

CURRICULUM VITAE

Robert William Mahley, M.D., Ph.D.

Date and Place of Birth: Shelbyville, IN – July 23, 1941
Citizenship: United States
Marital Status: Married (Linda), 1963; one child (Stephen), 1968.

Education:

June 1963 B.S., Maryville College
June 1968 Ph.D., Vanderbilt University (Pathology/Anatomy)
June 1970 M.D., Vanderbilt University
June 1971 Internship (Pathology), Vanderbilt University

Brief Chronology of Employment:

1963–1964 Instructor of Biology, Maryville College, Maryville, TN
1964–1970 Combined M.D.-Ph.D. program at Vanderbilt University
1971–1975 Staff, National Heart, Lung, and Blood Institute, NIH
1975–1979 Head, Comparative Atherosclerosis and Arterial Metabolism Section, Laboratory of Experimental Atherosclerosis, National Heart, Lung, and Blood Institute, NIH
1979–2005 Director/Founder, Gladstone Institute of Cardiovascular Disease
1979– Senior Investigator, Gladstone Institute of Cardiovascular Disease
1979– Professor of Pathology and Medicine and Senior Staff Member, Cardiovascular Research Institute, University of California, San Francisco
1992–2010 President, The J. David Gladstone Institutes
1998– Senior Investigator, Gladstone Institute of Neurological Disease
2006–2010 Director/Founder, Gladstone Center for Translational Disease
2010– President Emeritus, The J. David Gladstone Institutes

Professional Societies:

American Heart Association • American Society for Biochemistry and Molecular Biology (elected 1980) • American Society for Clinical Investigation (elected 1980) • Association of American Physicians (elected 1983) • International Academy of Pathology (elected 1984) • American Association for the Advancement of Science • Western Society for Clinical Investigation (elected 1982) • Western Association of Physicians (elected 1983)

Honors and Other Special Scientific Recognition:

Merrill Award in Experimental Pathology, 1968
Bordon Award for Basic Medical Research, 1970
Vivian B. Allen Medical (M.D.-Ph.D.) Scholarship, 1964–1970
Pfizer Traveling Fellow, 1976
Executive Committee, Council on Arteriosclerosis (American Heart Association), 1978–1981
Chairman, Program Committee of Council on Arteriosclerosis (American Heart Association), 1978–1981

Program Committee (American Heart Association), 1976–1984
Chairman, Gordon Conference on Lipid Metabolism, 1980
Heinrich Wieland Prize, 1982
Advisory Board, Arteriosclerosis, Hypertension, and Lipid Metabolism Committee, National Institutes of Health, 1980–1982
Advisory Committee, Atherogenesis Branch Task Group, National Heart, Lung, and Blood Institute, 1981–1982
Chairman, Gordon Conference on Atherosclerosis, 1983
Panel Member, NIH Consensus Development Conference on Lowering Blood Cholesterol to Prevent Heart Disease, December 1984
Medical Advisory Council, Merck Sharp & Dohme International, 1987
American Heart Association, Research Committee, 1985–1988
American Heart Association, Co-Chairman of the Pathology Research Study Section, 1985–1988
American Heart Association, Executive Committee of the Council on Arteriosclerosis, 1985–1988
George Lyman Duff Lecturer, Selected by American Heart Association, Arteriosclerosis Council, 1987
Chairman, Deuel Conference on Lipids, March 1989
Syntex Research Scholars Program, Advisory Committee, 1985–1992
Merck Institute Board of Scientific Advisors, 1989–1994
CIBA-GEIGY DREW Award in Biomedical Research, 1989
National Heart, Lung, and Blood Institute Task Force on Atherosclerosis, March 1990
Visiting Professor, American Hospital, Istanbul, Turkey, 1988–present.
Distinguished Alumnus, Maryville College, Maryville, Tennessee, 1994
Metropolitan Life Foundation Award for Medical Research, 1994
Honorary Degree of Doctor of Medicine, University of Göteborg, Göteborg, Sweden, 1995
National Cholesterol Education Program DeWitt S. Goodman Award for Basic Science Achievement, 1995
Honorary Membership, Turkish Society of Cardiology, 1997
Co-chair, Kern Aspen Lipid Conference, August 1998
Fellow, American Association for the Advancement of Science, elected 1999
Member, National Academy of Sciences, elected 2000
Chairman, Young Investigators Award Committee, 12th International Symposium on Atherosclerosis, June 2000
Distinguished Alumnus Award for 2000, Vanderbilt University School of Medicine, October 2000
Fellow, American Heart Association, July 2001
Member, National Academy of Medicine, elected 2001
Member, California Academy of Medicine, elected 2005
Advisory Board Member, Biomedicum Helsinki, 2005
Advisory Board Member, 14th International Symposium on Atherosclerosis (ISA), Rome, Italy, 2006
Member, American Academy of Arts & Sciences, elected 2006
Honorary Degree of Doctor of Medicine, Maryville College, Maryville, TN, 2006
Distinguished Fellow, International Atherosclerosis Society, 2006
Outstanding Achievement Award for Contributing to Atherosclerosis Research, 18th International Symposium on Atherosclerosis, June 2009

Award for Lifetime Achievement in Mentorship, presented by the Gladstone Postdoctoral Fellows, December 2009

Builders of Science Award, Research!America, Washington, DC, March 2010

Salute to Excellence Award, American Liver Foundation, San Francisco, CA, March 2011

Distinguished Scientist Award, American Heart Association, Orlando, FL, November 2011

24th Annual Robert J. and Claire Pasarow Foundation Award in Cardiovascular Disease, Los Angeles, CA, April 2012

Golden Heart Member Distinction, American Heart Association, January 2017

Editorial Boards:

Journal of Lipid Research, 1979–1983

Journal of Clinical Investigation, 1982–1987

Journal of Biological Chemistry, 1983–1988; 1993–1998

Lipid Review (London), 1986–1993

Arteriosclerosis, Thrombosis, and Vascular Biology, 1999–2002

Associate Editor, Journal of Atherosclerosis and Thrombosis, 1992–2004

Journal of Lipid Research Advisory Board, 1980–2006

Current Opinion in Lipidology, 1989–present

Nutrition, Metabolism and Cardiovascular Diseases, 1990–2006

Marmara Medical Journal, 2013–

The Anatolian Journal of Cardiology, 2009–

Board Memberships:

Member, Board of Directors, La Jolla Institute for Allergy and Immunology, 2016–

Member, Board of Trustees, Buck Institute for Research on Aging, 2017–

Scientific Advisory Board (Chair), E-Scape Bio, Inc., 2015–

Invited Lectureships:

David Rubinstein Memorial Lecture, Banff, Alberta, Canada, September 1983

Molecular Genetics Lectureship, University of Michigan, Ann Arbor, MI, May 1984

University Lecture Series, University of Texas, Dallas, TX, November 1984

John C. Higgins Memorial Lecture, Oregon Regional Primate Research Center, Beaverton, OR, November 1984

Advances in Internal Medicine Lecture, Meridian Hotel, San Francisco, CA, May 1985

International Symposium in Honor of Jacques Genest: The Future of Molecular Medicine and Clinical Research, Montreal, Canada, September 1985

Massachusetts General Hospital Research Lecture Series, Boston, MA, May 1986

Cold Spring Harbor Laboratory Symposium: Molecular Biology of *Homo sapiens*, Cold Spring Harbor, NY, June 1986

Robert W. Wissler Symposium, University of Chicago, Chicago, IL, April 1987

Robert E. Olson Honorary Lecture, St. Louis University, St. Louis, MO, May 1987

George Lyman Duff Memorial Lecture, American Heart Association 60th Annual Scientific Sessions, Anaheim, CA, November 1987

Honors Program Lecture, New York University School of Medicine, New York, NY, February 1988

Memorial Lecture, 30th Japanese Conference on the Biochemistry of Lipids, Tokyo, Japan, June 1988

Visiting Professor and Lecturer, The Cleveland Clinic Foundation, Cleveland, OH, April 1989

Keynote After Dinner Lecture, Mid-Atlantic Lipid Club, Atlantic City, NJ, April 1989

CIBA-GEIGY DREW Award Lecture, Madison, NJ, October 1989

After Dinner Lecture, Merck Institute Board of Scientific Advisors, Somerset, NJ, May 1990

Myant Lecture, British Hyperlipidaemia Association Meeting, Cardiff, England, July 1991

Markey Distinguished Lecturer, Eleanor Roosevelt Institute, Denver, CO, March 1992

John L. Shapiro Memorial Lectureship, Vanderbilt University, Nashville, TN, October 1992

Keynote Lecturer, Gulf Lipid Club, Bahrain, November 1993

Distinguished Alumni Award, Maryville College, Maryville, TN, 1993

Organizer, International Symposium: *Turkish Heart Study: Recent Advances in Coronary Artery Disease*, Istanbul, Turkey, November 1993

Metropolitan Life Foundation Award Lecture, Washington, DC, February 1995

Keynote Lecturer, First Congress of the Czech Atherosclerosis Society, Prague, Czechoslovakia, April 1996

Keynote Lecturer, 38th General Meeting of the Japan Geriatric Society, Tokyo, Japan, June 1996

Honors Program Lecture, New York University School of Medicine, New York, NY, February 1997

Karolinska Research Lecture Series, The Nobel Assembly, Nobel Forum, Stockholm, Sweden, February 1997

Keynote Lecturer, FASEB Summer Research Conference on *Intestinal Lipid Absorption, Metabolism and Transport*, Saxtons River, VT, July 1997

Keynote Lecturer, 6th International Conference on Alzheimer's Disease and Related Disorders, Amsterdam, The Netherlands, July 1998

Ernest William Goodpasture Lecturer, Vanderbilt University School of Medicine, Nashville, TN, November 1998

Samuel Rudin Distinguished Visiting Professor, Columbia University, New York, NY, November 1998

Dean's Research Seminar Series, University of California School of Medicine, San Francisco, CA, January 1999

Keystone Symposium on Molecular Mechanisms in Alzheimer's Disease, Taos, NM, March 1999

Keystone Symposium on Molecular and Cellular Biology, Durango, CO, January 2001

Dean's Distinguished Lectureship, University of Arkansas for Medical Sciences, Little Rock, AR, March 2001

Fourth Alexander and Helena Schonfeld Lecture in Medicine, Washington University School of Medicine, St. Louis, MO, November 2001

Keynote Address, Society for Neuroscience Satellite Symposium: *Apolipoprotein/Lipoprotein Receptors: Role in Neurobiology and Disease*, San Diego, CA, November 2001

Keynote Speaker, 13th International Symposium on Atherosclerosis, Kyoto, Japan, October 2003

Commencement Address, Maryville College, Maryville, TN, May 2006

Altan Onat Lecture, 77th European Atherosclerosis Society Congress, Istanbul, Turkey, April 2008

Master Lecture: *Apolipoprotein E: From Atherosclerosis to Alzheimer's Disease*, 15th International Symposium on Atherosclerosis, Boston, MA, June 2009

Keynote Address, Vanderbilt University Medical Scientist Training Program Retreat, Nashville, TN, June 2009

Dean's Distinguished Lecture, University of Kentucky, Lexington, KY, February 2010

Dinner Speaker, AOA MD/PhD Research Day and Student Retreat, University of Kentucky, Lexington, KY, February 2010

Speaker, Institute of Medicine's Forum on Neuroscience and Nervous System Disorders, *Alzheimer's Diagnostic Criteria Validation: Exploration of Next Steps*, Paris, France, July 2011

Keynote Lecture, Mexican Academy of Sciences Congress, Mexico City, Mexico, January 2012

Keynote Speaker, Joint Keystone Symposia on *ApoE, Alzheimer's and Lipoprotein Biology/ Clinical and Molecular Biology of Acute and Chronic Traumatic Encephalopathies*, Keystone, CO, February 2012

Keynote Speaker, *Fourth Annual ApoE, ApoE Receptors, and Neurodegeneration Symposium*, Georgetown University, Washington, DC, June 2013

Clinical and Translational Science Institute Seminar, University of California, Los Angeles, *Alzheimer's Disease: New Hope, Novel Therapy Based on Apolipoprotein E*, Los Angeles, CA, December 2014

HHMI Academia-Industry Panel Speaker, American Society for Clinical Investigation and the Association of American Physicians Joint Meeting, *Apolipoprotein E: From Atherosclerosis to Alzheimer's Disease to the Clinic*, Chicago, IL, April 2016

Visiting Professor and Lecturer, University of Milan, *Apolipoprotein E: From Atherosclerosis to Alzheimer's Disease*, Milan, Italy, September 2016

Plenary Speaker, American Heart Association, *Central Nervous System Lipoproteins: Role of ApoE in Lipid Metabolism and Neurodegeneration*, New Orleans, LA, November 2016

Plenary Speaker, Symposium Honoring Jean Davignon, MD, MSc, FRCP, FACP, FRSC, FACN, FAHA, *Apolipoprotein E: From Atherosclerosis to Alzheimer's Disease*, Montréal, Canada, February 10, 2017

University Committees:

Committee on Research Policy, 1983–1985 Committee on Research, 1985–1986

Vice Chairman, Committee on Research, 1986–1987

Faculty Search Committees:

- Chief, Cardiology (SFGH Division), 1988–1993
- Chairman, Department of Pathology, 1986–1987; 1995–1998
- Chairman, Department of Epidemiology, 1988–1989
- Director, AIDS Research Center, 1989–1991
- Dean's Advisory Council, 1986–1989
- Associate Director, General Clinical Research Center, 1992–1994
- Director, Cardiovascular Research Institute, 1995–1997
- Neurology (Alzheimer's Disease Center), 1994–1997
- Chair, Department of Medicine, 2006–2008

Advisory Board, Lung Biology Center (SFGH), 1987–1989

Executive Committee, Pathology Department, 1987–1989

SFGH AIDS Research Center Advisory Committee, 1989–1991

SFGH Research Executive Committee, 1991–1994

SFGH Research Committee, 1994–2006

Fund Raising Advisory Council, School of Medicine, UCSF, 1995–1998

Mission Bay Task Force Committee, UCSF, 1996–1998

Academic Implementation Committee for the Mission Bay Campus, 1998–2003

Executive Committee for Human Genetics, UCSF, Affiliate Member, 2005
Societies Committee, 2008–
Gladstone/UCSF Search Committee (Chair), President, The J. David Gladstone Institutes,
2009–2010

Research Interests:

- I. Plasma lipoprotein metabolism
 - Apolipoprotein structure and function, especially apolipoprotein (apo) E and apoB;
 - Characterization of cell surface receptors for lipoproteins;
 - Role of the liver in cholesterol homeostasis.
- II. Relationship of plasma lipoproteins to the development and progression of atherosclerosis
 - Role of HDL cholesterol metabolism.
- III. Role of apoE in the nervous system
 - Role in the pathogenesis of Alzheimer's disease and other neurodegenerative disorders;
 - Identification of small-molecule structure correctors to reverse detrimental effects of apoE4;
 - Effect on neuronal cytoskeleton and mitochondrial function;
 - Proteomics describing the effects of apoE4 on mitochondrial dysfunction and alterations in proteosomal activity and mitophagy.
- IV. Turkish Heart Study
 - Director of epidemiological study to determine the risk factors responsible for coronary artery disease in Turkey;
 - Characterization of genetic polymorphisms responsible for low HDL-C levels and metabolic syndrome in Turks.

BOOKS, BOOK CHAPTERS AND SYMPOSIA

1. Mahley RW and Innerarity TL (1977) Heparin-manganese precipitability of canine lipoproteins as correlated with binding to cell surface receptors on fibroblasts. In: *Atherosclerosis IV*. Schettler G, Gotto AM Jr, Hata Y, and Klose G, eds. Springer-Verlag, Berlin, pp. 52–56.
2. Mahley RW (1978) Alterations in plasma lipoproteins induced by cholesterol feeding in animals including man. In: *Disturbances in Lipid and Lipoprotein Metabolism*. Dietschy JM, Gotto AM Jr, and Ontko JA, eds. American Physiological Society, Bethesda, pp. 181–197.
3. Mahley RW, Weisgraber KH, Bersot TP, and Innerarity TL (1978) Effects of cholesterol feeding on human and animal high density lipoproteins. In: *High Density Lipoproteins and Atherosclerosis*. Gotto AM Jr, Miller NE, and Oliver MF, eds. Elsevier/North Holland Biomedical Press, Amsterdam, pp. 149–176.
4. Mahley RW (1979) Dietary fat, cholesterol and accelerated atherosclerosis. In: *Atherosclerosis Reviews*. Paoletti R and Gotto AM Jr, eds. Raven Press, New York, pp. 1–34.
5. Mahley RW and Weisgraber KH (1979) Subfractionation of high density lipoproteins into two metabolically distinct subclasses by heparin affinity chromatography and Geon-Pevikon electrophoresis. In: *Report of the Apolipoprotein Methodology Workshop*. Lippel KL, ed. Lipid Metabolism-Atherogenesis Branch, National Heart, Lung, and Blood Institute, Bethesda, MD, NIH Publication No. 79-1661, pp. 356–369.
6. Mahley RW (1980) Cholesterol feeding: Effects on lipoprotein structure and metabolism. In: *Atherosclerosis V*. Gotto AM Jr, Smith LC, and Allen B, eds. Springer-Verlag, New York, pp. 641–652.
7. Mahley RW (1980) Cholesterol-induced hyperlipoproteinemia and atherosclerosis in dogs, swine and monkeys: Models for human atherosclerosis. In: *Atherosclerosis V*. Gotto AM Jr, Smith LC, and Allen B, eds. Springer-Verlag, New York, pp. 355–358.
8. Innerarity TL and Mahley RW (1980) Lipoprotein metabolism mediated by cell surface receptors: *In vivo* and *in vitro* parallel. In: *Drugs Affecting Lipid Metabolism*. Fumagalli R, Kritchevsky D, and Paoletti R, eds. Elsevier/North-Holland Biomedical Press, Amsterdam, pp. 53–60.
9. Innerarity TL, Hui DY, and Mahley RW (1982) Hepatic apoprotein E (remnant) receptors. In: *Lipoproteins and Coronary Atherosclerosis*. Nosedá G, Fragiácomó C, Fumagalli R, and Paoletti R, eds. Elsevier Biomedical Press, Amsterdam, pp. 173–181.
10. Mahley RW and Weisgraber KH (1983) Canine plasma lipoproteins: Characterization of lipoproteins from control and cholesterol-fed dogs. In: *CRC Handbook of Electrophoresis, Vol. IV: Lipoproteins of Nonhuman Species*. Lewis LA and Naito HK, eds. CRC Press, Boca Raton, FL, pp. 151–173.
11. Bersot TP and Mahley RW (1983) Mechanisms of atherogenesis in diet-induced and familial hyperlipidemia. In: *Dietary Fats and Health*. Perkins EG and Visek WJ, eds. American Oil Chemists' Society, Champaign, IL, pp. 550–563.
12. Weisgraber KH and Mahley RW (1983) Characterization of rat plasma lipoproteins. In: *CRC Handbook of Electrophoresis, Vol. IV: Lipoproteins of Nonhuman Species*. Lewis LA and Naito HK, eds. CRC Press, Boca Raton, FL, pp. 103–132.
13. Bersot TP and Mahley RW (1983) Lipoprotein receptors in lipid transport and atherogenesis. In: *Atherosclerosis: Mechanisms and Approaches to Therapy*. Miller NE, ed. Raven Press, New York, pp. 143–152.
14. Mahley RW, Rall SC Jr, Innerarity TL, and Weisgraber KH (1983) Apolipoprotein E and cholesterol metabolism. In: *Atherosclerosis VI*. Schettler FG, Gotto AM, Middelhoff G, Habenicht AJR, and Jurutka KR, eds. Springer-Verlag, Berlin, pp. 489–501.
15. Taylor JM, Fukazawa C, Rall SC Jr, Weisgraber KH, Mahley RW, and McLean JW (1983) Regulation of rat liver apolipoprotein E mRNA biosynthesis and cloning of its cDNA. In:

- Atherosclerosis VI*. Schettler FG, Gotto AM, Middelhoff G, Habenicht AJR, and Jurutka KR, eds. Springer-Verlag, Berlin, pp. 580–584.
16. Weisgraber KH, Rall SC Jr, Innerarity TL, and Mahley RW (1983) Receptor interactions of human apolipoprotein E. In: *Atherosclerosis VI*. Schettler FG, Gotto AM, Middelhoff G, Habenicht AJR, and Jurutka KR, eds. Springer-Verlag, Berlin, pp. 537–542.
 17. Mahley RW, Weisgraber KH, Rall SC Jr, and Innerarity TL (1983) Structure and function of apolipoprotein E. In: *Proceedings of the Workshop on Apolipoprotein Quantification*. Lippel KL, ed. U.S. Govt. Printing Office, Washington, DC, NIH Publication No. 83-1266, pp. 123–135.
 18. Angelin B, Raviola CA, and Mahley RW (1983) Rapid regulation of canine hepatic lipoprotein receptors by bile acids. In: *Bile Acids and Cholesterol in Health and Disease*. Paumgartner G, Stiehl A, and Gerok W, eds. MTP Press, Boston, pp. 139–150.
 19. Weisgraber KH, Rall SC Jr, and Mahley RW (1983) Cysteamine modification as an aid in apolipoprotein E phenotyping. In: *Proceedings of the Workshop on Apolipoprotein Quantification*. Lippel KL, ed. U.S. Govt. Printing Office, Washington, DC, NIH Publ. No. 83-1266, pp. 404–407.
 20. Rall SC Jr, Weisgraber KH, Innerarity TL, and Mahley RW (1984) Structure and function of apolipoprotein E: Existence of multiple E2 alleles in type III hyperlipoproteinemia. In: *Latent Dyslipoproteinemias and Atherosclerosis*. DeGennes JL, Polonovski J, and Paoletti R, eds. Raven Press, New York, pp. 157–163.
 21. Chapman MJ, Innerarity TL, Arnold KS, and Mahley RW (1984) In vitro apo-B,E receptor binding and in vivo catabolism of trypsin-modified low density lipoproteins. In: *Latent Dyslipoproteinemias and Atherosclerosis*. DeGennes JL, Polonovski J, and Paoletti R, eds. Raven Press, New York, pp. 93–99.
 22. Steinmetz A, Utermann G, Haas J, Menzel HJ, Rall SC Jr, Weisgraber KH, and Mahley RW (1984) Mutations of apolipoprotein AI can affect cofactor function for cholesteryl ester formation by lecithin:cholesterol acyltransferase. In: *Cologne Atherosclerosis Conference, No. 2: Lipids*. Parnham MJ, ed. Birkhauser Verlag, Basel, Switzerland, pp. 217–224.
 23. Weisgraber KH, Innerarity TL, Rall SC Jr, and Mahley RW (1985) Apolipoprotein E: Receptor binding properties. In: *Drugs Affecting Lipid Metabolism*. Kritchevsky D, Holmes WL, and Paoletti R, eds. Plenum Publishing, New York, pp. 159–172.
 24. Mahley RW (1986) Lipoprotein interaction with cell surface receptors. In: *Lipoproteins and Coronary Heart Disease. Proceedings of the Glasgow Heart Disease Symposium*, September 1984. Shepherd J, Packard CJ, Lorimer AR, Lawrie TDV, Morgan HG, Brownlie SM, eds. The Committee of Editors, Royal Infirmary, Glasgow, pp. 37–45.
 25. Mahley RW and Bersot TP (1987) Lipid abnormalities and coronary heart disease: Mechanisms, clinical classifications, and management. In: *Cardiology*. Parmley WW and Chatterjee K, eds. JB Lippincott, Philadelphia. Vol. 2, Chap. 2.
 26. Mahley RW, Innerarity TL, Hui DY, Rall SC Jr, and Weisgraber KH (1986) Regulation of cholesterol metabolism by hepatic lipoprotein receptors: Ligand-receptor interactions. In: *Atherosclerosis VII*. Fidge NH and Nestel PJ, eds. Elsevier, Amsterdam, pp. 119–123.
 27. Mahley RW (1987) Receptor-mediated regulation of cholesterol metabolism. In: *Cardiovascular Disease: Molecular and Cellular Mechanisms, Prevention, and Treatment*. Sixth Annual International Spring Symposium on the Health Sciences. Gallo L, ed. Plenum Publishing, New York, pp. 79–85.
 28. Hui DY, Innerarity TL, and Mahley RW (1986) Structural and immunological comparison of the hepatic apolipoprotein E receptor with the apolipoprotein B,E(LDL) receptor. In: *Atherosclerosis VII*. Fidge NH and Nestel PJ, eds. Elsevier, Amsterdam, pp. 329–333.
 29. Mahley RW (1990) Biochemistry and physiology of lipid and lipoprotein metabolism. In: *Principles and Practice of Endocrinology and Metabolism*. Becker KL, ed. JB Lippincott, Philadelphia, pp. 1219–1229.

30. Mahley RW (1987) Cellular and molecular biology of apolipoproteins: Receptor-mediated regulation of cholesterol metabolism. In: *Drugs Affecting Lipid Metabolism*. Paoletti R, Kritchevsky D, and Holmes WL, eds. Springer-Verlag, Berlin, pp. 59–62.
31. Weisgraber KH, Rall SC Jr, Innerarity TL, and Mahley RW (1987) HDL-with apolipoprotein E: Important considerations and metabolic significance of this high density lipoprotein subclass. In *Proceedings of the Workshop on Lipoprotein Heterogeneity*. Lippel K, ed. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Washington, DC. pp. 111–121.
32. Innerarity TL, Wernette-Hammond ME, Koo C, and Mahley RW (1987) *In vivo* and *in vitro* metabolism of intestinal and hepatic remnant lipoproteins: Role of beta-very low density lipoproteins in atherosclerosis. In: *Proceedings of the Workshop on Lipoprotein Heterogeneity*. Lippel K, ed. U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, Washington, DC. pp. 123–140.
33. Mahley RW and Rall SC Jr (1989) Type III hyperlipoproteinemia (dysbetalipoproteinemia): The role of apolipoprotein E in normal and abnormal lipoprotein metabolism. In: *The Metabolic Basis of Inherited Disease*, 6th edition. Scriver CR, Beaudet AL, Sly WS, and Valle D, eds. McGraw-Hill, New York. pp. 1195–1213.
34. Mahley RW (1988) The 1984 NIH consensus report on cholesterol in light of the 1987 understanding of lipoproteins and coronary heart disease. In: *The Role of Cholesterol in Atherosclerosis: New Therapeutic Opportunities*. Grundy SM and Bearn AG, eds. Hanley & Belfus, Philadelphia, pp. 175–184.
35. Mahley RW, Boyles JK, and Pitas RE (1989) Role of apolipoprotein E and high density lipoproteins in lipid redistribution locally within tissues. In: *High Density Lipoproteins and Atherosclerosis II*. Miller NE, ed. Elsevier Science, Amsterdam, pp. 263–268.
36. Mahley RW (1991) Type III hyperlipoproteinemia (dysbetalipoproteinemia): A genetic disorder associated with premature atherosclerosis. In: *The Hyperlipidemias: Vol. 1: Primary Hyperlipidemias*. Steiner G and Shafritz E, eds. McGraw-Hill, New York, pp. 261–270.
37. Mahley RW and Bersot TP (1989) Lipid abnormalities and coronary heart disease: Mechanisms, clinical classifications, and management. In: *Cardiology*. Parmley WW and Chatterjee K, eds. JB Lipincott, Philadelphia, Vol. 2, Chap. 2.
38. Mahley RW (1990) Type III hyperlipoproteinemia: Dominant versus recessive expression of the lipid disorder. In: *Drugs Affecting Lipid Metabolism – X*. Gotto AM Jr and Smith LC, eds. Elsevier Science, Amsterdam, pp. 29–34.
39. Rall SC Jr, Innerarity TL, Weisgraber KH, Wardell MR, and Mahley RW (1990) The type of mutation in apolipoprotein E determines whether type III hyperlipoproteinemia is expressed as a dominant or recessive trait. In: *Atherosclerosis and Cardiovascular Disease, 7th International Meeting*. Descovich GC, Gaddi A, Magri GL, and Lenzi S, eds. Kluwer Academic Publishers, Dordrecht, The Netherlands, pp. 81–88.
40. Arnold KS, Innerarity TL, Pitas RE, and Mahley RW (1992) Lipoprotein-receptor interactions. In: *Lipoprotein Analysis. A Practical Approach Series*. Converse CA and Skinner ER, eds. Oxford University Press, Oxford, England, pp. 145–168.
41. Pitas RE and Mahley RW (1992) Analysis of tissue lipoproteins. In: *Lipoprotein Analysis. A Practical Approach Series*. Converse CA and Skinner ER, eds. Oxford University Press, Oxford, England, pp. 215–242.
42. Bersot TP and Mahley RW (1990) Overview of the atherogenicity of lipoproteins: Role of chylomicron remnants, very low density lipoproteins remnants, and low density lipoproteins. In: *Proceedings of the 14th International Congress of Nutrition*. Kim WY, Lee KY, Ju JS, Kim SH, eds. The 14th ICN Organizing Committee, Ewha Womans University, Seoul, Korea, pp. 423–426.
43. Mahley RW and Bersot TP (1991) Lipid abnormalities: Mechanisms, clinical classifications, and management. In: *Cardiology*. Chatterjee K, Karliner J, Rapaport E, Cheitlin MD, Parmley WW, and Scheinman M, eds. Gower Medical Publishing, New York, pp. 7.36–7.47.

44. Wardell MR, Wilson C, Agard DA, Mahley RW, and Weisgraber KH (1993) Crystal structures of the common apolipoprotein E variant: Insights into functional mechanisms. In: *Human Apolipoprotein Mutants III. Diagnosis and Treatment*. Sirtori CR, Franceschini G, and Brewer BH Jr, eds. Springer-Verlag, Berlin, pp. 81–96.
45. Mahley RW (1993) *Cellular and Molecular Biology of Atherogenesis, Cholesterol Transport and Lipoprotein Metabolism*. (Gökdemir O and Palaoğlu KE, editors of Turkish edition). Merck Sharp & Dohme, Istanbul, Turkey (BOOK).
46. Blaner WS, Talmage DA, Kong LWY, Piantedosi R, Goodman DS, Hussain MM, and Mahley RW (1993) Retinoids are actively metabolized in rabbit bone marrow. In: *Retinoids. Progress in Research and Clinical Applications*. Livrea MA and Packer L, eds. Marcel Dekker, New York. pp. 63–72.
47. Mahley RW and Bersot TP (1994) Lipid abnormalities: Mechanisms, clinical classifications, and management. In: *Cardiology*. Parmley WW and Chatterjee K, eds. JB Lippincott, Philadelphia, Vol. 2, Chap. 2, pp. 1–20.
48. Mahley RW and Rall SC Jr (1995) Type III hyperlipoproteinemia (dysbetalipoproteinemia): The role of apolipoprotein E in normal and abnormal lipoprotein metabolism. In: *The Metabolic and Molecular Bases of Inherited Disease*, 7th edition. Scriver CR, Beaudet AL, Sly WS, and Valle D, eds. McGraw-Hill, New York, Vol. 2, pp. 1953–1980.
49. Mahley RW and Ji Z-S (1995) Apolipoprotein E in remnant lipoprotein metabolism: Role of cell-surface heparan sulfate proteoglycans in enhanced hepatic binding and uptake. In: *Atherosclerosis X*. Woodford FP, Davignon J, and Sniderman A, eds. Elsevier Science Publishers, Amsterdam. pp. 645–650.
50. Fan J, Mahley RW, and Taylor JM (1995) Transgenic rabbits that overexpress hepatic lipase have a marked reduction of plasma high density lipoproteins and intermediate density lipoproteins. In: *Atherosclerosis X*. Woodford FP, Davignon J, and Sniderman A, eds. Elsevier Science, Amsterdam. pp. 666–669.
51. Weisgraber KH, Pitas RE, and Mahley RW (1995) Role of apolipoprotein E in Alzheimer's disease. In: *Atherosclerosis X*. Woodford FP, Davignon J, and Sniderman A, eds. Elsevier Science, Amsterdam. pp. 670–674.
52. Mahley RW (1995) Biochemistry and physiology of lipid and lipoprotein metabolism. In: *Principles and Practice of Endocrinology and Metabolism*, 2nd edition. Becker KL, ed. JB Lippincott, Philadelphia. pp. 1369–1378.
53. Mahley RW (1995) Apolipoprotein E and Alzheimer's disease. In: *HDL Deficiency and Atherosclerosis*. Assmann G, ed. Kluwer Academic Publishers, Dordrecht, The Netherlands. pp. 53–59.
54. Mahley RW and Young SG (1996) Hyperlipidemia: Molecular defects of apolipoproteins B and E responsible for elevated blood lipids. In: *Molecular Genetics and Gene Therapy of Cardiovascular Diseases*. Mockrin SC, ed. Marcel Dekker, New York. pp. 173–207.
55. Bersot TP and Mahley RW (1996) Clinical classifications of lipid abnormalities. In: *Atherosclerosis and Coronary Artery Disease*. Fuster V, Ross R, and Topol EJ, eds. Lippincott-Raven, Philadelphia. pp. 163–169.
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Commercial Activities:

E-Scape Bio, Inc.:

Co-founder, July, 2015

Consultant, 2015–2019

Scientific Advisory Board (Chair), 2015–

GABAeron, Inc.:

Chief Executive Officer, 2017–

Chief Scientific Officer, 2017–

Issued Patents:

R Mahley, K Weisgraber, Y Huang. U.S. Patent Number 7,964,598 for “*ApoE4 Domain Interaction Inhibitors and Methods of Use Thereof*,” issued June 21, 2011.

Y Huang, R Mahley. U.S. Patent Number 7,700,304 for “*Methods of Screening Disorders Related to ApoE*,” issued April 20, 2010.

Y Huang, R Mahley. U.S. Patent Number 6,787,519 for “*Methods of Treating Disorders Related to ApoE4*,” issued September 7, 2004.

L Mucke, J Raber, M Buttini, R Mahley, R Pitas. U.S. Patent Number 6,046,381 for “*ApoE Transgenic Mice and Assay Methods*,” issued April 4, 2000.