1	A. Marisa Chun (SBN 160351)	
2	mchun@crowell.com Kristin J. Madigan (SBN 233436)	
3	kmadigan@crowell.com	
3	Suzanne E. Rode (SBN 253830) srode@crowell.com	
4	CROWELL & MORING LLP 3 Embarcadero Center, 26th Floor	
5	San Francisco, California 94111	
6	Telephone: 415.986.2800 Facsimile: 415.986.2827	
7	Norman J. Hamill (SBN 154272) norman.hamill@ucop.edu	
8	Katharine Essick (SBN 219426)	
9	katharine.essick@ucop.edu UNIVERSITY OF CALIFORNIA	
10	Office of General Counsel 1111 Franklin Street, 8th Floor	
11	Oakland, CA 94607-5200 Telephone: 510.987.9800	
12	Facsimile: 510.987.9757	
	Attorneys for Defendants	
13	The Regents of the University of California and Michael V. Drake	
14		
15	SUPERIOR COURT OF TH	E STATE OF CALIFORNIA
16	COUNTY OF	FALAMEDA
17	CINDY KIEL, J.D., an Executive Associate Vice Chancellor at UC Davis, MCKENNA	Case No. HG20072843
18	HENDRICKS, a UC Santa Barbara student, EDGAR DE GRACIA, a UCLA student, and	Unlimited Civil Jurisdiction
19	LELAND VANDERPOEL, an employee at the Fresno satellite extension of the UCSF Medical	ASSIGNED FOR ALL PURPOSES TO: Hon. Richard L. Seabolt
20	Education Program, and FRANCES OLSEN, Professor of Law at UCLA,	Department 521
21	·	DECLARATION OF DR. HARVEY V.
22	Plaintiff,	FINEBERG IN SUPPORT OF DEFENDANTS' OPPOSITION TO
23	v	PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION
24	THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, a Corporation, and MICHAEL	Date: October 14, 2020
25	V. DRAKE, in his official capacity as President of the UNIVERSITY OF CALIFORNIA,	Time: 01:30 p.m. Dept.: 521
	· ·	Reservation No.: 2206283
26	Defendants.	Complaint filed: August 27, 2020
27		Trial: None set
၁၀		

CROWELL & MORING LLP
ATTURNEYS AT LAW

1, Dr. Harvey V. Fineberg, declare:

1. I provide this declaration in support of Defendants The Regents of the University of California and Michael V. Drake's ("Defendants") Opposition to Plaintiffs' Motion for Preliminary Injunction. I base this declaration on my expertise as outlined below and facts within my personal knowledge, to which I could and would testify competently if called upon to do so.

Professional Background and Experience

- 2. I am the president of the Gordon and Betty Moore Foundation, which fosters path-breaking scientific discovery, environmental conservation, improvements in patient care and preservation of the special character of the San Francisco Bay Area. I previously held the Presidential Chair for 2014-2015 as visiting professor at the University of California, San Francisco. Prior to that, I served as president of the Institute of Medicine from 2002 to 2014 and as provost of Harvard University from 1997 to 2001, following 13 years as dean of the Harvard School of Public Health.
- 3. Prior to joining the Gordon and Betty Moore Foundation, which is a philanthropic foundation, I devoted most of my academic career to the fields of health policy and medical decision-making. My past research has focused on global health, assessment of medical technology, evaluation and use of vaccines, and dissemination of medical innovations.
- 4. I am a trustee of the Carnegie Endowment for International Peace and the China Medical Board. I previously served on the Board of the William and Flora Hewlett Foundation. the Josiah Macy, Jr. Foundation, and the Association FXB (USA). I am a past chair of the boards of the Carnegie Endowment and the Hewlett Foundation. I helped found and served as president of the Society for Medical Decision Making. I serve on the editorial board of the New England Journal of Medicine and in several advisory capacities, including the foresight committee of the Veolia Environment Institute and the advisory board of the Peterson Center on Healthcare. I chaired the World Health Organization's Committee to Review the International Health Regulations and the 2009 H1N1 Influenza Pandemic. I currently chair the Standing Committee on Emerging Infectious Diseases and 21st Century Health Threats of the National Academies of Sciences, Engineering and Medicine.

- 5. I am a co-author of the books Clinical Decision Analysis. Innovators in Physician Education and The Epidemic That Never Was, an analysis of the controversial U.S. immunization program against swine influenza in 1976. I have co-edited books on such diverse topics as AIDS prevention, vaccine safety, understanding risk in society, and global health, and have authored numerous articles published in professional journals.
- 6. I am the recipient of several honorary degrees, the Frank A. Calderone Prize in Public Health, the Henry G. Friesen International Prize in Health Research, and the Harvard Medal, awarded by the alumni association of Harvard University, from which I carned my bachelor's and doctoral degrees.
- 7. Attached hereto as <u>Exhibit A</u> and incorporated by reference to this declaration is a copy of my curriculum vitae.

Assignment

- 8. I have been asked by outside counsel for Defendants to offer expert opinions on the University of California Executive Order, as originally issued and as amended, (collectively, "Executive Order") regarding the influenza vaccine—specifically my opinions on whether the influenza vaccine mandate in the Executive Order is a sound public health decision, particularly in light of the ongoing COVID-19 pandemic that will overlap with the influenza season during the 2020-2021 academic year.
- 9. I base my opinions on my professional training and experience, and my review of the Executive Order, the First Amended Complaint, Plaintiffs' motion for preliminary injunction, and the declarations of Dr. Peter Gotzche, Associate Professor Peter Doshi, Dr. Tom Jefferson, Dr. Laszlo Boros, and Associate Professor Andrew Noymer provided to me to review. I do not offer any legal opinions, nor do I interpret the legal terms of the Executive Order.

Opinions

10. Influenza is a highly contagious virus that can be deadly. For many years, an influenza vaccine has been available to offer a measure of protection to the public. The influenza vaccine is widely used in the United States. Each year the Centers for Disease Control and Prevention ("CDC") recommends that individuals aged six months and older receive the

influenza vaccine, a recommendation in which the California Department of Public Health concurs.

- 11. I have reviewed the Executive Order and understand that it requires UC students, faculty, and staff who will attend classes or work or live on UC premises to receive the influenza vaccine this year. I further understand the Executive Order allows for individuals to decline the influenza vaccine for medical reasons, or because they require a disability or religious accommodation.
- 12. Respiratory infections, including influenza, are more prevalent in the fall and winter months in the U.S. In years with large outbreaks of influenza, excess mortality tends to cluster in these same months. There is no reason to expect COVID-19 to follow a pattern that differs from other respiratory infections transmitted similarly from one person to another.
- 13. The soundest public health strategy to contain the burden of COVID-19 and other potentially serious respiratory infections, such as influenza, involves a layered approach, with multiple interventions, including consistent wearing of masks in the presence of others, avoiding crowded indoor settings, physical distancing, hand hygiene, frequent testing, contact tracing, quarantine of those exposed, isolation of those infected, and when vaccines are available, immunization.
- 14. In the 2019-2020 influenza season, the CDC estimates that approximately 30 million Americans contracted influenza. Over the past ten years, the CDC estimates that between 3 and 9 percent of the U.S. population was infected each year with influenza.
- 15. Influenza vaccines in use on an annual basis generally demonstrate moderate protective effect, on the order of 45 percent. This means that if an unimmunized population of 100,000 would experience 5,000 cases of influenza, that same population, if immunized, would experience 45 percent fewer, or 2,750 cases.
- 16. The University of California includes more than a half million students, staff and faculty. For illustrative purposes, suppose that, left unimmunized, 5 percent or 25,000 individuals in a population of this size, would become infected with influenza in 2020-21. If all were immunized, the number would be reduced to 13,750, assuming 45 percent vaccine effectiveness.

Those 11,250 who were spared infection would also pose no threat of transmitting influenza to others in the community.

- SARS-CoV-2 (the virus that causes the disease, COVID-19), influenza virus, and other respiratory pathogens. In a year when COVID-19 is likely to remain the dominant infectious threat, every individual with symptoms of any respiratory disease will raise the question of COVID-19, therefore prompt additional testing, and possibly lead to at least temporary quarantine of contacts. Every measure, including influenza immunization, that has the potential to reduce the number of symptomatic individuals, can reduce the burden on diagnosis and management of suspected cases of COVID-19, and spare others possible infection by influenza and disruption in their lives because of a suspected COVID-19 infection.
- 18. Influenza recurs each year, and different variants of the virus may become prevalent in any year. In a year when the circulating virus is new to many individuals, the number of influenza cases may be substantially greater than in a typical year. If the U.S. experiences a combined surge in COVID-19 and influenza cases this winter, the number of patients may exceed the capacity of physicians and hospitals to provide optimal care for all patients. In this eventuality, every measure taken to reduce the incidence of potentially severe respiratory infection, including through influenza immunization, may prove life-saving.
- 19. The Executive Order represents a targeted policy that appears to be designed to reduce the incidence of influenza, protect the capacity of medical care facilities, and ease the burden of diagnosis and management of suspected cases of COVID-19.
- 20. If carried out as written, the Executive Order may reduce the spread of serious or potentially serious disease among the community of coworkers and students who must be near one another on UC campuses and at other UC facilities. As one of a family of measures, influenza immunization is a sensible step for the University to add a layer of health protection to the individual and to the UC community.
- 21. In my opinion, the Executive Order sets forth a prudent public health policy to reduce the disease burden in the coming months on individuals, their families, health care

facilities, and the entire UC community from a combination of COVID-19 and influenza. Indeed, failure to adopt this type of mandate would raise questions about the University's exercise of responsibility because influenza vaccine offers direct benefits on the incidence of influenza and indirect benefits to the management of COVID-19 in the UC community.

- 22. By requiring all students, faculty and staff on UC campuses to receive the influenza vaccine, subject to medical exemptions and disability and religious accommodations, rather than have an opt-in policy, the University of California will achieve the full, potential benefit of the policy.
- 23. I have reviewed the First Amended Complaint, Plaintiffs' motion for preliminary injunction, and the declarations of Dr. Peter Gotzche, Associate Professor Peter Doshi, Dr. Tom Jefferson, Dr. Laszlo Boros, and Associate Professor Andrew Noymer.
- 24. Plaintiffs' declarants Dr. Peter Gotzche, Associate Professor Peter Doshi, Dr. Tom Jefferson, Dr. Laszlo Boros, and Associate Professor Andrew Noymer emphasize that randomized controlled trials have failed to show reduced hospitalization among those who are immunized against influenza, while case control studies have indicated this benefit. Randomized trials have the virtue of avoiding both recognized and unrecognized sources of bias, but they may have other limitations, including inadequate size to detect small, though clinically important differences. Regardless of the degree to which influenza immunization reduces hospitalization, a reduction in the incidence of infection and the number of symptomatic patients who require evaluation, will be highly advantageous in this year of COVID-19.
- 25. While no vaccine, including the influenza vaccine, can be guaranteed to be perfectly safe, the influenza vaccine has been widely used for decades, is a well-accepted tool to mitigate influenza, and is recommended by the CDC. Any known risks today are generally outweighed by the well-documented, though moderate, public health benefits of the influenza vaccine.
- 26. I am familiar with the Wolff study referenced and understand it does not apply to the SARS-CoV-2 virus that causes COVID-19. After publication, the author wrote a letter cautioning against interpreting his study as indicating any association between influenza

10

13 14

15 16

17 18

19

21

20

22 23

24

25

26 27

immunization and COVID-19, which I attach here as Exhibit B.

- 27. Other posited adverse effects of influenza vaccine, such as virus interference, autoimmune responses, and miscarriage are speculative. While no medicine or vaccine is free of all side effects, the benefit to risk ratio for influenza vaccine is convincing to the CDC and to the independent panel of experts who serve on the CDC's Advisory Committee on Immunization Practices.
- Given my research experience in the areas of evaluation and use of vaccines and 28. my institutional experience as Dean of Harvard's School of Public Health, Provost at Harvard University and President of the Institute of Medicine, I understand the University of California's reasoned decision to employ the influenza vaccine this year, in light of the ongoing COVID-19 pandemic. The value of requiring everyone who will access the UC campus or facilities to receive the influenza vaccine is to mitigate against the risk that UC community members will fall ill from influenza or develop symptoms requiring investigation for COVID-19 and the attendant, potential disruption to fellow students, staff and faculty. For a university community, the difference made by such a policy could be advantageous. The rationale is to protect as many members of the university community as a whole, rather than focusing on any one individual. In other words, UC's influenza vaccine policy is about protecting one's fellow students, employees and faculty members, as well as any one individual.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge.

Executed in San Francisco, California, on this 29th day of September 2020.

& MORNE LLF

EXHIBIT A

HARVEY VERNON FINEBERG

Curriculum Vitae

Home Address:	
H: E:	

Business Address:
Gordon and Betty Moore Foundation
1661 Page Mill Road
Palo Alto CA 94304
O
E:

Birth date: September 15, 1945 (Pittsburgh, Pennsylvania) Married to Dr. Mary Elizabeth Wilson

EDUCATION

1980 Ph.D. in Public Policy
Harvard University

1972 M.D.
Harvard Medical School

1972 Master of Public Policy
Kennedy School of Government
Harvard University

1967 B.A. (Psychology, magna cum laude)
Harvard University

AWARDS AND PRIZES

2018	Honorary Doctor of Law, Harvard University
2016	Honorary Doctoral Degree, Ben-Gurion University, Israel
2015-2016	Honorary Vice President for the United States, American Public Health Association
2014	Distinguished Leadership in Global Health, awarded by Consortium of University Programs in Global Health
2014	Doctor of Science, Honoris Causa, University of Miami
2013	Henry G. Friesen International Prize in Health Research, awarded by Friends of Canadian Institutes of Health Research

2012	Doctor of Public Service, Honoris Causa, University of North Texas
2011	Frank A. Calderone Prize in Public Health, awarded by the Mailman School of Public Health, Columbia University
2010	Doctor of Science (Honorary), New England University
2009	The Harvard Medal, awarded by the Harvard Alumni Association
2008	Stephen Smith Award for Lifetime Achievement in Public Health, awarded by the New York Academy of Medicine
2007	Doctor of Science (Honorary), George Washington University
2007	Doctor of Science, Honoris Causa, University of Arkansas for Medical Sciences
2006	Doctor of Medicine, Honoris Causa, University of South Florida
2005	Recognition of Technical and Political Innovations in Health, La Fundacion Mexicana para la Salud
2005	Cooper Lecturer, University of Pittsburgh Medical Center
2004	Doctor of Science, Honoris Causa, New York Medical College
2003	James A. Shannon Lecturer, National Institutes of Health
2003	The John M. Eisenberg Award for Practical Application of Medical Decision Making Research., Society for Medical Decision Making
2001	W. E. B. Du Bois Medal, awarded by the W. E. B. Du Bois Institute for African and African American Research, Harvard University
1998	Distinguished Alumnus Award, Taylor Allderdice High School, Pittsburgh PA
1998	Honorary Associate, Mexican Foundation for Health
1988	Wade Hampton Frost Lecture Prize, Epidemiology Section, American Public Health Association
1988	Joseph W. Mountin Lecture Prize, Centers for Disease Control
1987	Docteur Honoris Causa, Université de Bordeaux II
1967	Phi Beta Kappa
1964	Detur Prize Book

John Harvard Scholarship

POSITIONS HELD

2015-	resident, Gordon and Betty Woord Foundation
Academic	
2014	Presidential Chair Visiting Professor University of California, San Francisco
2008	Lew Kuan Yew Distinguished Visitor National University of Singapore
2006	Honorary Professor Peking Union Medical College
2002-	Professor Emeritus, Harvard School of Public Health
Jan-Jun 2002	Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford University
1997-2001	Provost, Harvard University
1986	Honorary Professor Shanghai Medical University
1985	McIlrath Visiting Professor Royal Prince Alfred Hospital, Sydney
1984-1997	Dean, Harvard School of Public Health
1982-2001	Professor of Health Policy and Management Harvard School of Public Health
1978-1981	Associate Professor of Health Services Harvard School of Public Health
1973-1978	Assistant Professor of Health Services Harvard School of Public Health
1973-1981	Faculty Member Kennedy School of Government Harvard University
1975-1978	Director Graduate Program in Health Policy and Management Harvard School of Public Health

1975

Mellon Fellow Aspen Institute for Humanistic Studies

1974-1975	Intermediate Junior Fellow Society of Fellows Harvard University	
Clinical		
1976-1984	Physician Harvard Street Health Center Boston, Massachusetts	
1974-1976	Physician East Boston Health Center East Boston, Massachusetts	
1972-1973	Medical Resident Beth Israel Hospital Boston, Massachusetts	
1972-1973	Clinical Fellow in Medicine Harvard University	
Business		
1996-1998	Member, Board of Directors, NovaCare Employee Services	
1996-1998	Member, Board of Directors, PrincipalCare (formerly MedAlliance)	
1994-1999	Member, Board of Directors, Integra (formerly Apogee)	
1994-1996	Member, Board of Directors, MedAlliance (formerly ImageAmerica)	
1992-1994	Member, Board of Directors, RehabClinics	
Public Service and Non-Profit Organizations		
2018-2019	Chair, National Academies of Sciences, Engineering and Medicine Committee on Reproducibility and Replicability in Science	
2018-	Co-chair, Sabin-Aspen Vaccine Science and Policy Strategy Group	
2017-2019	Member, Council of the American Philosophical Society	
2015-	President, Gordon and Betty Moore Foundation	
2014-2015	Chair, NRC/IOM Planning Committee for workshops on Gain-of-Function Research	
2014	Chair, William and Flora Hewlett Foundation Board of Directors	

2013-2018	Chair, Carnegie Endowment for International Peace Board of Trustees
2013-2014	Member, UCSF National Leadership Council
2012-	Chair, Advisory Committee to the Peterson Institute on Health
2012-2014	Chair, Steering Committee for the Centers of Excellence in the Asia Collaborative for Medical Education
2012-2014	Member, International Advisory Panel for the Saw Swee Hock School of Public Health, Singapore
2010-2011	Chair, Committee to Review the International Health Regulations and the 2009 H1N1 Influenza Pandemic, World Health Organization
2010-2014	Member, Josiah Macy Jr. Foundation Board of Directors
2010-2014	Vice Chair, William and Flora Hewlett Foundation Board of Directors
2009-	Member, Carnegie Endowment for International Peace Board of Trustees
2009-2014	Member, Harvard Catalyst External Advisory Board
2009-2010	Chair, International Advisory Committee for Health Services Research Competitive Research Grant, Singapore
2008-2010	Member, External Advisory Group on Research, World Health Organization
2008	Member, International Review Committee, Health Council of the Netherlands
2007-2014	Member of the Board, Institute for Health Metrics and Evaluation, University of Washington, Seattle
2007-	Member, China Medical Board
2006-2010	Member, Governing Council for Research on Patient Safety (WHO World Alliance for Patient Safety)
2005-2017	U.S. Delegate for Medicine, Oxford University Press
2004-2005	Member, Advisory Committee, The International Risk Goverance Council
2004-2006	Member, Advisory Council, 2022 Foundation Limited
2004-2005	Member, Advisory Committee, Rx for Survival (PBS Documentary Series)
2003-2017	Member, William and Flora Hewlett Foundation Board of Directors

2003	Member, American Public Health Association, Medicine and Public Health Initiative Advisory Board
2003-2014	Member, Advisory Council, "Sister to Sister - Everyone has a Heart Foundation"
2003-2008	Member, Journal of the American Medical Association Oversight Committee
2003	Member, Bill and Melinda Gates Foundation Human Capacity for Global Health Steering Committee
2003-2008	Member, Advisory Council, Nemours Health and Preventive Services
2003	Member, Hong Kong SARS Experts Committee
2002-2014	President, Institute of Medicine of the National Academies
2002-2012	Chairman, National Advisory Committee to the Robert Wood Johnson Foundation's Health & Society Scholars Program
2001-	Member, Foresight Committee, Veolia Institute
1999-2000	Co-Chair, Committee on HIV Prevention Strategies, Institute of Medicine
1998-2001	Member, Board on Global Health, Institute of Medicine
1997-1998	Chairman, Committee on Summary Measures of Population Health, Institute of Medicine
1996-1999	Member, CDC Foundation Board of Directors
1995-1998	Co-Chair, International Health Board, Institute of Medicine
1996-2001	Member, Board of Trustees, Carl J. Shapiro Institute for Education and Research at Harvard Medical School and Beth Israel Deaconess Medical Center
1994-2003	Member, Board of Visitors, Dimock Health Center, Boston
1994-2001	Member, Mayor Thomas Menino's Advisory Committee on AIDS
1994-2014	Member, François-Xavier Bagnoud US Foundation Board
1993-1998	Member, Membership Committee, Institute of Medicine
1993-1995	Chairman, Committee on Risk Characterization, National Research Council
1992-1994	Chairman, Committee on the Social and Ethical Impacts of Developments in Biomedicine, National Research Council

1991-1993	Honorary Trustee, Longwood Symphony Orchestra, Boston
1989-1991	Chairman, Committee to Evaluate the Adverse Consequences of Pertussis and Rubella Vaccines, Institute of Medicine
1989-1997	Member, Advisory Committee on AIDS, Centers for Disease Control
1989-1992	Member, Technical Advisory Group, Agency for International Development AIDS Program
1988-1991	Member, Advisory Committee, AIDS Fellowships Program, National Medical Fellowships, Inc.
1987-1988	Member, Committee on the Evaluation of Poliomyelitis Vaccines, Institute of Medicine
1986-1997	Member, Board of Directors, American Foundation for AIDS Research
1986	Member, Steering Committee on a National Strategy for AIDS, Institute of Medicine
1986	Chairman, Grants Review Committee to Establish Centers for Research and Demonstration of Health Promotion and Disease Prevention, Centers for Disease Control
1006	M I N I O I Comit T I D
1986	Member, New Jersey Cardiac Services Task Force
1985-1988	Member, New Jersey Cardiac Services Task Force Member, Board of Directors, Life Resources, Inc.
1985-1988	Member, Board of Directors, Life Resources, Inc.
1985-1988 1985-1995	Member, Board of Directors, Life Resources, Inc. Member, Academic Advisory Committee, National Institute for Public Health, Mexico Member, Advisory Committee, Health Policy and Management Program, National
1985-1988 1985-1995 1985-1988	Member, Board of Directors, Life Resources, Inc. Member, Academic Advisory Committee, National Institute for Public Health, Mexico Member, Advisory Committee, Health Policy and Management Program, National Medical Fellowships, Inc. Chairman, Child Health Advisory Panel, Office of Technology Assessment, Congress
1985-1988 1985-1995 1985-1988 1985-1988	Member, Board of Directors, Life Resources, Inc. Member, Academic Advisory Committee, National Institute for Public Health, Mexico Member, Advisory Committee, Health Policy and Management Program, National Medical Fellowships, Inc. Chairman, Child Health Advisory Panel, Office of Technology Assessment, Congress of the United States
1985-1988 1985-1995 1985-1988 1985-1988	Member, Board of Directors, Life Resources, Inc. Member, Academic Advisory Committee, National Institute for Public Health, Mexico Member, Advisory Committee, Health Policy and Management Program, National Medical Fellowships, Inc. Chairman, Child Health Advisory Panel, Office of Technology Assessment, Congress of the United States Member, Preventive Services Task Force, U.S. Public Health Service Consultant, Agency for Health Care Policy and Research (formerly, National Center for
1985-1988 1985-1995 1985-1988 1985-1988 1985-1988 1985-1990	Member, Board of Directors, Life Resources, Inc. Member, Academic Advisory Committee, National Institute for Public Health, Mexico Member, Advisory Committee, Health Policy and Management Program, National Medical Fellowships, Inc. Chairman, Child Health Advisory Panel, Office of Technology Assessment, Congress of the United States Member, Preventive Services Task Force, U.S. Public Health Service Consultant, Agency for Health Care Policy and Research (formerly, National Center for Health Services Research)

Harvey Vernon Fineberg

1982-1985	Member, Committee on Issues and Priorities for New Vaccine Development, Institute of Medicine
1982	Consultant, World Health Organization
1981-1982	Member, Health Care Technology Study Section, National Center for Health Services Research
1980-1983	Trustee, Newton-Wellesley Hospital
1980-1981	Consultant, National Center for Health Care Technology
1980-1981	Member, Advisory Panel on Strategies for Medical Technology Assessment, Office of Technology Assessment, Congress of the United States
1978-1984	Member, Visiting Committee of the Medical Department, Massachusetts Institute of Technology
1977-1978	Consultant, Department of Public Welfare, Commonwealth of Massachusetts
1976-1977	Member, Committee on CT Scanning, Institute of Medicine
1974-1979	Member, Public Health Council, Commonwealth of Massachusetts
1972-1973	Medical Consultant to the Governor's Advisory Council on Comprehensive Health Planning in Massachusetts
1971-1972	Member, Governor's Advisory Council on Comprehensive Health Planning in Massachusetts
1970	Investigator, Program Planning Department, Health Services Administration, New York City

Professional Organizations

2013-	Member, American Philosophical Society
2012-	Foreign Fellow, The Academy of Athens
2011-	Foreign Member, Chinese Academy of Engineering
2002-2014	President, Institute of Medicine of the National Academies (now National Academhy of Medicine)
1999-	Fellow, New York Academy of Sciences
1996-	Member, National Academy of Medicine (Mexico)

Harvey Vernon Fineberg

1997-	Fellow, American Association for the Advancement of Science
1994-	Fellow, American Academy of Arts and Sciences
1993-2002	Vice-President, International Council for Global Health Progress
1987-	Member, American College of Preventive Medicine
1984-	Member, American Public Health Association
1984-	Member, American Medical Association
1984-2002	Member, Massachusetts Medical Society
1982-	Member, National Academy of Medicine (formerly, Institute of Medicine)
1980-1981	President, Society for Medical Decision Making
1979-1980	Trustee, Society for Medical Decision Making
1979-	Member, Society for Medical Decision Making

Editorial Boards

2014-	New England Journal of Medicine
1994-1997	Preventive Medicine
1993-1997	Health and Human Rights
1982-1988	Medical Care Review
1981-1985	Medical Decision Making

PUBLICATIONS

Journal Articles

- 1. Fineberg HV, Parker GS, Pearlman LA. CT scanners: distribution and planning status in the United States. *The New England Journal of Medicine* 1977;297:216-8.
- 2. Fineberg HV, Bauman R, Sosman M. Computerized cranial tomography: effect on diagnostic and therapeutic plans. *Journal of the American Medical Association* 1977;238:224-7.
- 3. Wittenberg J, Fineberg HV, Black EB, Kirkpatrick RH, Schaffer DL, Ikeda MK, Ferrucci JT, Jr. Clinical efficacy of computed body tomography. *American Journal of Roentgenology* 1978;131:5-14.
- 4. Fineberg HV, Gabel R, Sosman M. The acquisition and application of new medical knowledge by anesthesiologists: three recent examples. *Anesthesiology* 1978;48:430-6.
- 5. Fineberg HV. Life, death...and dollars. *The Sciences* 1978;18:30-2.
- 6. Goitein M, Wittenberg J, Mendionda M, Doucette J, Friedberg C, Ferrucci J Jr., Gunderson L, Linggood R, Shipley WV, Fineberg, HV. The value of CT scanning in radiation therapy planning: a prospective study. *International Journal of Radiation Oncology, Biology, Physics* 1979;5:1787-8.
- 7. Fineberg HV. Advances in computed tomography. *Proceedings of the IEEE* 1979;67:1272-3.
- 8. Fineberg HV, Hiatt HH. Evaluation of medical practices: the case for technology assessment. *The New England Journal of Medicine* 1979;301:1086-91.
- 9. Gorry GA, Kassirer JP, Fineberg HV, Pauker SG, Elstein AS, Pierce JG. Symposium: the role of decision analysis in medical education and practice. *Research in Medical Education* 1979;18:427-37.
- 10. Wittenberg J, Fineberg HV, Ferrucci JT Jr., Simeone JF. Mueller PR, van Sonnenberg E, Kirkpatrick RH. Clinical efficacy of computed body tomography II. *American Journal of Roentgenology* 1980;134:1111-20.
- 11. Koplan J, Fineberg HV, Benfari MJ, Rosenberg ML. Value of stool cultures. *The Lancet* 1980;2:413-6.
- 12. Fineberg HV, Pearlman LA, Gabel RA. The case for abandonment of explosive anesthetic agents. *The New England Journal of Medicine* 1980;303:613-7.
- 13. Fineberg HV, Wittenberg J. Evaluation of computed tomography in pancreatic cancer. *Bulletin du Cancer* (Paris) 1980;67:390-4.

- 14. Fineberg HV. Decision trees: construction, uses, and limits. *Bulletin du Cancer* (Paris) 1980;67:395-404.
- 15. Fineberg HV, Sherman H. Tutorial on the health and social value of computerized medical imaging. *IEEE Transactions on Biomedical Engineering* Feb. 1981;BME-28(2):50-6.
- 16. Berwick DM, Fineberg HV, Weinstein MC. When doctors meet numbers. *American Journal of Medicine* 1981;71:991-8.
- 17. Fineberg HV, Pearlman LA. Surgery for peptic ulcer disease in the United States: trends before and after the introduction of cimetidine. *The Lancet* 1981;1:1305-7.
- 18. Sherman H, Sandberg S, Fineberg HV. Exponential increase in age-specific prevalence of ventricular dysrhythmia among males. *Journal of Chronic Diseases* 1982;35:734-50.
- 19. Goldman L, Weinberg M, Weisberg M, Olshen R, Cook EF, Sargent RK, Lamas GA, Dennis, C, Wilson C, Deckelbaum L, Fineberg HV, Stiratelli R, the Medical House Staffs at Yale-New Haven Hospital and Brigham and Women's Hospital. A computer-derived protocol to aid in the diagnosis of emergency room patients with acute chest pain. *The New England Journal of Medicine* 1982;307:588-96.
- 20. Fineberg HV, Pearlman LA. Low-cost medical practices. *Annual Review of Public Health* 1982;3:225-48.
- 21. Stason WB, Fineberg HV. Implications of alternative strategies to diagnose coronary artery disease. *Circulation* 1982;66(III):80-6.
- 22. Fineberg HV. Tendenze nella chirurgia dell'ulcera prima e dopo la cimetidina. Simposio Internazionale su "Costi e Benefici nella terapia dell'ulcera peptica." *Farmaci* 1982;6:81-8.
- 23. Jordan HS, Burke JF, Fineberg HV, Hanley JA. Diffusion of innovations in burn care: selected findings. *Burns* 1983;9(4):271-9.
- 24. Fineberg HV. Impact of technological investment on the cost of the health care system. Journal of Neuroradiology 1983;10:199-204.
- 25. Reder V, Fineberg HV, Rosoff CB, White LS. Shorter length of stay for simple cholecystectomy: cost-effectiveness of alternative strategies. *Medical Care* 1983;21(7):745-54.
- 26. Fineberg HV, Wittenberg J, Ferrucci J, Mueller P, Simeone J, Goldman J. The clinical value of body computed tomography over time and technologic change. *American Journal of Roentgenology* 1983; 141:1067-72.
- 27. Chang RW, Fineberg HV. Risk-benefit considerations in the management of polymyalgia rheumatica. *Medical Decision Making* 1983; 3(4):459-75.
- 28. Juul S, Pliskin JS, Fineberg HV. Variation and information in white blood cell differential counts. *Medical Decision Making* 1984;4(1):69-80.

- 29. Fineberg HV, Scadden D, Goldman L. Care of patients with a low probability of acute myocardial infarction: cost-effectiveness of alternatives to coronary-care- unit admission. *The New England Journal of Medicine* 1984;310:1301-7.
- 30. Fineberg HV. Irresistible medical technologies: weighing the costs and benefits. *Technology Review* 1984;87(8):17-8.
- 31. Read JL, Quinn RJ, Berwick DM, Fineberg HV, Weinstein MC. Preferences for health outcomes: comparison of assessment methods. *Medical Decision Making* 1984;4(3):315-29.
- 32. Louis TA, Fineberg HV, Mosteller F. Findings for public health from meta- analyses. *Annual Review of Public Health* 1985;6:1-20.
- 33. Goldman L, Fineberg HV. Must all rule-out myocardial infarction patients be admitted to intensive care unit? *Consultant* 1985;25:35-45.
- 34. Fineberg HV, Funkhouser AR, Marks H. Variation in medical practice: a review of the literature. *Ind Health Care* (Cambridge, MA) 1985;2:143-68.
- 35. Fineberg HV. Technology assessment: motivation, capability, and future directions. *Medical Care* 1985;23:663-71.
- 36. Barry MJ, Cleary PD, Fineberg HV. Screening for HIV infection: risks, benefits, and the burden of proof. *Law, Medicine and Health Care* 1986;14(5-6):259-67.
- 37. Fineberg HV. Clinical evaluation: how does it influence medical practice? *Bulletin du Cancer* (Paris) 1987;74:333-46.
- 38. Fineberg HV. Evaluation of medical technology in developing countries and industrialized countries. Salud Publica de Mexico 1986;28:328-34. [Spanish]
- 39. Fineberg HV. Theoretical models for assessing the value of diagnostic tests. *INSERM* 1987;79-92.
- 40. Cleary PD, Barry MJ, Mayer KH, Brandt AM, Gostin L, Fineberg HV. Compulsory premarital screening for the human immunodeficiency virus. *Journal of the American Medical Association* 1987;258(13):1757-62.
- 41. Fineberg HV, Wilson ME. Special report the politics of AIDS. Why mandatory testing is a bad idea. *The World & I* 1987 (November); 29-33.
- 42. Laffel GL, Fineberg HV, Braunwald E. A cost-effectiveness model for coronary thrombolysis/reperfusion therapy. *American Journal of Cardiology* 1987;10(5):79B-90B.
- 43. Fineberg HV. Education to prevent AIDS: prospects and obstacles. Science 1988;239:592-6.
- 44. Fineberg HV. The social dimensions of AIDS. Scientific American 1988;259(4): 128-34.

- 45. DeGruttola V, Fineberg HV. Estimating prevalence of HIV infection: considerations in the design and analysis of a national seroprevalence survey. *Journal of Acquired Immune Deficiency Syndromes* 1989;2(5):472-80.
- 46. Fineberg HV. Strategies for prevention of diseases. Salud Publica de Mexico 1989;31:124-6. [Spanish]
- 47. Makadon HJ, Seage GR, Thorpe KE, Fineberg HV. Paying the medical cost of the HIV epidemic: a review of policy options. *Journal of Acquired Immune Deficiency Syndromes* 1990;3(2):123-33.
- 48. Fineberg HV. Screening for HIV infection and public health policy. Law, Medicine and Health Care 1990;18(1-2):29-32.
- 49. Fineberg HV. The impact of AIDS on the health care system. Salud Publica de Mexico 1990;32(1):80-83. [Spanish]
- 50. Wilson ME, von Reyn CF, Fineberg HV. Infections in HIV-infected travelers: risks and prevention. *Annals of Internal Medicine* 1991;114(7):582-92.
- 51. Siegel JE, Weinstein MC, Fineberg HV. Bleach programs for preventing AIDS among IV drug users: modeling the impact of HIV prevalence. *American Journal of Public Health* 1991;81(10):1273-9.
- 52. Howson CP, Katz M, Johnston RB Jr., Fineberg HV. Chronic arthritis after rubella vaccination. *Clinical Infectious Diseases* 1992;15:307-12.
- 53. Howson CP, Fineberg HV. Adverse events following pertussis and rubella vaccines. *Journal of the American Medical Association* 1992;267(3):393-7.
- 54. Heymann SJ, Brewer TF, Fineberg HV, Wilson ME. How safe is safe enough? new infections and the U.S. blood supply. *Annals of Internal Medicine* 1992;117(7):612-4.
- 55. Howson CP, Fineberg HV. The ricochet of magic bullets: summary of the Institute of Medicine report, adverse effects of pertussis and rubella vaccines. *Pediatrics* 1992;89:318-24.
- 56. Cowan LD, Griffin MR, Howson CP, Katz M, Johnston RB Jr., Shaywitz BA, Fineberg HV. Acute encephalopathy and chronic neurological damage after pertussis vaccine. *Vaccine* 1993;11:1371-9.
- 57. Fineberg HV. Ethical Dilemmas in Health and Development. *Journal of Seizon and Life Sciences* 1993;4(1):13-21.
- 58. Mann JM, Gostin L, Gruskin S, Brennan T, Lazzarini Z, Fineberg HV. Health and human rights. *Health and Human Rights* Fall 1994;1(1):7-23.
- 59. Fineberg HV, Green G, Ware JH, Anderson BL. Changing public health training needs: professional education and the paradigm of public health. *Annual Review of Public Health* 1994;15:237-58.

- 60. Colditz GA, Brewer TF, Berkey CS, Wilson ME, Burdick E, Fineberg HV, Mosteller F. Efficacy of BCG vaccine in the prevention of tuberculosis: meta-analysis of the published literature.

 Journal of the American Medical Association 1994;271(9):698-702.
- 61. Wilson ME, Fineberg HV, Colditz GA. Geographic latitude and the efficacy of Bacillus Calmette-Guérin vaccine. *Clinical Infectious Diseases* 1995;20:982-91.
- 62. Colditz GA, Berkey CS, Mosteller F, Brewer TF, Wilson ME, Burdick E, Fineberg HV. The efficacy of bacillus calmette-guérin vaccination of newborns and infants in the prevention of tuberculosis: meta-analyses of the published literature. *Pediatrics* 1995;96(1 Pt 1):29-35.
- 63. Brewer TF, Heymann SJ, Colditz GA, Wilson ME, Auerbach K, Kane D, Fineberg HV. Evaluation of tuberculosis control policies using computer simulation. *Journal of the American Medical Association* 1996; 276:1898-903.
- 64. Litvak E, Siegel JE, Pauker SG, Lallemant M, Fineberg HV, Weinstein MC. Whose Blood is Safer?: The effect of the stage of the epidemic on screening for HIV. *Medical Decision Making* Oct-Dec 1997;(17)4.
- 65. Bach FH, Fishman JA, Daniels N, Proimos J, Anderson B, Carpenter CB, Forrow L, Robson SC, Fineberg HV. Uncertainty in xenotransplantation: Individual benefit versus collective risk. *Nature Medicine* 1998;4(2):141-4.
- 66. Ross RH, Fineberg HV. Medical Students' Evaluations of Curriculum Innovations at Ten North American Medical Schools. *Academic Medicine* 1998;73(3):258-65.
- 67. Howson CP, Fineberg HV, Bloom BR. The pursuit of global health: the relevance of engagement for developed countries. *The Lancet* 1998;351:586-90.
- 68. Heymann SJ, Brewer TF, Wilson ME, Fineberg HV. The need for global action against multidrug-resistant tuberculosis. *Journal of the American Medical Association* 1999;231(22):2138-40.
- 69. Heymann SJ, Brewer TF, Wilson ME, Colditz GA, Fineberg HV. Pediatric tuberculosis in the United States: What needs to be done to decrease morbidity and mortality. *Pediatrics* 2000;106(1):e1-7.
- 70. Brewer TF, Heymann SJ, Krumplitsch SM, Wilson ME, Colditz GA, Fineberg HV. Strategies to decrease tuberculosis in US homeless populations: A computer simulation model. *Journal of the American Medical Association* 2001;286(7):834-42.
- 71. Harrison SC, Alberts B, Ehrenfeld E, Enquist L, Fineberg H, McKnight SL, Moss B, O'Donnell M, Ploegh H, Schmid SL, Walter KP, Theriot J. Discovery of anrivirals against smallpox. *Proc. Natl. Acad. Sci. USA*. 2004;Early Edition/pnas.0403600101

- 72. Fineberg, HV. An economic analysis of eating and physical activity behaviors: exploring effective strategies to combat obesity. *American Journal of Preventive Medicine*. 2004, 27 (3S):172-4.
- 73. Fineberg HV: Science and medicine in the 21st century: Opportunities for rehabilitation medicine. *Am J Phys Med Rehabil.* 2005;84:928-31.
- 74. Fineberg HV. The predicament of American health care. Bulletin of the American Academy of Arts and Sciences 2005, 48(3):8-10.
- 75. Fineberg HV. Preparing for avian influenza: Lessons from the "Swine Flu Affair." *Journal of Infectious Diseases* 2008;197:S14-8.
- 76. Fineberg HV. Public health and medicine: Where the twain shall meet. *American Journal of Preventive Medicine* 2011;41 (4S3): S149-51.
- 77. Fineberg HV. Neo-evolution: Is *Homo sapiens* ready? *British Medical Journal* 2011;343:d7649 (24-31 December 2011, 1322-3).
- 78. Fineberg HV. From shared decision making to patient-centered decision making. *Israel Journal of Health Policy Research* 2012;1:6.
- 79. Fineberg HV. A successful and sustainable health system—how to get there from here (Shattuck Lecture). *The New England Journal of Medicine* 2012;366:1020-7.
- 80. Fineberg HV. The paradox of disease prevention: celebrated in principle, resisted in practice. Journal of the American Medical Association 2013;310:85-90.
- 81. Fineberg HV. Toward a new social compact for health research. *Journal of the American Medical Association* 2013;310:1923-1924.
- 82. Fineberg HV. Pandemic preparedness and response: lessons from the H1N1 influenza of 2009. New England Journal of Medicine 2014;370:1335-1342.
- 83. Madhavan G, Phelps CE, Colwell, RR, Rappuoli R, and Fineberg HV. In plain view: Transparent systems approach for enhancing health policy decisions. *The Bridge*, National Academy of Engineering, Summer 2016;5-10.
- 84. Phelps C, Madhavan G, Rappuoli R, Colwell R, Fineberg H. Beyond cost-erfectiveness: Using systems analysis for infectious disease preparedness. *Vaccine* 2017;35:A46-A49.

Editorials

1. Fineberg HV. Computerized tomography: dilemma of health care technology. *Pediatrics* 1977;59:147-9.

. , ,

- 2. Fineberg HV. Evaluation of computed tomography: achievement and challenge. *American Journal of Roentgenology* 1978;131:1-4.
- 3. Fineberg HV. Medical technology policies and computed tomography. *Annals of Internal Medicine* 1979;90:114-5.
- 4. Wittenberg J, Fineberg HV. Evaluating efficacy. *American Journal of Roentgenology* 1980;134:1277-9.
- 5. Fineberg HV. Medical decision making and the future of medical practice. *Medical Decision Making* 1981;1:4-6.
- 6. Stason WB, Fineberg HV. Coronary artery disease: what is a reasonable diagnostic strategy? *Annals of Internal Medicine* 1981;95:385-6.
- 7. Fineberg HV. Doctors and decision analysis. *Medical Decision Making* 1984;4(3):267-70.
- 8. Fineberg HV. Future directions for research. Medical Decision Making 1985;5(1):35-8.
- 9. Fineberg HV. A way to tackle AIDS education. The New York Times July 13, 1986.
- 10. Fineberg HV. Introduction to the invitational conference on applications of analytic methods to mental health: practice, policy, research. *Medical Care* 1987;25(12):S53-4.
- 11. Fineberg HV. Commentary. American Journal of Preventive Medicine 1995;11(6 Suppl):4-5.
- 12. Fineberg HV, Wilson ME. Social vulnerability and death by infection. *New England Journal of Medicine* 1996;334:859-60.
- 12. Bach FH, Fineberg HV. Call for moratorium on xenotransplants. *Nature* 1998;391:326.
- 13. Alberts B, Fineberg HV. Harnessing new science is vital for biodefense and global health. *Proc. Natl. Acad. Sci. USA*. 2004;Early Edition/pnas.0404433101.
- 14. Fineberg HV. Health reform in Mexico: a work in progress. *Lancet* 2006;368:1755-6.
- 15. Fineberg HV, Wilson ME. Epidemic science in real time. Science 2009;324:987.
- 16. Fineberg H. The need to get the right health statistics and to get the health statistics right. Annals of the American Academy of Political and Social Science 2010;631:28-9.
- 17. Fineberg HV, Hunter DJ. A global view of health—An unfolding series. *New England Journal of Medicine* 2013;368:78-79.
- 18. Fineberg HV. Public health in a time of government austerity. *American Journal of Public Health* 2013;103:47-49.

1, 1

- 19. Parker L, Fineberg HV. Building strategies and leadership for change: the obesity epidemic in Latino children. *American Journal of Preventive Medicine* 2013;44(3S3):S292-293.
- 20. Fineberg HV. The state of health in the United States. *Journal of the American Medical Association* 2013;310:585-586.
- 21. Hunter DJ, Fineberg HV. Convergence to common purpose in global health. *New England Journal of Medicine* 2014;370:1753-1755.
- 22. Dzau VJ, Fineberg HV. Restore the US Lead in Biomedical Research. *Journal of the American Medical Association* 2015;313:143-144.
- 23. Fineberg HV. Wider Attention for Gain of Function Research. Science 2015;347:929.
- 24. Fineberg HV. Chan Zuckerberg Science is a model for big donors. *The Chronicle of Philanthropy*, September 26, 2016.
- 25. Fineberg HV. Retrospective: David Hamburg (1925-2019), Renowned physician-psychiatrist and humanitarian. *Science* 2019;364:940.

Book Chapters

- 1. Weinstein MC, Fineberg HV. "Cost-effectiveness analysis for medical practices: appropriate laboratory utilization." In *Logic and Economics of Clinical Laboratory Use*, edited by ES Benson and M Rubin. Amsterdam: Elsevier North Holland, 1978. pp. 3-32.
- 2. Fineberg HV. "Assessing the diagnostic contribution of imaging tests: computed tomography and ultrasound of the pancreas." In *Evaluation of Efficacy of Medical Action*, edited by A Alperovitch, FT deDombal, and F. Gremy. Amsterdam: North-Holland Publishing Company, 1979, pp. 49-164.
- 3. Fineberg HV. "Gastric freezing: a study of diffusion of a medical innovation." In *Medical Technology and the Health Care System: A Study of the Diffusion of Equipment-Embodied Technology*. Washington, D.C.: National Academy of Sciences, 1979, pp. 173-200.
- 4. Fineberg HV. "Clinical chemistries: the high cost of low-cost diagnostic tests." In *Medical Technology: The Culprit Behind Health Care Costs?*, edited by S Altman and R Blendon. Washington, D.C.: DHEW Publication No. (PHS)79-3216, 1979, pp. 144-165.
- 5. Fineberg HV, Wittenberg J, Ferrucci JT Jr. "Cost-effectiveness." In *Alimentary Tract Imaging*, Vol. 3, edited by A Margulis and HJ Burhenne. C.V. Mosby Co., 1979, pp. 68-71.
- 6. Wittenberg J, Fineberg HV, Ferrucci JT Jr. "The clinical efficacy of computed body tomography in 461 patients." In *Abdominal Computerized Tomography*, edited by JL Lamarque and JM Bruel. Amsterdam: Excerpta Medica, 1979, pp. 348-352.
- 7. Frazier HS, Fineberg HV. "Health policy and the need to know." In *The Social Context of Medical Research*, edited by H Wechsler, et al. Ballinger Publishing Co., 1981, pp. 145-161.

y 14 .

- 8. Fineberg HV, Pearlman LA "Benefit-and-cost analysis of medical interventions: the case of cimetidine and peptic ulcer disease." In *The Implications of Cost- Effectiveness Analysis of Medical Technology*. Background Paper #2: Case Studies of Medical Technologies, Office of Technology Assessment, United States Congress, 1981.
- 9. Fineberg HV. "Surgery for peptic ulcer disease in the United States: trends before and after the introduction of cimetidine." In *Proceedings of A Cost-Benefit Symposium*. Smith Kline and French Company, Amsterdam, March 1981.
- 10. Fineberg HV. "Ulcer disease: Epidemiology, diagnosis, and treatment." In Cost-Benefit and Cost-Effectiveness Analysis in Policymaking: Cimetidine as a Model. Proceedings of an International Symposium, Tarpon Springs, Florida, November 22-24, 1981, pp. 81-87.
- 11. Fineberg HV. "Cost-effectiveness of medical technology: the physician's responsibility." In *The Quality of Care in Anesthesia*, edited by BL Grundy and JS Gravenstein. Springfield, IL: Charles C. Thomas Publishing, 1982, pp. 177-184.
- 12. Fineberg HV, Wittenberg J. "Cost-effectiveness." In *Alimentary Tract Radiology*, Vol. 2, 3rd Edition, edited by AR Margulis and HJ Burhenne. St Louis: C.V. Mosby Co., 1983, pp. 2447-2457.
- 13. Fineberg HV. "Discussion of paper by Jonsson A review of the macroeconomic evaluation of cimetidine." In *Economic and Medical Evaluation of Health Care Technologies*, edited by AJ Culyer and B Horisberger. Berlin: Springer-Verlag, 1983, pp. 262-269.
- 14. Goldman L, Fineberg HV. "The cost-effectiveness of coronary care units." In *Acute Coronary Care: Principles and Practice*, edited by RM Cahill and GS Wagner. Boston: Martinus Nijoff Publishing, 1985, pp. 369-374.
- 15. Fineberg HV, Lawthers-Higgins A. "The case study as a tool for medical technology assessment." In *Assessing Medical Technologies*. Washington, D.C.: National Academy Press, 1985, pp. 97-101.
- 16. Fineberg HV. "Effects of clinical evaluation on the diffusion of medical technology." In *Assessing Medical Technologies*. Washington, D.C.: National Academy Press, 1985, pp. 176-210.
- 17. Fineberg HV, Funkhouser AR, Marks H. "Variation in medical practice: a review of the literature." In *Industry and Health Care: Health Cost Management and Medical Practice Patterns*, Vol. 2, edited by R Egdahl and D Chapman Walsh. Cambridge, MA: Ballinger Publishing Company, 1985, pp. 143-168.
- 18. Fineberg HV. "Public health and private rights: health, social and ethical perspectives." In AIDS Impact on Public Policy, edited by R Hummel, W Levy, M Rampolla, and S Cohorost. New York: Proceedings of the AIDS International Symposium, Plenum Press, 1986, pp. 17-23.

14 .

- 19. Fineberg HV. "Evaluation of diagnostic tests and the role of diagnosis in therapeutic trials." In *Methods in Clinical Trials in Neurology: Vascular and Degenerative Brain Disease*, edited by R Capildeo and JM Orgogozo. London: The MacMillan Press Ltd, 1988, pp. 57-82.
- 20. Luthe MA, Fineberg HV. "Clinical efficacy: 5000 MRI cases between 0.15 and 0.6 tesla." In *Magnetic Resonance Imaging*, Vol. 1, 2nd Edition, edited by CL Partain, RR Price, JA Patton, AE James Jr., and MV Kulkarni. Philadelphia: W.B. Saunders, 1988, pp. 883-898.
- 21. Fineberg HV. "Is AIDS a special case for health services research?" In Health Services Research Methodology: A Focus on AIDS, edited by L Sechrest, H Freeman, and A Mulley. Proceedings of the National Center for Health Services Research and Health Care Technology Assessment Conference, Tucson, Arizona, June 4-6, 1988 pp. 1-4.
- 22. Weinstein MC, Graham JD, Siegel JE, Fineberg HV. "Cost-effectiveness analysis of AIDS prevention programs: concepts, compliance, and illustrations." In *AIDS, Sexual Behavior, and IV Drug Use*, edited by CF Turner, HG Muller, and LE Moses. Washington, D.C.: National Academy Press, 1989, pp. 471-499.
- 23. Fineberg HV. "Application of Health Services Research on HIV infection to the Formulation of Health Policy." In *New Perspectives on HIV-Related Illnesses: Progress in Health Services Research*, edited by WN LeVee. Proceedings of the National Center for Health Services Research and Health Care Technology Assessment Conference, Miami, Florida, May 17-19, 1989, pp. 13-17.
- 24. Fineberg HV. "Technology Assessment and Policy Making." In *On Health Care Technologies Assessment*. Proceedings of the Symposium on Health Care Technologies Assessment, Quebec City, May 25 and 26, 1989, pp. 13-18.
- 25. Fineberg HV. "The Quest for Causality in Health Services Research." In Research Methodology: Strengthening Causal Interpretations of Nonexperimental Data, edited by L Sechrest, E Perrin, and J Bunker. Proceedings of the National Center for Health Services Research and Health Care Technology Assessment Conference, Tucson, Arizona, May 1990, pp. 215-220.
- 26. Fineberg HV. "Modern Challenges in Medical Care." In Kampo Medicine: Tradition Guiding Innovation. Report of the 100th Anniversary International Kampo Symposium, Tokyo, Japan, April, 1993, pp. 12-15.
- 27. Fineberg HV. "Ethical Approaches to Health and Development." *Ethical Dilemmas in Health and Development*, edited by K Aoki. Tokyo: Japan Scientific Societies Press, 1994, pp. 3-17.
- 28. Fineberg HV. "Crossing Boundaries." In *Health Systems in an Era of Globalization:*Challenges and opportunities for North America, edited by P. Freeman, O. Gómez-Dantés, and J. Frenk. Washington, DC: National Academy of Sciences, 1995, pp.55-58.
- 29. Fineberg HV. "Health Reform in the United States." In *Environment, Health and Medical Care for the 21st Century*, edited by Eiji Yano. Report of the First Teikyo-Harvard Symposium, Tokyo, Japan, 1995, pp.20-34.

- 30. Fineberg HV. "Conclusion." In *Cancer, AIDS, and Quality of Life*, edited by Jay A. Levy, Claude Jasmin, and Gabriel Bez. New York: Plenum Press, 1997, pp. 189-192.
- 31. Report of the Committee on Summary Measures of Population Health: Fineberg HV (chair), Akhter M, Daniels N, Fryback D, Jamison D, Mundinger M, Sipes-Metzler PR. Summarizing Population Health: Directions for the Development and Application of Population Metrics, edited by Marilyn J. Field and Marthe R. Gold. Washington DC: National Academy Press, 1998.
- 32. Mann JM, Gostin L, Gruskin S, Brennan T, Lazzarini Z, Fineberg HV. "Health and Human Rights." In *Health and Human Rights*, edited by Jonathan M. Mann, Sofia Gruskin, Michael A. Grodin, and George J. Annas. New York: Routledge, 1999, pp. 7-20.
- 33. Fineberg HV. Foreword to *Decision Making in Health and Medicine: Integrating Evidence and Values*, by Myriam Hunink and Paul Glasziou (with Joanna Siegel, Jane Weeks, Joseph Pliskin, Arthur Elstein, and Milton Weinstein). Cambridge, UK: Cambridge University Press, 2001.
- 34. Fineberg HV and Fineberg DE. Foreword to *Medicine and Compassion: A Tibetan Lama's Guidance for Caregivers*, by Chokyi Nyima Rinpoche with David R. Shlim. Boston: Wisdom Publications, 2004.
- 35. Fineberg, HV. "Masterful Mentor." In Guardian of the Presidency: The Legacy of Richard E. Neustadt, edited by Matthew J. Dickinson and Elizabeth A. Neustadt. Washington, D.C.: Brookings Institution Press, 2007, pp. 110-120.
- 36. Fineberg, H. "The New Roles of the Academy of Medicine." In *First-Contact Medicine in Ibero-America*, Proceedings of the XVII ALANAN Meeting (2008), Mexico City, 2010, pp. 117-122.
- 37. Fineberg, HV. "Dialing Back the Weight of the Nation." Afterword to *The Weight of the Nation: To Win, We Have to Lose*, by John Hoffman and Judith A. Salerno, with Alexandra Moss, Foreword by Kelly D. Brownell. New York: St Martin's Press, 2012.
- 38. Fineberg, HV. Foreword to The American Health Care Paradox: Why Spending More Is Getting US Less, by Elizabeth H. Bradley and Lauren A. Taylor. New York: PublicAffairs, 2013.
- 39. Fineberg, HV. "Three Great Tasks for Health." United Health Foundation. *America's Health Rankings: A Call to Action for Individuals and Their Communities, 2013 Edition,* 4-7. http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/AnnualReport2013-r.pdf.
- 40. Fineberg, HV. Foreword to *Decision Making in Health and Medicine* (2nd edition) by Myriam Hunink and Paul Glasziou (with Joanna Siegel, Jane Weeks, Joseph Pliskin, Arthur Elstein, and Milton Weinstein). Cambridge, UK: Cambridge University Press, 2017.

)₄ p

- 1. Neustadt R, Fineberg HV. *The Swine Flu Affair: Decision Making on a Slippery Disease*. Washington, D.C.: U.S. Department of Health, Education and Welfare, 1978.
- 2. Weinstein MC, Fineberg HV. Clinical Decision Analysis. Philadelphia: W.B. Saunders, 1980.
- 3. Neustadt R, Fineberg HV. *The Epidemic That Never Was: Policy Making in the Swine Flu Scare*. New York: Vintage Books, 1983.
- 4. Howson C, Howe C, Fineberg HV (editors). Adverse Effects of Pertussis and Rubella Vaccines. Washington, D.C.: National Academy Press, 1991.
- 5. Sepulveda J, Fineberg HV, Mann J (editors). AIDS Prevention through Education: A World View. New York: Oxford University Press, 1992.
- 6. Bulger RE, Bobby EM, Fineberg HV (editors). Society's Choices: Social and Ethical Decision Making in Biomedicine. Washington, D.C.: National Academy Press, 1995.
- 7. Stern PC, Fineberg HV (editors). *Understanding Risk: Informing Decisions in a Democratic Society*. Washington, D.C.: National Academy Press, 1996.
- 8. Ross RH, Fineberg HV. Innovators in Physician Education: The Process and Pattern of Reform in North American Medical Schools. New York: Springer Publishing Company, Inc., 1996.
- 9. Ruiz MS, Gable AR, Kaplan EH, Stoto MA, Fineberg HV and Trussell J (editors). No Time to Lose: Getting More from HIV Prevention. Washington, D.C.: National Academy Press, 2001.
- 10. Jasmin C, Fineberg HV, Lajous L, Wiesel E (editors). Global Health Equity: Medical Progress and Quality in the XXIst Century. Paris, France: Regimedia, 2002.
- 11. Hunter D, Fineberg HV (editors). *Readings in Global Health*. New York: Oxford University Press, 2015.

Case Studies

Editor and co-author of case materials published in the Public Management Series by the Kennedy School of Government. Representative case studies include:

[&]quot;Decentralization of New York City Health Services"

[&]quot;Hypertension in New York City"

[&]quot;Beth Israel Hospital Ambulatory Care"

[&]quot;Harvard Community Health Plan: Origins and Growth"

[&]quot;Financing Neighborhood Health Centers"

[&]quot;Professional Standards Review Organization"

[&]quot;Fluoridation in Greenfield"

EXHIBIT B



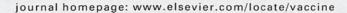
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

Vaccine





Letter to the Editor



On 10 January 2020, Greg Wolff published a study examining if seasonal influenza vaccination was associated with an increased odds of becoming infected with a respiratory virus other than influenza, a phenomenon known as virus interference https://www.sciencedirect.com/science/article/pii/S0264410X19313647).

Influenza vaccination data and viral respiratory laboratory results were obtained for the 20172018 influenza season. While the study found no association with influenza vaccination and overall risk of becoming infected with other respiratory viruses (slight decrease in odds was observed), when examining the association with influenza vaccination and the risk of becoming infected with specific viruses at the individual level, there were two viruses that showed significantly increased odds (endemic coronavirus and human metapneumovirus).

Coronavirus results in this study represented the four endemic, regularly circulating strains of coronavirus (229E, NL63, OC43, and HKU1) during the 20172018 influenza season, not novel coronavirus (COVID-19). The four circulating strains of coronavirus have existed in the general population for years, first identified in the mid-1960s. At the time of the study, and even at the time of initial electronic publication, COVID-19 was not yet in existence.

Established levels of immunity in the general population for the four circulating strains of coronavirus at the time of the study

when compared to lack of immunity for the novel COVID-19 strain make any sort of correlation between vaccination and COVID-19 invalid.

Therefore, the results of this study cannot and should not be interpreted to represent any sort of relationship or association of influenza vaccination receipt and COVID-19 illness. Results from this study DO NOT support the anti-vaccination viewpoint of avoiding seasonal influenza vaccination, and in fact should be interpreted in the opposite manner, since significant protection against influenza was associated with vaccination receipt, and a slight decrease in the odds of infection from other respiratory viruses was also noted.

Results from this study should not be applied to or interpreted with COVID-19 in any way.

Greg G. Wolff Armed Forces Health Surveillance Branch Air Force Satellite, 2510 5th Street, Bldg 840, Wright-Patterson AFB, OH 45433, United States

E-mail address: gregory.wolff.3@us.af.mil