

Earle B. Weiss, M.D. RESUME:

## MAJOR ACHIEVEMENTS:

1. Introduction and Pioneering studies of Controlled Mechanical Ventilation in the Acute Respiratory Failure of Chronic Obstructive Pulmonary Disorders.
  2. Arterial Blood gas profiles, 'Cross Over Asthma Point' in acute severe Asthma - Highlighted a critical phase in severe asthma for therapeutic intervention potential.
  3. Quantitative methods for recording breath sounds- early studies stimulated renewed interest in this area.
  4. Role of Calcium and Oxygen Toxic Products in inciting asthma and fundamental to basic airways reactivity.
  5. Clinical Symposia and The Ciba Collection THE RESPIRATORY SYSTEM; ANATOMY SECTIONS AND BRONCHIAL ASTHMA with Dr. Frank Netter.
  6. Advanced the scientific data for use of percutaneous needle biopsy in the diagnosis of (opportunistic) respiratory infections.
  7. Organized and served as General Chairman: First Scientific International Symposium of the Massachusetts Thoracic Society: STATUS ASTHMATICUS.
  8. Established (with Dr. L. Kettle) the first Clinical Assembly Section of the American Thoracic Society- A distinct scientific division of The American Thoracic Society (ATS) devoted exclusively to emphasize clinical respiratory issues- 1971- This Assembly has been a permanent component of ATS since that time and the major section of The Society.
  9. Textbook" BRONCHIAL ASTHMA: MECHANISMS AND THERAPEUTICS, In three editions this text was the major resource for basic researchers and clinicians in the United States as well as Internationally over a period of about 30 years.
  10. Status Asthmaticus Symposium Textbook: Published in 1978 was the only book devoted to the severe state of intractable asthma.
  11. Chairman and Organizer of the first Medical Devices Committee of The American Thoracic Society 1972-1975. Set standards for pulmonary function and lung physiology testing in laboratories and intensive care units. This committee also was integrated into a FDA advisory panel encompassing Respiratory Device Standards 1973-1975.
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## Curriculum Vitae

Date of birth: November 23, 1932

Place of birth: Waltham, MA

## Education

1955 B.S. Biology-Chemistry, Northeastern University - With Honors

1957 M.S. Biochemistry, Massachusetts Institute of Technology

1961 M.D. Albert Einstein College of Medicine

## Postdoctoral Training

### Internship and Residencies

1961-1962 Intern in Internal Medicine, Kings County Hospital, Brooklyn

1962-1964 Resident in Internal Medicine, Boston City Hospital, Boston

### Research Fellowships

1964-1966 Fellow, National Heart Institute(NIH): Lung Station (Tufts), UNITED STATES  
PUBLIC HEALTH SERVICE, Boston City Hospital, Boston

## Professional Positions and Appointments

### Academic Appointments

1966-1968	Instructor in Medicine, Tufts University School of Medicine
1968-1970	Assistant Professor of Medicine, Tufts University School of Medicine
1969-1970	Associate Professor of Medicine, Tufts University School of Medicine
1971-1977	Associate Professor of Medicine, University of Massachusetts Medical School
1976-1990	Associate Professor of Life Sciences, Worcester Polytechnic Institute
1978-	Lecturer in Medicine, Tufts University School of Medicine
1977-1990	Professor of Medicine, University of Massachusetts Medical School
1990-2002	Visiting Professor, Faculty of Medicine, Harvard Medical School

## Hospital Appointments

- 1967-1973 Associate Physician, Tufts Medical Service, Boston City Hospital, Boston
- 1964-1971 Senior Research Associate and Staff Physician Tufts Lung Station, Boston City Hospital
- 1964-1971 Founder and first Director Respiratory Intensive Care Unit, Boston City Hospital
- 1964-1971 Director Pulmonary Physiology Laboratory, Boston City Hospital
- 1969 –1971 Associate Chief of Medicine, Tufts Medical Service, Boston City Hospital, Boston
- 1971-1990 Director Division Respiratory Diseases, St. Vincent Hospital, Worcester 1971-
- 1990 Senior Physician, St. Vincent Hospital, Worcester
- 1984-1985 Associate Medical Director, St. Vincent Hospital, Worcester
- 1985-1987 Interim Medical Director, Saint Vincent Hospital, Worcester
- 1988- Medical Director, Senior Consultant - Foundation for Research in Bronchial Asthma and Related Diseases
- 1990-2004 Senior Pulmonary Scientist, Department of Anesthesia and Anesthesia Research, Brigham and Women's Hospital, Boston

## Other Professional Positions and Major Visiting Appointments

- 1966-1969 Consultant in Physiology, Norfolk County Sanitarium, South Braintree
- 1972-1990 Tuberculosis Consultant, Massachusetts Department of Public Health, Worcester County
- 1972-1990 Director, Regional Inpatient and Outpatient Tuberculosis Services, Commonwealth of Massachusetts, Worcester County
- 1973 Visiting Professor of Medicine, University of Guadalajara Medical School, Guadalajara
- 1975-1977 Consultant, FDA Advisory Panel: Pulmonary Devices Classification and Scientific Evaluation
- 1977 & 1982 Professor Extraordinaire, Faculty of Medicine, University of Guadalajara Medical School, Guadalajara, Jalisco, Mexico

## Awards and Honors

1955 The Academy-Honor Society, Northeastern University

1957- 2005 Society of Sigma Xi, Massachusetts Institute of Technology

1969 Diplomat, American Board of Internal Medicine

1970 Diplomat, American Board of Internal Medicine, Subspecialty Pulmonary Diseases

1970 Fellow, American College of Physicians- FACP

1971 Fellow, American College of Chest Physicians –FCCP

1971-1980 Associate Fellow, Royal College of Physicians

1971 Award for Meritorious Service, Teaching and Patient Care; I & III (Tufts) Medical Service, Boston City Hospital, Boston, Mass.

1973 First Annual Dr. J. McKeever M.D. Award for Outstanding Educator, ST. Vincent Hospital Teaching Affiliate University of Massachusetts Medical School, Worcester, Mass.

1990 The Chadwick Medal, Massachusetts Thoracic Society,  
For Distinguished Contributions to the Study and Treatment of Tuberculosis and Other Thoracic Diseases.

2003 Citation -one of America's Top Physicians -Staff physicians Brigham and Women's Hospital.

## Major Committee Assignments

### National and Regional

1971- Cofounder Scientific Assembly: Clinical Problems in Respiratory Disease, American Thoracic Society

1972-1974 Medical Education Committee, American Thoracic Society

1972-1975 Chairman, Medical Devices Committee, Scientific Assembly on Clinical Problems, American Thoracic Society

1973-1975 American Thoracic Society Representative: American National Standards

Institute, Medical Technical Advisory Board, ANSI-Z79 Committee  
1979-1982 American Thoracic Society, Representative Councilor (Massachusetts)

## University of Massachusetts Medical School

1972-1974 Chairman, Medical Education Committee  
1972-1988 Director Respiratory Disease Fellowship Program - St. Vincent hospital/Joint program U Mass.

## Editorial Board

1985-1987 Editor, Pulmonary Section, Practical Cardiology  
1979- Chest: Journal of American College of Chest Physicians.

## Memberships, Offices and Committee Assignments in Professional Societies

1963- American Medical Association  
1963- Massachusetts Medical Society  
1966- Massachusetts Thoracic Society  
1966- American Thoracic Society  
1966- American College of Chest Physicians  
1966- American College of Physicians  
1970- Association of Clinical Scientists  
1970- American Federation for Clinical Research  
1971- American Association for the Advancement of Science  
1972- 1980 Inter-Asthma  
1980- International Union Against Tuberculosis  
1985- Society for Free Radical Research  
1986 The American Academy of Medical Directors  
1970- Affiliate, Royal Society of Medicine, London  
1971-1984 New York Academy of Science  
1957- 2005 Society of Sigma Xi, Massachusetts Institute of Technology  
2006- SOCIETY FOR ASTRONOMICAL SCIENCES.  
ASTRONOMICAL SOCIETY OF THE PACIFIC  
THE PLANETARY SOCIETY  
INTERNATIONAL METEOR ORGANIZATION

## MASSACHUSETTS THORACIC SOCIETY

1967-1980 General Councilor MTS.

1974-1976 President-elect, Massachusetts Thoracic Society

1976-1978 President, Massachusetts Thoracic Society

1979-1981 Representative Councilor, American Thoracic Society

## Research Interests

1. First isolation and characterization of an enzyme from hog renal cortex responsible for oxidation of alpha-hydroxy acids to alpha- keto acids. (Graduate school thesis- MIT)

2. The effect of thyroid hormone upon the maturation of rat cerebral cortex as measured by behavioral patterns, enzyme alteration and oxygen consumption. (Albert Einstein college of Medicine)

3. Oxygen Free Radicals, Calcium Transport and Airways Hyper-reactivity and Asthma

## Teaching

1981- Lecturer in Medicine, Tufts University School of Medicine

1972-1990 Resident Staff St. Vincent Hospital, University of Massachusetts Medical School, Worcester Polytechnical Institute

1972-1990 Students University of Massachusetts Medical School. Primary Pulmonary Teacher resource in early development of Medical School.

1991-2003 Department Anesthesia Research Brigham and Women's Hospital/Harvard Medical School: Mentoring students, research fellows and post-doctorate staff.

1966-1990 Fellow trainees in Respiratory Diseases – 45 physicians in my fellowship programs or under my direct supervision: several now serve as major academic department directors, others in clinical practice.

## Principal Clinical and Hospital Service Responsibilities

1966-1971 Physician-in-Charge, Pulmonary Function, Physiology Section,  
Central Arterial Blood Laboratory

1967-1971 Founder and Director of first Respiratory Intensive Care Unit, Boston, City Hospital, (Tufts Lung Station, First and Third Medical Service)..

1969-1971 Associate Chief of Medicine, First and Third Medical Service (Tufts University), Boston City Hospital, Boston.

1971-1990 Director, Division of Respiratory Diseases, St. Vincent Hospital, Worcester

1991- 2004 Senior Pulmonary Research Scientist, Department of Anesthesia and Anesthesia Research, Brigham & Women's Hospital. Boston

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## Bibliography:

### Original articles

1. Hamburg M, Lynn E, Weiss EB. Analysis of the influences of thyroid hormone on prenatal and postnatal maturation of the rat. *Anatom. Rec.* 1964; 150:147-161.
2. Segal MS, Weiss EB. The treatment of respiratory insufficiency. *Med. Times* 1967; 95:185-195.
3. Segal MS, Weiss EB. Current concepts in the management of the patient with Status Asthmaticus. In: *Medical Clinics of North America* 1967; 51:373-389.
4. Weiss EB, Dulfano MJ. Controlled ventilation with IPPB in the management of acute ventilatory failure associated with chronic obstructive pulmonary disease. *Ann Intern Med.* 1967;67:556-567.
5. Weiss EB, Earnest DL, Greally JF. Goodpasture's syndrome--case report with emphasis on pulmonary physiology. *Am Rev Respir Dis.* 1968; 97:444-450.
6. Weiss EB, Dulfano MJ. The quantitative acid base dynamics in chronic pulmonary disease: Defense of pH during acute respiratory acidosis superimposed upon chronic hypercapnia. *Ann Intern Med.* 1968; 69:263-272.
7. Chodosh S, Weiss EB, Segal MS. Chronic bronchitis. In: Conn, eds. *Current Diagnosis*, 1968; 151-154.
8. Weiss EB, Chodosh S, Segal MS. Chronic diffuse emphysema. In: Conn, eds. *Current Diagnosis*, 1968; 154-158.
9. Weiss EB, Faling LJ. Clinical significance of PaCO<sub>2</sub> during status asthma: The cross-over point. *Ann Allergy* 1968; 26:545-551.
10. Weiss EB, Faling LJ, Brooks SM, Mintz S, Chodosh S, Segal MS. Bronchial asthma: Current concepts in pathophysiology and management of the patient with advanced and status asthma. In: eds. *Modern Treatment* 1969; 6:278-330

11. Weiss EB, Faling LJ, Brooks S, Mintz S, Chodosh S, Segal MS. Acute respiratory failure in chronic obstructive pulmonary disease--pathophysiology and treatment. *Disease of the Month*. 1969; 1-58.
12. Faling LJ, Weiss EB, Chodosh S, Segal MS. The preoperative management of patients with bronchial asthma. *Hahnemann Symposium*. 1969; 108-119.
13. Weiss, EB, Sewall, D. pH of intravenous solutions. *N.E.J.M.* 1969; 280: 902.
14. Weiss, EB. Acute respiratory failure in respiratory disease. *ICU #10*. 1970. 8-9.
15. Weiss EB, Cohen ML, Monaco MD. Successful management of *Pneumocystis Carinii* and *Nocardia* asteroids in a renal transplant patient. *Am J Med*. 1971; 50:269-276.
16. Segal MS, Weiss EB. Rectal aminophylline blood levels with concentrated solutions. *Ann Allergy* 1971; 29:135-138.
17. Weiss EB, Slawsky P, Desforjes J. Oxyhemoglobin affinity in chronic granulomatosis (Sarcoidosis) and fibrosis. *Am Rev Respir Dis* 1971; 104:694-702.
18. Cohen ML, Weiss EB. *Pneumocystis carinii* pneumonia: Percutaneous lung biopsy and review of literature. *Chest* 1971; 60:195-199.
19. Brooks S, Mintz S, Weiss EB. Pattern of responses to bronchodilators in patients with bronchial asthma. *J Lab Clin Invest*. 1972; 79:262-276.
20. Brooks S, Mintz S, Weiss EB. The changes occurring after freon inhalation. *Am Rev Respir Dis*. 1972; 105:64-643.
21. Weiss EB, Carlson C.J. Recording of breath sounds. *Am Rev Respir Dis*. 1972; 105:835-839.
22. Weiss EB, Desforjes J. Oxyhemoglobin affinity in bronchial asthma: Chronic stable state, acute and status asthmaticus. *Chest* 1972; 62:709-716.
23. Weiss EB. Bronchial Asthma. *CIBA Clinical Symposium*. 1975; 27:1:2:1-72.
24. Weiss EB, Anderson WH, O'Brian KP. The effect of a local anesthetic, lidocaine, on guinea pig trachealis muscle in vitro. *Am Rev Respir Dis*. 1975; 112:393-400.
25. Weiss EB, Anderson WH, O'Brien KP. Effects of lidocaine on trachealis smooth muscle in vitro. *ASCI-AFCR-AAP*. 1975; p. 335
26. Weiss EB, Segal MS. *Bronchial Asthma: Mechanisms and Therapeutics*. Little, Brown and Company, Boston, 1976. First Edition.
27. Weiss EB Status Asthmaticus Chapter in citation 25.
28. Weiss EB, Patwardhan AV. The response to lidocaine in bronchial asthma. *Chest* 1977; 72:429-438.

29. Hargraves WA, Weiss EB. Effect of histamine on the length-tension properties of guinea pig trachealis muscle. *Respir Physiol.* 1977; 29:211-224.
30. Weiss EB, Hargraves WA, Viswanath SG. The inhibitory action of lidocaine in anaphylaxis. *Am Rev Respir Dis.* 1978; 117:859-869.
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32. Fortier NL, Snyder LM, Paler J, Weiss EB. Effect of propranolol on normal human erythrocytes. *J Lab Clin Med.* 1977; 89:41-50.
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34. Weiss, EB. Bronchial Asthma. In Netter, Frank H, editor: *The CIBA Collection of Medical Illustrations, The Respiratory System.* 1979; 7:119-135.
35. Weiss, E.B. Anatomy sections in *CIBA Collection of Medical Illustrations, The Respiratory System.*
36. Janower ML, Weiss EB. Mycoplasma, Viral and Rickettsial pneumonia's. *Seminars in Roentgenology* 1980; 15:25-34.
37. Weiss EB, Markowicz J, Barbero L. Effect of calcium antagonists in experimental asthma. *Allergy* 1982; 37:513-519.
38. Weiss EB, Barbero L. Calcium homeostasis in asthma. *Chest* 1983; 83:834.
39. Weiss EB, Mullick PC. Leukotriene effect in airways smooth muscle: calcium dependency and verapamil inhibition. *Prostaglandins, Leukotrienes and Medicine* 1983; 12:53-66.
40. Weiss EB, Segal MS, Stein M. Editors. *Bronchial Asthma: Mechanisms and Therapeutics.* 2nd ed. Boston: 1985.
41. Weiss EB. 1. Status Asthmaticus. In *Bronchial Asthma: Mechanisms and Therapeutics.* 2nd ed. Boston:Pages 808- 842, 1985.
- 42 Weiss, EB, et al. Calcium and its role in the asthma process. In 1. *Bronchial Asthma: Mechanisms and Therapeutics.* 2nd ed. Boston: Pages 776-791, 1985.
43. Weiss EB, Bellino JR. Leukotriene-associated toxic oxygen metabolites induced airways hyperactivity. *Chest* 1986; 89:709-716.
44. Weiss EB. Toxic oxygen products alter calcium homeostasis in an asthma model. *J Allergy Clin Immun* 1985; 75:692-697.
45. Weiss EB, Bellino JR. Superoxide anion generation during airway anaphylaxis. *Int Arch Allergy Appl Immun* 1986; 80:211-213.

46. Devore-Carter D, Morway PF, Weiss EB. Isolation and characterization of guinea pig tracheal smooth cells that retain differentiated function in long-term subculture. *Cell Tissue Res.* 1988; 251:325-331.
47. Weiss EB. Clubbing. In: *Clinical Medicine*, H. Green, editor, 1991,
48. Weiss EB. Clubbing In: *Clinical Medicine*, H. Green, editor, Second edition, 1996.
49. Weiss EB, Stein M. Editors. *Bronchial Asthma: Mechanisms and Therapeutics*, Little Brown and Co. 3rd Edition 1993. 1259 pages
50. Weiss, EB. et al. Calcium, Calcium Antagonists, and Oxyradicals. In *Bronchial Asthma: Mechanisms and Therapeutics*, Little Brown and Co. 3rd Edition 1993. Pages 945-971.
51. Weiss, EB. Status Asthmaticus. In *Bronchial Asthma: Mechanisms and Therapeutics*, Little Brown and Co. 3rd Edition 1993. Pages 985-1016.
52. Williams, AJ, Weiss, EB et al. Status Asthmaticus. *Acute Care* 1988; 14-25: 208 – 228.

## Abstracts and Letters

53. Weiss EB, Dulfano MJ, Chodosh S, Blickman J, Stein M. The radiographic features of early chronic bronchitis. *Am. Col. Chest Physicians International Symp.*, 1971;
54. Weiss EB. Bactericidal action of ozone: Application to respiratory sterilization. *Am. Coll Chest Physicians International Symposium*, 1971.
55. Weiss EB, Synder LM, Fortier N. The effect of propranolol and calcium on human erythrocytes. 15th International Society of Hematology, Jerusalem, Israel, September 1974;
56. Weiss EB, Anderson WH, O'Brian KP. Effect of lidocaine on trachealis smooth muscle in vitro. *Clin. Res.* 1975; 23:353A.
57. Weiss, EB, Faling, LJ. Comparison of acute smoke inhalation in non-firemen and in firemen. *Am. Rev. Resp. Dis.* 121: #4. 174, April 1980.
58. Weiss EB. Effect of anaphylactic mediators, acetylcholine and  $\beta$ -adrenergic blockage upon calcium hypersensitivity in airway smooth muscle. *Am. Rev. Resp. Dis.* 1980; 121:101.
59. Weiss EB. The mechanism of lidocaine contraction and relaxation in tracheal smooth muscle. *Am. Rev. Resp. Dis.* 1980; 121:102.
60. Faling LJ, Weiss EB. Studies of acute smoke inhalation. *Am Rev Resp Dis.* 1980; 121:102.

61. Pathwardhan AV, Kendall RL, Weiss EB. Prophylactic post-operative tracheal intubation in chronic obstructive airways disease. Am Rev Respir Dis. 1980; 121:#4, 174.
62. Weiss, E.B., Raheja AK,. The significance of fever in acute exacerbation's of chronic obstructive airways disease. Am. Rev. Resp. Dis. 1981; 123:#4.
63. Weiss EB, Marckowicz J. Inhibition of anaphylaxis in airways smooth muscle by the calcium channel drugs verapamil and nifedipine. Am Rev Respir Dis. 1981; 123:#4.
64. Weiss, EB. Calcium homeostasis in asthma. Letter. Chest 1983. 83;834.
65. Weiss EB, Bellino FR. Interaction of leukotriene D4 and superoxide anion induce airways hyperreactivity. Am Rev Respir Dis. 1985; 131:A2.
66. Weiss EB. Airways hyperreactivity induced by interaction of LTD4 and superoxide anion. XIV Interasthma Congress, Angers, France, 1986.
67. Weiss, EB. Role of calcium in airway reactivity and asthma. (letter) J. Allergy & Clin. Immun. 1990:86, 274.
68. Weiss, EB. AMERICAN THORACIC SOCIETY - DEVICE STANDARDS - APRIL 1975. AMERICAN THORACIC SOCIETY NEWS AUGUST 1975. VOLUME 1, PAGES 21-25.

## AUDIO TAPE

68. Weiss, EB and Cudgell, D. AUDIOGRAPHIC SERIES- INTRODUCTION TO BREATH SOUNDS TAPE. American College of Chest Physicians, VOLUME 12. 1975 Chicago, Illinois

## Editorial

69. Weiss EB. In pursuit of Pneumocystis Carinii. Chest 1973; 64:547-549.

## THE DR. EARLE B. WEISS, M.D. STUDENT RESEARCH FELLOWSHIP AT THE ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY—

Established by family and friends the Fellowship is now established in perpetuity to support the early education of medical students and encourage their research interests.

## Books

1. Bronchial Asthma, Mechanisms and Therapeutics. Three editions 1976, 1985, 1993. Little Brown and Co,
2. Status Asthmaticus. 1978 University Park Press
3. Acute Respiratory Failure in COPD. 1969 YEAR BOOK MEDICAL PUBLISHERS, INC.

TEXT ON MAJOR CONTRIBUTIONS TO MEDICAL HISTORY IN PREPARATION

CITATIONS IN WHO'S WHO IN AMERICA, WHO'S WHO IN THE WORLD, WHO'A WHO IN THE EAST, WHO'S WHO IN HEALTHCARE, AMERICAN MEN AND WOMEN OF SCIENCE.