

Curriculum Vitae
Emelia J. Benjamin, MD, ScM

Academic Training

06/1979 AB, Harvard University, Boston, MA. Psychology and Social Relations
06/1983 MD, Case Western Reserve University School of Medicine, Cleveland, OH. Medicine
06/1990 ScM, Harvard University School of Public Health, Boston, MA. Epidemiology
09/2001 Genetic Approaches to Complex Heart, Lung and Blood Diseases Course, Jackson Laboratories, Bar Harbor, ME
09/2007-04/2008 Executive Leadership in Academic Medicine, Drexel University, Philadelphia, PA,
<http://www.drexelmed.edu/elam/home.html>

Postdoctoral Training

07/1983-06/1986 Internal Medicine Residency, Boston City Hospital, Boston, MA
07/1986-06/1988 Cardiology Fellowship, Boston University School of Medicine, Boston, MA
07/1988-06/1990 Echocardiography Fellows, Brigham & Women's Hospital, Boston, MA
07/1988-06/1990 Clinical Effectiveness Program, Brigham & Women's Hospital, Boston, MA
07/1988-06/1990 Research Fellow, Cardiology, Framingham, Heart Study, Framingham, MA

Academic Appointments

Boston University School of Medicine

12/1990-04/1998 Assistant Professor of Medicine & Preventive Medicine
Boston University School of Medicine
05/1998-06/2004 Associate Professor of Medicine & Preventive Medicine,
Boston University School of Medicine
07/2004-present Professor of Medicine & Preventive Medicine, Boston University School of Medicine
11/2006-present Professor of Epidemiology, Boston University School of Public Health
12/2008-present Vice Chair, Faculty Development and Diversity, Department of Medicine, Boston
University School of Medicine

Hospital Appointments

07/1990-present Staff Cardiologist, Coronary Care Unit Attending, Boston Medical Center

Awards and Honors

1979 Phi Beta Kappa Honor Society, Harvard University
1995 Gender Equity Award American Medical Women's Association, BU School of Medicine
2001 Wendy Kline Memorial Award, American Heart Association, Boston Division
2001 Great Communicator Award, American Heart Association, New England Affiliate
2008 Association of University Cardiologists, Elected to membership

Licenses and Certification

1986 American Board of Internal Medicine
1988 Massachusetts License Registration
1989 American Board of Cardiovascular Disease

Departmental and University Committees

Boston City Hospital

1984-1985 Co-President, House Officers' Association of Boston City Hospital

Boston University Medical Campus

2009-2011 Joint-Chair, BUMC Mentoring Task Force

Boston University School of Medicine

1991-1992	Boston City Hospital Risk Management Committee, Member
1994-1996	Boston University School of Medicine Committee to develop a curriculum to prepare residents for their teaching and leadership roles, Member
1992-1997	Internship Selection Committee, Member
1999, 2000	Internship Selection Committee, Member
2002-2007	Ad Hoc Committee to Assess the Academic Status of Women Faculty in the Department of Medicine, Member
2005-present	The Leah M. Lowenstein Women in Medicine Caucus, for the promotion of women's professional development in Medicine, Member
2005	Boston University School of Medicine Clinical Research-IT Working Group, Member. Committee to guide development of Boston Medical Center electronic medical record clinical research system
2007	Search Committee for Director of the Whitaker Cardiovascular Institute, Member
2007-present	Research Advisory Committee, Department of Medicine, Boston University School of Medicine, Member
2007-present	Faculty Development and Diversity Committee, Department of Medicine. Committee's Objective: to promote faculty recruitment, retention, and promotion.
2007-2009	Faculty Development and Diversity Committee, Role: Chair
2009-present	Faculty Development and Diversity Committee, Role: Member
2008-2010	Evans Medical Foundation, Board of Directors, Member
2009-present	Department of Medicine, Appointments and Promotions Committee, Member
2009-2010	BUSM, LCME, Faculty Standards Subcommittee, Member

Teaching Experience and Responsibilities***Local Grand Rounds and Conferences***

1999	Emergency Medical Services Cardiology Pathophysiology Lecture Series , Boston, MA. "Epidemiology of coronary artery disease"
1999	Boston VA Medical Center , General Medicine Lecture Series - "Management of valvular heart disease"
2000	Brigham and Women's Hospital Cardiology Grand Rounds. "Cardiac risk factors for stroke"
2000	West Roxbury Veterans Affairs Hospital , Boston, MA. Medical Grand Rounds. "An epidemiologist's approach to cardiac risk factors for stroke"
2001	Quincy Medical Center , Quincy, MA. Medicine Grounds. "Cardiac risk factors for stroke"
2002	New England Medical Center , Cardiology Grand Rounds. "The cardiologists approach to cardiovascular risk factors for stroke"
2003	Quincy Medical Center Update in Cardiology. "What is new in coronary heart disease risk prediction; how can the primary care clinician be more effective in implementing cardiovascular disease prevention strategies?"
2005	Beth Israel Deaconess Medical Center , Boston, MA, Cardiology Grand Rounds. "Atrial Fibrillation: Lessons from the Framingham Studies"
2006	New England Medical Center , Medical Grand Rounds, Boston, MA. "Atrial Fibrillation: Epidemiology and clinical perspectives."
2007	Harvard Medical School , Vascular Biology Seminar, Boston, MA. "The epidemiology and genetics of systemic inflammation."
2007	Quincy Medical Center , Quincy, MA. Cardiology Grand Grounds. "Atrial fibrillation: From Epidemiology, to Genetics to the Bedside"
2008	Boston University , Medical Grand Rounds "Can we Prevent Atrial Fibrillation? Opportunities Identified from Epidemiology & Genetics Insights" April 25, 2008

2008 **University of Massachusetts Medical School** Cardiology Grand Rounds, The Genetics and Epidemiology of Atrial Fibrillation May 7, 2008

Boston University

Boston University Medical Center Cardiology Summer School Lecture Series

1991-1992 The diagnosis and management of aortic and mitral stenosis
 1994-1998 The medical management of valvular heart disease
 1999 The medical management of aortic stenosis and mitral stenosis
 1999 The medical management of aortic insufficiency and mitral regurgitation

Boston University Medical Center Cardiology Core Curriculum Lecture Series

2001 The medical management of aortic stenosis and mitral stenosis
 2001 The medical management of aortic insufficiency and mitral regurgitation
 2004 The management of aortic stenosis and mitral regurgitation
 2007 The management of aortic stenosis and mitral regurgitation

House Officers' Clinical Skills Conference & Board Review

1993-1995 Boston City Hospital, Senior Medical Resident Cardiology Board Review Session
 1992, 1994 Cardiac Auscultation: Why should you care and how can you improve?
 1995, 1996 Risk factors for heart disease
 1995 Resident Leadership Skills Conference Series/Boston City Hospital, Facilitator Feedback and evaluation
 2001 Cardiac auscultation, pearls and pitfalls; interactive listening

Boston University School of Medicine, Second Year Biology of Disease Cardiovascular Curriculum

1995-present Annual lecture: "The epidemiology and risk factors for coronary artery disease"

Boston University School of Medicine, Affiliated Hospital Lectures

1991-1998 Faculty Teaching Rounds Malden Hospital/Boston Medical Center
 1996-1997 Norwood Hospital/Boston Medical Center Cardiology Case Presentations
 1996 Norwood Hospital Cardiology Grand Rounds "Cardiac precursors of stroke"

Boston University School of Medicine (BUSM) Miscellaneous Talks

1996 BUSM Astra España /Framingham Heart Study Cardiovascular Risk Factor Seminar, "Utility of the echocardiogram as a cardiovascular risk factor"
 1997 BUSM/Boston Medical Center Symposium: Contemporary Management of the Cardiovascular Patient, "Hypertension and organ damage"
 1998 BUSM/Boston VA Medical Center General Medicine Grand Rounds, "Cardiac disease and the risk of stroke"
 1998-present Annual Guest speaker - Boston University Occupational Health Center Work, BU Main Campus, Health and Life Series, "Smoking cessation and cardiovascular disease"
 1998 Featured Speaker - Boston Medical Center, Lunch-n-Learn Wellness Series - Great American Smoke out, "Cigarette smoking and heart disease"
 1999 BUSM/Department of Medicine Clinical Epidemiology Rounds - "Studies of a question of prognosis"
 1999 BUSM, General Internal Medicine Grand Rounds - "Cardiac risk factors for stroke; Assessing the new risk factor on the block"
 2001 BUSM, Cardiology Grand Rounds - "Cardiac risk factors for stroke"
 2000-2002 BUSM, Cardiology Department, Schwarz Pharma Lecture for German Physicians "Cardiac risk factors for stroke"
 2000 BUSM, Cardiology Department, Research Conference - "The epidemiologist's approach to understanding atrial fibrillation"
 2002 Boston Medical Center Ambulatory Morning Report - Evidence based medicine, supervised a house officer presentation of article addressing an outpatient clinical question

- 2003 BUSM Women in Medicine Peer Mentorship Seminar. "How to write your first grant"
- 2004 BUSM Board of Visitors Meeting, Cardiovascular Health. "The Framingham Heart Study; The past, the present and the future."
- 2005 BUSM Board of Visitors Meeting, Cardiovascular Health. "The Framingham Heart Study; The Future of Translational Epidemiology Research."
- 2005 BUSM. DAREWIN: Three-Day Preceptorship in Cardiology. "Left Ventricular Hypertrophy: The Quest for Understanding: From Echo to SNPs (single nucleotide polymorphisms) and Back"
- 2005 BUSM, Cardiology Grand Rounds, "The Genetic Epidemiology of Left Ventricular Hypertrophy"
- 2005 BUSM. Practical Issues in Obstetrics, Gynecology and Women's Health. "Cardiovascular screening and risk prediction in elderly women."
- 2006 BUSM. Cardiology for the Consulting Cardiologist. Moderator.
- 2007 BUSM, Department of Medicine Faculty Meeting. "The Framingham Heart Study: New Opportunities at the Framingham Heart Study"
- 2007 BUSM, Medical House Officers' Noon Conference. "The Framingham Heart Study – how does an epidemiologist study atrial fibrillation?"
- 2007 CREST Seminar. "The Promise of Genetic Studies: What the clinical investigator should know before pursuing genetic research."
- 2007 Betsy Nabel, MD, Wilkins Visiting Lecture – "New developments in Framingham Research. Is there a genetic basis to atrial fibrillation in the community?"
- 2008 Department of Medicine, BUSM, Faculty Development Seminar "Mentoring in Academic Medicine: A Primer for Mentors & Mentees"

Boston University School of Public Health (BUSPH) Miscellaneous Talks:

- 2003 The Epidemiology of Cardiovascular Disease in the Elderly. "Atrial fibrillation and congestive heart failure the two epidemics"
- 2002–2006 Cardiovascular Epidemiology Class, "Epidemiology of congestive heart failure", annual lecture
- 2007-2009 Cardiovascular Epidemiology Class, "Atrial Fibrillation: Epidemiology, Treatment and Genetics", Annual lecture

Boston University, Undergraduates

- 2008 BU College of Health & Rehabilitation Sciences: Sargent College: SAR HS 300 Epidemiology. "Atrial Fibrillation, an Epidemiologists Approach"

Dissertation Committee

- 2007 Keyes MJ. Statistical analysis of data with a dense sequence of measurements from medical devices for evaluating subclinical disease. Biostatistics, PhD.
Emelia J. Benjamin, MD, ScM, Examining Committee Member.

Grant Mentoring

- 2003-2008 **K23 HL074077**, TJ Wang, Natriuretic Peptides, Genes, and Diastolic Heart Failure
- 2003-2008 **K23-AG026754**, Beeson Award PI, Dellara F. Terry, MD, MPH Genetics of Cardiac Disease in Centenarian Offspring
- 2003 **1 K23 DK063176-01A1** PI, Liam F. Casserly, MB, MSc Iron and Cardiovascular Disease in Renal Failure. Note: ***Grant approved for funding, but Dr. Casserly declined, to move back to Ireland.**
- 2003-2005 **1F32AG022773-01** PI, Angela Lee Jefferson, PhD Cardiovascular disease and neurocognition in the elderly
- 2005-2007 **K12-HD42444 BU BIRCWH Scholars Program** PI. Angela Lee Jefferson, PhD Inflammatory markers as a risk factor for Alzheimer's disease in women
- 2007-2012 **K23 AG030962, Beeson Mentored Clinical Scientist** PI. Angela Lee Jefferson, PhD, Cardiac integrity and the aging brain

2005-2008	0530188N, AHA National Scientist Development grant Mehra, Reena "Oxidative Stress in Sleep Apnea and Cardiac Disease"
2005-2007	0555209B AHA Grant in Aid , Fox, Ervin R., C-Reactive Protein in African Americans: Jackson Heart
2007-2009	Deutsche Forschungsgemeinschaft (German Research Foundation) Research Fellowship SCHN 1149/1-1 Schnabel, Renate, MD Genetics and Epidemiology of Atrial Fibrillation in the Framingham Heart Study.
2007-2009	K12-HD42444 BU BIRCWH Scholars Program PI. Erica D. Bernstein, MD, PhD.
2009-2011	American Heart Association National Clinical Research Program, Scientist Development Grant. Magnani, Jared, MD. P Wave Indices: Characterization, Correlation and Association with Atrial Fibrillation
2009-2014	American Heart Association National Clinical Research Program, Fellow-to-Faculty Program. Magnani, Jared. The Epidemiology and Genetic Associations of P Wave Indices. Role: Mentor.

Major Administrative Responsibilities

Framingham Heart Study - Framingham, MA

1990-present	Director, Echocardiography Laboratory
1993-1998	Co-Principal Investigator
1993-present	Joint-Director, Medical Endpoints Review Committee
1996-present	Member, Executive Committee
1998-present	Director, Vascular Testing
2001-2003	Member, DNA Committee
2003-present	Member, Research Committee
2003-present	Member, Laboratory Committee
2004-present	Member, Genetics Steering Committee
2006-present	Member, SHARe Steering Committee
2007-2008	Member, DNA Committee

Other Professional Activities

International Studies

1991-2001	International Brachial Reactivity Task Force , for Quality Control and Training. Section Leader and Writing Group Member
2006-present	Gutenberg Heart Study, Advisory Board, Mainz, Germany. Advisory Board Member, 15,000 subject German community-based genetic epidemiology study
2009-present	ENAFRA Network – European/North-American Atrial Fibrillation Research Alliance Fondation Leducq Transatlantic Network of Excellence, Member

Professional Societies: Memberships, Offices and Committee Assignments

Fellow	American College of Cardiology
Member	American Society of Echocardiography
Fellow	American Heart Association/Council Epidemiology & Prevention
Fellow	American Heart Association/Clinical Cardiology Council
Fellow	American Heart Association/Functional Genomics and Translational Biology Council

National Studies

1993-1999	Atherosclerosis Risk in Communities Study, Jackson, MI Field Center, Echocardiography Consultant
1995-1999	CHAMPS (Combination Hemotherapy and Mortality Prevention) Study Endpoints Committee, VA multicenter randomized trial, Member
2008-2009	Jackson Heart Study, Scientific Directions Subcommittee Meeting.

National American Heart Association

1996	AHA Prevention IV Conference: Prevention and Rehabilitation of Stroke, Invited participant and Writing Group Member
1999-2002	AHA, Clinical Cardiology Council's Women in Cardiology Committee, Member
2002-2004	American Heart Association, Clinical Cardiology Council Committee on Exercise Cardiac Rehabilitation and Prevention, Member
2002	AHA, Atherosclerotic Vascular Disease Conference. Epidemiology of Atherosclerotic Vascular Disease Section, Writing group member
2003	AHA closed national conference "Discovering the Full Spectrum of Cardiovascular Disease - Addressing Ethnic Disparities". Conference Co-Chair
2003-present	American Heart Association, Functional Genomics Interdisciplinary Working Group, Steering Committee Member
2002-2004	AHA, Clinical Cardiology Council Committee on Exercise Cardiac Rehabilitation and Prevention, Member
2008-2010	AHA, Interdisciplinary Council on Functional Genomics & Translational Biology, Vice-Chair
2009-2010	AHA, Science Advisory & Coordinating Committee, Member-at-Large
2009	AHA, Science Classification Task Force, Member
2010	AHA, Atrial Fibrillation Summit, Chair
2010-2012	AHA, Science Advisory & Coordinating Committee, FGTB Council Representative
2010-2011	AHA, Manuscript Oversight Subcommittee
2010	AHA, Science Advisory & Coordinating Committee, Nominating Subcommittee

American Heart Association Science to Science Program*

2005	American Heart Association, Dallas, TX, Science to Science Meeting, Sponsored by AHA to create a dialogue between AHA Volunteers and Pharmaceutical Company Scientific Leaders
2006	American Heart Association, Plainsboro, NJ, Science to Science Meeting, Sponsored by AHA to create a dialogue between AHA Volunteers and Pharmaceutical Company Scientific Leaders
2006	American Heart Association-Pfizer Workshop, New York, NY. Sponsored by AHA and Pfizer to share knowledge and explore potential future educational initiatives related to CV disease.

*Note that the American Heart Association offers the Science to Science program to industry members of the American Heart Association's Scientific Round Table; Dr. Benjamin participates as a volunteer at the request of the American Heart Association. **Dr. Benjamin does not receive any consulting fees from industry.**

National American College of Cardiology

2001-2002	American College of Cardiology Bethesda Conference #33 "Preventive Cardiology: How Can We Do Better?" Task Force entitled "Magnitude of the Prevention Problem, Opportunities and Challenges". Co-Chair, and Writing Group Section Leader.
2005-2011	American College of Cardiology, Prevention of Cardiovascular Disease Committee, Member.
2005	American College of Cardiology, Prevention Task Force, Member.

National American College of Cardiology &/or American Heart Association Guidelines & Performance Measures

2003	Preventive Cardiology for Women, Scientific Statement Writing Group Member
2007	Preventive Cardiology for Women, Scientific Statement Writing Group Member
2006-2009	American College of Cardiology, Primary Prevention of Cardiovascular Disease Performance Measures, Writing Committee Member

- 2008-present ACC/AHA representative for the ACC/AHA Guideline on the Detection and Assessment of Coronary Artery Disease in Apparently Healthy Adults (D-CAD).
- 2009- Secondary Prevention 2010 Update, Writing Group, Member

National – Other Organizations

- 1998 North American Society of Pacing & Electrophysiology (NASPE) and National Heart, Lung and Blood Institute, Roundtable Conference on Future Research Directions in Atrial Fibrillation, Bethesda, MD. “The Epidemiology of Atrial Fibrillation”, Invited Keynote Lecturer and Writing Group Member,
- 2001-2002 American Society of Echocardiography (ASE), Vascular Strategy Task Force, charged with guiding ASE’s approach to integrating echocardiography & vascular labs, Member.
- 2007 Society of Atherosclerosis Imaging and Prevention, Member

State

American Heart Association - Massachusetts Affiliate

- 1992-1995 Women & Heart Disease Task Force and Committee, Member
- 1995-present American Heart Association Annual Heart Walk, Walker
- 1995-2001 Board of Directors - City of Boston Division, Member
- 1997-2001 Community Relations Subcommittee, City of Boston Division, Co-Chair
- 2004-2006 Massachusetts Health Quality Partners, 2005 Adult Routine Preventive Care Recommendations and Immunization Guidelines; Advisor

Metropolitan

Boston Public Health Commission Cardiovascular Task Force

- 2000-2001 Task Force to design a cardiovascular disease community prevention effort for the City of Boston Encouraged Formation; Task Force Member

Town

- 1999-2005 METCO (Metropolitan Council for Educational Opportunity – Program that buses Boston children to surrounding suburbs) Family Partner
- 2002-2003 Brookline, Massachusetts Special Education Parents Advisory Committee, Member
- 2002-2003 Driscoll Public School, Brookline, Massachusetts, Room Parent
- 2002-2004 Driscoll Public School, Diversity Committee, Member

Editorial Boards

- 2001-present Member, Editorial Board *Journal of Cardiopulmonary Rehabilitation*
- 2004-present Associate Editor, *Circulation*
- 2005 Guest Editor, *Circulation* - Ethnic & Racial Disparities Themed Issue
- 2006-2007 Guest Editor, *BMC Medical Genetics*
17 phenotype-genotype articles and 1 overview supplement reporting the Framingham Heart Study 100K Genome-wide Association Study

Journal Reviewer

American Journal of Cardiology
American Journal of Epidemiology
American Journal of Medicine
Circulation
JAMA
Journal of the American College of Cardiology
Journal of Cardiopulmonary Rehabilitation and Prevention
New England Journal of Medicine

American Heart Association Abstract Grading National Scientific Sessions

- 2006 Human Genetics and Genomics of Cardiovascular Disease and Therapy (FGTB)

2007-2009 Human Genetics, Cardiovascular Disease Epidemiology
 2010 Genetic Epidemiology, Genomics, and Pharmacogenomics of Cardiovascular Disease

Major Committee Assignments

Federal Government: National Institutes of Health

1992 National Heart, Lung and Blood Institute, Hypertension and the Heart: The Role of the Echocardiogram in Epidemiologic Studies and Clinical trials - "Normality: Lessons from Doppler echocardiography" Chevy Chase, Maryland

1995 National Heart, Lung and Blood Institute, Bethesda, MD, Special Emphasis Panel on Standardized Assessment of Heart Failure in Population Studies, Presenter.

1996 National Heart, Lung and Blood Institute, Jackson, Mississippi, Symposium on Cardiovascular Disease; the design of the Jackson Heart Study. Lecture: "Why is left ventricular hypertrophy/remodeling so predictive of morbidity and mortality?" Speaker and Writing Group Member

1999 National Heart, Lung, and Blood Institute's Workshop on Genetic Elements of Sudden Cardiac Death and Lethal Arrhythmias, Bethesda, MD. 'How do we integrate genetic approaches into ongoing SCD population studies and clinical trials?' Moderator and Writing Group Member

2002 National Heart Lung and Blood Institutes, Bethesda, MD. Cardiovascular Consequences of Sleep Disordered Breathing Workshop. "Pathophysiology of atrial and ventricular arrhythmias; prevalence and prognosis in sleep disordered breathing"

2003 National Heart Lung and Blood Institute Program in Genomic Applications Coordinating Committee, Boston, MA. "Issues in phenotype genotype association studies with large data bases: Cardiac structure and function – The Framingham Heart Study."

2004 National Heart, Lung, and Blood Institute's Workshop on Oxidative Stress/Inflammation Measures and HLBS Disorders, Bethesda, MD. "Framingham – Oxidative Stress and Inflammation"

2006 National Heart Lung and Blood Institutes, NIH, Strategic Plan, Level 1 Vascular Diseases/Hypertension Working Group

2007 National Heart Lung and Blood Institutes, NIH, "Future Research Opportunities for NHLBI CARDIA Study" Working Group Member

2008 National Heart Lung and Blood Institute, NIH, Workshop on the Prevention of Atrial Fibrillation. Objective to develop a set of prioritized recommendations for future analyses and research for NHLBI and the research community, Role, Co-Chair

2010 National Heart Lung and Blood Institute, NIH, Workshop on Future Directions for Cardiovascular Disease Comparative Effectiveness Research. Role, Chair, Atrial Fibrillation Group.

Centers for Disease Control

2009 Center for Disease Control, Global Burden of Disease Project – Atrial Fibrillation. Group charged with identifying, reviewing and summarizing literature on the international epidemiology and prognosis of atrial fibrillation. Role, Member

Study Sections: NIH Study Section Review Activities

2002 NHLBI, NIH Special Emphasis Panel Study Section, ZRG1 CCVS, Washington, D.C. Ad hoc member

2002 NHLBI, NIH Social Sciences, Nursing, Epidemiology, & Methods (SNEM) Integrated Review Group 5, Special Emphasis Panel Ad hoc member

2003 NHLBI, NIH Special Emphasis Panel Study Section, ZRG1 CCVS, Washington, D.C. Ad hoc member

2003	NHLBI, Biostatistical Methods and Research Design Study Section (BMRD), Health of Populations (HOP) Integrated Review Group, Ad hoc member
2004	NHLBI, NIH ECD Special Emphasis Panel, Health of Populations (HOP) Integrated Review Group, Ad hoc member
2004	Epidemiology of Cancer (EPIC), NIH (formerly EDC-2), Health of the Population (HOP) Integrated Review Group, Center for Scientific Review, Ad hoc member
2004	NIH Clinical and Integrative Cardiovascular Science (CICS) study section.
2004	NIH, NHLBI, Epidemiology of Chronic Diseases & Epidemiology of Cancer Member Review
2005	NIH, Center for Scientific Review Special Emphasis Panel, ZRG1 Health of the Population-Q (02), Epidemiology Member Conflict
2006	NIH, Center for Scientific Review Special Emphasis Panel, Health of the Population (HOP) Integrated Review Group, Epidemiology Member Conflict
2006	NIH, Center for Scientific Review, Cardiovascular and Sleep Epidemiology Study Section, Ad hoc member
2007-2011	NIH, Center for Scientific Review, Cardiovascular and Sleep Epidemiology Study Section, Charter member.
2009	NIH, Center for Scientific Review, ZRG1 PSE-J (58) R, RFA OD-09-003: Challenge Grants Panel, electronic mail in reviewer
	NIH, Center for Scientific Review, ZRG1 PSE-C (58) R, RFA OD-09-003: Challenge Grants Panel, electronic mail in reviewer

American Heart Association Study Section Review Activity

2006-2007	American Heart Association, Behavioral Science, Epidemiology and Prevention 1, Research Grant Peer Review
2010-2011	American Heart Association, Genomics & Translational Biology Epidemiology and Observational / Epidemiology Research, AHA Chairperson

Food and Drug Administration, Endocrinologic and Metabolic Drugs Advisory Committee

2009	Center for Drug Evaluation and Research, Review supplemental new drug application 21-366, <i>CRESTOR</i> (rosuvastatin calcium) tablets, AstraZeneca Pharmaceutical for primary prevention of cardiovascular disease based on <i>JUPITER</i> , Temporary Member
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Current Other Support:

2010-2013	NHLBI 1R01HL102214, Multi- PI: Lesley H Curtis, PhD, Emelia J Benjamin, Susan R Heckbert, Patterns of Health Care Use, Treatment & Outcomes in Atrial Fibrillation: PATH-AF \$493,621, \$1,448,509
2009-2011	NHLBI 1RC1 HL101056-01, Joint PI E.J. Benjamin, MD, ScM, A. Alonso, MD, PhD, Risk prediction of atrial fibrillation: clinical, biological and genetic markers, \$492,694/967,223
2009-2013	NHLBI 1R01HL092577-01A1, Joint PI E. J. Benjamin, MD, ScM, P. T. Ellinor, MD, PhD, Identification of Common Genetic Variants for Atrial Fibrillation and PR interval, \$827,603/\$3,328,845
2006-2011	NIA 1R01 AG028321 PI, E. J. Benjamin, MD, ScM Aging and Inflammation: Longitudinal Markers and Genetics in the Framingham Study \$217,732
2002-2008	NHLBI N01-HC 25195 PI, Philip A. Wolf, MD The Framingham Heart Study, Physical Examination, Testing and Surveillance \$5,612,683
1981-2009	NINDS 5R01-NS-17950-22 PI, Philip A. Wolf, MD Precursors of Stroke Incidence and Prognosis \$429,440

2002-2009	NHLBI BAA-N01-HV-28178 PI, C. Costello; R. Cohen, PhD; FHS PI Vasam Ramachandran, MD Oxidative Protein Modifications in Cardiovascular Disease \$1,388,061
2005-2010	NIH/NHLBI R01 HL077447 PI, Vasam S. Ramachandran, MD Biomarkers of Ventricular Vascular Remodeling (VVR) \$395,930
2005-2010	R01HL 080124 Ramachandran (PI) Ventricular Vascular Coupling: Correlates and Prognosis \$496,273
2006-2010	NIH/NHLBI R01 HL083197 (PI) TJ Wang Endothelial Progenitor Cells: Clinical Correlates and Prognosis in the Community \$278,815
2007-2010	NIH/NHLBI 1R01HL087201 PI: Freedman, Jane Gene Expression and Thrombosis in a Community Based Cohort Study \$439,678
2008-2013	U54 RR024381 (PI) David Center, MD Clinical and Translational Science Award \$9,165,210
2008-2012	R01-AG029451 PI: Murabito, Joanne, MD Exceptional Aging Across the Life Span: Framingham Study \$304,249
2008-2009	1P01AG031093 (Christakis, PI, Benjamin BU sub "Genetics and Networks" - Sub contract from Harvard \$1,299,868

Past Other Support:

2004-2007	NIA R01 AG024448 PI, Nicholas A. Christakis, MD, PhD Social Network Study of Health Effects in Aging
2002-2007	NHLBI1R01 HL70100 PI, Emelia J. Benjamin, MD, ScM Vascular Function in the Framingham Third Generation
1998-2002	NHLBI 1R01 HL60040 PI, Emelia J. Benjamin, MD, ScM Endothelial Vasomotor Function in the Framingham Heart Study
2000-2004	NHLBI 1R01 HL64753 PI, Emelia J. Benjamin, MD, ScM Inflammation: Correlates and Prognosis in Framingham
2000-2005	NHLBI 1U01 HL66582 PGA PI, Izumo S, MD; Project 5 PI, Benjamin EJ Functional Genomics of the Cardiovascular System: Component 5, Framingham Heart
1994-2004	NHLBI 2U01 HL53941 PI, George T. O'Connor, MD, ScM Sleep Health Heart Study (SHHS): The Framingham Study Site
2001-2005	NHLBI 1R01 HL67288 PI, Vasam S. Ramachandran, MD Ventricular Matrix Remodeling: Correlates and Prognosis
2001-2005	NHLBI 1R01 HL70279 PI, Warren Manning, MD Cardiac MR of Subclinical CVD: Impact of Age
2000-2005	Reynolds Foundation. Stanford Consortium Reynolds Scholar, Daniel Levy, MD; Co-PI, Emelia J. Benjamin, MD, ScM Genetics of Vascular Stiffness: Framingham Heart Study
2001-2006	NHLBI 1P50 HL55007 PI, Richard P. Lifton, MD; subcontract#1 PI, Martin G. Larson, ScD Molecular Genetics of Hypertension and its Consequences
2004-2009	NHLBI 1 R01 HL076784 PI, E. J. Benjamin, MD, ScM Framingham: Inflammation, Genes & Cardiovascular Disease \$487,615

Visiting Professorships

2005	FuWai Hospital , Beijing, China, • Visiting Professor, Reviewing Chinese Research on the Epidemiology of Atrial Fibrillation and Coronary Heart Disease Trends in China. • Lecture "The Epidemiologist's Approach to the Epidemiology and Genetics of Left Ventricular Hypertrophy"
2005	Oregon Health Sciences , Portland, OR, • Visiting Professor

- Medical Grand Rounds: “The Framingham Heart Study: Epidemiology of Atrial Fibrillation and Future Directions”
- Cardiology Rounds: “Genetic Epidemiology of Left Ventricular Hypertrophy: The Framingham Approach”

- 2007 **University of Mississippi, Jackson, MI**
- Roundtable Discussion and Presentation Jackson Heart Study Research Directions.
 - Cardiology seminar, genetic epidemiology of systemic inflammation”
 - Distinguished Lecture – Research Seminar Series. Jackson, MS. “Atrial Fibrillation: epidemiology, treatment and genetics.”

- 2007 **Geisinger Health System, Danville, PA**
- Visiting Professor
 - Professor Rounds with Fellows

- 2008 **University of Minnesota Cardiovascular Division, Minneapolis, MN**
- Visiting Professor
 - Professor Rounds with Fellows
 - Visiting Professor Lecture “The Epidemiology, treatment and genetic epidemiology of AF”

- 2009 **MetroHealth Campus of Case Western Reserve University, Cleveland, OH**
- American College of Cardiology, Women in Cardiology, Visiting Professor, Cleveland Hospitals Women in Training Breakfast. Met with women from University, Cleveland Clinic, MetroHealth and discussed – “Why cardiology is a great career”
 - Cardiology Grand Rounds. “Atrial Fibrillation: Epidemiology, Genetics, and Prevention”
 - “Where am I going, what will I do; Career development workshop.”

Invited Lectures and Presentations

International

- 2003 **McDonald Research Laboratories, The iCAPTURE Centre, Vancouver, British Columbia, Canada.** “Left ventricular hypertrophy the quest for understanding: From echo to SNPs and Back in the Framingham Heart Study”
- 2005 **American Heart Association, Second International Conference on Women, Heart Disease, and Stroke.** Orlando, FL
Lecture: “Heart Failure with Normal Systolic Function; Current knowledge and Future Directions.”
Moderator: “Novel Risk Factors” Session
- 2005 **International Heart Forum Beijing 2005, International Faculty Invited Lecturer:** Cardiovascular Epidemiology and Genetics: “Research on Atrial Fibrillation Epidemiology”
- 2005 **International Heart Forum Beijing 2005, International Faculty Invited Moderator** Session on Cardiovascular Epidemiology and Genetics:
- 2006 **Johannes Gutenberg – Universität, Mainz, Germany, Epidemiology of Atrial Fibrillation** Grand Rounds
- 2009 **Erasmus Medical Center, Rotterdam, The Netherlands, How Do I Get My Paper Published?: An Editor’s Top 10 Tips.**

- 2009 **International Heart Forum Beijing 2009**, International Faculty Invited Lecturer: Cardiovascular Epidemiology and Genetics: "The Genetics of Atrial Fibrillation, What Have we Learned"
- 2009 **Fu Wai Hospital**, Beijing, Lecturer: "The Epidemiology, Risk Prediction and Genetics of Atrial Fibrillation"
- National**
- 1992 **National Heart, Lung and Blood Institute**, Hypertension and the Heart: The Role of the Echocardiogram in Epidemiologic Studies and Clinical trials - "Normality: Lessons from Doppler echocardiography" Chevy Chase, Maryland
- 1992 **Albert Einstein College of Medicine**, Educational Program, Montefiore Medical Center, Washington, DC. "Cardiac precursors of stroke"
- 1997 **American Society of Echocardiography**, Invited Poster Moderator
- 1998 Awareness Meeting Slide Review. Hyatt Regency at Reunion Dallas, TX. "The Framingham Study: Clinical implications for atrial fibrillation"
- 1999 **ACC Satellite Symposium/Atrial Fibrillation in the 21st Century: How Will New Advances Impact the Way We Practice?** "Epidemiology of atrial fibrillation"
- 1999 **American Society of Echocardiography** 10th Annual Scientific Sessions, Valvular Heart Disease. Meet-the-Experts/Controversies Lecture "Assessing Left Ventricular Hypertrophy", Poster Moderator
- 1999 **Columbia-Presbyterian Medical Center** Cardiology Grand Rounds, New York City, NY. "Cardiac risk factors for stroke"
- 1999 **Massachusetts General Hospital** and Harvard Medical School course, Update in Echocardiography, Boston, MA. "Mitral Valve Prolapse: How often does it really occur?"
- 1999 **American College of Cardiology**, Core Curriculum, "Epidemiology of atrial fibrillation"
- 2000 **National Kidney Foundation & Northeast Friends Chapter of the Polycystic Kidney Research Foundation** Conference, Boston, MA. "Mitral valve prolapse and polycystic kidney disease"
- 2000 **Pennsylvania State College of Medicine**, The Milton S. Hershey Medical Center Cardiology Grand Rounds, Hershey, PA. "Cardiac risk factors for stroke; How to evaluate risk factors"
- 2000 **Massachusetts General Hospital** and Harvard Medical School course, Update in Echocardiography, Boston, MA. "Mitral valve prolapse: How often does it really occur?"
- 2001 **American Heart Association**, New England Regional Delegate Assembly, New England Center, Durham NH. Cardiovascular Prevention: "The gap between knowledge and practice; Lessons from Framingham"
- 2001 **American College of Cardiology** Conference on Cardiology for the Consulting Cardiologist, Orlando, FL. "Atrial Fibrillation: What it means for your patient"
- 2001 **American Heart Association** Scientific Sessions, Anaheim, CA, Genetics of coronary disease and arrhythmias, Moderator
- 2002 **National Heart Lung and Blood Institutes**, Bethesda, MD. Cardiovascular Consequences of Sleep Disordered Breathing Workshop. "Pathophysiology of atrial and ventricular arrhythmias; prevalence and prognosis in sleep disordered breathing"
- 2002 **American Heart Association**, Chicago, IL. Cardiovascular Seminar: Cardiovascular Disease and Stroke: How Strong Is The Connection? "Cardiovascular and stroke risk reduction interventions"
- 2002 **American Heart Association**, Chicago, IL Special Session VIII: Joint AHA/APSC Symposium Ischemic Stroke: The Current Challenge. "Risk Factors for Ischemic Stroke: East vs. West – West"
- 2003 **American College of Cardiology**, Chicago, IL. Evening Session. Prevention Primer: Cardiovascular Risk Reduction. "Opportunities and challenges"

- 2003 **Strategic Research Institute** and Medical Education Collaborative, Disease Management Conference, Boston, MA. "Cardiovascular disease: Can we predict it? Can we prevent it?"
- 2003 **National Heart Lung and Blood Institute Program in Genomic Applications** Coordinating Committee, Boston, MA. "Issues in phenotype genotype association studies with large data bases: Cardiac structure and function – The Framingham Heart Study."
- 2003 **American Heart Association**, Orlando, FL. "How to effectively combine heart & stroke prevention"
- 2004 **Peripheral Arterial Tonometry Investigators' Meeting**. Boston, MA "Peripheral arterial tonometry; experience with initial 564 studies in the Framingham Heart Study"
- 2004 **American Heart Association** Satellite Symposium of the Second National CDC Prevention Conference on Heart Disease and Stroke. "Hypertension & Health Disparities: Conquering Issues, Challenges & Opportunities." Moderator.
- 2004 **NHLBI** Workshop on Oxidative Stress/Inflammation Measures and HLBS Disorders, Bethesda, MD. "Framingham – Oxidative Stress and Inflammation"
- 2004 **American Heart Association**, New Orleans, LA. "Meet the Experts: Congestive Heart Failure."
- 2005 **American College of Cardiology**, Orlando, FL. Women in Cardiology Committee Special Lunchtime Session: Research Careers in Cardiology, Panelist
- 2005 **National Medical Association Annual Conference**, Invited Speaker: Guidelines for Prevention of Cardiovascular Disease in Women
- 2005 **American Heart Association**, Dallas, TX, AHA IWG on Functional Genomics Special Saturday Session, From Genome to Phenome: The Translational Biology of Cardiovascular Disease, Moderator
- 2005 **American Heart Association**, Dallas, TX, Oral Abstract Session: Human Genetics of Cardiovascular Disease and Therapy II, Moderator
- 2006 **American College of Cardiology**, Atlanta, GA, Brown-Bag Breakfast Panels: Overcoming Barriers to Lifestyle Changes for Cardiovascular Health
- 2006 **American Heart Association**. Chicago, IL. Pre-Symposium "Whole-Genome Association Studies: From Genome to Phenome," Talk entitled: Early Whole Genome Association Results from Framingham.
- 2007 **Geisinger Health System**. Clinical Research Symposium. "Gee Wiz, What's a GWAS?"
- 2007 **Jackson Heart Study**. Jackson, MS, Research Lecture. "Biomarkers in Observational Research - epidemiology, clinical utility and genetic epidemiology."
- 2007 **University of Mississippi Medical Center** Distinguished Lecture – Research Seminar Series. Jackson, MS. "Atrial Fibrillation: epidemiology, treatment and genetics."
- 2007 **American Heart Association**. Orlando, Florida. Invited Plenary Lecture for session Is There a Clinical Role for Inflammatory Markers? Talk entitled: "Limitations and Pitfalls of Inflammatory Markers"
- 2007 **American Heart Association**. Orlando, Florida. Moderated Electronic Poster, "Genetics and Pharmacogenomics of Cardiovascular Disease Risk"
- 2008 **UMass Medical School** Special Lecture "Atrial Fibrillation: Epidemiology, Treatment and Genetics"
- 2008 **University Hospitals, Case Medical Center**, Cleveland, OH, Cardiology Grand Rounds, "The clinical, epidemiologic and genetic features of atrial fibrillation."
- 2008 **University of Minnesota, Minneapolis, MN**, Visiting Professor, and Cardiology Grand Rounds, "The clinical, epidemiologic and genetic features of atrial fibrillation."
- 2008 **Harvard School of Public Health** Friday Forum in Cardiovascular Epidemiology, "Epidemiology & Genetics of Atrial Fibrillation; Current Insights & Future Directions."
- 2008 **American Heart Association**. New Orleans, LA, Moderator, Special Session, Defining Cardiovascular Risk - Time for Changes?

- 2008 **American Heart Association.** New Orleans, LA, Special Session, Defining Cardiovascular Risk - Time for Changes? Talk entitled "Putting it All Together: What Do We Use to Manage Patients?"
- 2009 **Association of University Cardiologists.** Carmel, CA. Election to AUC talk. Talk entitled "Development of a Risk Score for Atrial Fibrillation in the Community"
- 2009 **Epigenomics, Sequencing & SNiPs-2009.** Harvard Medical School. Boston, MA "Genetics of Atrial fibrillation focusing on SNP analysis"
- 2009 **California Heart Rhythm Symposium.** Epidemiology of Atrial Fibrillation.
- 2010 **Boston Atrial Fibrillation Symposium.** Epidemiology and Predicting Risk for Atrial Fibrillation
- 2010 **American Heart Association, Atrial Fibrillation Summit.** Washington, DC. Prediction and Prevention of Atrial Fibrillation: The Decade Ahead

American Heart Association, Massachusetts Affiliate – Community & Professional Women and Heart Disease Annual Conference

- 1994 Case Presentations, Moderator
- 1995 Cardiovascular Risk Factors and Prevention Session, Moderator

Women and Heart Disease - Lay/Professional Talks

- 1993 Women's Day Program, Temple Beth Am, Framingham, MA
- 1994 Clinical Conference, Metro-West Medical Center, Framingham, MA
- 1996 Brookline Visiting Nurse Association, Brookline, MA
- 1996 Elderlink, Somerville Home Health Aides, Somerville, MA

Symptoms, Risk Factors, Prevention and Treatment of Heart Disease – Lay Talk

- 2000 Liberty Mutual Insurance Company, Boston, MA. Employee lunch presentation.
- 2000 Dorchester Elder Service Plan. Morning in-service for health workers.
- 2002 South Shore Hospital Cardiac Rehabilitation Annual Reunion. Cardiac Risk Factors, Are they Risky, and Can We Prevent Heart Disease?
- 2004 Greater Framingham Community Church. "Ethnic Disparities in Cardiovascular Disease, The Framingham Heart Study and The Framingham Omni Study

Boston Public Health Commission Cardiovascular Health Task Force – Lay Talk

- 2000 American Heart Association's Goal to Reduce Cardiovascular Disease in the United States; Strategies and Challenges

Boston University School of Medicine Cardiology for the Non-Cardiologist - CME Conference

- 1992 Coronary Artery Disease: Risk Factor Assessment & Modification - Cases
- 1994 Acute Myocardial Ischemia - controversies/cases
- 1995 Coronary artery disease: Risk Factor Assessment, Moderator
- 1996-1998 "Cardiac disease and stroke: Innocent bystander or cause and effect?"
- 1999 "Smoking: Review of facts & a practical approach to implementing smoking cessation"
- 2000 "Cardiovascular source of embolus: In search of the truth"
- 2001 "Coronary heart disease risk prediction"
- 2002 "Risk assessment: How to evaluate and follow through," Moderator
- 2003 "Predicting risk for patients with coronary heart disease: An office based approach"
- 2005 "Cardiac source of embolus – Do I really need to look for this?"
- 2006 Atrial fibrillation: From epidemiology to genetics to the bedside.
- 2007 "Cigarettes and Cardiovascular Disease – I know it's bad, but how bad?"
- 2008 Genetics and Cardiovascular Disease: What does the clinician need to know?

Framingham Heart Study Miscellaneous Talks

- 1996 Framingham Heart Study Scientific Research. "New research in heart failure"

- 1998 Framingham Heart Study Afternoon Symposium. "Epidemiology of atrial fibrillation"
- 2001 Framingham Heart Study Research Conference. "Epidemiological and genetic linkage approaches to left ventricular dimensions"
- 2003 Framingham Heart Study, Outside Safety and Monitoring Board presentation, Baltimore, MD, "Genes impacting left ventricular function & structure"
- 2006 Framingham Heart Study Research Conference. "Inflammatory markers, Genetic and Environmental Influences; Correlates and Prognosis."
- 2006 Framingham Heart Study Research Conference for Dutch Cardiologists. "Echocardiography in relation to diabetes & obesity; genetic and environmental considerations."

Bibliography

Original, Peer Reviewed Articles

Original Research Articles

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2. **Benjamin EJ**, Levy D, Anderson KM, Wolf PA, Plehn JF, Evans JC, Comai K, Fuller DL, Sutton MSJ. Determinants of Doppler indexes of left ventricular diastolic function in normal subjects (the Framingham Heart Study). *Am J Cardiol* 1992;70:508-515.
3. Galderisi M, **Benjamin EJ**, Evans JC, D'Agostino RB, Fuller DL, Lehman B, Wolf PA, Levy D. Intra- and interobserver reproducibility of Doppler-assessed indexes of left ventricular diastolic function in a population-based study (the Framingham Heart Study). *Am J Cardiol* 1992;70:1341-1346.
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5. Sagie A, **Benjamin EJ**, Galderisi M, Larson MG, Evans JC, Fuller DL, Lehman B, Levy D. Echocardiographic assessment of left ventricular structure and diastolic filling in elderly subjects with borderline isolated systolic hypertension (the Framingham Heart Study). *Am J Cardiol* 1993;72:662-665.
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8. **Benjamin EJ**, Levy D, Vaziri SM, D'Agostino RB, Belanger AJ, Wolf PA. Independent risk factors for atrial fibrillation in a population-based cohort. The Framingham Heart Study. *JAMA* 1994;271:840-844.
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11. Vaziri SM, Larson MG, Lauer MS, Benjamin EJ, Levy D. Influence of blood pressure on left atrial size. The Framingham Heart Study. Hypertension. 1995;25:1155-1160.
12. **Benjamin EJ**, D'Agostino RB, Belanger AJ, Wolf PA, Levy D. Left atrial size and the risk of stroke and death. The Framingham Heart Study. *Circulation* 1995;92:835-841.
13. Lin HJ, Wolf PA, **Benjamin EJ**, Belanger AJ, D'Agostino RB. Newly diagnosed atrial fibrillation and acute stroke. The Framingham Study. *Stroke*. 1995;26:1527-1530.
14. Vasan RS, Larson MG, **Benjamin EJ**, Levy D. Echocardiographic reference values for aortic root size: the Framingham Heart Study. *J Am Soc Echocardiogr* 1995;8:793-800.
15. Wolf PA, **Benjamin EJ**, Belanger AJ, Kannel WB, Levy D, D'Agostino RB. Secular trends in the prevalence of atrial fibrillation: The Framingham Study. *Am Heart J* 1996;131:790-795.
16. Chen L, **Benjamin EJ**, Larson MG, Evans JC, Levy D. Doppler diastolic filling indexes in relation to disease states. *Am Heart J* 1996;131:519-524.

17. Lin HJ, Wolf PA, Kelley-Hayes M, Beiser AS, Kase CS, **Benjamin EJ**, D'Agostino RB. Stroke severity in atrial fibrillation. The Framingham Study. *Stroke* 1996;27:1760-1764.
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