CURRICULUM VITAE   **JANUARY 2021**
M. ELIZABETH HALLORAN, MD, MPH, DSc

1.   PERSONAL DATA

Place of birth: Wooster, Ohio, USA
betz@fhcrc.org
office phone: currently not in office

2.   EDUCATION

1970-1972	BSc, General Science, University of Oregon, Eugene, OR
1977-1983	MD, Freie Universität Berlin, West Berlin, Germany
1983-1985	MPH, Tropical Public Health, Harvard School of Public Health, Boston, MA
1986-1989	DSc, Population Sciences, Harvard School of Public Health, Boston, MA Concentration: Human Ecology & Population Dynamics of Infectious Diseases

3.   POST GRADUATE TRAINING

A.

1984	Diploma in tropical medicine and parasitic diseases Bernard-Nocht Institute of Tropical Medicine, Hamburg, Germany
1985-1986	Research Fellow, Department of Tropical Public Health, Harvard School of Public Health, Boston, MA. Faculty Advisor: Andrew Spielman.
1987-1989	Research Associate, Department of Biology, Princeton University, based at the Department of Pure and Applied Biology, Imperial College, University of London. Faculty Advisor: Robert M. May.

B.

1982-1983	Medical Internship, City Hospital of Neukölln, Berlin, Germany
1983-1984	Medical Research Associate, City Hospital of Neukölln, West Berlin, study of a hypo-allergenic oral formula to prevent chronic diarrhea in infants with acute diarrhea

4.   FACULTY POSITIONS HELD (see A. Primary, and B. Secondary)

A. Primary

1989-1990	Assistant Professor, Department of Epidemiology and Biostatistics School of Medicine, Emory University
1990-1993	Assistant Professor, Division of Biostatistics, School of Public Health, Emory University
1993-1998	Associate Professor, Public Health, Emory University
1998-2005	Professor, Department of Biostatistics, Rollins School of Public Health, Emory University
2006-	Professor, Program in Biostatistics, Bioinformatics, and Epidemiology Vaccine and Infectious Diseases and Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle
2006-	Professor, Department of Biostatistics, School of Public Health, University of Washington
2015-	Professor, Department of Epidemiology, School of Public Health, University of Washington

B. Secondary

1992-2005	Secondary appointment, Department of Biology, Emory College, Atlanta, GA
1992-2003	Director, NIH Statistical and Clinical Research Training Grant in AIDS, Emory College, Atlanta, GA
1994-2005	Secondary appointment, Department of Epidemiology, Emory College, Atlanta, GA
1996-2005	Faculty, Population Biology, Ecology, and Evolution (PBEE) PhD Program, Graduate Division of Biological and Biomedical Sciences, Emory College, Atlanta, GA
2002-2005	Director, Center for AIDS Research, Biostatistics Core, Emory College, Atlanta, GA

2004–2005	Director, Center for Highthroughput Experimental Design and Analysis (CHEDA), Emory College, Atlanta, GA
2005	Director, NIH/NIGMS Training Grant in Biostatistics in Genetics, Immunology, and Neuroimaging (BGIN), Emory College, Atlanta, GA
2008 –	Adjunct Professor, Applied Mathematics, University of Washington, Seattle, WA
2009 –	Director and Founder, Summer Institute in Statistics and Modeling in Infectious Diseases, Department of Biostatistics, University of Washington, Seattle, WA
2014 –	Director, MIDAS Center for Inference and Dynamics of Infectious Diseases, Fred Hutchinson Cancer Research Center, Seattle, WA
2018 –	Director, PAHO/WHO Collaborating Center for Inference and Dynamics of Infectious Diseases, Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, WA
2020 –	Program Head, Biostatistics, Bioinformatics and Epidemiology Program, Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, WA

5.   HOSPITAL POSITIONS HELD
(N/A)

6.   HONORS

1986-1987	Graduate Associate, Takemi Program of International Health, Harvard School of Public Health
1996	Fellow, American Statistical Association
1997	Fellow, Royal Statistical Society
2002	40th Don W. Gudakunst Memorial Lecture, Department of Epidemiology, University of Michigan
2006-2007	Dr. Ross Prentice Professor of Biostatistics, University of Washington
2006	Featured in a *Vogue* article: Power Players, for her work simulating possible flu pandemics, 2006 Mar 1, pages 534-538. https://archive.vogue.com/issue/20060301
2009	Fellow, American Association for the Advancement of Science
2010-2021	NIH/NIAID MERIT Award. Methods for Evaluating Vaccine Efficacy
2016	Aspen Institute Italia Prize for Research and Collaboration between Italy and United States
2019	Invited Speaker, Buehler-Martin Plenary Lecture, IRSA Annual Conference, University of Minnesota, Minneapolis
2019	Nathan Mantel Lifetime Achievement Award for contributions at the intersection of statistical science and epidemiology, The American Statistical Association
2019	Invited Plenary Speaker, Epidemics 7 Conference, Charleston, South Carolina
2019-present	Member, National Academy of Medicine
2020-present	Member, Washington State Academy of Sciences

7.   BOARD CERTIFICATION
(N/A)

8.   LICENSURE
(N/A)

9.   PROFESSIONAL ORGANIZATIONS

2010-2019	American Society of Tropical Medicine and Hygiene (also 1993-2002)
1996-	Royal Statistical Society
1994-2018	Institute of Mathematical Statistics
1990-	American Association for the Advancement of Science
1990-	American Statistical Association
1990-	Biometric Society

1989-2009, 2019 Society for Epidemiologic Research
1989-2004   Society for Vector Ecology

10.   TEACHING RESPONSIBILITIES
Harvard University courses
1986-1987   Population Dynamics of Infectious Diseases in Humans, full year undergraduate seminar, Biology Department, Faculty of Arts and Sciences
WS 1988   Population Dynamics of Infectious Diseases in Humans, Biology Department, Faculty of Arts and Sciences
SS 1989   Teaching Fellow (course coordinator), Biology, Epidemiology, Economics and Policy of Malaria (BEEP), Department of Tropical Public Health, School of Public Health

Emory University courses
1989 SS; 1991-92 WS   Epidemiology of AIDS: methodological issues
1990-91 SS; 1992-93 SS   Analytic methods for infectious disease interventions (also 1995-96 WS; 1997-98 WS)
1990 WS; 1993 SS   Advanced Seminar in Biometry
1992; 1994 SS   Theory of survival analysis, including counting processes
1993 SS   Introduction to analytic methods for infectious disease interventions
1993-94 WS   Population Biology and Dynamics of Disease
1995-97 WS; 1998-99 WS   PhD Research Seminar
1996 SS; 2000-01 WS   Bayes and empirical Bayes methods (also 2003 SS)
1996-97 WS; 2000 SS   Missing and mismeasured data
1998-99 WS   Bayes and empirical Bayes methods
1997-98 WS; 2000 SS   Statistical computing
2001 SS   Generalized Linear Models
2002 SS; 2003 WS   Analysis of microarray data
2005-06 WS   Causal Inference

University of Washington courses
2007 Winter   Analytic Methods for Infectious Disease
2009 Winter   Analytic Methods for Infectious Disease
2009-present   Director and Founder, Summer Institute in Statistics and Modeling in Infectious Diseases, Department of Biostatistics, University of Washington

Short courses and tutorials
1992   New England Epidemiology Summer Program, Boston MA, July 12-31, Concepts in Infectious Disease Epidemiology
1992   University of São Paulo, Brazil, August 3-6, Concepts in Infectious Disease Epidemiology
1997   Chiron Corporation, Emeryville, CA, December 15-16, Design and Analysis of Vaccine Studies
1998   Bristol Myers Squibb, Connecticut, April 24, Design and Analysis of Vaccine Studies, Causal Inference
2000   Research Methods on Vaccines and Immunization in Public Health, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil, December 18-22
2006   Analytic Methods for Infectious Diseases, ENAR Biometrics Meeting, Tampa, FL, March
2007   Analytic Methods for Infectious Diseases, ENAR Biometrics Meeting, Atlanta GA, March
2011   Design and Analysis of Vaccine Studies, Deming Conference, Atlantic City, NJ, December

Scientific Initiatives/Workshops
2007-2009   Proposer and Organizer, Workshop on Analysis of Infectious Disease Data, Mathematisches Forschungsinstitut in Oberwolfach, Germany, November

2009-2021	Markov Chain Monte Carlo I, Summer Institute in Statistics and Modeling in Infectious Disease, University of Washington, held annually in July
2011-2013	Proposer and Organizer, Weeklong Workshop on Analysis of Infectious Disease Data, Mathematisches Forschungsinstitut in Oberwolfach, Germany, November
2013	Co-organizer, Workshop on Integrating Genomic Data and Transmission Analysis, University of Florida, January
2016-2018	Proposer and Organizer, Weeklong Workshop on Analysis of Infectious Disease Data, Mathematisches Forschungsinstitut in Oberwolfach, Germany, February

A. DOCTORAL MENTORSHIP ACTIVITIES
a. PRE-DOCTORAL FELLOWS DIRECTED

2016	Leora Feldstein, PhD Epidemiology
2018	Lauren Schwartz, PhD Epidemiology
2019	Natasha Wenzel, PhD Epidemiology
2020	Madhura Rane, PhD Epidemiology

b. POST-DOCTORAL FELLOWS DIRECTED

2013-2019 Laura Matrajt, Post-Doctoral Fellow, Applied Mathematics

DOCTORAL COMMITTEES

2014	Amanda Koepke, PhD, Statistics, University of Washington
2016	Leigh Fisher, PhD Biostatistics, University of Washington
2017	Yingying Chen, PhD Biostatistics, University of Washington
2017	Diana Rojas, PhD Epidemiology, University of Florida
2018	Jon Fintze, PhD Biostatistics. University of Washington
2018	Maryclare Griffin PhD Statistics, University of Washington
2020	Fareed A. Awan, PhD Philosophy, University of Washington
2020	Allison Black, PhD Epidemiology, University of Washington
2020	Tracy Dong, PhD Biostatistics, University of Washington

B. MEDICAL STUDENTS
(N/A)
C. UNDERGRADUATE STUDENTS
(N/A)
D. INVITED TALKS
(Not tracked)

11. EDITORIAL RESPONSIBILITIES

1993 – 1998	Editorial Board, Epidemiology
1994 – 2005	Editorial Board, Statistics in Medicine
1998 – 2003	Associate Editor, Journal of the American Statistical Association, Applications and Case Studies
2002 – 2009	Associate Editor, American Journal of Epidemiology (also 1991–1997)
2004 – 2014	Associate Editor, Biometrics
2008 –	Editorial Board, Epidemics
2009 – 2012	Editorial Board, Statistical Communications in Infectious Diseases
2011 – 2020	Editorial Board, Epidemiologic Methods
2014 –	Editorial Board, Observational Studies

12. SPECIAL NATIONAL RESPONSIBILITIES

1991-1993	Member, Core exam writing group, American Board of Preventive Medicine
1994−1995	Program Chair, Section on Epidemiology, American Statistical Association
1998−2003	Board of Trustees, National Institute of Statistical Sciences

2003–2005	Member, Committee on Excellence in Statistical Reporting Award, American Statistical Association
2004–2006	Member, (2006 Chair) Fellow Selection Committee, American Statistical Association
2004	FDA on improving FDA's approach to Clin Trials and vaccines, October 2004, invited talk
2008–2012	Committee on Sections, Section on Statistics in Epidemiology, American Statistical Association
2010–2014	Elected Member-at-Large, Statistics Section, American Association for Advancement of Science
2011–2016	NIH Study Section on Clinical Research and Field Studies
2012–2014	Chair-elect, Chair, Past, Section on Statistics in Epidemiology, American Statistical Association
2013–	Dengue Modeling Consortium (FHCRC, U Florida, Johns Hopkins, Imperial College, Sanofi Pasteur
2014–2018	Nominating Committee, Statistics Section, American Association for Advancement of Science
2015–2016	Wellcome Trust PhD Programmes Committee
2015–	Scientific Advisory Group, WHO Blueprint for R and D to prevent outbreaks
2016–	WHO Blueprint Working Group for Study Designs for Outbreaks
2018–2021	Chair-elect, Chair, Past, Statistics Section, American Association for Advancement of Science

13. SPECIAL LOCAL RESPONSIBILITIES

2013–2014	PATH Technical Consulting Group I: Phase III cluster-randomized design for malaria transmission blocking vaccines
2013–2014	PATH Technical Consulting Group II: Novel design of Phase III studies for malaria transmission blocking vaccines
2020-present	M2 Renovation Steering Committee
2020-present	Executive Committee of the Vaccine and Infectious Diseases Division
2020-present	Program Head, Biostatistics, Bioinformatics and Epidemiology Program, Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center, Seattle, WA

14. RESEARCH FUNDING

A. CURRENT

1992-2021	Sponsor: NIH, R01 AI032042: As of 10/2010: R37 AI032042 (MERIT Award) Title: Methods for evaluating vaccine efficacy Total Costs: $9,886,609 Role: PI
2009-2025	Sponsor: NIH, R01 AI085073 Title: Causal Inference for Infectious Disease Studies PI Michael Hudgens, UNC Chapel Hill Total Costs: $822,258, Direct Costs: $39,172 (annual) Role: Consortium PI
2014-2020	Sponsor: NIH, U54 GM111274 Title: MIDAS Center for Excellence: Center for Statistics and Quantitative Infectious Diseases, Fred Hutch Total Costs: $12,453,836 Role: PI
2017-2022	Sponsor: NIAID, R01 AI132496 Title: Quantifying the Breadth and Duration of Immunity Induced by Meningococcal B Vaccine, PI Nicole Basta, University of Minnesota, Minneapolis Total Costs: $41,376, Direct Costs: $25,217 (annual)

Role: Consortium PI
2018-2023   Sponsor: NIAID, R01 AI139761
              Title: Design and Analysis of Vaccine Trials for Emerging Infectious Disease Threats,
              PI Natalie Dean, University of Florida, Gainesville
              Total Costs: $217,280, Direct Costs: $114,096 (annual)
              Role: Consortium PI
2018-2023   Sponsor: NIDA, DP2 DAO46856
              Title: Causal Inference Methods for HIV Prevention Studies Among Networks of
              People Who Use Drugs, PI Ashley Buchanan, University of Rhode Island, Kingston
              Total Costs: $25,228, Direct Costs: $14,334 (annual)
              Role: Consortium PI
2019-2024   Sponsor: NIH, U24 GM132013
              Title: MIDAS Coordinating Center, PI Wilbert van Panhuis, University of Pittsburgh,
              Pittsburgh
              Total Costs: $65,109, Direct Costs: $36,994 (annual)
              Role: Consortium PI
2019-2024   Sponsor: NIH, UO1 (sub from Emory, Gonzalo M. Vazquez Prokopec)
              Title: Quantifying the Epidemiological Impact of Targeted Indoor Residual Spraying
              on Aedes-borne Diseases
              Direct Costs: $41,845 (annual)
              Role: Consortium PI   (NOA pending)
2020-2021   Sponsor: NIH, R56 AI148284
              Title: Mathematical and Statistical Methods for the Control of Global Infectious
              Disease Threats, MPI Ira Longini, Jr., University of Florida, Gainesville
              Total Costs: $802,262, Direct Costs: $26,114 (annual)
              Role: MPI, Consortium PI
2020-2025   Sponsor: NIH, R25 AI147391
              Title: Summer Institute in Statistics and Modeling in Infectious Diseases, University of
              Washington, Seattle Washington, PI M. Elizabeth Halloran
              Total Costs: $1,662,546, Direct Costs: $1,567,173 (five years)
              Role: PI

B. PENDING

C. PAST
1990-1991   Sponsor: CDC Contract 434MIM90
              Title: Mathematical Modeling of a Varicella Vaccination Program
              Total Costs: ~$18,500
              Role: PI
1991-1992   Sponsor: CDC Contract 308MIM92
              Title: Application of Mathematical Modeling of a Varicella Vaccination Program
              Total Costs: ~$9,840
              Role: PI
1991-1997   Sponsor: NIH FIRST Award R29 AI31057
              Title: Study designs for malaria and other vector-borne disease
              Total Costs: $494,921
              Role: PI
1992-2003   Sponsor: NIH Training Grant T32 AI07442
              Title: Statistical and Clinical Research Training on AIDS
              Total Costs: $825,494
              Role: Program Director
1994-1996   Sponsor: NSF Career Advancement Award DMS-9410138

Title: Foundations and Methods of Inference
Total Costs: $30,000
Role: Principal Investigator

1997   Sponsor: Emory University, University Teaching Fund Award
Title: Developing a course in Statistical Computing
Total Costs: $4,900
Role: Awardee/Recipient

1997-1998   Sponsor: Emory University, University Research Fund Award
Title: Estimating the Relation of Exposure to Malaria Infection to Immunity
Total Costs: ~$4,800
Role: Awardee/Recipient

1997-2001   Sponsor: NIH, R01 AI40846:
Title: Design and analysis of HIV vaccine trials
Total Costs: $552,000
Role: PI

2000-2001   Sponsor: Principal investigator, NIH, R13 CA91646
Title: Conference on Causation, Statistics, and Applications
Total Costs: $99,000
Role: PI

2001-2002   Sponsor: CDC Contract 01IP09659
Title: Evaluating Prophylactic Antivirals against Influenza
Total Costs: $43,645
Role: IPA Agreement

2001-2002   Sponsor: Emory University, University Teaching Fund Award
Title: Analysis of Microarray Data
Total costs: $8,000
Role: Awardee/Recipient

2002-2005   Sponsor: NIH
Title: Center For AIDS Research (CFAR) (PI Curran)
Total Costs: $97,650
Role: Core Director (Biostatistician)

2003-2004   Sponsor: NIH 263-MD-306089
Title: Analytic methods for determining smallpox control in response to a bioterrorist attack
Total Costs: $196,000
Role: PI

2005-2006   Sponsor: Emory University, University Teaching Fund Award
Title: Course on Causal Inference,
Total Costs: $5,000
Role: Awardee/Recipient

2005-2006   Sponsor: NIH R56 AI32042-A1
Title: Methods for evaluating vaccine efficacy
Total Costs: $390,537
Role: PI.

2005-2010   Sponsor: NIH NIGMS T32 GM074909 (left 12/05)
Title: Biostatistics in Genetics, Immunology, and Neuroimaging
Total Costs (2005-06): $187,131
Role: Program Director

2007-2009   Sponsor: Bill and Melinda Gates Foundation, Contract 5485
Title: Evaluating the BMGF Portfolio of New TB Drugs, Diagnostics and Vaccines
Total Costs: $711,128
Role: PI

2009-2014   Sponsor: NIH, U01 GM070749
             Title: Containing Bioterrorist and Emerging Infectious Diseases (MIDAS Network)
             Total Costs: ~$2,700,000
             Role: PI (MPI)
2010-2019   Sponsor: NIH, R25 GM089694
             Title: Summer Institute in Statistics and Modeling in Infectious Diseases
                 (SISMID), Biostatistics, University of Washington
             Total Costs: $1,833,760
             Role: Director
2015-2020   Sponsor: NIH R01 GM108731
             Title: A 3-population 3-scale Social Network Model to Assess Disease Transmission,
             PI Ling Bian, University of Buffalo, Buffalo
             Total Costs: $16,356, Direct Costs: $9,293 (annual)
             Role: Consortium PI

15. BIBLIOGRAPHY

a. PUBLICATIONS IN REFEREED JOURNALS

1. Russo VEA, Gallori E, and **Halloran ME**. Ethylene is Involved in the Autochemotropism of Phycomyces. Planta. 1977;134:61-67.
2. Struchiner CJ, **Halloran ME**, and Spielman A. Modeling Malaria Vaccines I: New Uses for Old Ideas. Math Biosci. 1989;94:87-113.
3. **Halloran ME**, Struchiner CJ, and Spielman A. Modeling Malaria Vaccines II: Population Effects of Stage-specific Malaria Vaccines Dependent on Natural Boosting. Math Biosci, 1989;94:115-149.
4. **Halloran ME**. Nicaragua Health Study Collaborative at Harvard, and CEIS, and UNAN. Health Effects of the War in Nicaragua in Two Communities. Am J Pub Health, 1989;79:424-430.
5. **Halloran ME**, Bundy DAP, and Pollitt E. Infectious Disease and the Unesco Basic Education Initiative. Parasitol Today. 1989;5:359-362.
6. Struchiner CJ, **Halloran ME**, Robins JM, Spielman A. The Behavior of Common Measures of Association Used to Assess a Vaccination Program under Complex Transmission Patterns – A Computer Simulation Study of Malaria Vaccines. Int J Epidemiol. 1990;19:187-196.
7. Longini IM, Haber MJ, **Halloran ME**. Efectos directos e indirectos de las vacunas: un anotacion sobre la estimación de la eficacia vacunal a partir de brotes por agentes de infecciones agudas como sarampion. Bio Med Hosp Infant Mex. 1990;47:516-520.
8. **Halloran ME**, Haber MJ, Longini IM, Struchiner CJ. Direct and Indirect Effects in Vaccine Efficacy and Effectiveness. Am J Epidemiol, 1991;133:323-331.
9. Haber MJ, Longini IM, **Halloran ME**. Measures of the Effects of Vaccination in a Randomly Mixing Population. Int J Epidemiol. 1991;20:300-310.
10. Haber MJ, Longini IM, **Halloran ME**. Estimation of Vaccine Efficacy in Outbreaks of Acute Infectious Diseases. Stats in Med. 1991;10:1573-1584.
11. **Halloran ME** and Struchiner CJ. Study designs for dependent happenings. Epidemiology. 1991;2:331-338. PMID: 1742381
12. Struchiner CJ and **Halloran ME**. Models of AIDS Vaccines: The Cellular Level. Memorias deInstituto Oswaldo Cruz, Rio de Janeiro. 1992;87:103-113.
13. **Halloran ME**, Haber MJ, and Longini, IM. Interpretation and Estimation of Vaccine Efficacy under Heterogeneity. Am J Epidemiol, 1992;136:328-343.
14. **Halloran ME** and Struchiner CJ. Modeling transmission dynamics of stage-specific malaria vaccines. Parasitol Today. 1992;8:77-85.
15. **Halloran ME**. Persistence, Drugs, and Rock'n'Roll. Trends Ecol Evol. 1992;7:212-214.
16. Longini IM, **Halloran ME**, Haber MJ, Chen, RT. Measuring Vaccine Efficacy from Epidemics of Acute Infectious Agents: Study Designs and Estimation Methods. Stats in Med. 1993;12:249-263.

17. Brunet R, Struchiner CJ, and **Halloran ME**. On the distribution of vaccine protection under heterogeneous response. Math Biosci, 1993;116:111-125.

18. Longini IM, **Halloran ME**, and Haber MJ. Estimation of vaccine efficacy from epidemics of acute infectious agents under vaccine-related heterogeneity. Math Biosci. 1993;117:271-281.

19. **Halloran, ME**. Salmonella enteritidis infection in France and the United States: causes versus causal models. Am J Pub Health. 1993;83:1667-1669.

20. Lieu TA, Cochi SL, Black S, **Halloran ME**, Shinefield HR, Holmes SR, Wharton M, and Washington AE. Cost-Effectiveness of a routine varicella vaccination program for US children. J Am Med Assoc. 1994;271:375-381.

21. **Halloran, ME**. Mycobacterium tuberculosis: just desserts for an ungrateful luncheon guest. Trends Ecol Evol, 1994;9:72-74.

22. **Halloran ME**, Longini IM, Struchiner CJ, Haber MJ, Brunet R. Exposure efficacy and change in contact rates in evaluating HIV vaccines in the field. Stats in Med. 1994;13:357-377.

23. **Halloran ME**, Struchiner CJ, and Watelet, L. Epidemiologic effects of vaccines with complex direct effects in an age-structured population. Math Biosci. 1994;121:193-225.

24. **Halloran ME**, Cochi SL, Lieu TA, Wharton M, Fehrs L. Epidemiologic and morbidity effects of routine varicella immunization of preschool children in the United States. Am J Epidemiol. 1994;140:81-104.

25. Devine OJ, Louis TA, **Halloran ME**. Empirical Bayes methods for stabilizing incidence rates before mapping. Epidemiology. 1994;5:622-630.

26. Devine OJ, Louis TA, **Halloran ME**. Empirical Bayes estimators for spatially correlated incidence rates, Environmetrics, 1994;381-398.

27. Longini, IM, **Halloran ME**, Haber MJ. Some current trends in estimating vaccine efficacy, in Epidemic Models: Their Structure and Relation to Data. 1995;pp. 394-403, ed. D. Mollison, Cambridge Univ Press, Cambridge.

28. **Halloran ME**, Longini IM, Struchiner CJ, Haber MJ. Feasibility of prophylactic HIV vaccine trials: some statistical issues. in Models for Infectious Human Disease. 1995;pp. 76-82, ed. V.S. Isham and G. Medley, Cambridge Univ Press, Cambridge.

29. Haber M, **Halloran ME**, Longini IM, Watelet L. Estimation of vaccine efficacy in non-randomly mixing populations. Biometrics J. 1995;37:1, 25-38.

30. **Halloran ME** and Struchiner CJ. Causal inference for infectious diseases. Epidemiology. 1995;6:142-151. PMID: 7742400

31. Struchiner CJ, **Halloran ME**, Brunet R, Ribeiro JMC, Massad E. Malaria vaccines: lessons from the field. Cadernos do Saude Publica. 1995;10(supplement 2):310-326.

32. Longini IM and **Halloran ME**. AIDS: Modeling Epidemic Control. letter to Science. 1995;267:1250-1251.

33. Haber MJ, Orenstein WA, **Halloran ME**, Longini IM, and Watelet, L. The effect of disease prior to an outbreak on estimates of vaccine efficacy. Am J Epidemiol. 1995;141:980-990.

34. Norohna, CP, Struchiner CJ, **Halloran ME**. Assessment of the direct effectiveness of BC meningococcal vaccine in Rio de Janeiro, Brazil: a case-control study. Int J Epidemiol. 1995;24(5):1050-1057.

35. Haber MJ, Watelet L, and **Halloran ME**. On individual and population effectiveness of vaccination. Int J Epidemiol. 1995;24:1249-1260.

36. Struchiner CJ, Brunet R, **Halloran ME**, Massad E, Azevedo-Neto RS. On the use of state-space models for the evaluation of health interventions. J Biol Systems. 1995;3:851-865.

37. Longini IM and **Halloran ME**. A frailty mixture model for estimating vaccine efficacy. Appl Stats. 1996;45:165-173.

38. Devine OJ, Louis TA, **Halloran ME**. Identifying areas with high rates in mapping using empirical Bayes methods. Geograp Anal. July 1996;28: 187-199.

39. Antia R. and **Halloran ME**. Recent developments in theories of pathogenesis of AIDS. Trends Microbiol. 1996;4:282-285.

40. **Halloran, ME**, Longini, IM and Struchiner, CJ. Estimability and interpretation of vaccine efficacy using frailty mixing models. Am J Epidemiol. 1996;144:83-97.
41. Efron B, **Halloran ME**, and Holmes, S. Bootstrap confidence intervals for phylogenetic trees, PNAS, USA. 1996;93:7085-7090. PMCID: PMC3890
42. Mosure DJ, Berman S, Kleinbaum D, **Halloran ME**. Predictors of Chlamydia trachomatis infection among female adolescents: a longitudinal analysis. Am J Epidemiol. 1996;144:997-1003.
43. **Halloran, ME**. Evaluating HIV vaccines: discussion. Stats in Med. 1996;15:2405-12.
44. Rhodes P, Halloran ME, Longini IM. Counting process models for infectious disease data: distinguishing exposure to infection from susceptibility. J Roy Statist Soc B. 1996;58:751-762.
45. Longini, IM, Datta, S, and **Halloran, ME**. Measuring vaccine efficacy for both susceptibility to infection and reduction in infectiousness for prophylactic HIV-1 vaccines. J AIDS and HR. 1996;13:440-447.
46. Bertolli J, Pangi C, Frerichs R, and **Halloran ME**. A case-control study of the effectiveness of BCG vaccine for preventing leprosy in Yangon, Myanmar. Int J Epidemiol. 1997;26:888-896.
47. **Halloran ME**, Struchiner CJ, and Longini, IM. Study designs for different efficacy and effectiveness aspects of vaccination. Am J Epidemiol. 1997;146:789-803.
48. Datta, S, **Halloran, ME** and Longini, IM. Augmented HIV vaccine trial designs for estimating reduction in infectiousness and protective efficacy. Stats in Med. 1998;17:185-200.
49. Longini IM, Sagatelian K, Rida WN, and **Halloran ME**. Optimal vaccine trial design when estimating vaccine efficacy for susceptibility and infectiousness from multiple populations, Stats in Med. 1998;17:1121-1136.
50. Sun F, Ashley AE, Durham LK, Feingold E, **Halloran ME**, Manatunga AK, Sherman SL. Testing for contributions of mitochondrial DNA mutations to complex diseases. Gen Epidemiol. 1998;15:451-469.
51. Durham, LK, Longini, IM, **Halloran, ME**, Clemens, JD, Nizam, A, Rao, M. Estimation of vaccine efficacy in the presence of waning; Application to cholera vaccines. Am J Epidemiol. 1998;147:948-959.
52. Golm, GT, **Halloran, ME**, and Longini, IM. Semiparametric models for mismeasured exposure information in vaccine trials. Stats in Med. 1998;17:2335-2352.
53. **Halloran, ME**. Statistical issues in HIV vaccine trial design. J Roy Stat Soc A. 1998;161:265-272.
54. Longini, IM, Hudgens, MG, **Halloran, ME**, Sagatelian, K. A Markov model for measuring vaccine efficacy for both susceptibility to infection and reduction in infectiousness for prophylactic HIV-1 vaccines. Stats in Med. 1999;18:53-68.
55. Golm, GT, **Halloran, ME** and Longini, IM. Semiparametric methods for multiple exposure mismeasurement and a bivariate outcome in HIV vaccine trials. Biometrics. 1999;55:94-101.
56. Datta, S, **Halloran, ME**, and Longini, IM Randomization by individual or by household in vaccine studies? Biometrics. 1999;55:792-8.
57. Durham, LK, **Halloran, ME**, Longini, IM, Manatunga, AM Smoothing methods for exploring time-dependent vaccine effects. Appl Stats. 1999;48(3):395-407.
58. **Halloran, M**E, Longini, IM, Struchiner, CJ Design and interpretation of vaccine field studies. Epidemiol Reviews. 1999;21:73-88.
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f. ABSTRACTS
(Not tracked)

g. MANUSCRIPTS IN PREPARATION
1. Rane M, Wakefield J, Rohani P and **Halloran ME**. Pertussis epidemiology and spatio-temporal dynamics within King County, WA

16. (OPTIONAL) OTHER
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