “On the Accommodation of Differential Item Functioning in Latent Class Regression.” The University of Texas Health Science Center at Houston, Houston, Texas, March 7, 2014.
- “Frailty of Older Adults: Physiology, Ascertainment and National Scope.” University of Rochester Medical Center, Rochester, NY, April 4, 2014.
- “On the Accommodation of Differential Item Functioning in Latent Class Regression.” Albert Einstein College of Medicine, New York, New York, June 20, 2014.

**PRESENTATIONS CONTRIBUTED**

- "A Mixture Model for Compositional Aggregates." The Joint Statistical Meetings, Atlanta, Georgia, August, 1991 "Hierarchy of Physical Disability: Supporting Evidence." Meeting of The Gerontological Society of America, Washington, DC, November 19, 1992.
- “Modeling Failure-time Associations in Data with Multiple Levels of Clustering.” The Joint Statistical Meetings, San Francisco, August 12, 1993.
- "Hierarchy of Disability: Prospective Support". Meeting of the Gerontological Society of America, New Orleans, November 19, 1993.

Presentations Contributed (continued)

- "Exploratory Analysis for Association in Multivariate Survival Models". The Joint Statistical Meetings, Toronto, Canada, August 16, 1994.
- "Methods for Summarization of Disability Data." Annual Meeting of the American Public Health Association, Washington, D.C., November 2, 1994.
- "Challenges to Defining and Quantifying Dry Eye: SEE Project." Annual Meeting of the Association for Research in Vision and Ophthalmology, Fort Lauderdale, Florida, May 18, 1995.
- "Data Summary: Before, During, or After Analysis? Challenges to Tracking Multiple Measurements Over Time." Joint Meetings of the American Statistical Association, The Biometric Society, and the Institute of Mathematical Statistics, Orlando, Florida, August 16, 1995.
- "Multiple Disability Outcomes: Import of Summary to Characterizing Natural History." Meeting of the Gerontologic Society of America, Los Angeles, California, November 17, 1995.
- "On Analyzing Multiple Questionnaire Outcomes: A Methods Case Study." Joint Meetings of the American Statistical Association, The Biometric Society, and the Institute of Mathematical Statistics." Dallas, Texas, August 11, 1998.
- "Explicitly Longitudinal Latent Class Regression Analysis." International Biometric Society-ENAR Spring Meeting. Chicago, Illinois, March 22, 2000.
- "Measurement Stability in Longitudinal Latent Class Regression: Identification & Consequences." Joint Meetings of the American Statistical Association, The Biometric Society, and the Institute of Mathematical Statistics. Indianapolis, Indiana, August 13, 2000.
- "Delineating the Possible Mechanisms Underlying Longitudinal Associations in Observational Studies on Aging." Joint Statistical Meetings, San Francisco, California, August 5, 2003.
- "Analytic Issues in Delineating Mechanisms in a Complex Pathway." Annual Meeting of the Gerontological Society of America, San Diego, California, November 22, 2003.
- Discussion, "Analyzing Trajectories of Physical and Cognitive Function Before or After a Sentinel Health Event Among Older Women." Annual Meeting of the Gerontological Society of America, San Diego, California, November 24, 2003.
- "On the Study of Hypothetical Health Constructs." Joint Statistical Meetings, Toronto, Ontario, August 9, 2004.

Presentations Contributed (continued)

“On Bridging the Theory and Measurement of Frailty.” 2<sup>nd</sup> International Conference on Frailty, Montreal, QC, March 17, 2006.

“Improved Latent Variable-based Outcomes for Subsequent Regression Analysis” Methods and Applications in Modern Statistics Workshop to Celebrate David Ruppert, Keystone Resort, Colorado, June 1, 2008.

“Multi-Stage Latent Class Regression with Accommodation for Differential Item Functioning.” Joint Statistical Meetings, Miami, FL, August 4, 2011.