

CURRICULUM VITAE

MORTON LIPPMANN

Born: New York City, September 21, 1932

Education: B.Ch.E., The Cooper Union, 1954
S.M. (Industrial Hygiene), Harvard University, 1955
Ph.D. (Environmental Health Science), New York University, 1967

Occupational Background:

1986-present Director, Human Exposure and Health Effects Program, Nelson Institute of Environmental Medicine, New York University Medical Center, New York, NY

1977-present Director, Aerosol and Inhalation Research Laboratory, and Professor, NYU Medical Center, New York, NY

1970-1977 Associate Professor and Director of Aerosol Research Laboratory, NYU Medical Center, New York, NY

1967-1970 Assistant Professor, NYU Medical Center, New York, NY

1964-1967 Associate Research Scientist, NYU Medical Center, New York, NY

1962-1964 Senior Research Engineer, Del Electronics Corporation, Mount Vernon, NY

1957-1962 Industrial Hygienist, Health and Safety Laboratory, U.S. Atomic Energy Commission, New York, NY

1955-1957 Industrial Hygienist, Occupational Health Program, U.S. Public Health Service, Cincinnati, OH

Professional Certifications:

American Board of Industrial Hygiene Certifications in: Comprehensive Practice of Industrial Hygiene, Engineering Aspects of Industrial Hygiene

Honors:

Alice Hamilton Lecture, National Institute for Occupational Safety & Health, 1989
Maurice L. Thomson Visiting Lecturer, London School of Hygiene & Tropical Medicine, 1989
David Sinclair Award, American Association for Aerosol Research, 1990
Jerry F. Stara Memorial Lecture, USEPA and University of Cincinnati, 1991
Cummings Memorial Award, American Industrial Hygiene Association, 1991
Herbert E. Stokinger Award, American Conference of Governmental Industrial Hygienists, 1993

Professional Societies, Society Committees and Editorial Boards:

Member, American Academy of Industrial Hygiene (AAIH)
Member, American Industrial Hygiene Association (AIHA)
Member, American Conference of Governmental Industrial Hygienists (ACGIH)
Chairman, ACGIH, 1982-1983, Member Board of Directors, 1980-84
Member, American Association for Aerosol Research (AAAR)
Counselor, International Society for Environmental Epidemiology, 1989-1991
Councilor, International Society of Exposure Analysis, 1990-present, President-elect, 1993-1994
Chairman, ACGIH Air Sampling Instruments Committee, 1961-1962, 1968-1981, Member, 1981-present
Member, ACGIH, Air Sampling Procedures Committee, 1982-present
Chairman, ACGIH-AIHA Aerosol Hazards Evaluation Committee, 1971-1975

Vice-Chair, AIHA Journal Advisory Committee, 1978-1983
 Chairman, NYAS Environmental Sciences Section, 1980
 Member, Editorial Advisory Board, AIHA Journal, 1978-1985
 Member, Editorial Board, Aerosol Science and Technology, 1985-1988
 Member, Editorial Board, Archives of Environmental Health, 1986-present
 Associate Editor, Inhalation Toxicology, 1987-present

Governmental and National Academy of Sciences Committees:

Chairman, Indoor Air and Total Human Exposure Advisory Committee, U.S. Environmental Protection Agency (EPA), 1987-present
 Chairman, Clean Air Scientific Advisory Committee, EPA, 1983-1987
 Member, Executive Committee-Science Advisory Board, EPA, 1983-present
 Chairman, Board of Scientific Counselors, National Institute for Occupational Safety and Health (NIOSH), 1992-present; Member, 1988-1991
 Chairman, Scientific Review Panel for Health Research, EPA, 1989-1992; Member, 1980-1992
 Co-Chair, Fourth National Institute of Environmental Health Sciences (NIEHS) Task Force for Research Planning in Environmental Health, 1991
 Member, Second National Institute of Environmental Health Sciences (NIEHS) Task Force for Research Planning in Environmental Health, 1976
 Chairman, Working Group on Acute Health Consequences of Winter-type and Summer-type Smog Episodes, WHO-EURO, 1990-1991
 Member, Committee on Measurement and Control of Respirable Dust in Mines, National Materials Advisory Board, National Research Council, 1978-1979
 Member, Committee on Indoor Pollutants, Board on Toxicology and Environmental Health Hazards, National Research Council, 1979-1981
 Member, Committee on Toxicity Data Elements, Board of Toxicology and Environmental Health Hazards, National Research Council, 1980-1983
 Member, Committee on Methods for the In Vivo Toxicity Testing of Complex Mixtures from the Environment, Board on Toxicology and Environmental Health Hazards, National Research Council, 1985-1987

Non-Governmental Advisory Committees - Current:

Environmental Health Sciences Center, UMDNJ-Rutgers, NJ
 Environmental Health Sciences Center, Johns Hopkins, MD
 Chemical Industry Institute of Toxicology, Research Triangle Park, NC
 Harvard Six-Cities Study, MA
 Harvard Multi-City Study, MA and Canada
 Center for Indoor Air Research, MD
 Health Effects Institute-Asbestos Research, MA
 Laborers-AGC Hazardous Waste Workers Training Center, CT
 NJ-NY Waste Workers Training Center, NJ
 USC-Chronic Effects of Ambient Air Pollutants in Southern California

Doctoral and Post-Doctoral Trainees - Major Advisor:

Doctoral

Jack M. Berger, Ph.D., 1975 (subsequently M.D.). Thesis: Toxic and Physiologic Factors Affecting Mucociliary Clearance and Particle Deposition in the Lungs of Donkeys. Private practice in pediatric anesthesiology, Downey, CA.

Richard B. Schlesinger, Ph.D., 1975. Thesis: Intrabronchial Pattern of Particle Deposition. Professor of Environmental Medicine, New York University Medical Center.

Tai L. Chan, Ph.D., 1978. Thesis: The Characterization of Particle Deposition in the Human Tracheobronchial Tree. Senior Scientist, General Motors Technical Center, Warren, MI.

George D. Leikauf, Ph.D., 1981. Thesis: The Effects of Sulfuric Acid Aerosol on Respiratory Mechanics and Mucociliary Particle Clearance in Healthy and Asthmatic Adults. Associate Professor, University of Cincinnati Medical Center, Cincinnati, OH.

Joshua Gurman, Ph.D., 1983. Thesis: Particle Deposition Patterns in Human Upper Bronchial Airways. Senior Scientist, Hoechst-Celanese, Summit, NJ.

Andrey Nikiforov, Ph.D., 1985. Thesis: Validation of In Vivo Aerosol Probe Technique by Measurements of Deposition and Morphometry in Excised Human Lungs. Inhalation Toxicologist, Exxon Corp., E. Millstone, NJ.

Julie Esch (Wilson), Ph.D., 1986. Thesis: Aerosol Penetration in Human Lung Airways as a Function of Gas Properties. Sr. Project Scientist, Roy F. Weston, Inc., Seattle, WA.

Michael McCawley, Ph.D., 1987. Thesis: An Aerosol Bolus Dispersion Test Compared to Indices of Lung Disease. Team Leader, Environmental Investigations Branch, Division of Respiratory Disease, NIOSH, Morgantown, W. VA.

James K. Briant, Ph.D., 1988. Thesis: Distinction of Reversible and Irreversible Convection by High-Frequency Ventilation of a Respiratory Airway Cast. Inhalation Technology and Toxicology, Biology and Chemistry Department, Battelle Pacific Northwest Laboratories, Richland, WA.

Robert G. Sussman, Ph.D., 1988. Thesis: The Effect of Fiber Dimension on the Deposition of Asbestos Fibers in Casts of the Human Tracheobronchial Tree. Industrial Toxicologist, Warner Lambert Co., Morris Plains, NJ.

Postdoctoral

Joan M. Daisey, Ph.D., 1976-1978. Director, Indoor Air Research Program, Lawrence Berkeley National Laboratory, Berkeley, CA.

Frank S. Rosenthal, Ph.D., 1979-1981. Associate Professor of Industrial Hygiene, Purdue University, Lafayette, IN.

John Morris, Ph.D., 1979-1981. Associate Professor of Toxicology, University of Connecticut, Storrs, CT.

Rudolph Valentine, Ph.D., 1982-1984. Staff Toxicologist, Haskell Laboratories, duPont, Newark, DE.

Books Written and Edited:

1. Lippmann, M. (Editor)
Air Sampling Instruments for Evaluation of Atmospheric Contaminants
2nd Edition - 1962, 4th Edition - 1972, 5th Edition - 1978
Cincinnati, American Conference of Governmental Industrial Hygienists
2. Lippmann, M. and Schlesinger, R.B.
Chemical Contamination in the Human Environment
New York, Oxford University Press, 1979
3. Lippmann, M. (Editor)
Environmental Toxicants: Human Exposures and Their Health Effects
New York, Van Nostrand Reinhold, 1992

Vice-Chair, AIHA Journal Advisory Committee, 1978-1983
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 Member, Editorial Advisory Board, AIHA Journal, 1978-1985
 Member, Editorial Board, Aerosol Science and Technology, 1985-1988
 Member, Editorial Board, Archives of Environmental Health, 1986-present
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 Harvard Six-Cities Study, MA
 Harvard Multi-City Study, MA and Canada
 Center for Indoor Air Research, MD
 Health Effects Institute-Asbestos Research, MA
 Laborers-AGC Hazardous Waste Workers Training Center, CT
 NJ-NY Waste Workers Training Center, NJ
 USC-Chronic Effects of Ambient Air Pollutants in Southern California

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New York, Oxford University Press, 1979
3. Lippmann, M. (Editor)
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Publications:

1. Paulus, H.J., Lippmann, M. and Cohen, A.E. Fumigation of shelled corn with a mixture of carbon disulfide and carbon tetrachloride. Amer. Ind. Hyg. Assoc. Quart. 18: 345-350 (1957).
2. Hosey, A.D., et al. Control of silicosis in Vermont granite industry. Public Health Service Publication No. 557 (1957).
3. Lippmann, M. Chapters B-22, C-3, C-4, C-6, C-7 and C-9. In: The Industrial Environment-It's Evaluation and Control, Public Health Service Publication No. 614 (1958).
4. Fraser, D.A., Bales, R.E., Lippmann, M. and Stokinger, H.E. Exposure Chambers for Research in Animal Inhalation, Public Health Monograph No. 57 (1959).
5. Lippmann, M., Christofano, E.E. and Graveson, R.T. Lightweight air sampling pumps for field use. Amer. Ind. Hyg. Assoc. J. 20: 212-216 (June 1959).
6. Lippmann, M. Environmental exposure to uranium compounds. AMA Arch. Ind. Health 20: 211-226 (1959).
7. Lippmann, M. Review of cascade impactors for particle size analysis and a new calibration for the Casella cascade impactor. Amer. Ind. Hyg. Assoc. J. 20: 406-416 (1959).
8. Harris, W.B., Christofano, E.E. and Lippmann, M. Combination hot plate and hood for multiple beaker evaporations. Amer. Ind. Hyg. Assoc. J. 22: 302-306 (1961).
9. Lippmann, M. A compact cascade impactor for field survey sampling. Amer. Ind. Hyg. Assoc. J. 22: 348-353 (1961).
10. Lippmann, M. and Harris, W.B. Size-selective samplers for estimating respirable dust concentrations. Health Physics 8: 155-163 (1962).
11. Lippmann, M. Filter Holders and Filter Media. In: Air Sampling Instruments - 2nd Ed., Cincinnati, American Conference of Governmental Industrial Hygienists (1962).
12. Lippmann, M., Ong, L.D.Y. and Harris, W.B. The significance of urine uranium excretion data. Amer. Ind. Hyg. Assoc. J. 25: 43-54 (1964).
13. Lippmann, M., DiGiovanni, H.J., Cravitt, S. and Lilienfeld, P. Lightweight high-volume electrostatic precipitator survey sampler. Amer. Ind. Hyg. Assoc. J. 26: 485-489 (1965).
14. Albert, R.E., Lippmann, M., et al. The clearance of radioactive particles from the human lung. pp. 361-378. In: Inhaled Particles and Vapours II, C.N. Davies (ed.), Oxford, Pergamon Press (1966).
15. Lippmann, M. Electrostatic Precipitators. In: Air Sampling Instruments, 3rd Ed., Cincinnati, American Conference of Governmental Industrial Hygienists (1966).
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18. Lippmann, M. and Albert, R.E. A compact electric-motor driven spinning disc aerosol generator. Amer. Ind. Hyg. Assoc. J. 28: 501-506 (1967).
19. Albert, R.E., Spiegelman, J.R., Lippmann, M. and Bennett, R. The characteristics of bronchial clearance in the miniature donkey. Arch. Environ. Health 17: 50-58 (1968).

20. Spiegelman, J.R., Hanson, G.D., Lazarus, A., Bennett, R., Lippmann, M. and Albert, R.E. Effect of sulfur dioxide exposure on bronchial clearance in the donkey. Arch. Environ. Health 17: 321-326 (1968).
21. Lippmann, M. and Albert, R.E. Use of monodisperse aerosols for studies on respiratory tract deposition and clearance. J. Air Pollut. Control Assoc. 18: 672-674 (1968).
22. Albert, R.E., Spiegelman, J.R., Shatsky, S. and Lippmann, M. The effect of acute exposure to cigarette smoke on bronchial clearance in the miniature donkey. Arch. Environ. Health 18: 30-41 (1969).
23. Lippmann, M. and Albert, R.E. The effect of particle size on the regional deposition of inhaled aerosols in the human respiratory tract. Amer. Ind. Hyg. Assoc. J. 30: 257-275 (1969).
24. Albert, R.E., Lippmann, M. and Briscoe, W. The characteristics of bronchial clearance in humans and the effects of cigarette smoking. Arch. Environ. Health 18: 738-755 (1969).
25. Lippmann, M. Characterization of air concentrations in relation to health effects. Yale Scientific 44: 22-27 (1970).
26. Lippmann, M. "Respirable" dust sampling. Amer. Ind. Hyg. Assoc. J. 31: 138-159 (1970).
27. Lippmann, M. Experimental inhalation studies - equipment and procedures. pp. 55-72. In: Inhalation Carcinogenesis - AEC Symposium Series 18, CONF-691001, Clearinghouse for Federal Scientific and Technical Information, Springfield, VA 22151 (1970).
28. Lippmann, M. Deposition and clearance of inhaled particles in the human nose. Ann. Otol. Rhinol. Laryngol. 79: 519-528 (1970).
29. Frances, R., Alessandro, D., Lippmann, M., Proctor, D.E. and Albert, R.E. Effect of cigarette smoke on particle transport on nasociliary mucosa of donkeys. Arch. Environ. Health 21: 25-31 (1970).
30. Lippmann, M. and Goldstein, D.H. Oil mist studies, environmental evaluation and control. Arch. Environ. Health 21: 591-599 (1970).
31. Lippmann, M. and Kydonieus, A. A multi-stage aerosol sampler for extended sampling intervals. Amer. Ind. Hyg. Assoc. J. 31: 730-737 (1970).
32. Albert, R.E., Alessandro, D., Lippmann, M. and Berger, J. Long-term smoking in the donkey. Arch. Environ. Health 22: 12-19 (1971).
33. Albert, R.E., Lippmann, M. and Peterson, H.T., Jr. The effects of cigarette smoking on the kinetics of bronchial clearance in humans and donkeys. pp. 165-182. In: Inhaled Particles, III, W.H. Walton (ed.), Unwin Bros., Old Woking, England (1971).
34. Lippmann, M., Albert, R.E. and Peterson, H.T., Jr. The regional deposition of inhaled aerosols in man. pp. 105-122. In: Inhaled Particles, III, W.H. Walton (ed.), Unwin Bros., Old Woking, England (1971).
35. Spertell, R.B. and Lippmann, M. Airborne density of ferric oxide aggregate microspheres. Amer. Ind. Hyg. Assoc. J. 32: 734-740 (1971).
36. Lippmann, M. Aerosol sampling for inhalation hazard evaluations. pp. 449-464. In: Assessment of Airborne Particles, T.T. Mercer, P.E. Morrow, W. Stober and C.C. Thomas (eds.), Springfield, IL (1972).
37. Schlesinger, R.B. and Lippmann, M. Particle deposition in casts of the human upper tracheobronchial tree. Amer. Ind. Hyg. Assoc. J. 33: 237-251 (1972).
38. Albert, R.E. and Lippmann, M. Factors influencing dust retention in the pulmonary parenchyma. Ann. N.Y. Acad. Sci. 200: 37-45 (1972).

Publications:

1. Paulus, H.J., Lippmann, M. and Cohen, A.E. Fumigation of shelled corn with a mixture of carbon disulfide and carbon tetrachloride. Amer. Ind. Hyg. Assoc. Quart. 18: 345-350 (1957).
2. Hosey, A.D., et al. Control of silicosis in Vermont granite industry. Public Health Service Publication No. 557 (1957).
3. Lippmann, M. Chapters B-22, C-3, C-4, C-6, C-7 and C-9. In: The Industrial Environment-It's Evaluation and Control, Public Health Service Publication No. 614 (1958).
4. Fraser, D.A., Bales, R.E., Lippmann, M. and Stokinger, H.E. Exposure Chambers for Research in Animal Inhalation, Public Health Monograph No. 57 (1959).
5. Lippmann, M., Christofano, E.E. and Graveson, R.T. Lightweight air sampling pumps for field use. Amer. Ind. Hyg. Assoc. J. 20: 212-216 (June 1959).
6. Lippmann, M. Environmental exposure to uranium compounds. AMA Arch. Ind. Health 20: 211-226 (1959).
7. Lippmann, M. Review of cascade impactors for particle size analysis and a new calibration for the Casella cascade impactor. Amer. Ind. Hyg. Assoc. J. 20: 406-416 (1959).
8. Harris, W.B., Christofano, E.E. and Lippmann, M. Combination hot plate and hood for multiple beaker evaporations. Amer. Ind. Hyg. Assoc. J. 22: 302-306 (1961).
9. Lippmann, M. A compact cascade impactor for field survey sampling. Amer. Ind. Hyg. Assoc. J. 22: 348-353 (1961).
10. Lippmann, M. and Harris, W.B. Size-selective samplers for estimating respirable dust concentrations. Health Physics 8: 155-163 (1962).
11. Lippmann, M. Filter Holders and Filter Media. In: Air Sampling Instruments - 2nd Ed., Cincinnati, American Conference of Governmental Industrial Hygienists (1962).
12. Lippmann, M., Ong, L.D.Y. and Harris, W.B. The significance of urine uranium excretion data. Amer. Ind. Hyg. Assoc. J. 25: 43-54 (1964).
13. Lippmann, M., DiGiovanni, H.J., Cravitt, S. and Lilienfeld, P. Lightweight high-volume electrostatic precipitator survey sampler. Amer. Ind. Hyg. Assoc. J. 26: 485-489 (1965).
14. Albert, R.E., Lippmann, M., et al. The clearance of radioactive particles from the human lung. pp. 361-378. In: Inhaled Particles and Vapours II, C.N. Davies (ed.), Oxford, Pergamon Press (1966).
15. Lippmann, M. Electrostatic Precipitators. In: Air Sampling Instruments, 3rd Ed., Cincinnati, American Conference of Governmental Industrial Hygienists (1966).
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17. Lippmann, M., Albert, R.E. and Laskin, S. The production of test aerosols for inhalation studies. J. Air Pollut. Control Assoc. 17: 586-587 (1967).
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40. Drew, R.T. and Lippmann, M. Production of test atmospheres for instrument calibration. In: Air Sampling Instruments, 4th Ed., *ibid.*
41. Albert, R.E., Lippmann, M., Peterson, H.T., Jr., Berger, J.M., Sanborn, K. and Bohning, D.E. Deposition and clearance of aerosols. Arch. Intern. Med. 131: 115-127 (1973).
42. Lippmann, M. Instruments and techniques used in calibrating sampling equipment, Chapter 11. In: The Industrial Environment - Its Evaluation and Control, USGPO (1973).
43. Lippmann, M., Albert, R.E., Foster, W.M., Peterson, H.T., Jr., Berger, J.M. and Bohning, D.E. The clearance of insoluble particles from the bronchial tree. pp. 100-112. In: Aerosole in Physik, Medizin und Technik, Gesellschaft fur Aerosolforschung (Association for Aerosol Research), Bad Soden, W. Germany (1973).
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45. Blachman, M.W. and Lippmann, M. Performance characteristics of the multicyclone aerosol sampler. Amer. Ind. Hyg. Assoc. J. 35: 311-326 (1974).
46. Schlesinger, R.B., Cohen, V.R. and Lippmann, M. Studies of intrabronchial particle deposition using hollow bronchial casts. pp. 116-127. In: Environmental Lung Cancer-Carcinogenesis and Bioassay, J. Parkand, E. Karbe (eds.), Heidelberg, Springer-Verlag (1974).
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Reviewer, American Journal of Industrial Medicine
Reviewer, American Journal of Public Health

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