

CURRICULUM VITAE

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Home Address: 14 Pond View Avenue, Medfield, MA 02052

Place of Birth: New York, New York

Education:

1975 B.S. Duke University, Durham, NC
1981 M.D. University of North Carolina, Chapel Hill, NC
1986 M.P.H. Boston University School of Public Health, Boston, MA (Epidemiology/
Biostatistics)

Postdoctoral Training:

Internships and Residencies:

1981-1982 Intern in Medicine, Dartmouth-Hitchcock Medical Center, Hanover, NH
1982-1984 Internal Medicine Resident, Dartmouth-Hitchcock Medical Center,
Hanover, NH

Research Fellowships:

1984-1986 Fellowship General Internal Medicine, Boston University Medical Center,
Boston, MA

Licensure and Certification:

1984- State of Massachusetts
1984- American Board of Internal Medicine
1986-2012 State of Rhode Island
1990- Added Qualifications Geriatric Medicine
2000- Recertification – Geriatric Medicine

Academic Appointments:

1986-1992	Assistant Professor of Medicine, Brown University School of Medicine, Providence, RI (Voting Faculty)
1992-2000	Adjunct Assistant Professor of Medicine (Non-voting Faculty), Brown University School of Medicine, Providence, RI
1993-1999	Assistant Professor of Medicine, Harvard Medical School, Boston, MA
1999-2010	Associate Professor of Medicine, Harvard Medical School, Boston, MA
1999-2010	Adjunct Associate Professor of Medicine (Non-voting Faculty), Brown University School of Medicine, Providence, RI
2010-	Adjunct Professor of Medicine (Non-voting Faculty), Brown University School of Medicine, Providence, RI
2010-	Professor of Medicine, Harvard Medical School, Boston, MA

Hospital or Affiliated Institution Appointments:

1986-2002	Associate Physician, Division of General Internal Medicine, Rhode Island Hospital, Providence, RI
1986-1992	Consultant Staff, Department of Medicine, Women & Infants Hospital, Providence, RI
1986-1992	Faculty Associate, Brown University Center for Gerontology & Health Care Research, Brown University, Providence, RI
1990-2002	Co-Director Rhode Island Hospital Osteoporosis Research and Bone Densitometry Unit
1992-	Associate Physician, Beth Israel Deaconess Medical Center, Boston, MA
1992-	Medical Staff, Hebrew Rehabilitation Center, Department of Medicine, Boston, MA

Major Administrative Responsibilities:

1992-2000	Associate Director of Medical Research, HRCA Research and Training Institute
2000-2011	Director of Medical Research, HRCA Research and Training Institute
1992-2002	Director Rhode Island Hospital Osteoporosis Research and Bone Densitometry Unit
2001-2006	Clinical Research Overseer BIDMC Divisions of Gerontology and Bone and Mineral Research
2006-2011	Director of Research BIDMC/HSL/Harvard Interdisciplinary Center on Aging
2011-	Director Musculoskeletal Research Center, Institute for Aging Research, Hebrew SeniorLife

Major Committee Assignments:

Local/Regional

1986-1992	Division of General Internal Medicine, Rhode Island Hospital, Research Committee
1986-1992	Division of General Internal Medicine, Rhode Island Hospital, Medical Primary Care Unit
1986-1992	Division of General Internal Medicine, Rhode Island Hospital, Committee on Residency Selection
1987-1992	Committee on Protection of Human Subjects, Rhode Island Hospital
1988-1992	Radio-Active Drug Research Committee, Rhode Island Hospital
1992-	Medical Care Review Committee, HRCA
1992-	Library Committee, HRCA
2001-2005	Harvard Medical School Division on Aging, Executive Committee and Liaison to Advisory Committee
2004-	Harvard Medical School, Division on Aging T32 “Translational Research in Aging Training Program,” Executive Committee
2004-2008	Committee on Clinical Investigations, Beth Israel Deaconess Medical Center
2009-2010	Chair, Hebrew SeniorLife, Institute for Aging Research, Senior Faculty Council

National

1994-96	NIH Ad Hoc Reviewer Epidemiology and Disease Control-2, NRRC and Geriatrics & Rehabilitation Medicine Study Sections
1997-2000	Permanent Reviewer NIH Study Section Geriatrics & Rehabilitation Medicine
1997	Ad Hoc Reviewer NIH Study Section Orthopedics
1999-2000	Invited Contributor Surgeon General’s Report on Smoking
2002	Ad Hoc Reviewer NIH Study Section, Epidemiology and Disease Control.
1999-	Advisory Board National Osteoporosis Foundation
2003-	Education Committee National Osteoporosis Foundation
2003	Ad Hoc Reviewer NIAMS SCOR Grants, March 3, 2003
2004	Sub-committee of Education Committee - National Osteoporosis Foundation Awareness and Prevention Month (May 2004)
2007-2009	Philips Lifeline Falls Safety Advisory Council
2008	Ad Hoc Reviewer NIH Study Section HOP-T-02 Special Emphasis Panel
2009-2010	Chair PhenX Skin, Bone, Muscle and Joint Working Group of the National Human Genome Research Institute “Consensus Measures for Phenotypes and Exposures.”(PhenX)
2009-	Yale Pepper Center External Advisory Committee

Professional Society Involvement:

1984-	Member American College of Physicians
1984-2000	Society of General Internal Medicine
1985-1990	American Federation for Medical Research
1988-	Fellow American College of Physicians
1989-	American Society for Bone and Mineral Research
	1999 Scientific Program Committee - Reviewer
	2000 Scientific Program Committee - Reviewer and invited speaker
	2001 Scientific Program Committee - Reviewer
	2002 Scientific Program Committee - Reviewer and Meet the Professor invited speaker
	2003 Publications Committee
	2004 Clinician Information Dissemination Task Force
	2006 ASBMR Journal Evaluation Task Force
	2006 New Editor Search Committee - Journal Bone and Mineral Research
	2008-11 ASBMR Council Member
	2009- Appointed ASBMR Nominating Committee
	2011- Ethics Advisory Committee
	2011-12 Organizing Committee for two topical meetings: "Forum on Aging and Skeletal Health" and "Bone and Skeletal Muscle Interactions."
	2013 ASBMR-NOF Task Force on Goals of Osteoporosis Treatment
1992-	American Geriatrics Society
	1996 – 2003 AGS Research Committee - Member
	1997 Epidemiology Abstract Review - Chairman
	1998 – 2000 Research Committee - Vice Chairman
	2000 – 2003 Research Committee – Chairman
	2009-2010 Invited panelist - Centers for Disease Control and American Geriatrics Society Clinical Practice Guideline: Vitamin D Supplementation in Older Adults
1992-	Gerontological Society of America
2010-	European Calcified Tissue Society
	2009 Meet the Professor: "Nutritional Influences on Bone"

Community Service Related to Professional Work:

1990-1992	State of Rhode Island Injury Prevention Committee
1998-	State of Rhode Island Osteoporosis Advisory Committee
1998	Massachusetts Public Health Department Osteoporosis Speakers' Bureau
2003-	Speaker, National Osteoporosis Foundation National Grand Rounds project
2003	Member of Blue Ribbon Panel: A Whole Woman Strategy and Action Plan to Raise National Awareness About Osteoporosis, University of Maine Center on Aging and Maine Center for Osteoporosis Research and Education, U.S. Administration on Aging Project 90AM2685
2007	Fall Prevention Statewide Task Force Massachusetts – Member

Editorial Boards:

Reviewer

1987-	Reviewer, New England Journal of Medicine
1988-	Reviewer, Annals of Internal Medicine
1988-	Reviewer, American Journal of Medicine
1990-	Reviewer, Journal of the American Geriatrics Society
1991-	Reviewer, Medical Care
1992-	Reviewer, Journals of Gerontology
1992-	Reviewer, Journal of Bone and Mineral Research
1994-	Reviewer, Journal of the American Medical Association
1996-	Reviewer, Osteoporosis International
1997-	Reviewer, Journal of Clinical Endocrinology and Metabolism
1999-	Reviewer, Calcified Tissue International
2000-	Reviewer, Arteriosclerosis, Thrombosis and Vascular Biology
2000-	Reviewer, Bone

Other Editorial Roles

1997-	Editorial Board, Journal of Clinical Densitometry
1998-2004	Editorial Board, Journal of Clinical Endocrinology and Metabolism
2004-	Editorial Board, American Journal of Bone and Mineral Research
2010-	Associate Editor Journal of Bone and Mineral Research

Awards and Honors:

1972	Phi Eta Sigma Honorary Society, Duke University
1975	Magna Cum Laude, Duke University
1981	Alpha Omega Alpha, University of North Carolina
1989-	Fellow, American College of Physicians
1990	Henry J. Kaiser Family Foundation Faculty Scholar in General Internal

	Medicine
1997	Invited Peer Reviewer of the Surgeon General's Report on Women and Smoking
2000-	Invited Data and Safety Monitoring Board, "PTH and alendronate in combination for the treatment of osteoporosis." NIAMS-045 NO1-AR-9-2245
2000-	Chair, Data and Safety Monitoring Board, "A trial to reduce delirium in aged post-acute patients." NIA AG17649
2002	Invited Data and Safety Monitoring Board, "Testosterone for prevention of fracture in men with osteoporosis." NIA AG18887
2002	Invited presenter, The Surgeon General's Workshop on Osteoporosis and Bone Health.
2003	Invited participant, NIAMS Roundtable on Bone Diseases
2004	Invited contributor, The Surgeon General's Report on Osteoporosis and Bone Health.
2003-2006	Invited Safety Officer, "Feasibility and Dosing Study of Bone Density Changes with and without PEMF Following Immobilization of the Forearm" NIH/NIAMS NO1-AR-3-2267.
2004	Nomination for the 2003-2004 Excellence in Mentoring Award, Harvard Medical School
2005	Outstanding Excellence in Geriatric Research All Categories, American Geriatrics Society 2005
2003-2005-2010	Scientific Advisory Board, National Osteoporosis Foundation Observational Study Monitoring Board - Extension of the Women's Health Initiative Program
2006-	Invited Data and Safety Monitoring Board, "Determination of RDA for Vitamin D in Caucasian and African American Women" AG028168
2007	Nomination for the 2007-2008 Excellence in Mentoring Award, Harvard Medical School
2007	Nomination for the 2007-2008 Annual Center for Faculty Development membership Award for Excellence Mentoring, Beth Israel Deaconess Medical Center
2008	Elected to Council, American Society for Bone and Mineral Research
2008	Invited participant, NIAMS Roundtable on Genome Wide Association Studies
2008	Invited member, NIA Clinical Trials Advisory Panel
2009	Member of the Nominations Committee, American Society for Bone and Mineral Research Member, Planning Group for Summit on Aging and Skeletal Health with NIA and American Society for Bone and Mineral Research
2010-2011	Recipient, A. Clifford Barger Excellence in Mentoring Award

Research Past and Current funding information:

Past

- 1986-1988 The Robert Wood Johnson Foundation, Princeton, NJ. "An Epidemiologic Cohort Study of Risk Factors for Hip Fracture in the Framingham Heart Study Cohort" (Co-investigator)
- 1987-1989 Nichols Institute, San Juan Capistrano, CA. "Effects of diet on fasting and 24 hour hydroxyproline excretion and serum gla protein" (Co-investigator)
- 1987-1993 Henry J. Kaiser Family Foundation Faculty Scholar in General Internal Medicine
- 1991-1992 Rhone Poulenc Rorer Central Research. "The effect of salmon calcitonin injection on vertebral bone mineral density in patients on chronic glucocorticoid therapy" (Principal Investigator)
- 1991-1996 Sandoz Research Institute "A Multicentered, Double-blind, Randomized Study to Investigate the Efficacy of Miacalcin Spray (Salmon Calcitonin) in the Prevention of Osteoporotic Vertebral Fractures" (Principal Investigator)
- 1991-1996 (R01 AR1398) National Institute of Arthritis, Musculoskeletal and Skin Diseases "Risk Factors for Vertebral Fracture and Bone Loss" (Principal Investigator)
- 1992-1994 Rhone Poulenc Rorer Central Research "A Double-blind, Randomized, Placebo-controlled Multicenter Trial to Determine the Efficacy of Intranasal Salmon Calcitonin in Post-menopausal Osteoporosis" RI Hospital (Principal Investigator).
- 1992-1996 NIA R01 AG10942 "Growth Hormone and/or Exercise for the Frail Elderly" (Co-investigator)
- 1993-1998 CDC Injury Research Program Project Grant R49CCR/109053 "Hip Fracture Prevention from Falls in the Elderly"(Principal Investigator).
- 1993-1998 Project 4, "Vitamin D and Bone Status in the Elderly" (Principal Investigator Michael Holick, PhD, MD), HRCA/Harvard Research Nursing Home Continuation P01 AG04390 (Co-Investigator).
- 1994-1995 Administrative Supplement to R01 AR1398-03 "Vitamin D Receptor Alleles and Bone Mineral Density"
- 1994-1995 Pfizer Research "Droloxifene for the Prevention of Bone Loss in

- Postmenopausal Women” (Principal Investigator).
- 1995-1996 Merck Research Laboratories “A Two-Week, Double Blind, Placebo-Controlled, Randomized, Parallel Group, Multicenter, Dose-Finding Study of the Safety, Tolerability, and Biologic Activity of Oral MK-677 in Postoperative Hip-Fracture Patients” (Principal Investigator).
- 1995-1996 Merck Research Laboratories “A Double-Blind, Placebo-Controlled, Parallel, Multiple Oral Dose Pilot Study of MK-0677 in Musculoskeletally-Impaired Elderly” (Principal Investigator).
- 1995-1997 NIA R01 AG13645-01, “Genetic Epidemiology of Osteoporosis” (Principal Investigator)
- 1995-1997 Merck Research Laboratories “A Triple-Blind, Randomized, Active-controlled, Parallel-group Multicenter Study to Evaluate and Compare the Efficacy and Tolerability of Alendronate Sodium with Calcium Supplementation in the Treatment of Postmenopausal Women with Osteoporosis” (Co-Investigator)
- 1996-1998 R01 13333 NIA/NIAMS “Hip Fracture Prediction by QDR” (Principal Investigator Wilson C. Hayes, PhD) - Sub-Contract to HRCA, (Principal Investigator).
- 1996-1998 R01 AR40321 NIAMS, “Fall Biomechanics and Hip Fracture Risk” (Principal Investigator Wilson C. Hayes, PhD) (Co-P I).
- 1996-2006 (R01 AR1398) National Institute of Arthritis, Musculoskeletal and Skin Diseases "Risk Factors for Age-Related Bone Loss" (Principal Investigator)
- 1997-1998 NIA Contract, “Association Between Insulin-Like Growth Factor Binding Proteins 4 and 5 and Bone Density of the Hip and Spine”(Principal Investigator)
- 1997-2001 Pfizer Research “A Randomized, Double-Blind, Placebo-controlled Study of the Effects of Droloxifene 20 mg/d, 40 mg/d, and 60 mg/d on BMD in Osteopenic, Postmenopausal Women” (Principal Investigator).
- 1997-1998 Pfizer Research “Phase II Double-Blind Placebo-Controlled Trial of the Safety, Toleration and Efficacy of CP-336,156 for the Prevention of Bone Loss in Postmenopausal Women” (Principal Investigator).
- 1998-2000 Merck Research Laboratories “A Randomized, Double-Blind, Multicenter Study to Compare the Safety and Efficacy of Oral Alendronate Sodium 35

- mg Once Weekly, and 5 mg Once Daily for the Prevention of Osteoporosis in Postmenopausal Women” (Principal Investigator).
- 1998-2000 Merck Research Laboratories “A Randomized, Double-Blind, Multicenter Study to Compare the Safety and Efficacy of Oral Alendronate Sodium 10 mg Daily, 35 mg Twice Weekly, and 70 mg Once Weekly, for the Treatment of Osteoporosis in Postmenopausal Women” (Principal Investigator).
- 1998-1999 Pfizer Research “Phase II Double-Blind, Placebo-Controlled Trial of the Safety, Toleration and Efficacy of CP-336,156 for the Prevention of Bone Loss in Postmenopausal Women” (Principal Investigator).
- 1998-2002 R01 14759 NIA (Sub-Contract to HRCA), “Vitamin K Insufficiency: A Risk Factor for Osteoporosis” (Principal Investigator Sarah L. Booth, PhD) (Principal Investigator)
- 1999-2000 Pfizer Research “Phase II, Double-Blind, Placebo-Controlled Trial of The Safety, Toleration and Efficacy of CP-336,156 and Raloxifene 60 mg/day for the Prevention of Bone Loss in Postmenopausal Women” (Principal Investigator).
- 1999-2004 P01 AG04390 NIA “HRCA/Harvard Research Nursing Home - Clinical Research Core A” (Principal Investigator of PO1 Lewis A. Lipsitz, MD) (Principal Investigator).
- 1999-2000 NIA Contract, “Factors Related to Bone Loss in the Very Old - The Hebrew Rehabilitation Center for Aged Longitudinal Study of Osteoporosis” (Principal Investigator).
- 1999-2000 Hoechst Marion Roussel “A Multicenter Prospective Study to Assess the Impact of Physician’s Reinforcement on the Subject’s Compliance and Persistence on Treatment using Feedback on Bone Markers in Previously Undiagnosed Postmenopausal Osteoporotic Women Treated with Risedronate” (Principal Investigator).
- 2000-2002 NPS/Allelix “An 18-Month Double-Blind, Placebo-Controlled, Phase III, Trial with a 12-Month Interim Analysis of the Effect of Recombinant Human Parathyroid Hormone (ALX-11) on Fracture Incidence in Women with Postmenopausal Osteoporosis” (Principal Investigator).
- 2001-2003 Eli Lilly “Teriparatide compared with Alendronate on Spine Bone Mineral Density in Postmenopausal Women with Osteoporosis”(Principal Investigator).

- 2001-2003 Merck & Co., Inc “A Randomized, Double-Blind, Double-Dummy, Parallel-Group, Multicenter Study to Evaluate and Compare the Effects of Alendronate and Raloxifene on Bone Mineral Density in Postmenopausal Women with Osteoporosis. (EFFECT Study - Efficacy of Fosamax vs. Evista Comparison Trial” (Principal Investigator).
- 2001-2002 Pfizer Pharmaceuticals Group “Double-Blind, Placebo controlled, Dose Ranging Trial to Evaluate the Efficacy of Atorvastatin on Bone Mineral Density and Markers for Bone Turnover in Postmenopausal Women with Dyslipidemia and at Risk for Osteoporosis” (Principal Investigator).
- 2001-2003 R01 AR47368 NIAMS “Low Level Biomechanical Stimuli to Inhibit and Reverse Age-Related Bone Loss” (Principal Investigator).
- 2001-2006 R01 AG18393 NIA (Subcontract to HRCA), The “Framingham Osteoarthritis Study” (Principal Investigator)
- 2001-2006 P60 AG08812-11A1 NIA “Harvard Older Americans Independence Center” Director Research Development Core).
- 2001-2006 R01 AG18461 NIA “Trochanteric Padding to Prevent Hip Fractures.” (Principal Investigator)
- 2002-2007 R01 AR47853. NIAMS Foot Disorders, Pain and Physical Disability in Elders. (Co-investigator)
- 2002-2005 Wyeth Ayerst Research, “A Double Blind, Randomized, Placebo- and Active- Controlled Safety and Efficacy Study of Bazedoxifene/Conjugated Estrogens Combinations in Postmenopausal Women”(Principal Investigator).
- 2002 Merck Human Health, “A Randomized, Double-Blind, Double-Dummy, Parallel Group, Multicenter Study to Evaluate and Compare the Effects of Once Weekly Alendronate and Risedronate on Bone Mineral Density in Postmenopausal Women with Osteoporosis (Fosamax®Actonel® Comparison Trial – FACT) (Principal Investigator)
- 2002-2009 R01 AG05407 NIA “Study of Osteoporotic Fractures” (Principal Investigator – Subcontract from University of California, San Francisco)
- 2004-2006 Novartis, “A One Year, Multicentre, Double-Blind, Randomized, Placebo-Controlled, Parallel-Group, Dose-Finding, Safety, Tolerability and Efficacy Study of AAE581 in Postmenopausal Women with Osteopenia/Osteoporosis Supplemented with Calcium and Vitamin D” (Principal Investigator)

- 2004-2009 2P01 AG04390. NIA HRCA/Harvard Research Nursing Home - Core A (Epidemiology Core Leader)
- 2005-2007 Pfizer, “Evaluation of the Effect of a 4-Month Intervention of Exercise and/or Vitamin D on Mobility Function and Strength in Frail Elderly Subjects.” (Principal Investigator and Core Reader DXA Whole Body Scans)
- 2005-2009 R01 AR053205-01. NIAMS “Effect of Dietary Protein on Bone Mass, Subsequent Bone Loss and Fracture in the Elderly” (Co-Investigator)
- 2006-2008 Amgen, “A Randomized, Double-Blind Study to Compare the Efficacy of Treatment with Denosumab versus Alendronate Sodium in Postmenopausal Women with Low Bone Mineral Density” (Principal Investigator)
- 2006-2009 R21 AT003503 NCCAM “Tai Chi for Osteopenic Women: A Pilot Randomized Controlled Trial.” (Principal Investigator – Subcontract from Beth Israel Deaconess Medical Center)
- 2007-2009 R21 AR053992 “New Ways To Find Human BMD Genes Using Mouse QTL Mapping.” (Co-investigator) (No cost-extension)
- 2007-2010 R01 AG031206-01 “Population-Based Reference Ranges for Testosterone” (Principal Investigator – Subcontract from Boston Medical Center)
- 2008-2010 R21 AG032598 “Genetics of the Reproductive Life Period and Health Outcomes” (Co-investigator) – Subcontract from Boston Medical Center)
- 2008-2010 R01 AR057118 “Unraveling Musculoskeletal Pleiotropy Using Genome-Wide Association” (Co-investigator).

CURRENT

- 2013-2016 R01 _____ “ _____ ” (Co-Investigator)
- 2011-2016 R01 AG041658 “Mechanisms and Clinical Implications of Hyperkyphosis: The Framingham Study” (Co-Investigator)
- 2012-2014 Eli Lilly. “A Phase 2 Randomized Study to Investigate the Efficacy

and Safety of LY2495655 Versus Placebo in Older Patients Who Have Fallen Recently and Have Muscle Weakness (Principal Investigator Hebrew SeniorLife).

- 2012-2017 R01 AR 061445 “Bone Microarchitecture: The Framingham Osteoporosis Study” (Principal Investigator)
- 2011-2013 R01 AR 061162 “Targeted Sequencing of 3 Loci Associated with BMD in the Framingham Osteoporosis Study” (Principal Investigator)
- 2007-2012 Merck Research Labs, A Phase III Randomized Placebo Controlled Trial to Assess the Safety and Efficacy of Odanacatib (MK0822) to Reduce the Risk of Fracture in Osteoporotic Postmenopausal Women Treated with Vitamin D and Calcium (Principal Investigator Hebrew SeniorLife)
- 2007-2012 R01 AR053986 “Biomechanics of Vertebral Fractures: The Framingham QCT Study.” (Principal Investigator – Subcontract from Beth Israel Deaconess Medical Center)
- 2007-2012 R01 AR1398 NIAMS “Risk Factors for Age-Related Bone Loss” (Principal Investigator) and Competing Supplement to R01 AR 41398
- 2009-2012 R01 HL094755 “Clinical Correlates of High and Low Testosterone in Women: Framingham Heart Study” (Principal Investigator Andrea Coviello)
- 2010-2012 R21 AR056405-01A2 “Osteocalcin and Metabolic Risk Factors. The Framingham Study (Principal Investigator - Yi-Hsiang Hsu, Sc.D.)

Continuing Medical Education

- 1993 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Falls in the Elderly," March 1993.
- 1994 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Falls in the Elderly," March 1994.
- 1995 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, “Falls in the Elderly,” February 1995

- 1996 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Falls in the Elderly," February 1996.
- 2001 Harvard Medical School Department of Continuing Education, Joslin Diabetes Center Continuing Medical Education, Diabetes and Endocrinology 2001: Critical Issues, "Osteoporosis: Advances in Diagnosis and treatment."
- 2002 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2002.
- 2003 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2003.
- 2004 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2004.
- 2005 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2005.
- 2006 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2006.
- 2007 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2007.
- 2008 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2008.
- 2009 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2009.
- 2010 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, "Osteoporosis in Elderly Persons," March 2010.

- 2011 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine, “Osteoporosis in Elderly Persons,” March 2011.
- 2012 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine “Management of Osteoporosis in Older Persons” March 5, 2012
- 2013 Harvard Medical School Department of Continuing Education, Division on Aging Course on Geriatric Medicine “Management of Osteoporosis in Older Persons” March 5, 2012

Graduate/Postdoctoral Students and Fellows

- 1994- Harvard Medical School Division on Aging
Mentoring of second and third year geriatric fellows including career guidance, oversight of research projects
1 hour per week over the course of each year
- 1994-1966 Dr. Adam Burrows - currently faculty member Boston University Medical Center and Director Geriatrics Upham’s Corner Community Health Center
- 1995-1997 Dr. Susan Mitchell - completed fellowship and returned to Canada as faculty member University of Ottawa and recipient of career development award. In 2000 relocated to Harvard Medical School as Assistant Professor of Medicine and has received funding through a K12 award from NIA and two subsequent R01 awards from NIA and is now Associate Professor of Medicine.
- 1995- Co-sponsor of successful grant application by Dr. Mary Bouxsein, post-doctoral fellow, department of orthopedics, and Orthopaedic Biomechanics Laboratory Harvard Medical School and Beth Israel Deaconess Medical Center to the Medical Foundation and Charles A. King Trust; “Prediction of vertebral fractures from spine radiographs. The Framingham Osteoporosis Study.” Dr. Bouxsein is currently an Assistant Professor at Harvard Medical School and has been NIH grant funded since 1999.
- 1995- Reader/Examiner for Dissertation of Marian T. Hannan for the degree of D.Sc. Epidemiology/Biostatistics, Boston University School of Public Health, Boston, MA. Dr. Hannan is currently junior faculty at HRCA Research and Training Institute. She has been grant funded since her

doctoral dissertation through NIH (co-investigator) and the Arthritis Foundation. Dr. Hannan was recently promoted to Associate Professor at Harvard Medical School

- 1996-1998 Dr. Anne Fabiny - currently faculty member Harvard Medical School Division on Aging and recipient of several teaching awards.
- 1998 Dr. Guido Navarro - completed geriatric fellowship at Harvard and working on a clinical research project regarding the safe and effective use of anticoagulation in the nursing home environment.
- 1998- Mentor for postdoctoral training in epidemiology, Lisa Samelson Sc.D. Oversight of research on risk factors for incident vertebral fractures in men and women of the Framingham Osteoporosis Study - 1-2 hours per week discussing and reviewing data and analyses. Dr. Samelson then became junior faculty at HSL Institute for Aging Research. In 2001 she received a Young Investigator Award from the American Society for Bone and Mineral Research., and received awards from the Arthritis Foundation 2002 to study risk factors in middle age years and hip fracture in elders. Also received a grant from AstraZeneca LP 2003 to study the relation between atherosclerosis and osteoporosis, and the Eli Lilly and Company Women's Health Fellowship 2004-2005 from Harvard Medical School, culminating in a K01 award from the NIH (NIAMS) and was promoted to Assistant Professor March 2010.
- 1999 Reader/Examiner for Dissertation of Jacqueline Center for the degree of Ph.D. Epidemiology, The University of New South Wales, Sydney, Australia. Currently on the faculty at University of New South Wales, Sydney, Australia.
- 1999 Dr. Xing Ren - completed geriatric fellowship, worked with data from the Framingham Heart Study on cytokine levels and heart failure. Dr. Ren subsequently opted for career in clinical medicine in California.
- 2000- David Karasik, PhD Tel Aviv University Genetic Epidemiology. Dr. Karasik worked with me in a post doctoral position at HRCA Research and Training Institute and subsequently became an investigator. Mentoring enabled him to receive an RO3 from NIA in 2001, an RO1 from NIAMS in 2003, and a second RO1 from NIAMS in 2004, followed by an R21 from NIAMS in 2007. He has also received numerous young investigator awards and joined the faculty of Bar Ilan Medical School in Israel
- 2000-2001 Dr. Zaldy Tan - completed first year of geriatric fellowship and working with data from the Framingham Heart Study on lipids and the risk of

Alzheimer's Disease. Dr. Tan rose to Assistant Professor of Medicine at Harvard Medical School and then joined the faculty at UCLA in 2012 where he is an Associate Professor of Medicine at UCLA

- 2001-2002 Dr. Suzanne Leveille, a junior faculty member at HRCA, received a pilot grant award from the Harvard Older American Independence Center grant for which mentoring is required. This project involved the collection of pilot data regarding disability in community dwelling elderly persons. She relocated to the General Internal Medicine Division at BIMDC where she has received independent NIH funding, and also assumed a position at University of Massachusetts, Boston in the School of Nursing.
- 2002-2005 Laurel Yates, MD, second year geriatrics fellow elected to work with me during her early clinical research training. Dr. Yates successfully competed for American Federation for Aging Research grant to fund her research during the second year of fellowship. Also she received two consecutive grant awards from the Harvard Division on Aging grant program. She received a young investigator award from the American Society for Bone and Mineral Research and then joined the Geriatrics Division at Brigham and Women's Hospital.
- 2004-2008 Heike Bischoff-Ferrari, MD, currently Head of Clinical Research, Department of Rheumatology, University Hospital Zurich, was a member of the Harvard Division on Aging and received Division grant funding for which I served as her mentor. I subsequently served on her Harvard School of Public Health. PhD dissertation committee. She is currently a faculty member at the University of Zurich.
- 2005- Sarah D. Berry, MD. Fellow in Geriatrics at Harvard who is completing second year of fellowship and was awarded Harvard / Hartford Foundation Advanced Research Fellowship Award in 2005 and then was selected as recipient of 2006-2008 T-32 Institutional Award. She was appointed Instructor of Medicine at Harvard Medical School, was promoted to Assistant Professor and successfully competed for a K23 award.
- 2007-2010 Tuhina Neogi, MD, MPH. Junior Faculty at Boston Medical Center Division of Clinical Epidemiology. I serve as co-mentor for her T. Franklin Williams Scholars award from the American College of Rheumatology Research and Education Foundation-Association of Specialty Professors Junior Career Development Award in Geriatric Medicine
- 2007-2009 Ching-Lung Cheung, PhD. Post-doctoral Fellow in Genetic Epidemiology at the Institute For Aging Research, Hebrew Rehabilitation Center. Dr. Cheung joined the institute in April of 2008. He received his PhD in

Genetics of Osteoporosis at the University of Hong Kong in 2007. He joined the University of Hong Kong as a faculty member in 2012

- 2007-2010 Emily Bergeron Farina PhD student Tufts University – dissertation committee – “Fat intake, bone and fractures in the Framingham Osteoporosis Study”
- 2007- Huanyu Zhou, Dsc. Dr. Zhou completed his Doctor of Science in Population Genetics in February of 2008 and Joined the Genetic Epidemiology team at the Institute of Aging Research, Hebrew Rehabilitation Center in June of 2007. He is currently Senior Scientist at Merck Research Laboratories in Boston.
- 2008- Amy DiVasta, MD, MS. Dr. DiVasta requested that I become co-mentor for her K23 application in metabolic bone diseases in adolescents, which was funded for five years.
- 2009-2011 Yue Fang, PhD. Dr. Fang completed his PhD in genetics at Erasmus University in Rotterdam, Netherlands and joined the Institute for Aging Research as a post-doctoral fellow in genetic epidemiology
- 2010-2011 Jesse Muir, PhD student State University of New York Stony Brook – dissertation committee – “Evaluating the Potential of Low Magnitude Mechanical Signals as a Means of Preserving Postural Control in the Aged and Disabled”
- 2010-2012 Kannabiran Nandakumar, PhD. Dr. Nandakumar completed his PhD in bioinformatics at University of Heidelberg in Heidelberg, Germany. He entered a second post doctoral fellowship program at the University of Kentucky in 2012
- 2012-2014 Melina Claussnitzer, PhD. Dr. Claussnitzer completed her PhD in Molecular Nutrition Science, Molecular Epidemiology at the Technical University of Munich
- 2012-2014 Wen-Chi Chou, PhD. Dr. Chou completed his PhD in bioinformatics at University of Georgia.

Invited presentations:

Local

- 1991 "Falls in the Elderly." Geriatric Grand Rounds, Beth Israel Hospital, Boston, MA. July 10, 1991
- 1995 "The Prevalence and Incidence of Vertebral Fractures in the Elderly: Results from the Framingham Study." Invited presentation at the Beth Israel Hospital, Brigham and Women's Hospital and Massachusetts General Hospital Orthopedic Biomechanics Laboratories Joint Biomechanics Seminar. December 5, 1995
- 1998 "IGF-I and Bone Metabolism: Results from the Framingham Study." Geriatric Grand Rounds, Beth Israel Deaconess Medical Center, September 1, 1998
- 2003 "Falls in Elderly Persons:" – Geriatrics Grand Rounds, BIDMC July 15, 2003
- 2004 "Hip Fracture Prevention: A Geriatrics Perspective" Medical Grand Rounds Beth Israel Deaconess Medical Center, October 14, 2004
- "Aging, Bone Mass and Vascular Calcification" Invited presentation at BIDMC Vascular Biology seminar series, December 1, 2004
- "Genetics and the Skeleton: Findings from the Framingham Osteoporosis Study," Invited presentation at BIDMC Endocrine Grand Rounds, December 3, 2004
- 2012 "Where Do We Fall On Vitamin D?" Invited presentation at BIDMC Medical School Grand Rounds, March 15, 2012
- 2012 "The Muscle Bone Connection" Invited presentation at Weill Cornell Medical College Grand Rounds, March 21, 2012

Regional

- 1986 "Falls in the Elderly." Geriatric Grand Rounds, Jewish Memorial Hospital, Boston, MA. June, 1986
- 1987 "Epidemiology of Osteoporotic Fractures." Geriatric Grand Rounds, Jewish Memorial Hospital, Boston, MA. November 5, 1987
- 1988 "Epidemiology of Osteoporotic Fractures." Endocrinology Grand Rounds, Rhode Island Hospital, Providence, RI. January 27, 1988
- "Epidemiology of Osteoporotic Fractures." Medical Grand Rounds,

- Rhode Island Hospital, Providence, RI. November 16, 1988
- 1989 "Epidemiology of Osteoporotic Fractures." Rheumatology Grand Rounds, Roger Williams General Hospital, Providence, RI. August 11, 1989
- 1990 "Hormone Replacement Therapy" Butler Hospital, Rhode Island Nurse Practitioners, Providence, RI. April 11, 1990
- "Estrogen Replacement Therapy." Medical Grand Rounds, Eastern Maine Medical Center, Bangor, Maine. November 11, 1990
- 1991 "Osteoporotic Fractures in the Elderly." Geriatric Grand Rounds, Bedford VA Medical Center, Bedford, MA. February 25, 1991
- 1993 "Vitamin D and Calcium: Descriptive Observational Epidemiology," presented at the 13th Annual Bristol-Myers Squibb/Mead Johnson Nutrition Research Symposium, USDA Human Nutrition Research Center on Aging at Tufts University, Boston MA, October 11-13, 1993
- 1994 "Osteoporosis: The role of bone densitometry." Invited presentation at the Women and Infants Hospital of Rhode Island course in Primary/Preventive Care for Obstetricians and Gynecologists, October 1994
- "Prevention of Osteoporotic Fractures." Keynote Speaker Massachusetts Geriatrics Society Annual Meeting, Waltham, MA June 21, 1994
- "Osteoporosis Overview." Invited talk at Massachusetts Nurses Association Workshop, "Osteoporosis: A Woman's Fate or a Woman's Prerogative." Randolph, MA, June 24, 1994
- "Failure to Thrive and Weight Loss in the Nursing Home." Presentation sponsored by Harvard Medical School Department of Continuing Medical Education and The Nutrition Support Service at the New England Deaconess Hospital, "Malnutrition in the Hospitalized Patient: Major Advances in Nutritional and Metabolic Support," May 1994
- 1995 "The Role of Hormone Replacement in the Treatment of Osteoporosis." Invited Presentation at the American College of Physicians Rhode Island Scientific Meeting. Warwick, RI, April 26, 1995
- "Treatment of Osteoporosis in the Geriatric Patient." Invited presentation at the Rhode Island Society of Hospital Pharmacists Annual Seminar. Warwick, RI, September 15, 1995

- 1996 “What Have We Learned About Osteoporosis and Related Fractures from the Framingham Study?” Boston University Division of Endocrinology Grand Rounds, Boston, MA, April 16, 1996
- “Treatment of Osteoporosis in the Geriatric Patient; Is it Too Late to Diagnose and Treat?” Dartmouth Hitchcock Medical Center Medical Grand Rounds, Lebanon, NH September 20, 1996
- “Diagnosis and Treatment of Osteoporosis in 1996.” Rhode Island Chapter, American College of Physicians “Internal Medicine Update – Women’s Health.” Newport, RI, October 29, 1996
- “Safety and Falls in the Older Patient.” Combined grand rounds, Medical Center of Central Massachusetts, Worcester, MA, November 6, 1996
- 1997 “Osteoporosis: Lessons from Framingham.” Endocrine Guest Lecture Series at the University of Massachusetts Medical Center, Worcester, MA September 23, 1997
- 1998 “Osteoporosis: Lessons from Framingham.” Endocrine Grand Rounds at Rhode Island Hospital, Providence, R.I. February 4, 1998
- “Osteoporosis in the Nursing Home,” Geriatric Grand Rounds at University of Connecticut Center on Aging, Farmington, CT, May 29, 1998
- "Research in Falls Among the Elderly." Invited presentation at the Summer Institute in Geriatrics at Boston University Medical Center, July 31, 1998
- “Prevention and Treatment of Osteoporosis in 1998,” Contemporary Topics in Nutrition - The Eighth Annual Nutrition Symposium, The Department of Food and Nutrition Services Rhode Island Hospital, Providence, RI, September 17, 1998
- 1999 “Detection, Prevention and Treatment of Osteoporosis in Postmenopausal Women,” Medical Grand Rounds Rhode Island Hospital, November 9, 1999
- 2000 “Update on Diagnosis and Treatment of Osteoporosis.” Medical Grand Rounds Waltham Deaconess Medical Center March 8, 2000
- 2003 “Gene-Environment Interactions on the Skeleton.” Brown University School of Medicine, Department of Community Health Seminar, Providence, RI, February 26, 2003

- 2004 “Osteoporosis Update” Medical Grand Rounds Roger Williams General Hospital, Providence Rhode Island, January 18, 2004.
- “Osteoporosis Update” Medical Grand Rounds, Milford General Hospital, Milford, MA, June 22, 2004
- 2005 “Diagnosis and Treatment of Osteoporosis 2005” Invited presentation at Rhode Island Academy of Family Physicians Primary Care Update, Newport, RI. April 15, 2005
- “Interpretation of a DXA Report” and “Pharmacological Treatment Options” Invited presentation at the Rhode Island Osteoporosis Coalition Osteoporosis Workshop for Physicians, Providence, RI, October 1, 2005
- “The Use of Hip Protectors to Prevent Hip Fractures,” Invited presentation Rheumatology Grand Rounds, Boston Medical Center, November 30, 2005
- 2006 “Assessing the Risk of Fracture: Evidence Based Practical Approaches” Invited Presentation at the Second Annual Osteoporosis Workshop, Rhode Island Osteoporosis Coalition. Providence, RI, October, 2006
- 2007 “The Role of the RANK/RANK-Ligand/OPG Pathway in Bone” Division of Endocrinology Grand Rounds, Brown Medical School, Providence, RI, February 14, 2007.
- “Postmenopausal female with a forearm fracture” Visiting Professor, University of Massachusetts Geriatric Teaching Day, Worcester, MA, April 4th and 5th, 2007
- 2008 “Do Hip Protectors Really work?” Invited Presentation, the Orthopedic Department at University of Massachusetts Geriatric Teaching Day, Worcester, MA, March 12th, 2008
- 2009 “Falls/Hip Protector Research,” Invited presentation Geriatric Department at Boston Medical Center, May 15, 2009
- 2010 “Osteoporosis in Older Individuals” Invited presentation Obstetrics’ and Gynecology Department University of Massachusetts Medical Center Grand Rounds, March 15, 2010
- “The Role of the RANK/RANKL OPG Pathway and treatment with Denosumab”. Boston Medical Center, Rheumatology Grand Rounds, May 19, 2010

"Falls/Hip Protector Research," Invited presentation Design and Conduct of Clinical Trials summer course, Geriatric Department at Boston Medical Center, July 27, 2010

2011 "The Muscle Bone Connection" Invited presentation at MGH Endocrine Grand Rounds, December 20, 2011

National

1986 "A Cohort Study of Risk Factors for Hip Fractures in Postmenopausal Women." Presented at the National Meeting of the American Federation for Clinical Research (AFCR), Washington, D.C., May, 1986

1987 "Alcohol Consumption and Hip Fractures: The Framingham Study." Poster Presentation at the National Meeting of the American Federation for Clinical Research (AFCR), San Diego, CA. May, 1987

1988 "Impaired Vision and Hip Fracture: The Framingham Study". Poster presentation at the National Meeting of the American Federation for Clinical Research (AFCR). May, 1988.

1989 "What Happens After a Fall." Abstract Presentation at Society of General Internal Medicine National Meeting, Washington, D.C. April 27, 1989

"Prospective Study of Risk Factors for Falls and Outcomes from Falls and Stumbles." Poster Presentation at the National Meeting of the American Geriatrics Society. May 11, 1989

1990 "Gait Speed and Computerized Balance Measurements Among Subjects With and Without Fear of Falling." Poster Presentation at the National Meeting of the American Geriatrics Society. May 17, 1990

"Does A Computerized Balance Platform Validly and Reliably Measure Balance in a Manner Acceptable to Older Persons?" Poster Presentation at the National Meeting of the American Geriatrics Society. May 17, 1990

"Cigarette Smoking Modifies the Effect of Oral Estrogens on The Risk of Hip Fractures." Poster Presentation at the National Meeting of the American Society for Bone and Mineral Research. August 29, 1990

1992 "Outcomes Among Patients Newly Admitted to Nursing Homes with Hip Fracture." Oral Presentation at the Annual Meeting of the Society of General Internal Medicine. May 1, 1992

- "Total body fat is associated with total body bone mineral content in postmenopausal women." Poster Presentation at the Annual Meeting of the Society for Bone and Mineral Research, September 1992
- 1993 "The ongoing problem of osteoporotic fractures among institutionalized elderly." Oral Presentation at the Annual Meeting of the Society for Epidemiologic Research, 1993
- "Can the HCFA-Mandated resident assessment instrument predict falls in the nursing home?" Poster Presentation at the Annual Meeting of the American Federation for Clinical Research, 1993
- "Osteoporosis and Related Fractures: A Frailty and Aging Perspective." The Brookdale Foundation/National Institute on Aging Summer Institute in Research on Aging, July 1993, Airlie Conference Center, Warrenton, VA
- "Risk Factors for Weight Loss in the Nursing Home," presented at National Institute on Aging Workshop on Failure to Thrive in Old Age. Arizona Center on Aging, Tucson AZ, September 9-12, 1993
- "Age-related bone loss in the old: A study of institutionalized elderly." Oral Presentation at the Annual Meeting of the American Geriatric Society Annual Mtg 1993
- "Unintentional weight loss in the nursing home: Results from the Minimum Data Set." Oral Presentation at the Annual Meeting of the American Geriatric Society Annual Mtg 1993
- "The effect of smoking at different life stages on bone mineral density in elderly men and women." Poster Presentation at the Annual Meeting of the American Society for Bone and Mineral Research, 1993
- "Converting results from DPA to DXA in the elderly: The effects of analytic software and body thickness." Poster Presentation at the Annual Meeting of the American Society for Bone and Mineral Research, 1993
- "Alcohol intake and bone mineral density in elderly men and women." Poster Presentation at the Annual Meeting of the American Society for Bone and Mineral Research, 1993
- 1994 "How Do Alcohol and Smoking Fit into Bone Health?" Invited presentation at the American Society of Bone and Mineral Research Nutrition Working Group Symposium on "Diet and Bone Health: Lifestyle Issues," Kansas City, KA September 1994

"Longitudinal bone mineral density (BMD) change in elderly men and women: The Framingham osteoporosis study." Oral presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 1994

"Prevalence and incidence of vertebral fractures in the elderly: Initial results from the Framingham Study." Oral presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 1994

"Estrogen use and bone mass - The Framingham Experience." Invited presentation at the Society for Clinical Densitometry First Annual Scientific Meeting. Chantilly, VA, December 1994

1995

"Magnesium intake is associated with bone mineral density (BMD) in elderly women." Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

"Is there an association between serum TSH concentration and bone mineral density (BMD) in elderly women?" Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

"The association of peripheral WBC-derived interleukin-1 (IL-1), tumor necrosis factor (TNF), interleukin-6 (IL-6) with bone mineral density (BMD) in a large cohort study." Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

"Polymorphisms at the vitamin D receptor (VDR) are associated with bone mineral density (BMD) in younger but not older persons." Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

"Age-related bone loss in the 'old old': A longitudinal study of institutionalized elderly." Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

"Height loss in women as an indicator of subsequent incident hip fracture." Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

"Low dose growth hormone for frail elders stimulates bone turnover in a dose-dependent manner." Poster presentation at the Annual Meeting of the

American Society for Bone and Mineral Research, September 10, 1995

“Hip fracture in the nursing home: The role of bone density and fall severity.” Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 10, 1995

1996 “The Use of Estrogen Replacement Therapy in Light of Newly Approved Medications for Osteoporosis Management,” and “The Complexity of Osteoporotic Fractures: Potential Interventions.” The Haywood County Medical Society and Haywood County Osteoporosis Center, Waynesville, NC, March 21, 1996

“Risk factors for long term cortical bone loss.” Poster presentation at the Annual Meeting of the American Society for Bone and Mineral Research, September 7, 1996

“Do Estrogens Prevent Against Age-Related Bone Loss?” Tenth Annual Metabolic Bone Conference, Denver, Colorado, September 27, 1996

1997 “Bone loss and the progression of lumbar aortic calcification.” Oral presentation at the American Society for Bone and Mineral Research Annual Meeting, September 9, 1997

“Do women with higher bone mass have a lower risk of myocardial infarction?” Oral presentation at the American Society for Bone and Mineral Research Annual Meeting, September 9, 1997

“Elderly subjects in cohort studies unable to return for follow-up do not have lower bone mass than those who return.” Poster presentation at the American Society for Bone and Mineral Research Annual Meeting, September 9, 1997

“Osteoporosis and at risk elderly: Critical issues in diagnosis and treatment,” Invited Discussant at the 50th Annual Scientific Meeting of the Gerontologic Society of America, October 1997

1998 “Predicting fractures using bone mineral density: A prospective study of long-term care residents,” in a Symposium, “The Osteoporosis Revolution: Updates from the Laboratory and the Clinic.” Oral presentation at the 51st Annual Scientific Meeting of the Gerontologic Society of America, November 22, 1998

“Bone mineral density (BMD), hip fracture and apolipoprotein E (ApoE) genotype,” Poster presentation at the American Society for Bone and Mineral Research Annual Meeting, December 2, 1998

- 2000 “Physical Approaches to Fracture Prevention” Invited Speaker NIH
Consensus Development Conference on Osteoporosis, March 27-29, 2000
- “The Use of Hip Protectors to Prevent Hip Fractures” Invited Speaker
American Society for Bone and Mineral Research Annual Meeting
September 22, 2000
- “Bone Loss and the Progression of Lumbar Aortic calcification Over a 25-
Year Period: The Framingham Study,” Invited Speaker Seminar Series
National Institute on Aging Gerontology Research Center, January 19,
2000
- 2001 Systematic Review of Randomized Trials of Osteoporosis Therapies”
Invited Speaker 2001 Merck National Metabolic Bone Disease Consultants
Meeting, Phoenix, AZ, January 26-27, 2001
- “Osteoporosis - When to Treat, Who to Treat,” Invited Speaker American
Geriatrics Society 2001 Annual Meeting
- “Genome screen for quantitative trait loci contributing to normal variation
in bone mineral density: The Framingham Study.” Oral presentation
American Society for Bone and Mineral Research Annual Meeting
September 2001
- “Mapping of quantitative ultrasound of the calcaneus to chromosomes 1
and 5 by genome-wide linkage analysis.” Oral presentation (David
Karasik) American Society for Bone and Mineral Research Annual
Meeting September 2001
- “Higher BMDs in NSAID users compared to non-users: The Framingham
Study.” Poster presentation American Society for Bone and Mineral
Research Annual Meeting September 2001
- “Natural history of kyphosis: A prospective study of change in thoracic
curvature in men and women in the Framingham Study.” Oral
presentation (Lisa Samelson) American Society for Bone and Mineral
Research Annual Meeting September 2001
- “Dietary silicon and bone mineral density: The Framingham Study.”
Poster presentation American Society for Bone and Mineral Research
Annual Meeting September 2001
- “Comparison of two measures of weight bearing physical activity to bone
mass in adults.” Poster presentation American Society for Bone and

Mineral Research Annual Meeting September 2001

- 2002 “Elderly long term care residents continue to lose bone, but not uniformly.” Oral presentation (Kerry Broe) American Society for Bone and Mineral Research Annual Meeting September 2002
- “Interleukin-6 genetic variation and the effects of estrogens and dietary calcium on bone mass: The Framingham Osteoporosis Study.” Oral presentation (Serge Ferrari) American Society for Bone and Mineral Research Annual Meeting September 2002
- “Management of Osteoporosis in Frail Elderly Persons: What We Know and What We Don’t Know.” National PACE Association Annual Meeting, Quincy, MA, October 14, 2002
- “What All Individuals Can Do to Assure Their Own Future Bone Health” The Surgeon General’s Workshop on Osteoporosis and Bone Health, Washington, DC December 12-13, 2002.
- 2003 “Bone Formation – The Therapeutic Role of PTH and Other Interventions.” Baltimore Bone Club, Baltimore, MD, May 14, 2003.
- “Osteoporosis – Impact of the Silent Disease” - Invited Presentation at “The State of the Art in the Management of Osteoporosis” sponsored by the Office on Women’s Health of the US Department of Health and Human Services July 28-29, Washington, DC.
- “Old and Older: How Aging Affects Rheumatologic Care.” Southern California Rheumatology Society, November 22, 2003.
- Symposium: “Hip Fracture Prevention: A Multidisciplinary Approach. The Gerontologic Society of America national meeting November 24, 2003.
- 2004 “New Frontiers in Osteoporosis: A Conversation with the Experts” American Federation for Aging Research sponsored Osteoporosis Media Briefing, New York Academy of Sciences, March 26, 2004.
- “Osteoporosis: Incorporating New Research into Clinical Practice.” North Shore University Hospital, Manhasset, NY, March 25, 2004.
- “Aging, Bone Mass, and Vascular Calcification” Invited presentation, Working Group on Aging and the Human Skeleton, 2004 National Meeting of the American Society for Bone and Mineral Research, October 4, 2004.

“Falls in Older Persons: What Every Rheumatologist Should Know”
Invited presentation National Meeting of the American College of
Rheumatology, October 18, 2004

2006

“Hip Protectors to Prevent Hip Fractures” Invited presentation at
University of Michigan Geriatrics Center/Institute of Gerontology,
February 2, 2006.

“Does Homocysteine or Related Vitamins Influence the Skeleton?”
Invited presentation at University of Maryland Endocrine Grand Rounds,
Baltimore, MD February 13, 2006

“Hip Protectors to Prevent Hip Fractures” Invited presentation at
University of Maryland Department of Gerontology February 14, 2006.

“Osteoporosis and Related Fractures in the Nursing Home” Invited
presentation at New York Bone Club, Beth Israel Medical Center, New
York, NY April 3, 2006

“Does Homocysteine or Related Vitamins Influence the Skeleton?”
Invited presentation at Columbia University Endocrine Grand Rounds,
New York, NY, April 7, 2006

"Trochanteric Padding to Prevent Hip Fractures" National Institute on
Aging Summer Institute in Research on Aging, Aspen Wye River
Conference Center, Queenstown, MD, July 2006

“Good, Good, Good Vibrations: Evidence for the Therapeutic Potential of
Low-Magnitude, High Frequency Mechanical Signals”. Symposium
(Clinical) Oral presentation, American Society for Bone and Mineral
Research Annual Meeting, Philadelphia, PA, September 2006

“Hip Protectors: Are they all what they’re cracked up to be?” Invited
Presentation at The Bone Club Meeting, Center Club, Baltimore, MD,
October, 2006

VISN 8 HIP Protector Toolkit Development and Translation meeting,
Invited Guest, Patient safety Center (Florida VA), Tampa, FL, October,
2006

Aortic Calcification Advisory Board Meeting, Amgen, Inc. Chicago, IL,
November 11, 2006.

- 2007 "Trochanteric Padding to Prevent Hip Fractures" National Institute on Aging Summer Institute in Research on Aging, Aspen Wye River Conference Center, Queenstown, MD, July 2007
- "Novel Non-pharmacologic Approaches to Treating Osteoporosis and Preventing Fractures. Invited presentation, New Mexico Bone Club, Albuquerque, NM, July 12, 2007.
- "Trochanteric Padding to Prevent Hip Fractures" Invited presentation to National Institute on Aging Council September 26, 2007.
- 2008 "Trochanteric Padding to Prevent Hip Fractures" National Institute on Aging Summer Institute in Research on Aging, Aspen Wye River Conference Center, Queenstown, MD, July 2008.
- "Genome Wide Association Studies" State-of-the-Art Lecture: Technologies for the 21st Century, American Society for Bone and Mineral Research, September 14, 2008.
- University of Alabama, Center for Metabolic Bone Disease, Invited Professor, Expert Speakers Program, Osteoporosis and metabolic bone diseases, October, 16th, 2008.
- American College of Rheumatology Annual Conference, Invited Presentation, Pre-meeting Clinical Research Conference, "Low Magnitude Mechanical Stimulation to Improve Bone Density," San Francisco, CA, October 24-29, 2008.
- 2009 8th International Symposium on Osteoporosis, National Osteoporosis Foundation, Invited Presentation, "Osteoporosis in the Long-Term Care Setting" Washington, DC, April 2-5, 2009.
- 2010 New York Metropolitan Area Bone Club. Invited speaker. "Non-Pharmacologic Approaches to Fracture Prevention." February 3, 2010
- Yale University Division of Geriatrics, Pepper Center Speaker. Non-Pharmacologic Approaches to Fracture Prevention, March 3, 2010
- Clinical Osteoporosis 2010: An ISCD-NOF Symposium, San Antonio, TX Presentations on Managing the Frail, Elderly Patient – Long-Term Care and Skeletal Genetics, March 12, 2010
- 2012 "Evidence that Geriatricians Should have a Goal of Achieving a Serum Level of 30 ng/ml (25)OH Vitamin D to Reduce Falls and Injuries in Older

Adults” AGS Expert Panel Recommendations For Vitamin D To Reduce Falls And Injuries In Older Adults. American Geriatrics Society, Washington DC, May 5, 2012

- 2012 ASMBR Topical Meeting on Bone and Skeletal Muscle Interaction. Organizing Committee Member and Invited Speaker. “Genetic Pleiotrophy of Bone and Muscle” July 17, 2012
- 2013 Mayo Clinic Division of Endocrinology, Visiting Professor March 4-5, 2013.

International

- 1999 “Fall Prevention,” Invited presentation at the Second French-American Geriatric Meeting, Palais de Congres, Paris, France, September 2, 1999
- 2002 “Genetic and Environmental Determinants of Bone Mass: The Framingham Osteoporosis Study.” Workshop: Osteoporose: qu’attendre de la genetique? Hospitaux universitaires de Geneve, Geneva Switzerland October 11, 2002
- 2004 “Treatment of Osteoporosis in the Nursing Home” Invited keynote presentation, Colloque sure le traitement de l’osteoporose dans les unites de longue duree de Geriatrie a Quebec. November 5, 2004
- 2005 “New Insights into Nutrition and the Skeleton” Invited presentation at the European Calcified Tissue Society/International Bone and Mineral Society combined meeting, Geneva, Switzerland, June 25, 2005
- 2008 International Society of Nutrigenetics and Nutrigenomics Conference, Invited Presentation, Geneva, Switzerland, October 6-8, 2008.
- 2009 European Calcified Tissue Society, Invited Presentation, “Hip Protectors to Prevent Hip Fracture, Vienna Austria, May 25, 2009.
- 2009 European Calcified Tissue Society, Invited Presentation, “Meet the Professor, Nutrition and Bone, Vienna, Austria, May 25, 2009
- 2012 “Cardiovascular Diseases and Osteoporosis: Clinical Perspectives, Bone Academy Scientific Meeting, Brussels, February 4, 2012

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Original Articles:

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2. Jacobs RF, **Kiel DP**, Sanders ML, Steele RW. Phagocytosis of type III group B streptococci by neonatal monocytes: enhancement by fibronectin and gammaglobulin. *J Infect Dis*. 1985 Oct;152(4):695-700. PMID: 2413135
3. **Kiel DP**. Oculopharyngeal muscular dystrophy as a cause of dysphasia in the elderly. *J Am Geriatr Soc*. 1986 Feb; 34(2):144-7. PMID: 3944405
4. Jacobs RF, Thompson JW, **Kiel DP**, Johnson D. Cellular uptake and cell-associated activity of third generation cephalosporins. *Pediatr Res*. 1986 Sep;20(9):909-12. PMID: 3489219
5. Jacobs RF, **Kiel DP**, Balk RA. Alveolar macrophage function in a canine model of endotoxin-induced lung injury. *Am Rev Respir Dis*. 1986 Oct;134(4):745-51. PMID: 3532887
6. Chute CG, Baron JA, Plymate SR, **Kiel DP**, Pavia AT, Lozner EC, O'Keefe T, MacDonald GJ. Sex hormones and coronary artery disease. *Am J Med*. 1987 Nov;83(5):853-9. Erratum in: *Am J Med* 1988 Jul;85(1):129. PMID: 3674092
7. **Kiel DP**, Felson DT, Anderson JJ, Wilson PW, Moskowitz MA. Hip fracture and the use of estrogens in postmenopausal women: the Framingham study: *N Engl J Med*. 1987 Nov 5; 317(19):1169-1174. PMID: 3657888
8. Tabor DR, **Kiel DP**, Jacobs RF. Receptor-mediated ingestion responses by lung macrophages from a canine model of ARDS. *J Leukoc Biol*. 1987 Jun;41(6):539-43. PMID: 3474333
9. Tabor DR, **Kiel DP**, Jacobs RF. Cyclophosphamide-sensitive activity of suppressor T cells during treponemal infection. *Immunology*. 1987 Sep;62(1):127-32. PMID: 2958405
10. Felson DT, **Kiel DP**, Anderson JJ, Kannel WB. Alcohol consumption and hip fractures: the Framingham study. *Am J Epidemiol*. 1988 Nov; 128(5):1102-10. PMID: 3189283
11. Felson DT, Anderson JJ, Hannan MT, Milton R, Wilson PWF, **Kiel DP**. Impaired vision and hip fracture: the Framingham study. *J Am Geriatr Soc*. 1989 Jun; 37(6):495-500. PMID: 2715555
12. **Kiel DP**, Baron JA, Chute CG, Plymate S. Sex hormones and lipoproteins in men. *Am J Med*. 1989 Jul; 87(1):35-9. PMID: 2787120

13. Berland B, Wachtel TJ, **Kiel DP**, O'Sullivan PS, Phillips E. Patient characteristics associated with the use of mechanical restraints. *J Gen Intern Med.* 1990 Nov-Dec; 5(6):480-5. PMID: 2266428
14. Teno J, **Kiel DP**, Mor V. Multiple stumbles: a risk factor for falls in community-dwelling elderly: A prospective study. *J Am Geriatr Soc.* 1990 Dec; 38(12):1321-5. PMID: 2254571
15. Felson DT, Sloutskis D, Anderson JJ, Anthony JM, **Kiel DP**. Thiazide diuretics and the risk of hip fracture: Results from the Framingham study. *JAMA.* 1991 Jan 16; 265(3):370-3. PMID: 1984536
16. **Kiel DP**, Falls. *R I Med J.* 1991 Feb;74(2):75-9. PMID: 2003191
17. **Kiel DP**, Felson DT, Hannan MT, Anderson JJ, Wilson PW. Caffeine and the risk of hip fracture: the Framingham study. *Am J Epidemiol.* 1990 Oct; 132(4):675-84. PMID: 2403108
18. **Kiel DP**, O'Sullivan P, Teno JM, Mor V. Health care utilization and functional status in the aged following a fall. *Med Care.* 1991 Mar; 29(3):221-8. PMID: 1997751
19. **Kiel DP**, O'Sullivan PS, Ellis PJ, Wartman SA. Alumni perspectives comparing a general internal medicine and traditional medicine program. *J Gen Intern Med.* 1991 Nov-Dec; 6(6):544-52. PMID: 1765871
20. **Kiel DP**, Baron JA, Anderson JJ, Hannan MT, and Felson DT. Smoking eliminates the protective effect of oral estrogens on the risk of hip fracture among women. *Ann Int Med* 1992; 116:716-721. PMID: 1558342
21. Felson DT, Zhang Y, Hannan MT, **Kiel DP**, Wilson PWF, Anderson JJ. The effect of postmenopausal estrogen therapy on bone density in elderly women. *N Engl J Med* 1993;329:1141-6. PMID: 8377776
22. **Kiel DP**, Eichorn A, Intrator O, Silliman RA, Mor V. Outcomes of patients newly admitted to nursing homes: The case of hip fracture. *Am J Pub Health* 1994;84:1281-1286. PMID: 8059886
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24. Felson DT, Zhang Y, Hannan MT, Kannel WB, **Kiel DP**. Alcohol intake and bone mineral density in elderly men and women: The Framingham Study. *Am J Epidemiol* 1995;142:485-492. PMID: 7677127

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26. Cali CM, **Kiel DP**. An epidemiology study of fall-related fractures among institutionalized older people. *J Amer Geriatr Soc* 1995 Dec; 43(12):1336-40. PMID: 7490382
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29. Rosenberg R, Gagnon M, Murphy-Gismondi, Ooi WL, **Kiel DP**, Lipsitz LA. Factors influencing subject willingness to participate in clinical gerontologic research. *Aging (Milano)*. 1996 Dec;8(6):400-8. PMID: 9061127
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