Kenneth W. Wachter

Curriculum Vitae, 15 April 2024

PERSONAL INFORMATION

U.S. Citizen, born 1947, New York; Married to Bernadette Bell, 1982.

Office: Social Sciences Building, Third Floor, Berkeley, CA 94720-2120

Electronic Mail: kenwachter [at] berkeley [dot] edu

Web Site: http://www.demog.berkeley.edu/[tilde]wachter

ORCID: 0000 0003 2802 2212; SCOPUS: 7004584924

EDUCATION

A.B., Harvard, 1968, magna cum laude, History and Literature.

M.A., Oxford, 1971, by special decree, Applied Mathematics.

Ph. D., Cambridge, 1974, Statistics (Trinity College).
Dissertation: "Foundations of the Asymptotic Theory of Random Matrix Spectra", supervised by D. G. Kendall and J. F. C. Kingman, 4 June 1974.

AWARDS

- Distinguished Service Award, Division of Social Sciences, U.C. Berkeley, 20 May 2008.
- Alumni "Letter in Life" Award, The Pingry School, 10 June 2007.
- Distinguished Teaching Award, Division of Social Sciences, U.C. Berkeley, 11 October 2002.
- Member of the National Academy of Sciences, elected 27 April 1999.
- Fellow of the American Association for the Advancement of Science, February 1997
- Fellow of the American Academy of Arts and Sciences, elected April 1996.
- Mindel Sheps Award from the Population Association of America for Outstanding Contributions to Mathematical Demography, April 1988.

- Fellow of the American Statistical Association, August 1986.
- Phi Beta Kappa, Harvard "Junior Eight", June 1967.
- Harvard Prize for History and Literature, June 1967.
- Presidential Scholar, named by President Johnson, June 1964.

CHRONOLOGY OF POSITIONS

- Distinguished Professor of Demography and Statistics, Emeritus,
 and Professor of the Graduate School,
 University of California, Berkeley.
- 1985–2014 Professor of Demography and Statistics, UC Berkeley
- 2009–2010 Miller Professor, Miller Institute for Basic Research in Science, U.C. Berkeley.
- 1997–2008 Chair, Department of Demography, U.C. Berkeley.
- 1979–1985 Associate Professor of Demography and Statistics, U.C. Berkeley.
- 1977–1979 Miller Fellow in Statistics, U.C. Berkeley.
- 1977–1978 Associate Professor of Statistics, Harvard University.
- 1974–1977 Assistant Professor of Statistics, Harvard University Head Tutor of Statistics 1975-1977; Resident Tutor, Eliot House Research Associate, Harvard Center for Population Studies.
- 1971-1974 Research Fellow, St. Catherine's College, Oxford, Applied Mathematics
- 1970-1971 Keasbey Memorial Scholar, Trinity College, Cambridge.
- 1968-1969 Associate Member of Technical Staff, Bell Telephone Laboratories,
- 1964-1968 Undergraduate, Harvard College, in History and Literature; senior thesis on the German poet Stefan George.
- 1958-1964 Student, The Pingry School, Elizabeth, New Jersey.

LANGUAGES

German, French, Latin.

PROFESSIONAL APPOINTMENTS

Committee on Publications, National Academy of Sciences, 2015–2023.

Editorial Board, Proceedings of the National Academy of Sciences, U.S.A., 2000–2006, 2010–.

Review Monitor, The National Academies, "Employment Data through the Equal Employment Opportunities Commission", 2022.

Member, Assessment Committee for Professorship in Demography, Southern Denmark University, 2022.

Review Monitor, The National Academies, "Measuring the 21st Century Science and Engineering Workforce Population: Evolving Needs", 2017.

U.S. National Member Organization, International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria, oversight committee, U.S. National Academy of Sciences, 2010–2013.

Review Monitor, National Research Council, "Realizing the Potential of the American Community Survey", 2014.

Cozzarelli Prize Committee, Proceedings of the National Academy of Sciences, 2011 and 2012.

Chair, Special Emphasis Panel on the Biodemography of Aging, National Institutes of Health, 2012.

Editorial Board, Spatial Demography 2011–2018.

Miller Professor, U.C. Berkeley, Miller Institute for Basic Research in Sciences, 2009–2010.

Review Monitor, National Research Council, "Allocating Federal Funds for State Programs for English Language Learners", 2010.

Assessor, Wirtschaftsuniversität Wien, Austria.

Member at Large, Section on Statistics, American Association for the Advancement of Science, 2009–2012.

Member, DBASSE Advisory Committee on Aging Research, Division of Behavioral and Social Sciences and Education, National Research Council, 2007–2012.

Chair, Committee on Population, National Research Council, 2003–2008.

Member, Committee on Data Priorities for Behavioral and Social Research on Aging, National Institute on Aging (evaluation of demographic data sets).

Content Advisor, Cherry Lake Publishing Company, Ann Arbor, Michigan, "Counting Our People", 2009-2010.

Visiting Professor, University of California Center in Washington, D.C., Spring 2007.

Professeur Invité, Ecole des Hautes Etudes en Science Sociales, Paris, May and June 2006.

Chair, Fachbeirat, Max Planck Institut für Demografische Forschung, Rostock, Germany, 1999-2004.

Member, Committee on Population, National Research Council, 1999-2008.

Advisor, Population and Reproductive Health Partnership, UC Berkeley–Ahmadu Bello University, Nigeria, 2006–2011.

Advisory Panel, The American People Series (Census 2000), Russell Sage Foundation and Population Reference Bureau, 1999-2004.

Board of Directors, Population Association of America, 1999-2002.

Chair, National Research Council Workshop on the Biodemography of Fertility and Family Formation Behavior, 2000-2003.

Chair, Finance Committee, Population Association of America, 2002.

John J. Carty Award Committee, National Academy of Sciences, 2002.

Institut d'Etudes Politiques de Paris, Enseignant Invité, 1986,1993,2001.

Court Appointed Scientific Experts Program, American Association for the Advancement of Science, 1999-2004.

Selection Panel, Los Angeles Times Science Book Awards, 2000-2002.

Board of Directors, Social Science Research Council, 1993-2000.

Presidential Search Committee, Social Science Research Council, 2000.

Research Associate, Freshpond Institute, Cambridge, Massachusetts, 1998-1999.

Board of Advisors, Mountain View Research, Los Altos, California, 1996-2001.

National Research Council Workshops on Biodemography, Co-Chair, 1995-1997.

Mathematical Population Studies, Co-editor, 1991–2000, Editorial Board 2003–2006.

Theoretical Population Biology, Associate Editor, 1993–2002.

University of California Press, Series Co-editor, 1985-1994.

National Institute on Aging, Chair, Site Visit Review of Program Project on Oldest-Old Mortality, April 1992.

Special Advisory Panel on 1990 Census Adjustment, U.S. Department of Commerce, 1989-1991.

National Research Council Committee on National Statistics, 1985-1991.

National Science Foundation Panel on Measurement Methods and Data Resources, 1981-1985.

Population Association of America, Sheps Award Committee, 1988-1992.

National Academy of Sciences Panel on Immigration Statistics, 1983-1985.

National Bureau for Economic Research, Associate, 1979-1992.

International Union for the Scientific Study of Population, Research Committee on Family and Life Cycle Demography, 1982-1985.

National Research Council Working Group on Statistics for the Report on the Ten-Year Outlook for Social Science, 1985-1988.

National Institute on Aging, Study Section on Forecasting, 1988.

National Institute on Aging, Chair, Site Visit Review of Program Project on Oldest-Old Mortality, March 1989.

UNIVERSITY SERVICE

Chair, Department of Demography, UC Berkeley 1997–2008.

Head Graduate Advisor, Department of Demography, 1982-1991; 1992-1993; 1994-1995; 2000; 2013–2018.

Head Graduate Advisor, Graduate Group in Sociology and Demography, 2013–2018.

Acting Chair, Department of Demography, Summer 2013.

Core Leader, Center for the Economics and Demography of Aging (CEDA), Core C: External Network Development, 2014—.

Committee on Prizes of the Academic Senate, 1988-1993, 1996-1999; Chair 1990-1993.

Chair, Migration Search Committee, International and Area Studies, 1995-1998.

Eugene A. and Joan S. Hammel Prize Selection Committee, Chair, 2010-.

Alan Sharlin Memorial Committee, 1987-1990; 1995-1998; Chair, 1990.

RESEARCH INTERESTS

Mathematical demography, demography of aging, biodemography, evolutionary theories of longevity, genetic marker analysis, computer simulation of demographic and social processes, spatial demography, data sciences, census adjustment, familial impacts of AIDS, mathematics of feedback systems, kinship forecasting, nonlinear dynamics, multivariate data analysis, sample surveys, historical social structure, statistics in endocrinology and astronomy.

CONSULTING

Expert Witness, U.S. Department of Justince, Civil Division, Lukens versus Clinton, No. 08-CV-243 (D.D.C.). 2009–2012.

Expert Witness, Jones-Day, Blaine et al. v. IBM, Index Number 2008-00012, New York State Supreme Court, Broome County, NY.

Consultant, Lapkoff and Gobalet Demographic Research, in connection with U.S. Department of Justice versus Donald Sterling et al., 2008–2009.

Consulting Statistician, U.S. Department of Justice, Civil Division, Thompson vs. HUD, District of Maryland, Civ. No. MJG95-3090, 2002-2004.

Consultant, Sideman and Bancroft, San Francisco, 2001-2005.

Expert Witness, City of New York *et al.* vs. Dept. of Commerce *et al.* 88 Civ. 3474, U.S. District Court, Eastern District of New York (1990 Census Adjustment), 1991-1992.

Expert Witness, Cuomo versus Baldrige, 80 Civ. 4550, U.S. District Court, Southern District of New York (1980 Census Adjustment), 1983-1984.

Statistical Consultant, Weinberg Consulting Group, Washington, D.C., meta-analysis, F.D.A. applications, exposures to chemical risks, 1988.

Statistical Consultant, Bell Communications Research, Morristown, N.J., multivariate analysis, c. 1984-1985.

Statistical Consultant, Bell Telephone Laboratories, Murray Hill, N.J., data analysis of shareowner distributions, productivity measurements, 1975-c.1984.

COMPLETED GRANTS

- "Alleles Affecting Longevity as a Genome-Wide Statistical Ensemble", Pilot Grant, Center for the Economics and Demography of Aging, University of California Berkeley, funded by the U.S. National Institute on Aging Grant P30 AG12839. (\$20,280) 19 September 2014 to 30 June 2016.
- "Genetic Markers in the Health and Retirement Study: Risk Aversion, Height, and Health", Pilot Grant, Center for the Economics and Demography of Aging, University of California Berkeley, funded by the U.S. National Institute on Aging Grant P30 AG12839. (\$13,050 + \$18,000 supplement) 30 March 2012 to 30 June 2014.
- "The Mathematical Demography of Biodemography" Project Leader: K. W. Wachter, Project 3 of Program Project (James Carey, Principal Investigator) National Institute on Aging from Program Grant 2P01 AG022500-06A1, Sponsored Projects Number 028331-003, subaward 08-002634-03. (\$264,913), 30 September 2009 to 31 August 2012.
- "The Mathematical Demography of Biodemography" Project Leader: K. W. Wachter, Project 3 of Program Project (James Carey, Principal Investigator) National Institute on Aging Project Grant AG-P01-008454 from Program Grant P01 AG022500 (\$360,781), 15 September 2003 to 30 June 2008.
- "Career Award Program in the Demography of Aging" Principal Investigator: K. W. Wachter National Institute on Aging Grant K12-AG00981-01 (\$983,923). 30 September 1999 to 31 August 2006.
- "Lifecourse Impacts of AIDS on Zimbabwe's Elderly" Investigator: K. W. Wachter, Supplement to P-30 Center Grant in the Economics and Demography of Aging, Ronald Lee, Principal Investigator, National Institute on Aging Grant AG (\$45,887) 1 June 2001 to 31 May 2002 (31 December 2002).
- "Heritability of Longevity in Historical Peasant Europe" Principal Investigator: E. A. Hammel Co-Principal Investigator: K. W. Wachter National Institute on Aging Grant R01AG16074-01 (\$72,910).
- "Grade of Membership Models in Aging Studies" Principal Investigator: K. W. Wachter National Institute on Aging Grant R01AG14023-01 (\$43,181) 10 January 1997 to 31 December 2000.
- "Projecting Kinship Resources for the Elderly" Principal Investigator: K. W. Wachter National Institute on Aging Grant R01AG09781-01 (\$420,387) 30 September 1992 to 31 August 1998.

- "Applications of Non-Linear Population Models in Biology and Demography" Principal Investigator: K. W. Wachter Alfred P. Sloan Foundation Grant 89-12-10 (\$85,815) 1 January to 30 June 1990.
- "Stochastic Variability and Human Population Regulation" Principal Investigator: K. W. Wachter National Institute of Child Health and Human Development Grant 1 R01 HD 22432-01 DBS (\$34,225) 1 May 1987 to 30 April 1989.
- "Applications of Non-Linear Population Models in Biology and Demography" Principal Investigators: K. W. Wachter and Wayne Getz Alfred P. Sloan Foundation Grant 86-6-18 (\$200,000) 1 July 1986 to 31 August 1988.
- "Estimating the Limits to Human Life Expectancy: A Workshop" Principal Investigator: K. W. Wachter; Conference Organizer: Sheila R. Johansson, National Institute of Aging Grant 1R13AG07684-01(\$23,406) 1 March 1988 to 28 February 1989.
- "Cross-Disciplinary Activities in Population Studies" Principal Investigator: Kenneth W. Wachter, Alfred P. Sloan Foundation Grant 85-6-21 (\$24,700) 1 Sept. 1985 to 28 Feb. 1987.
- "The Roots of Lotka's Equation" Principal Investigator: Kenneth W. Wachter, National Institute of Child Health and Human Development Grant 1R01HD17949-01 (\$25,620) 1 July 1983 to 30 June 1985.
- "Applied Probability Theory" Principal Investigator: Kenneth W. Wachter, National Science Foundation Grant MPS75-O9835 (\$5,572) 1975 to 1976.
- "Demographic Household and Community Microsimulation" Principal Investigator: Kenneth W. Wachter, National Science Foundation Grant SOC76-8OO14 (\$41,100) 1977 to 1979.
- "Computer Simulation of Demographic and Familial Change," Principal Investigator: P. Laslett; Associate Investigator K.W. Wachter, British Social Science Research Council, (1000 pounds) March 1972 to September 1973.
- "Computer Simulation of Demographic and Social Processes: SOC-SIM" Principal Investigator: E. Hammel; Associate Investigator K.W. Wachter, National Science Foundation Grant GS38293, 1973-75 and 1976-79.

BOOKS

- 2014 Essential Demographic Methods by Kenneth W. Wachter, Harvard University Press, Cambridge, MA. ISBN 978-0-674-04557-6, June 2014.
- 2013 A mutation-selection model with recombination for general genotypes, by Steven N. Evans, David Steinsaltz and Kenneth W. Wachter, Memoir of the American Mathematical Society 222, Providence, RI, ISBN 978-0-8218-7569-8, March 2013. www.ams.org/journals/memo/0000-000/S0065-9266-2012-00662-9
- 1990 Height, Health, and History: Nutritional Status in the United Kingdom, 1750-1980
 by Roderick Floud, Kenneth Wachter, and Annabel Gregory,
 Cambridge University Press, Cambridge, England (paperback 2006).
 ISBN 0-521-30314-1, October 1990.
- 1978 Statistical Studies of Historical Social Structure by Kenneth W. Wachter, with E.A. Hammel and Peter Laslett, Academic Press, New York, ISBN 0-12-729150-4, 1978.

EDITED VOLUMES

- 2013 Mathematical Demography: Selected Papers, Second, revised edition, edited by Kenneth W. Wachter and Hervé Le Bras, by David Smith and Nathan Keyfitz, Springer Verlag, Berlin, ISBN 978-3-642-35857-9, August 2013.
- 2008 Biosocial Surveys
 edited by Maxine Weinstein, James Vaupel, and Kenneth Wachter,
 National Academies Press, Washington, D.C.,
 ISBN 978-0309108676, January 2008.
- 2003 Offspring: Human Fertility Behavior in Biodemographic Perspective, edited by Kenneth Wachter and Rodolfo A. Bulatao, National Research Council, National Academies Press, Washington, D.C., ISBN 978-0309087186, April 2003.
- 1997 Between Zeus and the Salmon: The Biodemography of Longevity, edited by Kenneth W. Wachter and Caleb Finch National Research Council, National Academy Press, Washington, D.C., ISBN 978-0309057875, November 1997.
- 1990 The Future of Meta-Analysis
 edited by K. W. Wachter and Miron Straf
 Russell Sage Foundation, New York City, N.Y.,
 ISBN 978-0871548900, May 1990.
- 1987 Family Demography: Methods and their Applications edited by John Bongaarts, Thomas Burch, and K. W. Wachter, Clarendon Press, Oxford.
 ISBN 978-0198295013, September 1987.

ARTICLES

- 2021b "Reply to Dushoff *et al.* and Pifarré i Arolas *et al.*: age prioritization for COVID-19 vaccination does save lives and years of life", by Joshua R. Goldstein, Thomas Cassidy, and Kenneth W. Wachter. *PNAS* 118 (29) 1–2, e2107654118, doi.org/10.1073/pnas.2107654118, 6 July 2021.
- 2021a "Vaccinating the oldest-old against COVID-19 saves both the most lives and the most years of life", by Joshua R. Goldstein, Thomas Cassidy, and Kenneth W. Wachter.
 PNAS 118(11) e2026322118, doi.org/10.1073/pnas.2026322118, online 25 February 2021, issue 16 March 2021.
- 2020a "On negative heritability and negative estimates of heritability", by David Steinsaltz, Andrew Dahl, and Kenneth W. Wachter, *Genetics*, 215(1) 343–357, doi.org/10.1534/genetics.120.303161, June 2020.
- 2018d "Hypothetical Errors and Plateaus: A Response to Newman", by Kenneth W. Wachter, *PLOS-Biology* 16(12):e3000076; doi.org/10.1371/journal.pbio.3000076; PMCID: PMC6301559; 20 December 2018.
- 2018c "Response to Comment on 'The Plateau of Mortality: Demography of Longevity Pioneers' by Elisabetta Barbi, Francesco Lagona, Marco Marsili, James W. Vaupel, and Kenneth W. Wachter, *Science* 360 (6412):298; doi.org/10.1126/science.aav3229; 19 October 2018.
- 2018b "The Plateau of Mortality: Demography of Longevity Pioneers" by Elisabetta Barbi, Francesco Lagona, Marco Marsili, James W. Vaupel, and Kenneth W. Wachter, *Science* 360 (6396):1459–1461; doi.org/10.1126/science.aat3119; PMCID: PMC6457902; 29 June 2018.
- 2018a "Statistical properties of simple random-effects models for genetic heritability"
 by David R. Steinsaltz, Andrew W. Dahl, and Kenneth W. Wachter, Electronic Journal of Statistics 12(1):321–358; PubMed PMID: 30057658; PubMed Central PMCID: PMC6063091; doi.org/10.1214/17-EJS138; 1 January 2018.
- 2014c "Evolutionary Shaping of Demographic Schedules", by Kenneth W. Wachter, David Steinsaltz, and Stephen H. Evans (2014)

 PNAS 111 (s3):10846–10853; PubMed PMID: 25024186; PubMed Central PMCID: PMC4113925; doi.org/10.1073/pnas.1400841111; 22 July 2014.

- 2014b "Population Heterogeneity in the Spotlight of Biodemography", by Kenneth W. Wachter,

 Population in the Human Sciences: Concepts, Models, Evidence edited by Philip Kreager, Bruce Winney, Stanley Ulijaszek, and Christian Capelli, Oxford University Press;

 doi.org/10.1093/acprof:oso/9780199688203.003.0005; 21 May 2015.
- 2014a "Alleles, Mortality Rates, and the Evolutionary Theory of Senescence", by Kenneth W. Wachter, in *Sociality, Hierarchy, Health: Comparative Biodemography* edited by Maxine Weinstein and Meredith A. Lane, National Academies Press, Washington, DC.
- 2013 "The age-specific force of natural selection and biodemographic walls of death", by Kenneth W. Wachter, Steven N. Evans, and David Steinsaltz, PNAS, 110 (25): 10141–10146; PubMed PMID: 23657010; PubMed Central PMCID: PMC3690893; doi 10.1073/pnas.1306656110; 8 May 2013.
- 2012 "Biodemographic determinants of lifespan" (Special Issue Editorial), by James R. Carey, Shripad Tuljapurkar, and Kenneth W. Wachter, Experimental Gerontology, 47(10):755–758; online at www.sciencedirect.com/science/article/pii/S0531556512002288 doi.org/10.1016/j.exger.2012.08.003; 1 October 2012.
- 2010 "Vital Rates and the Action of Mutation Accumulation", by Kenneth W. Wachter, David R. Steinsaltz, and Steven N. Evans. Journal of Population Ageing 2(1): 5–22; online at www.springer.com/article/10.1007/s12062-009-9015-3; PubMed PMID: 21258638; PubMed Central PMCID: PMC3018262; 1 January 2010.
- 2008d "Biodemography Comes of Age", by Kenneth W. Wachter, Demographic Research 19(40): 1501–1512; PMCID: PMC2714645; PMID 19633726, online at www.demographic-research.org/Volumes/Vol19/40; i doi 10.4054/DemRes.2008.19.40; 26 August 2008.
- 2008c "Age Structure Changes and Extraordinary Life Span in Wild Medfly Populations", by James R. Carey, Nikos T. Papadopoulous, Hans-Georg Müller, Byron I. Katsoyannos, Nikos A. Kouloussis, Jane-Ling Wang, Kenneth Wachter, Wei Yu, and Pablo Liedo,

 **Aging Cell 7: 426–437;*

 online at onlinelibrary.wiley.com/doi/10.1111/j.1474-9726.2008.00390.x/full;

 PubMed PMID: 18363903; PubMed Central PMCID: PMC2398686;

 doi: 10.1111/j.1474-9726.2008.00390; 1 June 2008.

- 2008b "The Future of Census Coverage Surveys" by Kenneth W. Wachter, in *Probability and Statistics: Essays in Honor of David A. Freedman*, Volume 2, edited by Deborah Nolan and Terence Speed, Institute of Mathematical Statistics, Beachwood, Ohio, pages 234–245.
- 2008a "Introduction" to Biosocial Surveys, by James Vaupel, Kenneth Wachter, and Maxine Weinstein, in Biosocial Surveys, edited by M. Weinstein, J. W. Vaupel, and K.W. Wachter, National Academy Press, Washington, DC; pages 1–11; doi.org/10.17226/11939; 6 January 2008.
- 2007 "Methods for Census 2000 and Statistical Adjustment", by David A. Freedman and Kenneth W. Wachter, in *The Sage Handbook of Methodology* edited by William Outhwaite and Stephen Turner, Sage Publications, London, chapter 13, pages 232–245.
- 2006b "Relationships between Period and Cohort Life Expectancy: Gaps and Lags" by Joshua R. Goldstein and Kenneth W. Wachter, Population Studies 60 (3): 257–269; PubMed PMID: 17060053; November 2006.
- 2006a "Understanding Mortality Rate Deceleration and Heterogeneity" by David R. Steinsaltz and Kenneth W. Wachter, *Mathematical Population Studies* 13(1): 19–37; doi.org/10.1080/08898480500452117; 31 December 2006.
- 2005c "Tempo and its Tribulations"

 **Demographic Research, 13(9): 201–222;

 online at www.demographic-research.org/volumes/vol13/9 11 November 2005.
- 2005b "Spatial Demography" by Kenneth W. Wachter, Proceedings of the National Academy of Sciences, USA, 102(43):15299–15300; online at www.pnas.org/content/102/43/15299; doi.org/10.1073/pnas.0508155102; 25 October 2005.
- 2005a "A generalized model of mutation-selection balance with applications to aging" by David R. Steinsaltz, Steven N. Evans, and Kenneth W. Wachter, Advances in Applied Mathematics 35(1), 16–33; doi.org/10.1016/j.aam.2004.09.003; 1 July 2005.
- 2003f "The Past, Present, and Future of Demography and the Role of the Max-Planck-Institute for Demographic Research" by Kenneth W. Wachter *Demographic Research* 9(4): 1–12; online at www.demographic-research.org/volumes/vol9/4/; doi.org/10.4054/DemRes.2003.9.4; 8 October 2003.

- 2003e "Stochastic Population Theory" in *Encyclopedia of Population*, edited by Paul Demeny and Geoffrey McNicoll, Macmillan Reference USA, New York, Volume 2, 921-924.
- 2003d "Hazard Curves and Life Span Prospects" in *Life Span: Evolutionary, Ecological, and Demographic Perspectives* edited by James R. Carey and Shripad Tuljapurkar, *Population and Development Review*, (supplement) 29: 270-291; PubMed PMID: 19337587; PubMed Central PMCID: PMC2662736.
- 2003c "On the Likelihood of Improving the Accuracy of the Census Through Statistical Adjustment" by David A. Freedman and Kenneth W. Wachter, in *Science and Statistics: A Festschrift for Terry Speed* edited by Darlene R. Goldstein and Sandrine Dudoit, IMS Lecture Notes, Monograph Series, Volume 40, Institute of Mathematical Statistics, Beachwood, Ohio, pages 197-230.
- 2003b "Biodemography, Fertility, and Family Formation" in Offspring: Human Fertility Behavior in Biodemographic Perspective, edited by Kenneth Wachter and Rodolfo A. Bulatao, National Research Council, National Academy Press, Washington, D.C.
- 2003a "Parental Bereavement: Heterogeneous Impacts of AIDS in Thailand" by Kenneth W. Wachter, John E. Knodel, and Mark VanLandingham *Journal of Econometrics* 112:193–206, January 2003.
- 2002 "AIDS and the Elderly of Thailand: Projecting Familial Impacts" by Kenneth W. Wachter, John E. Knodel, and Mark VanLandingham, *Demography*, 39 (1):25–41.
- 2001c "Census Adjustment: Statistical Promise or Illusion?" by David Freedman and Kenneth W. Wachter, *Society* 39: 26–33.
- 2001b "A Probability Model for Census Adjustment", by David A. Freedman, Philip Stark, and Kenneth W. Wachter Mathematical Population Studies, 9: 165–180.
- 2001a "Biosocial Opportunities for Surveys" in Cells and Surveys: Should Biological Measures Be Included in Social Science Research? edited by Caleb E. Finch, James W. Vaupel, and Kevin Kinsella National Academies Press, Washington, D.C., pages 329-336.

- 2000b "Measuring Local Heterogeneity with 1990 Census Data" by Kenneth W. Wachter and David A. Freedman Demographic Research 3(10):1 32, 7 November 2000, online at www.demographic-research.org/volumes/vol3/10/.
- 2000a "The Fifth Cell: Correlation Bias in U.S. Census Adjustment" by Kenneth W. Wachter and David A. Freedman, *Evaluation Review*. 24:191–212, April 2000.
- 1999c "Grade of Membership Models in Low Dimensions: Geometry and Robustness" *Statistical Papers*, 40:439–458, October 1999.
- 1999b "Statistical Controversies in Census 2000" by Lawrence D. Brown, Morris L. Eaton, David A. Freedman, Stephen P. Klein, Richard A. Olshen, Kenneth W. Wachter, Martin T. Wells, and Donald Ylvisaker, *Jurimetrics*, 39: 347-375.
- 1999a "Evolutionary Demographic Models for Mortality Plateaus", by Kenneth W. Wachter *Proceedings of the National Academy of Sciences, USA* 96(18): 10544-10547; online at www.pnas.org/content/96/18/10544; doi.org/10.1073/pnas.96.18.10544; 31 August 1999.
- 1997c "Kinship Resources for the Elderly" by Kenneth W. Wachter, *Philosophical Transactions of the Royal Society of London B* 352: 1811-1817; doi.org/10.1098/rstb.1997.0166; 29 December 1997.
- 1997b "Testing the Validity of Kinship Microsimulation" by Kenneth W. Wachter, Debra Blackwell, and Eugene A. Hammel Journal of Mathematical and Computer Modeling. 26: 89-104.
- 1997a "Between Zeus and the Salmon: Introduction", in Between Zeus and the Salmon: The Biodemography of Longevity edited by Kenneth W. Wachter and Caleb Finch National Academies Press, Washington, D.C. October 1997, pages 1-16.
- 1996c "Evaluating the Slavonian Census of 1698: Part II: A Microsimulation Test and Extension of the Evidence" by E.A. Hammel and K. W. Wachter European Journal of Population 12: 295-326.
- 1996b "Planning for the Census in the Year 2000" by David A. Freedman and Kenneth W. Wachter Evaluation Review 20: 355-377.

- 1996a "Evaluating the Slavonian Census of 1698: Part I: Structure and Meaning" by E.A. Hammel and K. W. Wachter
 - European Journal of Population 12: 145-166.
- 1994e "Heterogeneity and census adjustment for the inter-censal base", by David A. Freedman and K. W. Wachter *Statistical Science*, 9: 476-485,527-537.
- 1994d "The Cohort Feedback Model with Symmetric Net Maternity" Mathematical Population Studies 5: 25-44.
- "Nonlinear Feedback Dynamics in Fisheries:
 Analysis of the Deriso-Schnute Model"
 by Shripad Tuljapurkar, Carl Boe, and Kenneth W. Wachter
 Canadian Journal of Fisheries and Aquatic Sciences, 51: 1462-1473.
- 1994b "Analysis of the Temporal Coincidence of Hormonal Pulses" by George R. Merrriam and Kenneth W. Wachter *Pulsatility in Neuroendocrine Systems*, edited by Jon E. Levine, Academic Press, San Diego, pages 326-335.
- 1994a "Adjusting the census of 1990: loss functions", by David A Freedman, K.W. Wachter, R. Cutler, and S. Klein *Evaluation Review*, 18: 243-280.
- 1993e "The Census Adjustment Trial: An Exchange" Jurimetrics, 34: 107-115, November 1993.
- 1993d "Ignoring Non-Ignorable Effects"

 Journal of the American Statistical Association, 88: 1161-1163, September 1993.
- 1993c "Adjusting the census of 1990: the smoothing model" by David A. Freedman, David, K. W. Wachter, D. Coster, R. Cutler, and S. Klein *Evaluation Review*, 17: 371-443, August 1993.

- 1993b "Further thoughts on the nutritional status of the British population" by Roderick Floud, Kenneth W. Wachter, and Annabel Gregory *The Economic History Review*, 46: 367-368, May 1993.
- "Measuring Historical Heights Short-Cuts or the Long Way Round: A Reply to Komlos" by Roderick Floud, Kenneth W. Wachter, and Annabel Gregory *The Economic History Review*, 46: 145-154, February 1993.
- "Variabilité aleatoire des phénomènes démographiques : enseignements des séries paroissiales de Wrigley et Schofield"

 ("Levels of Demographic Randomness : Evidence from the Wrigley and Schofield Parish Series")

 in Modèles de la démographie historique, edited by Alain Blum, Noël Bonneuil, and Didier Blanchet, Congrès et Colloques 11, Institut National d'Études Démographiques, Presses Universitaires de France, Paris.
 - 1992 "The Contribution of Galaxy Clusters to the Soft X-Ray Background" by A. Blanchard, K. W. Wachter, A.E. Evrard, and J. Silk *The Astrophysical Journal*, 391: 1-15, May 1992.
 - "Comment on 'Total Error in Post-Enumeration Survey Estimates of Population'
 by Kenneth W. Wachter and Terence P. Speed
 Journal of the American Statistical Association, 86: 858-861, November 1991.
 - 1991 "Pre-procreative Ages in Population Stability and Cyclicity" Mathematical Population Studies, 3: 79-104.
 - 1991 "Reflections on 'Time Left Us' "
 in Resources, Environment, and Population:
 Present Knowledge, Future Options, edited by Kingsley Davis and Mikhail Bernstam, Oxford University Press and the Population Council, New York, pages 76-78.
 - 1991 "Rapid population change and kinship: the effects of unstable demographic changes on Chinese kinship networks, 1750-2250," by E. A. Hammel, C. Mason, K.W. Wachter, F. Wang, and H. Yang,

- Consequences of Rapid Population Growth in Developing Countries, edited by G. Tapinos, D. Blanchet, and D. Horlacher, Taylor and Francis, New York, pages 243-271. (French translation published by the Institut National d'Etudes Démographiques, Paris.)
- 1991 "Synchronization of Hormonal Time Series: Analytical Approaches" by G. R. Merriam, K. W. Wachter, N. Ma, and L. Liu, *Acta Paediatrica Scandinavica (Supplement)* 372: 63-68.
- 1991 "Elusive Cycles : Are There Dynamically Possible Lee-Easterlin Models for U.S. Births?"

 Population Studies, 45: 109-135.
- 1990 "Dust Obscuration by an Evolving Galaxy Population" by Joan Najita, Joseph Silk, and Kenneth W. Wachter, *The Astrophysical Journal* 348: 383-397.
- "Methods for Assessing the Linkage Between Pulsatile Hormone Profiles",
 by G. R. Merriam, N. Ma, L. Liu, K.W. Wachter, and E. Libre,
 Acta Paediatrica Scandinavica (Supplement) 349: 167-172.
- 1989 "Statistical Adjustment: Comment on H. Wainer's 'Eelworms, Bullet Holes, and Geraldine Ferraro'" Journal of Education Statistics 14: 183-186.
- 1989 "U.S. Births and Limit Cycle Models" by K. W. Wachter and Ronald D. Lee *Demography*, 26: 99-115.
- 1988 "Age Group Growth Rates and Population Momentum" *Population Studies*, 42: 487-494.
- 1988 "Disturbed by Meta-Analysis?"

 Science 241: 1407-1408 (16 September 1988).

- 1988 "Soft X-Ray Variability and the Covering Fraction of Active Galactic Nuclei" by K. W. Wachter, M.A. Strauss, and A. Filippenko, *Astrophysical Journal* 330: 91-104.
- "Cohort Parity Analysis: Statistical Estimates of the Extent of Fertility Control" by Paul David, Thomas Mroz, Warren Sanderson, Kenneth W. Wachter, and David Weir, *Demography*, 25: 163-188 (May 1988).
- 1987 "Statistics in Historical Studies"

 Encyclopedia of Statistical Sciences, Volume 8,
 edited by S. Kotz and N. Johnson, John Wiley and Sons, New York,
 pages 732-738.
- "Microsimulation of the Household Cycle",
 Family Demography,
 edited by J. Bongaarts, T. Burch, and K.W. Wachter, Clarendon Press,
 Oxford, pages 215-227.
- 1986b "Ergodicity and Inverse Projection" Population Studies, 40: 275-287.
- 1986a "The Genesis of Experimental History" by K. W. Wachter and E. A. Hammel, in *The World We Have Gained*, edited by Richard M. Smith and Lloyd Bonfield, Basil Blackwell, Oxford.
- "The Imputation and Treatment of Missing Data"

 Immigration Statistics, A Story of Neglect,
 edited by Daniel Levine, Kenneth Hill, and Robert Warren, National
 Academy Press, Washington, D.C. pages 251-254.
- 1985 "Predicting Demographic Contours of an Interstellar Future"

 Interstellar Migration and the Human Experience,
 edited by Ben R. Finney and Eric Jones, University of California Press,
 Berkeley, pages 120-133.
- 1985 "Are Productive People to be Found?: Robust Analysis of Sparse Two-Way Tables",

- by K. W. Wachter and Richard A. Becker, Journal of the American Statistical Association 80: 266-276.
- 1984 "A Demographic Analogy for Shareowner Accounts" by Paul A. Tukey and K. W. Wachter,

 Journal of the American Statistical Association 79: 525-530.
- "Measurement and Analysis of Episodic Hormone Secretion" by George R. Merriam, M.D., and K. W. Wachter, *Computers in Endocrinology, edited by D.A. Rodbard and G. Forti, Raven Press, N.Y., pages 325-346.
- 1984 "Lotka's Roots under Rescalings"

 Proceedings of the National Academy of Sciences
 81 (11) 3600-3604, 1 June 1984, doi:10.1073/pnas.81.11.3600.
- "Haar Distributions"
 Encyclopedia of Statistical Sciences,
 edited by S. Kotz and N. Johnson, John Wiley and Sons, New York, 3: 559-562.
- "Secular Changes in American and British Stature and Nutrition" by Robert W. Fogel, Stanley L. Engerman, Roderick Floud, Gerald Friedman, Robert A. Margo, Richard H. Steckel, T. James Trussell, Georgia Villaflor, and Kenneth W. Wachter,

 Journal of Interdisciplinary History 14 (2): 445–481.
- 1982 "Algorithms for the Study of Episodic Hormone Secretion" by George R. Merriam, M.D. and K. W. Wachter, *American Journal of Physiology*, E310-E318.
- 1982 "Poverty and Physical Stature" by Roderick Floud and K. W. Wachter, *Social Science History*, 6: 422-452.
- 1982 "Estimating Historical Heights" by K. W. Wachter and James Trussell,

 Journal of the American Statistical Association 77: 279-303, invited discussion paper of the applications section, with comments and rejoinder.
- 1982 "Applied Heuristics" Gegenbild, Reihenfolge, Sprung by H. Stern, Ottendorfer Series 15, Peter Lang, Frankfurt-am-Main.

- "The Kin of the Aged in A.D. 2000"
 by E.A. Hammel, K. W. Wachter, and C.K. McDaniel,
 Aging, edited by S. Kiesler, J. Morgan, and V. Oppenheimer, Academic Press, New York, pages 11-40.
- 1981 "Graphical Estimation of Military Heights" Historical Methods 14: 31-42.
- 1980 "The Limiting Empirical Measure of Multiple Discriminant Ratios" *Annals of Statistics* 8: 937-957.
- 1980 "Ancestors at the Norman Conquest"

 Genealogical Demography,

 edited by B. Dyke and W. T. Morrill, Academic Press, N.Y., pages 85-93.
- "Vice in the Villefranchian: A Microsimulation Analysis of the Demographic Effects of Incest Prohibitions" by E.A. Hammel, C.K. McDaniel, and K. W. Wachter, Genealogical Demography, edited by B. Dyke and W. T. Morrill, Academic Press, N.Y., pages 209-234 (expanded version of 1979b).
- 1980 "The Sisters' Riddle and the Importance of Variance When Guessing Demographic Rates from Kin Counts" *Demography*, 17: 103-114.
- 1979 "Demographic Consequences of Incest Prohibitions: A Microsimulation Analysis" by E. A. Hammel, C. K. McDaniel, and K. W. Wachter, Science, 205: 972-977.
- 1979 "Parameter Estimation in X-ray Astronomy Using Maximum Likelihood" by K. W. Wachter, R. Leach and E. Kellogg, *The Astrophysical Journal*, 230: 274-287.
- 1978 "The Strong Limits of Random Matrix Spectra for Sample Matrices of Independent Elements" Annals of Probability, 6: 1-18.

- 1977 "Primonuptiality and Ultimonuptiality:
 Their Effects on Stem Family Household Frequencies",
 by E. A. Hammel and K. W. Wachter,
 Population Patterns in the Past, edited by R. D. Lee, Academic Press,
 pages 113 134.
- 1976 "Probability Plotting of Multiple Discriminant Ratios"

 Proceedings of the Social Statistics Section of the American Statistical Association, Part II 830-833.
- 1976 "Probability Plotting Points for Principal Components"

 Proceedings of the Ninth Interface Symposium on Computer Science
 and Statistics, edited by D. Hoaglin and R. Welch, Prindle, Webber
 and Schmidt, pages 299-308.
- 1976 The SOCSIM Demographic-Sociological Microsimulation Program by E. A. Hammel, D. Hutchinson, K. W. Wachter,
 R. Lundy, and R. Deuel,
 Institute of International Studies, Berkeley, California.
- 1976 "A Stochastic Simulation and Numerical Test of the Deterministic Model: Matrilateral Implications of Structural Cross-Cousin Marriage" by E. A. Hammel, D. W. Hutchinson, and K. W. Wachter, Demographic Anthropology: Quantitative Approaches, edited by E. Zubrow, University of New Mexico Press, pages 163-168.
- 1974 "Exchangeability and Asymptotic Random Matrix Spectra" *Progress in Statistics*, edited by J. Gani, Sarkadi, and Vince, North Holland Press.
- 1972 "Valency Enumeration of Rooted Plane Trees" by Colin L. Mallows and Kenneth W. Wachter, Journal of the Australian Mathematical Society, 13: 472-476.
- 1971 "Statistical Techniques for Talker Identification"
 by P. D. Bricker, R. Gnanadesikan, M. V. Mathews, S. Pruzansky, P. A. Tukey, K. W. Wachter, and J. L. Warner,
 The Bell System Technical Journal, 50: 1427-1454.

TO APPEAR

• "Genetic Evolutionary Demography" (book chapter), by Kenneth W. Wachter, in *Human Evolutionary Demography*, edited by Oskar Burger, Ronald D. Lee, and Rebecca Sear, osf.io/p59eu.

UNDER REVIEW

• "The Gompertz, the Gamma, and the Plateau: Extending an Analysis Begun by Jim Vaupel", by Kenneth W. Wachter, Elisabetta Barbi, and Francesco Lagona, *Demographic Research*.