

Curriculum vitae Carol Bigelow

January 2021

CONTACT INFORMATION

Department of Biostatistics and Epidemiology
University of Massachusetts Amherst
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EDUCATION

- 1978 **Skidmore College**
BA, Chemistry & Mathematics
Saratoga Springs, NY USA
- 1984 **University of Washington**
PhD, Biomathematics
Biomathematics Program
School of Public Health, Seattle, WA USA
Advisor: Donald C. Martin
Dissertation: *Randomization methods in the analysis of repeated measurements designs*

POSTDOCTORAL FELLOWSHIP

- 1984-1985 **University of North Carolina**
Postdoctoral Research Fellow
Department of Biostatistics
Gillings School of Public Health,
University of North Carolina
Chapel Hill, NC USA
Advisor: Clarence E. Davis

APPOINTMENTS

- 1998-present **Research Associate Professor of Biostatistics**
Department of Biostatistics and Epidemiology
University of Massachusetts, Amherst, MA USA

January 2021

- 1988-1998 **Research Assistant Professor of Biostatistics**
 Division of Biostatistics and Epidemiology
 University of Massachusetts, Amherst, MA USA
- 1985-1987 **Assistant Professor of Biostatistics**
 Division of Biometry and Medical Informatics
 Department of Community and Family Medicine
 Duke University, Durham, NC USA
- 1985-1987 **Adjunct Assistant Professor of Biostatistics**
 Department of Biostatistics
 Gillings School of Public Health,
 University of North Carolina
 Chapel Hill, NC USA

HONORS AND AWARDS

- 1978 **Phi Beta Kappa**
 Skidmore College, Saratoga Springs, NY USA
- 2012 **Outstanding Online Teacher Award**
 School of Public Health & Health Sciences, University of Massachusetts Amherst, MA USA
- 2014 **Delta Omega**
 Washington, DC USA
- 2017 **Distinguished Achievement Award**
 For Outstanding Service to the Section on Teaching of Statistics in the Health Sciences of
 the American Statistical Association, Alexandria, VA USA
- 2019 **College Outstanding Teacher Award - Nominee**
 School of Public Health & Health Sciences, University of Massachusetts Amherst, MA USA

RESEARCH SUPPORT

Current:

- 2020-2025 National Institutes of Health
 Type: R01
 Katherine Boyer (PI)
 Title: *Muscle fatigue, gait alterations and increased energy cost of walking in aging*
 Role: Co-Investigator
- 2019-2024 National Institutes of Health
 Type: R01
 Jane Kent (PI)
 Title: *Muscle fatigue and its impact on mobility functioning in aging*
 Role: Co-Investigator
- 2019-2022 National Science Foundation
 Lynnette Leidy Sievert (PI)
 Title: *Brown adipose tissue in relation to biometrically measured and subjectively reported hot flashes*
 Role: Co-Investigator

Completed:

- 2015-2018 National Institutes of Health
Type: R01
Katherine Reeves (PI)
Title: *Phthalate metabolites and breast cancer risk in the Women's Health Initiative*
Role: Co-Investigator
- 2014 American Statistical Association, Biometrics Section
Carol Bigelow (PI)
Title: *Teaching of Statistics in the Health Sciences Resources Portal – Best Practices*
- 2013-2014 American Statistical Association
Type: Member Initiative
Carol Bigelow (PI)
Title: *Teaching of Statistics in the Health Sciences Resources Portal – Development*
- 2013 Rays of Hope Center for Breast Cancer Research, Springfield, MA USA
Katherine Reeves (Co-PI)
Title: *Rays of Hope Breast Cancer Registry Description*
Role: Co-PI
- 2008-2013 National Institutes of Health
Type: R01
Rong Shao (PI)
Title: *Role of a novel angiogenic factor, YKL-40, in risk of breast cancer*
Role: Co-Investigator
- 2010-2012 National Institutes of Health
Type: R03
Susan Sturgeon (PI)
Title: *Urinary levels of melatonin and risk of breast cancer*
Role: Co-Investigator
- 2010-2011 Rays of Hope Foundation
Sallie Smith-Schneider (PI)
Title: *Relationship of BMI and insulin levels with expression of factors involved in fatty acid synthesis in women*
Role: Co-Investigator
- 2009-2010 Avon Foundation
D. Joseph Jerry (PI)
Title: *Transcriptional changes in breast tissue associated with parity and age*
Role: Co-Investigator
- 2007-2009 Premier Perspective to Baystate Health
Type: Contract
Peter Lindenauer (PI)
Title: *Effect of influenza on the association between inpatient statin use and mortality from pneumonia*
Role: Co-Investigator

Completed – continued

- 2007 University of Massachusetts/CBRP
Giovanna Crisi (Co-PI)
Title: *DMBT-1 expression, atypical hyperplasia and Gail model risk*
Role: Co-PI
- 2006-2007 Avon Foundation
D. Joseph Jerry (PI)
Title: *Effects of age and parity on gene expression signatures associated with p53-mediated prophylaxis*
Role: Co-Investigator
- 2005 Rays of Hope Foundation
Carol Bigelow (PI)
Title: *Atypia database management system*
- 2004-2007 Environmental Protection Agency (EPA)
R. Thomas Zoeller (PI)
Title: *Low dose effects of thyroid toxicant on neurodevelopment*
Role: Co-Investigator
- 2002-2006 Substance Abuse and Mental Health Services Administration (SAMHSA)
Maria Madison (PI)
Title: *Minority HIV/AIDS mental health services*
Role: Co-Investigator
- 2002-2004 Department of Defense
Susan Sturgeon (PI)
Title: *Intervention study of flaxseed in postmenopausal women: effects on hormonal biomarkers of breast cancer risk*
Role: Co-Investigator
- 1997-1998 Proctor and Gamble
Type: Contract
Stephen A. Gehlbach (PI)
Title: *Recognition of vertebral fracture in a clinical setting*
Role: Co-Investigator
- 1996-2000 National Institutes of Health
Type: R23
Jane G. Zapka (PI)
Title: *Cancer prevention and control education*
Role: Co-PI
- 1996-2000 National Institutes of Health
Type: R01
Dennis Fisher (PI)
Title: *Interventions to reduce HBV, HCV, and HIV in IDU's*
Role: Co-Investigator
- 1995-1998 National Science Foundation
Rodney K. Murphey (PI)
Title: *Development of selective connectivity in a simple nervous system*
Role: Co-Investigator

Completed – continued

- 1994 University of Massachusetts Faculty Research Grant
Carol Bigelow (PI)
Title: *Quantal analysis of neurotransmitter release*
- 1991-1993 Agency for Health Care Policy and Research (AHCPR)
Jane G. Zapka (PI)
Title: *Validating women's self-report of mammogram experience*
Role: Co-Investigator
- 1990-1994 National Institutes of Health
Type: R01
Benjamin F. Lewis (PI)
Title: *Four treatment models for AIDS prevention*
Role: Co-Investigator
- 1990-1992 State of California
Roger S. Luckmann (PI)
Title: *Comparison of rate of progression of Alzheimer's disease in subjects with early and late age of onset*
Role: Co-Investigator
- 1988-1991 National Institutes of Health
Type: U01
Russell V. Luepker (PI)
Title: *Child and adolescent trial for cardiovascular health (CATCH) - Phase I*
Role: Deputy Director, Coordinating Center

PUBLICATIONS

1. Stiefel D, Shaffer SM, **Bigelow C.** (1981) Dentists' availability to treat the disabled patient. *Special Care in Dentistry*, 1(6):244-9.
2. **Bigelow C.** (1984) Randomization methods in the analysis of repeated measurements designs. Doctoral dissertation. University of Washington, Seattle.
3. Harpole DH, **Bigelow C**, Young WG, Wolfe WG, Sabiston DC, Jr (1988) Alveolar cell carcinoma of the lung: A retrospective analysis of 205 patients. *Annals of Thoracic Surgery* 46:502-7.
4. Goldin A, **Bigelow C** and Veneman PLM (1990) Resource Recovery Incinerator Ash: Chemical and Physical Characteristics, Management and Regulatory Aspects. Environmental Institute, University of Massachusetts, Amherst, Massachusetts. 65 pp.
5. Goldin A, **Bigelow C** and Veneman PLM (1991) Resource Recovery Incinerator Ash: Characteristics, Management and Regulatory Aspects. Final Report. Environmental Institute, University of Massachusetts, Amherst, Massachusetts. 45 pp.
6. Johnson SH, **Bigelow C**, Lee KL, Pryor DB, Jones RH (1991) Prediction of death and myocardial infarction by radionuclide angiography in patients with suspected coronary artery disease. *American Journal of Cardiology* 67:919-26.

7. Jones RH, Johnson SH, **Bigelow C**, Pieper KS, Coleman RE, Cobb FR, Pryor DB, Lee KL. (1991) Exercise radionuclide angiography predicts cardiac death in patients with coronary artery disease. *Circulation* 84 (Supplement I), pages I1-I58.
8. Goldin A, **Bigelow C**, Veneman P. (1992) Chemical and physical properties of solid waste. *Chemosphere*. 24(3):270-80.
9. Hearn MD, **Bigelow C**, Nader PR, Stone EJ, Johnson CC, Parcel GS, Perry, Luepker RV (1992). Involving families in cardiovascular health promotion: CATCH feasibility study. *Journal of Health Education*. 23: 22-31.
10. Obarzanek E, Reed DB, **Bigelow C**, Glovsky E, Pobocik, Nicklas TA, Clesi A, Zive M, Trenkner L, Lakatos E. (1993) Fat and sodium content of school lunch foods: Calculated values and chemical analysis. *International Journal of Food Sciences and Nutrition*. 44:155-65.
11. Belcher JD, Ellison RC, Shepard EN, **Bigelow C**, Webber LS, Wilmore JH, Parcel GS, Zucker DM, Luepker RV (1993). Lipid and lipoprotein distributions in children by ethnic group, gender, and geographic location. *Preventive Medicine* 22: 143-53.
12. McCusker J, **Bigelow C**, Zapka, J, Zorn M, Stoddard AM, Lewis BF. (1994) HIV-1 antibody testing among drug users participating in AIDS education. *Patient Education and Counseling*, 24: 267-78.
13. McCusker J, **Bigelow C**, Stoddard AM, Zorn M. (1994) Human Immunodeficiency Virus Type 1 antibody status and changes in risk behavior among drug users. *Annals of Epidemiology*, 4:466-71.
14. Snyder MP, Obarzanek E, Montgomery DH, Feldman H, Nicklas T, Raizman D, Rupp J, **Bigelow C**, Lakatos E. (1994) Reducing the fat content of ground beef in a school foodservice setting. *Journal of the American Dietetic Association*, 94(10):1135-9.
15. Hindin R, McCusker J, Vickers-Lahti M, **Bigelow C**, Garfield F, Lewis B. (1994) Radioimmunoassay of hair for determination of cocaine, heroin, and marijuana exposure: comparison with self-report. *International Journal of the Addictions*, 29(6):771-89.
16. McCusker J, **Bigelow C**, Frost R, Hindin R, Vickers-Lahti M, Zorn M. (1994) The relationships of HIV status and HIV risky behavior with readiness for treatment. *Drug and Alcohol Dependence*, 34:129-38.
17. McCusker J, **Bigelow C**, Servigon C, Zorn M. (1994) Test-retest reliability of the Addiction Severity Index composite scores among clients in residential treatment. *American Journal on Addiction*, 3(3):254-62.
18. Zapka JG, Chasan-Taber L, **Bigelow C**, Hurley T. (1994) Methodological issues for surveys of multicultural older women about mammography. *Evaluation and the Health Professions*, 17(4):485-500.
19. McCusker J, **Bigelow C**, Luippold R, Zorn M. (1995) Outcomes of a 21-Day Drug Detoxification Program: Retention, Transfer to Further Treatment and HIV Risk Reduction. *American Journal of Drug and Alcohol Abuse*, 21(1):1-16.
20. McCusker J, Goldstein R, **Bigelow C**, Zorn M. (1995) Psychiatric status and HIV risk reduction among residential drug abuse treatment clients. *Addiction*, 90:1377-87.
21. Vickers-Lahti M, Garfield F, McCusker J, Hindin R, **Bigelow C**, Love C, Lewis B. (1995) The relationship between legal factors and attrition from a residential drug abuse treatment program. *Journal of Psychoactive Drugs*, 27(1):17-25.

22. McCusker J, Vickers-Lahti M, Stoddard AM, Hindin R, **Bigelow C**, Zorn M, Garfield F, Frost R, Love C, Lewis BF. (1995) The effectiveness of alternative planned durations of residential drug abuse treatment. *American Journal of Public Health*, 85(10):1426-29.
23. Morrison CR, McCusker J, Stoddard AM, **Bigelow C**. (1995) The validity of behavioral data reported by injection drug users on a clinical risk assessment. *International Journal of Addictions*, 30: 889-99.
24. Zapka JG, **Bigelow C**, Hurley T, Ford LD, Egelhofer J, Cloud WM, Sachsse E (1996) Mammography use among sociodemographically diverse women: The accuracy of self-report. *American Journal of Public Health* 86 No 7: 1016-21.
25. DeIrala J, **Bigelow C**, McCusker J, Hindin R, Zheng L. (1996) Reliability of self-reported behaviors in a residential drug treatment population. *American Journal of Epidemiology*, 143(7):725-32.
26. Cheng TL, Savageau JA, DeWitt TG, **Bigelow C**, Charney E. (1996) Expectations, goals, and perceived effectiveness of child health supervision: A study of mothers in pediatric practice. *Clinical Pediatrics*, 35(3): 129-37.
27. Goldstein RB, Powers SI, McCusker J, Mundt K, Lewis B, **Bigelow C**. (1996) Gender differences in manifestations of antisocial personality disorder among residential drug abuse clients. *Drug and Alcohol Dependence*, 41:35-45.
28. Cheng T, Savageau JA, **Bigelow C**, Charney E, Kumar S, DeWitt TG. (1996) Assessing mothers' attitudes about the physician's role in health promotion. *American Journal of Public Health*, 86(12): 1809-12.
29. McCusker J, **Bigelow C**, Frost R, Garfield F, Hindin R, Vickers-Lahti M, Lewis B. (1997) The effects of planned duration of residential drug abuse treatment on recovery and HIV risk behavior. *American Journal of Public Health* 87(10): 1637-44.
30. McCusker J, **Bigelow C**, Vickers-Lahti M, Spotts D, Garfield F, Frost R. (1997) Planned duration of residential drug abuse treatment: efficacy versus effectiveness. *Addiction* 92(11): 1467-78.
31. Kreindel S, Rosetti R, Goldberg R, Savageau J, Yarzebski J, Gore J, Russo A, **Bigelow C**. (1997) Health insurance coverage and outcome following acute myocardial infarction. A community wide perspective. *Archives of Internal Medicine* Apr 14; 157(7): 758-62.
32. Goldberg RJ, O'Donnell C, Yarzebski J, **Bigelow C**, Savageau J, Gore JM. (1998) Gender differences in symptom presentation associated with acute myocardial infarction: A population-based perspective. *American Heart Journal* 136 No. 2, 189-95.
33. Goldstein RB, Powers SI, McCusker J, Lewis BF, **Bigelow C**, Mundt KA (1998) Antisocial behavioral syndromes among residential drug treatment clients. *Drug and Alcohol Dependence*. 49 No 3, 210-6.
34. Schneider GA, **Bigelow C**, Amoroso PJ. (2000) Risk of reinjury among 1,214 elite army airborne soldiers. *Journal of Preventive Medicine*, 18 (3S): 156-63.
35. Striker J, Luippold RS, Nagy L, Liese B, **Bigelow C**, Mundt KA. (1999) Risk factors for psychological stress among international business travelers. *Occupational and Environmental Medicine* 56: 245-52.
36. Goldberg RJ, Samad NA, Yarzebski J, Gurwitz J, **Bigelow C**, Gore JM (1999). Temporal trends in cardiogenic shock complicating acute myocardial infarction. *New England Journal of Medicine*. April 15; 340 (15): 1162-8.

37. Gehlbach SH, **Bigelow C**, Heimisdottir M, May S, Walker M, and Kirkwood JR (2000). Recognition of vertebral fractures in a clinical setting. *Osteoporosis International* 11: 577-82.
38. Schneider GA, **Bigelow C**, Amoroso PJ (2000). Evaluating risk of re-injury among 1214 army airborne army airborne soldiers using a stratified survival model *American Journal of Preventive Medicine*. 18 (3 Suppl): 156-63.
39. Sulsky SI, Mundt KA, **Bigelow C**, Amoroso PJ (2000). Case-control study of discharge from the US army for disabling occupational knee injury: the role of gender, race/ethnicity, and age. *American Journal of Preventive Medicine* 18(3 Suppl): 103-11.
40. Demure B, Mundt KA, **Bigelow C**, Luippold RS, Ali D, Liese B (2000). Video display terminal workstation improvement program. II. Ergonomic intervention and reduction of musculoskeletal discomfort. *Journal of Occupational and Environmental Medicine* 42(8): 792-7.
41. Demure B, Luippold RS, **Bigelow C**, Ali D, Mundt KA, Liese B (2000). Video display terminal workstation improvement program. I. Baseline associations between musculoskeletal discomfort and ergonomic features of workstations. *Journal of Occupational and Environmental Medicine* 42(8): 783-91.
42. Torbey MT, Selim M, Knorr J, **Bigelow C**, Recht L (2000). Quantitative analysis of the loss of distinction between gray and white matter in comatose patients after cardiac arrest. *Stroke* 31(9): 2163-67.
43. Zapka JG, Luckmann R, Sulsky SI, Goins KV, **Bigelow C**, Mazor K, Quirk M. (2000) Cancer control knowledge, attitudes and perceived skills among medical students. *Journal of Cancer Education*. 15: 73-8.
44. Mundt KA, Dell LD, Austin RP, Luippold RS, Noess R, **Bigelow C** (2000) Historical cohort study of 10, 109 men in the North American vinyl chloride industry, 1942-72: update of mortality to 31 December 1995. *Occupational and Environmental Medicine* 57(11): 774-81.
45. Goldstein RB, **Bigelow C**, McCusker J, Lewis BF, Mundt KA, Powers SI (2001) Anti-social behavioral syndromes and return to drug use following residential relapse prevention/health education treatment. *American Journal of Drug and Alcohol Abuse* 27(3): 453-82.
46. Gehlbach SH, Fournier M, **Bigelow C** (2002) Recognition of osteoporosis by primary care physicians. *American Journal of Public Health* 92(2): 271-3.
47. Sulsky SI, Mundt KA, **Bigelow C**, Amoroso P (2002) Risk factors for occupational knee related disability among enlisted women in the US Army. *Occupational and Environmental Medicine* 59 (9): 601-7.
48. Blair D, **Bigelow C**, Sweet SJ (2003) Nutritional effects of delivered bicarbonate dose in maintenance hemodialysis patients. *Journal of Renal Nutrition* 13 (3): 205-11.
49. Dembe AE, Mastroberti MA, Fox SE, **Bigelow C**, Banks SM (2003) Inpatient hospital care for work related injuries and illnesses. *American Journal of Industrial Medicine* 44(4): 331-42.
50. May S, **Bigelow C** (2005) Modeling nonlinear dose-response relationships in epidemiologic studies: statistical approaches and practical challenges. *Dose Response* 3: 474-90.

51. Doubeni C, **Bigelow C**, Lessard D, Spencer F, Yarzebski J, Gore J, Gurwitz J, Goldberg R (2006) Trends and outcomes associated with angiotensin-converting enzyme inhibitors. *American Journal of Medicine*. Jul; 119 (7): 616 e9-16.
52. Doubeni C, Field TS, Buist DS, Korner EJ, **Bigelow C**, Lamerato L, Herrinton L, Quinn VP, Hart G, Hornbrook MC, Gurwitz JH, Wagner EH (2007) Racial differences in tumor stage and survival for colorectal cancer in an insured population. *Cancer* Feb 1; 109(3): 612-20.
53. Sturgeon SR, Heersink JL, Volpe SL, Bertone-Johnson ER, Puleo E, Stanczyk FZ, Sabelawski S, Wahala K, Kurzer MS, **Bigelow C** (2008) Effect of dietary flaxseed on serum levels of estrogens and androgens in postmenopausal women. *Nutrition and Cancer* 60 (5): 612-8.
54. Shao R, Hamel K, Petersen L, Cao QJ, Arenas RB, **Bigelow C**, Bentley B, Yan W (2009) YKL-40, a secreted glycoprotein, promotes tumor angiogenesis. *Oncogene* 28(50): 4456-68.
55. Sturgeon SR, Volpe SL, Puleo E, Bertone-Johnson ER, Heersink J, Sabelawski S, Wahala K, **Bigelow C**, Kurzer MS (2010) Effect of flaxseed consumption on urinary levels of estrogen metabolites in postmenopausal women. *Nutrition and Cancer* 62(2): 175-80.
56. Tao L, Roberts AL, Dunphy KA, **Bigelow C**, Yan H, Jerry DJ (2011) Repression of mammary stem/progenitor cells by p53 is mediated by notch and separable from apoptotic activity. *Stem Cells* 29(1): 119-27.
57. Clemson CM, Tzekov R, Krebs M, Checchi JM, **Bigelow C**, Kaushal S. (2011) Therapeutic potential of valproic acid for retinitis pigmentosa. *British Journal of Ophthalmology*. 2011 Jan; 95 (1): 89-93.
58. Chocano-Bedoya PO, Manson JE, Hankinson SE, Willet WC, Johnson SR, Chasan-Taber L, Ronnenberg AG, **Bigelow C**, Bertone-Johnson ER (2011) Dietary B vitamin intake and incident premenstrual syndrome. *American Journal of Clinical Nutrition* 93(5): 1080-6.
59. Shao R, Cao QJ, Arenas RB, **Bigelow C**, Bentley B, Yan W. (2011) Breast cancer expression of YKL-40 correlates with tumor grade, poor differentiation, and other cancer markers. *British Journal of Cancer* 105(8): 1203-9.
60. Sturgeon SR, Volpe SL, Puleo E, Bertone-Johnson ER, Heersink J, Sabelawski S, Wahala K, **Bigelow C**, Kurzer MS (2011) Dietary intervention of flaxseed: Effect on serum levels of IGF-1, IGF-BP3, and C-Peptide. *Nutrition and Cancer* 63(3): 376-380.
61. Shao R, Scully Jr SJ, Yan W, Bentley B, Mueller J, Brown C, **Bigelow C**, Schwartz LM (2012) The novel lupus antigen protein Acheron enhances the development of human breast cancer. *International Journal of Cancer* Feb; 130 (3): 554-554.
62. Sun X, Casbas-Hernandez P, **Bigelow C**, Makowski L, Jerry JD, Smith Schneider S, Troester MA (2012) Normal breast tissue of obese women is enriched for macrophage markers and macrophage-associated gene expression. *Breast Cancer Research and Treatment* 131(3): 1003-12.
63. Rothberg MB, **Bigelow C**, Pekow PS, Lindenauer PK (2012) Association between statins given in and mortality in pneumonia patients. *Journal of General Internal Medicine* 27(3): 280-6.
64. Radhakrishnan K, Jacelon CS, **Bigelow C**, Roche JP, Marquard JL, Bowles KH. (2013) Association of comorbidities with home care service utilization of patients with heart failure while receiving Telehealth. *Journal of Cardiovascular Nursing* 28(3): 216-27.

65. Chocano-Bedoya PO, Manson JE, Hankinson SE, Johnson SR, Chasan-Taber L, Ronnenberg AG, **Bigelow C**, Bertone-Johnson ER. (2013) Intake of selected minerals and risk of premenstrual syndrome. *American Journal of Epidemiology* 177(10): 1118-27.
66. Radhakrishnan K, Jacelon CS, **Bigelow C**, Roche JP, Marquard JL, Bowles KH. (2013) Use of a homecare electronic health record to find associations between patient characteristics and re-hospitalizations in patients with heart failure using telehealth. *Journal of Telemedicine and Telecare* 19(2): 107-12.
67. Palmer CJ, **Bigelow C**, Van Emmerik RE (2013) Defining solder equipment trade space: load effects on combat marksmanship and perception-action coupling. *Ergonomics* 56(11): 1708-21.
68. Diaz AA, Come CE, Mannino DM, Pinto-Plata V, Divo MJ, **Bigelow C**, Celli B, Washko GR (2014) Obstructive lung disease in Mexican-Americans and non-Hispanic Whites: an analysis of diagnosis and survival in the NHANES III Follow-up Study. *Chest* 145(2): 282-9.
69. Sturgeon SR, Doherty A, Reeves KW, **Bigelow C**, Stanczyk FZ, Ockene JK, Liu S, Manson JE, Neuhaus ML. (2014) Urinary levels of melatonin and risk of postmenopausal breast cancer: women's initiative observational cohort. *Cancer Epidemiol Biomarkers Prev.* 23(4): 629-37.
70. Schwartz LM, Brown C, McLaughlin K, Smith W, **Bigelow C** (2016) The myonuclear domain is not maintained in skeletal muscle during either atrophy or programmed cell death. *American Journal of Physiology – Cell Physiology.* 311(4): C607-C615.
71. Quintana-Zinn FA, Whitcomb BW, Ronnenberg AG, **Bigelow C**, Houghton SC, Bertone-Johnson ER. (2017) Premenstrual symptom patterns and behavioral risk factors in young women: A cross-sectional study. *Journal of Women's Health* (2002). 26(10): 1099-1105.
72. Houghton SC, Manson JE, Whitcomb BW, Hankinson SE, Troy LM, **Bigelow C**, Bertone-Johnson ER. (2017) Intake of dietary fat and fat subtypes and risk of premenstrual syndrome in the Nurses' Health Study II. *The British Journal of Nutrition.* 118(10): 849-857.
73. Houghton SC, Manson JE, Whitcomb BW, Hankinson SE, Troy LM, **Bigelow C**, Bertone-Johnson ER. (2018) Carbohydrate and fiber intake and the risk of premenstrual syndrome. *European Journal of Clinical Nutrition.* 72(6): 861-870.
74. Szkwarko D, Owiti P, Buziba N, **Bigelow C**, Eaton CB, Carter EJ. (2018) Implementation of an active, clinic-based child tuberculosis contact management strategy in western Kenya. *Public Health Action.* 8(2): 91-94.
75. Brearley AM, **Bigelow C**, Poisson LM, Grambow SC, Nowacki A. (2018) The TSHS Resources Portal: A source of real data for teaching statistics in the health sciences, *Technology Innovation in Statistics Education*, 11 (1). Retrieved from <https://escholarship.org/uc/item/8qh9b82c>.
76. Díaz Santana MV, Hankinson SE, **Bigelow C**, Sturgeon SR, Zoeller RT, Tinker L, Manson JAE, Calafat AM, Meliker JR, Reeves KW (2019) Urinary concentrations of phthalate biomarkers and weight change among postmenopausal women: a prospective cohort study. *Environmental Health.* 18(1):20.
77. Houghton SC, Manson JE, Whitcomb BW, Hankinson SE, Troy LM, **Bigelow C**, Bertone-Johnson ER (2019). Protein intake and the risk of premenstrual syndrome. *Public Health Nutrition.* 22(10): 1762-1769.

78. Reeves KW, Díaz Santana M, Manson JE, Hankinson SE, Zoeller RT, **Bigelow C**, Sturgeon SR, Spiegelman D, Tinker L, Luo J, Chen B, Meliker J, Bonner MR, Cote ML, Cheng TD, Calafat AM (2019). Urinary Phthalate Biomarker Concentrations and Postmenopausal Breast Cancer Risk. *Journal of the National Cancer Institute*. 111(10):1059-1067.
79. Reeves KW, Santana MD, Manson JE, Hankinson SE, Zoeller RT, **Bigelow C**, Hou L, Wactawski-Wende J, Liu S, Tinker L, Calafat AM (2019). Predictors of urinary phthalate biomarker concentrations in postmenopausal women. *Environmental Research*. 169:122-130.
80. Dunphy KA, Black AL, Roberts AL, Sharma A, Li Z, Suresh S, Browne EP, Arcaro KF, Ser-Dolansky J, **Bigelow C**, Troester MA, Schneider SS, Makari-Judson G, Crisi GM, Jerry DJ. (2020) Inter-Individual Variation in Response to Estrogen in Human Breast Explants. *Journal of Mammary Gland Biology and Neoplasia*. Mar; 25(1):51-68.
81. Sheel A, Shao R, Brown C, Johnson J, Hamilton A, Sun D, Oppenheimer J, Smith W, Visconti PE, Markstein M, **Bigelow C**, Schwartz LM. (2020) Acheron/Larp6 Is a Survival Protein That Protects Skeletal Muscle from Programmed Cell Death During Development. *Frontiers in Cell and Developmental Biology* 8: 622.
82. Tsuji J, Thomson T, Chan E, Brown CK, Oppenheimer J, **Bigelow C**, Dong X, Theurkauf WE, Weng Z, Schwartz LM (2020) High-resolution analysis of differential gene expression during skeletal muscle atrophy and programmed cell death. *Physiological Genomics* Oct1: 52(10): 492-511.

LETTERS

1. Luckmann R and **Bigelow C** (1990) Alzheimer's Disease: Age of Onset and Rate of Progression (letter to the Editor). *Journal of the American Gerontology Society* **38**: 723-724.
2. Fisher DG and **Bigelow C** (1998) RE: Invited Commentary: Le Mystere de Montreal *American Journal of Epidemiology* **148** No 7: 714-717.
3. Mundt KA, **Bigelow C**, van Wijngaarden E (2003) Apportionment of disease in individuals (letter) *Journal of Clinical Epidemiology* **56** No 3: 290-291.
4. Zoeller RT, **Bigelow C**, Rovet J (2004) Lack of a relation between human neonatal thyroxine and pediatric neurobehavioral disorders: neonatal total thyroxine is not a good proxy measure of maternal thyroid hormone insufficiency (letter to the Editor) *Thyroid* 14(3): 239-241.
5. **Bigelow C**, Schwartz LM, Zoeller RT (2008) Comments on Regulatory Determination on Perchlorate Docket EPA-HQ-OW-2008-0068. Letter to: US Environmental Protection Agency, Office of Water Docket (Mailcode: 2822T) 1200 Pennsylvania Avenue, NW, Washington DC 20460, November 10.
6. Tzekov R, **Bigelow C**, Clemson C, Checchi J, Krebs M, Kaushal S. (2011) Sandberg et al letter entitled "Lack of scientific rationale for use of valproic acid for retinitis pigmentosa. Authors' response. *British Journal of Ophthalmology* Aug 95 (8): 1177-9.

PRESENTATIONS

1. **Bigelow C**, Goldin A and Veneman PLM (1989) Monitoring waste-to-energy incineration: Can we learn more: Proceedings of Municipal Solid Waste Technology Conference. San Diego, CA, January 30-February 1.
2. **Bigelow C**, Garfield FB, McCusker J, Stoddard AM. (1992) A general method for measuring change in drug abuse behavior. College on Problems of Drug Behavior. College on Problems of Drug Dependence, 54th Annual Scientific Meeting, Keystone, Colorado, June 22-23.
3. McCusker J, **Bigelow C**, Frost R, Hindin R, Vickers-Lahti M. (1992) HIV status and risky behavior: Do they affect motivation for treatment? College of Drug Dependence, 54th Annual Scientific meeting, Keystone, Colorado, June 22-23.
4. Hindin R, **Bigelow C**, Lewis B, McCusker J, Vickers-Lahti M. (1992) Gender differences in sharing behavior among intravenous drug users (IVDUs). VIII International conference on AIDS/III STD World Congress, Amsterdam, The Netherlands, July 19-24.
5. McCusker J, Goldstein R, **Bigelow C**, Zorn M. (1993) HIV risk reduction and psychiatric diagnosis among drug users. IXth International Conference on AIDS, Berlin, June 7-11.
6. McCusker J, **Bigelow C**, Stoddard A, Vickers-Lahti M, Hindin R, Lewis B, Love C, Garfield F, Frost R. (1994) Randomized evaluation of effectiveness of residential drug treatment: preliminary results. Society of Behavioral Medicine, 15th Anniversary Meeting, Boston, April 13-16.
7. McCusker J, **Bigelow C**, Zorn M, Vickers-Lahti M, Garfield F, Love C. (1994) Relapse following residential drug abuse treatment on randomized controlled trial comparing 3- and 6-month treatment program. Annual Meeting, Society for Epidemiologic Research, Miami, FL, June 15-19.
8. Vickers-Lahti M, McCusker J, Garfield F, Hindin R, Love C, Lewis B, **Bigelow C**. (1994) The relationship of legal factors and early attrition from a residential drug abuse treatment program. Annual Meeting, Society for Epidemiologic Research, Miami, FL, June 15-19.
9. **Bigelow C**, Luippold R, Puleo E. (1997) Matching the analysis to the sampling design in surveillance data. Annual Meeting, American Public Health Association, Indianapolis, IN, November 10-14.
10. Luippold RS, Mundt KA, Demure B, Ali D, **Bigelow C**, Liese B. (1997) A VDT workstation improvement program: Ergonomic intervention and improvement in musculoskeletal pain. Annual Meeting, American Public Health Association, Indianapolis, IN, November 10-14.
11. Bigelow C, Mundt KA, Sulsky SI. (2001) Attributable Risk and Apportionment of Disease. Joint Annual Meeting, Society for Epidemiological Research, American College of Epidemiology, Toronto, Ontario, Canada, June.
12. Sturgeon SR, Heersink JL, Bertone-Johnson ER, Stanczyck F, Kurzer M, Volpe S, **Bigelow C**. (2005) Effect of Dietary Flaxseed on Serum Levels of Estrogens and Androgens in Postmenopausal Women. Department of Defense Era of Hope Meetings 2005: Philadelphia PA. June 8-11. # 61-P12.
13. **Bigelow C**, Pekow P. (2005) Distance Learning from the Trenches: Lessons Learned. Joint Statistical Meetings 2005: Minneapolis, MN. August 7-12. # 429.

14. Sulsky S, Mundt KA, Scofield R, **Bigelow C.** (2006) A critical evaluation of the use of epidemiological risk estimates as the basis of concentration-response functions. Society for Risk Analysis 2006 Annual Meeting: Baltimore MD, December 3-6. # T4-J.2
15. **Bigelow C.** (2007) “Basic Structure of a Scientific Report”. Seminar Presentation to University of Massachusetts School of Nursing. November 16.
16. Rothberg M, Pekow PS, **Bigelow C,** Lindenauer PK. (2008) Mortality benefits of statins for pneumonia when influenza is circulating. The Third European Influenza Conference. Vilamoura, Portugal. September 14-17. SS02-4.
17. **Bigelow, C.** (2008) “Population Studies of Risk and Disease Etiology: A Framework for Translational Research” Seminar Presentation at Baystate Health, Springfield, MA USA March 28.
18. Pekow, P and **Bigelow C.** (2008) Enhancing Statistical Literacy in the Medical Professions. Round table discussion. Joint Statistical Meetings, Denver, CO USA, August 3-7.
19. Zilberberg MD, **Bigelow C,** Ramsey A, Shorr AF. (2009) Epidemiology and outcomes of clostridium difficile infection among hospitalized patients with sepsis. Society for Healthcare Epidemiology of American Annual Scientific Meeting. San Diego, CA. March 19-22.
20. Nowacki A, **Bigelow C.** (2020) “Exploring and Utilizing the TSHS Resources Portal”. American Statistical Association Section on Teaching of Statistics in the Health Sciences. Webinar, July 29, 2020.

UNIVERSITY TEACHING

Classroom Instruction, graduate level, 3-credit:

1986, 1987	<i>Design of Etiological, Clinical, and Experimental Studies</i> Duke University Durham, NC USA
1987	<i>Statistical Issues in Study Design and Critique of the Medical Literature</i> Duke University Durham, NC USA
1988	<i>Categorical Data Methods in Public Health</i> University of Massachusetts Amherst, MA USA
1988-present (32 times)	<i>Introductory Biostatistics</i> University of Massachusetts Amherst, MA USA https://people.umass.edu/~biep540w/
1992	<i>Statistical Methods for Clinical Trials</i> University of Massachusetts Amherst, MA USA
1989 – present (32 times)	<i>Intermediate Biostatistics</i> University of Massachusetts Amherst, MA USA https://people.umass.edu/~biep640w/

Classroom Instruction, graduate level, 3-credit - continued:

2002 *Information Systems in Public Health (one of two co-instructors)*
University of Massachusetts
Amherst, MA USA

2005 *Practical Data Management & Statistical Computing*
University of Massachusetts
Amherst, MA USA

Online Instruction, graduate level, 3-credit:

2003-present
(18 times) *Introductory Biostatistics*
University of Massachusetts
Amherst, MA USA
<https://people.umass.edu/~biep540w/>

2009-2019
(11 times) *Practical Data Management & Applied Data Analysis with Stata*
University of Massachusetts
Amherst, MA USA
<https://people.umass.edu/~biostat690c/>

2014-present
(7 times) *Intermediate Biostatistics*
University of Massachusetts
Amherst, MA USA
<https://people.umass.edu/~biep640w/>

2020 *Practical Data Management & Applied Data Analysis with Stata and R*
University of Massachusetts
Amherst, MA USA

WORKSHOPS AND SHORT COURSES

1993-1995, 1997
(4 times) *Intensive Course in Occupational Epidemiology (One of 3 instructors, one week course)*
Akademie für Öffentliche Gesundheit e. v.
Münster, Germany

1998 *Computer Analysis of Occupational Epidemiological Data (Instructor, one week course)*
Harvard Instituted for International Development
Bratislava, Slovakia

1999-2009
(11 times) *Biostatistics for Epidemiology (Instructor, one week course)*
Akademie für Öffentliche Gesundheit e. v.
Münster, Germany

2001-2003
(3 times) *Principles for Basic Clinical Research Design (One of 3 instructors, 2-day course)*
Pharmaceutical Education & Research Institute
Fairvax, VA USA

- 1998 *Computer Analysis of Occupational Epidemiological Data (Instructor, one week course)*
Harvard Instituted for International Development
Bratislava, Slovakia
- 2003 *Practical Research Designs in Phase II, III, and IV Clinical Research*
(One of 3 instructors, 2-day course)
Pharmaceutical Education & Research Institute
Fairvax, VA USA

MENTORING AND ADVISING

Chair,

Master's Thesis Committee:

Gary Schneider (1996-97, Biostatistics)

Supervisor,

MPH Culminating Experience:

Eric Rubinstein: 1997-98
Adam Ragazzino: 1997-98
Michael Torbey: 1998-99
Marie Borbone: 1998-99
Maureen Connor: 1998-99
Foss Tighe: 1998-99
Yaqi Li: 1999-2000
Patricia Connell: 1999-2000
Robert Fitzpatrick: 1999-2000
Sharon Xu: 2000-01
Annie MacMillan: 2000-01

Supervisor,

MPH Culminating Experience - continued:

Ying Shan: 2001-02
Edward Weiss: 2002-03
Patrick McCabe: 2006-07
Xiufeng Wu: 2007-08
Christine David: 2009-10
Megan McCoy: 2009-10
Heather Alker: 2011-12
Michael Costa: 2011-12
Alyson Porter: 2011-12
Alejandro Diaz: 2012-13
Shirin Haddady: 2013-14
Padma Kandadi: 2013-14
Margaret McManus: 2015-16
Michael Taylor: 2015-16
Daria Szwarko: 2016-17
Jinghua Liu: 2016-17

***Member,
Dissertation Committee:***

Biostatistics

Gordon Fitzgerald: 1992-94

Susanne May: 1996-00

Wenjun Li: 2001-02

Epidemiology

Charles Morrison: 1996-98

Bonnie Silverman: 1996-98

Maria Heimisdottir: 1997-02

Sandra Sulsky: 1997-00

Allison Donta: 1997-00

Patricia Chocano-Bedoya: 2008-11

Serena Houghton: 2013-16

Mary Diaz: 2015-18

Nutrition

Kavita Radhakrishnan: 2010-11

Aldophino Addo: 2012-14

Radhika Natarajan: 2012-15

Joyce Faraj: 2013-17

Catherine Wickham: 2016-17

Nursing

Chao Yeh: 1996-97

Ruth Remington: 1996-98

Catherine Boni: 1999-2001

Sandra Founds: 2001-02

Patricia Bruckenthal: 2002-04

Michele DeGrazia: 2002-06

Deborah Rosenbloom-Brunton: 2007-09

Clare LaMontagne: 2009-14

Sherily Pereira: 2014-16

***Member,
Dissertation Committee - continued:***

Other

Andrei Alyokhin (Entomology): 1996-98

Eliza McArdle (Psychology): 2000-02

Mickey Spokas (Plant and Soil Sciences): 2004-05

Rebecca Kinney (Health Policy and Management): 2008-10

Christopher Palmer (Kinesiology): 2009-11

Member,***Master's Thesis Committee:*****Biostatistics**

James Campbell: 1996-99
 Musa Nsereko: 1996-97
 Scott Moseley: 1997-98
 Ruitao Zhang: 2003-04
 Peikang Yao: 2004-05

Epidemiology

Ann Marie Sorensen: 1996-99
 Varant Kupellian: 1997-98
 Rachel Williams: 1997-98
 Padmaja Patnaik: 1997-98
 Mary Alexander: 1997-98
 Joanna Heerskink: 2003-04
 Lauren Zichitella: 2003-04
 Anthony Nunes: 2005-06
 Lori Peterson: 2010-11
 Ashley Doherty: 2011-12
 Preethi Raj: 2011-12,
 Emily Konieczny: 2012-13
 Felicia Quintana-Zinn: 2014-15

Other

Emily Weber LeBrun (Clinical Research, UMass/Worcester): 2009-10
 Ujjwala Dandekar (Nutrition): 2008-09
 Jocelyn Faraj (Nutrition): 2010-11
 Kirsten Schlein (Nursing): 2010-11

Member,***MPH Culminating Experience:***

Nancy Cordella: 1996-97
 Connie Liese: 1996-97
 Mary Foley: 1997-98
 Gary Friday: 1998-99
 Samuel Zylstra: 1998-99
 Celia Hartigan: 1998-99
 Jere Ponder: 1998-99
 Daniel O'Donnell: 2001-02
 Youfu Li: 2003-04
 Chyke Doubeni: 2003-04
 Dominic Geffken: 2004-05
 Piper Lillard: 2007-08
 Palani Manickam: 2007-08
 Chunying Li: 2011-12
 Vinita Sharma: 2013-14
 Amir Shaik: 2014-15

UNIVERSITY SERVICE

(**Note:** My initial appointment at UMass did not include a University service commitment, but that changed in the 2000-2001 to a 5% academic year commitment).

Administrative:

- 1989-2012 **Co-Director, University of Massachusetts/Amherst School of Public Health and Health Sciences Blended MPH Program on the Worcester Campus** (formerly: Master's in Public Health -Epidemiology Program Worcester), Worcester, MA USA
- 2010-15 **Head, Division of Biostatistics and Epidemiology**, Department of Biostatistics and Epidemiology, Department of Public Health, University of Massachusetts, Amherst, MA USA
- 2015-18 **Head, Program in Biostatistics**, Department of Biostatistics and Epidemiology, University of Massachusetts, Amherst, MA USA
- 2018-19 **Co-Head, Program in Biostatistics**, Department of Biostatistics and Epidemiology, University of Massachusetts, Amherst, MA USA

Committee Chair:

- 2003-04 Admissions, Biostatistics Program
- 2007-08, 2010-11, 2017-18 Faculty Search – Assistant Professor of Biostatistics
- 2007-08, 2015-16, 2017-18 Faculty Search – Research Assistant Professor of Biostatistics
- 2014-15 Faculty Search - Associate/Full Professor of Biostatistics
- 2011-12 Faculty Search – Research Associate/Full Professor of Biostatistics
- 2013-14, Fall 2019 Department of Biostatistics & Epidemiology Personnel Committee (formerly: Division of Biostatistics and Epidemiology Personnel Committee)
- 2018-19 Faculty Search – Lecturer of Biostatistics & Epidemiology

Committee Member:

- 1999-2000, 2000-01 Distance Learning Task Force
- 2001-02, 2004-05 Distance Education Advisory Committee
- 2004-05, 2005-06, 2006-07 Department of Public Health Personnel Committee
- 2007-08, 2011-12 Division of Biostatistics & Epidemiology Personnel Committee

Committee Member - continued:

2005-06, 2006-07, 2007-08, 2011-12	Ad Hoc Committee on Online Learning
2007-08	School of Public Health & Health Sciences MPH Task Force Committee
2007-08, 2008-09, 2009-10	UMass Worcester ACS IRG Review Committee
2010-11	Faculty Search – Postdoctoral Fellow of Biostatistics
2010-11	Faculty Search – Full Professor of Public Health Intervention
2014-15, 2016-17	Faculty Search – Assistant Professor of Biostatistics
2010-11, 2011-12, 2012-13, 2013-14, 2014-15	School of Public Health & Health Sciences Executive Committee
2010-11, 2011-12, 2012-13	Collaborative Biomedical Research Program Board of Reviewers
2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, Fall 2019	School of Public Health & Health Sciences Undergraduate Major Advisory Committee (formerly: Undergraduate Advisory Board)
2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, Fall 2019	School of Public Health & Health Sciences PHP Program Advisory Committee (formerly: Online Degree Advisory Committee)
Spring 2016	School of Public Health & Health Sciences By-Laws Committee
2016-17, 2018-19	School of Public Health & Health Sciences Diversity Committee
2018-19	Department of Biostatistics & Epidemiology Graduate Affairs Committee
2018-19	School of Public Health & Health Sciences Climate Survey Committee

SERVICE TO PROFESSION

Service to Disciplinary Associations

2008-2009	Program Chair Elect, Program Chair Section on Teaching of Statistics in the Health Sciences American Statistical Association Alexandria, VA USA
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2011-2013 **Chair Elect, Chair, Past Chair**
 Section on Teaching of Statistics in the Health Sciences
 American Statistical Association
 Alexandria, VA USA

2016-18 **Elected Member, Council of Sections**
 American Statistical Association
 Alexandria, VA USA

2015-present **Co-Founder and Co-Director**
 Resources Portal
 Section on Teaching of Statistics in the Health Sciences
 American Statistical Association
 Alexandria, VA USA
<https://www.causeweb.org/tshs/>

Chair/Organizer/Moderator

2007 **Co-Chair, Roundtable**
 “Enhancing Statistical Literacy in the Medical Professions.” Joint Statistical Meetings,
 Denver, CO USA.

2008 **Co-Chair, Roundtable**
 “A New Statistics Student: The Translational Researcher”. Joint Statistical Meetings,
 Denver, CO USA.

2015 **Chair, Session #127**
 “Using Real Data for Teaching in the Health Sciences: Benefits, Challenges and
 Opportunities.” Joint Statistical Meetings, Seattle, WA USA

Ad Hoc Reviewer for Professional Journals

2008, 2013 *American Journal of Preventive Medicine*

2010 *Journal of Environmental Health Perspectives*

2015 *American Statistician*

2015, 2016, 2017,
 2018, 2019 *American Journal of Human Biology*

External Reviewer

2008 Application for Promotion to Research Associate Professor
 Department of Statistics
 University of Vermont
 Burlington, VT USA

- 2011 Application for Promotion to (non-tenure) Associate Professor
Department of Biostatistics and Informatics
Duke University Medical Center
Durham, NC USA
- 2014 Application for Promotion to (non-tenure) Associate Professor
School of Public Health, University of Pittsburgh
Pittsburgh, PA USA
- 2020 Application for Promotion to (non-tenure) Professor
Milken Institute School of Public Health
George Washington University
Washington, DC USA

PROFESSIONAL SOCIETY MEMBERSHIPS

American Statistical Association, 1980-present
Biometric Society, 1980-Present
American Association of Public Health, 1994-1995, 1997-1998
Society for Epidemiological Research, 2001