

CURRICULUM VITAE

Name: Ernesto Canalis, M.D.

Office Address: Department of Research
Saint Francis Hospital and Medical Center
114 Woodland Street
Hartford, CT 06105-1299

Born: February 26, 1944, in Lima, Peru

Citizenship: U.S.A.

Education: High School: Colegio de la Inmaculada, Lima, Peru, 1959
Pre-Medical School: Universidad Nacional Mayor de San Marcos, Lima, Peru, 1960-1962
Medical School: Universidad Peruana Cayetano Heredia, Lima, Peru M.D., 1969

Postdoctoral Education and Fellowship Appointments:

Rotating Internship: Centro Medico Naval, Lima, Peru, 1968-1969
Straight Medical Internship: University of Connecticut Health Center, Farmington, CT, 1969-1970
Medical Residency: First Year - Henry Ford Hospital, Detroit, MI, 1970-1971
Medical Residency: Second Year - University of Connecticut Health Center, Farmington, CT, 1971-1972
Fellowship in Endocrinology: Tufts-New England Medical Center Hospital, Boston, MA, 1972-1974

Academic Appointments:

Instructor of Medicine, University of Connecticut School of Medicine, Farmington, CT, 1974-1976
Assistant Professor of Medicine, University of Connecticut School of Medicine, 1976-1981
Associate Professor of Medicine, University of Connecticut School of Medicine, 1981-1985
Professor of Medicine, University of Connecticut School of Medicine, 1985-present
Professor of Medicine and Orthopedic Surgery, University of Connecticut School of Medicine, 1990-present

Hospital Appointments:

Assistant Director of Endocrine-Metabolic Section, Saint Francis Hospital and Medical Center, Hartford, CT, 1976-1979
Associate Director of Endocrine-Metabolic Section, Saint Francis Hospital and Medical Center, Hartford, CT, 1979-1990
Director of Research Laboratory, Saint Francis Hospital and Medical Center, 1978-1990
Director of Research, Saint Francis Hospital and Medical Center, 1990-present

Certification:

Diplomat, American Board of Internal Medicine, 1972
Diplomat, Subspecialty Endocrinology and Metabolism, 1975

Medical Licensure: Active: Connecticut
Inactive: Vermont and Massachusetts

Awards and Honors:

Recipient of the 1990 Kappa Delta Award of the American Academy of Orthopaedic Surgeons
 MERIT Award, National Institute of Arthritis and Musculoskeletal and Skin Diseases-1992
 Recipient of the 1996 Gerald D. Aurbach Lecture Award of the Endocrine Society
 Recipient of the 1998 The Marshall Urist Award for Excellence in Tissue Regeneration Research of the
 Orthopaedic Research Society
 Recipient of the 2004 Louis V. Avioli Founders Award of the American Society for Bone and Mineral
 Research for fundamental contributions to bone and mineral basic research
 2008 Distinguished Physician Award, Medical Staff; Saint Francis Hospital and Medical Center

Editorial Positions:

Editor, Journal of Clinical Endocrinology and Metabolism, 1991-1993
 Associate Editor of Bone, 1986-2003
 Consulting Editor, Journal of Clinical Investigation, 1997-2007
 Member of Editorial Board of Endocrinology 1985-1988, 1994-1998; 2004-2007
 Member of Editorial Board of Calcified Tissue International, 1989-present
 Member of Editorial Board of Bone and Mineral, 1989-1994
 Member of Editorial Board of Journal of Bone and Mineral Research, 1989-1993
 Member of Editorial Board of Journal of Endocrinological Investigation, 1991-1996
 Member of Editorial Board of Clinica delle Malattie dell' Osso, 1993-1996
 Member of Editorial Board of Reviews in Endocrine and Metabolic Disorders, 2006

Books:

Editor, Skeletal Growth Factors, 2000
 Co-editor, Frontiers of Hormone Research: Glucocorticoid Induced Osteoporosis, 2000

Consulting Activities:

a. National Institutes of Health (NIH)

Member of National Advisory Dental Research Council (NIH) National Institute of Dental Research,
 1997-2000
 Member of Orthopedic Study Section, (NIH) Division of Research Grants, 1985-1988
 Member of General Medicine B Study Section, (NIH) Division of Research Grants, 1989-1991
 Member of Reviewer Reserve, (NIH) Division of Research Grants, 1991-present
 Ad Hoc Consultant, Board of Scientific Counselors, National Institute of Dental Research, 1985
 Reviewer for Special Study Sections for National Institute of Child Health and Development; National
 Institute of Diabetes, Digestive and Kidney Diseases and National Institute of Arthritis,
 Musculoskeletal and Skin Disorders
 Reviewer, Site Visits, National Cancer Institute

b. Other

Scientific Advisory Board, National Osteoporosis Foundation, 1991-1999
 Member, Advisory Panel, The United States Pharmacopeia Convention, Inc., 1995-2000
 Scientific Advisory Board, The Patrick and Catherine Weldon Donaghue Foundation, Hartford, CT,
 1994-2004
 Donaghue Investigator Steering Committee, The Patrick and Catherine Weldon Donaghue Medical
 Research Foundation, Hartford, CT, 1997-1998
 Reviewer, Grants From The Arthritis Foundation, The Veterans Administration, The National Science
 Foundation
 Member, Connecticut Stem Cell Research Advisory Committee, 2005 - present

Societies (Member):

Association of American Physicians
 American Society for Clinical Investigation
 American Federation for Clinical Research
 Endocrine Society
 American Society for Bone and Mineral Research
 Orthopedic Research Society
 International Bone and Mineral Society
 Association of Osteobiology
 American Society for Cell Biology
 Association for the Advancement of Science
 American Association of Clinical Endocrinologists
 Societa Italiana Dell Osteoporosi e Delle Malattie Metaboliche Dell Osso
 Sociedad Peruana del Climatorio, Honorary Member
 Sociedad Chilena de Osteologia y Metabolismo Mineral, Honorary Member
 Connecticut Academy of Science and Engineering

Societies (Officer):

Councilor American Society for Bone and Mineral Research, 1989-1992
 Chairman Program Committee, American Society for Bone and Mineral Research, 1989
 Executive Committee, American Society for Bone and Mineral Research, 1993-1996
 President, American Society for Bone and Mineral Research, 1995
 Member of the Board of the International Bone and Mineral Society, 1989-1998
 Councilor and Founding Member, Association of Osteobiology, 1994-2000
 Secretary, Association of Osteobiology, 1994-1998

Committees:

a. National and International

Member Program Committee, American Society for Bone and Mineral Research, 1986-1988, 1991, 1994
 Chair Program Committee, American Society for Bone and Mineral Research, 1989
 Member Program Committee, American Rheumatism Association, 1987, 1988
 Member Program Committee (Abstract Reviewer), Endocrine Society, 1989, 1990
 Member Scientific Committee, Second, Third, Fourth, Fifth, Sixth, Seventh and Eighth International Workshop on Cells and Cytokines in Bone and Cartilage, Davos, Switzerland,
 Leader Growth Factor Session at the Bones and Teeth Gordon Conferences, 1993, 1997
 Member Scientific Advisory Board, The First and Second International Conference on Steroids and Bone, Florence and Siena, Italy, 1994, 1997
 Chair, Workshop on Anabolic Hormones in Bone, National Institute of Diabetes, Digestive and Kidney Diseases, 1995
 Chair and Member Scientific Committee, Symposium Pharmaco-Clinique Roussel Uclaf, Role of Growth Factors in Skeletal Tissue, Paris, France, 1996
 Chair, Anabolic Agents in Bone, Alba, Italy, 1997
 Chair, Osteoporosis: Strategies for Early Prevention Symposium, Cincinnati, Ohio, 1997
 Coordinator, International Meeting on Glucocorticoid Induced Osteoporosis, Gardone, Italy, 1999; Mantova, Italy, 2001; Torino, Italy, 2003; Trieste, Italy, 2005
 Co-Chair, First International Meeting on Skeletal Endocrinology, Italy, 2004
 Co-Chair of the 4th International Congress on Glucocorticoid Induced Osteoporosis, Trieste, Italy, October 2005
 Co-Chair, Second International Meeting on Skeletal Endocrinology, Italy, 2007
 Co-Chair of the 5th International Congress on Glucocorticoid Induced Osteoporosis, Naples, Italy, October 2007

b. Local

Research Committee, Saint Francis Hospital and Medical Center, 1976-present
 Animal Care and Use Committee, Saint Francis Hospital and Medical Center, 1981-2006
 Institutional Review Board, Saint Francis Hospital and Medical Center, 1984-1992
 Chairman 1992-present
 Intramural Research Support Grants (Chairman) Saint Francis Hospital and Medical Center, 1990
 Dean Search Committee, University of Connecticut School of Medicine, 1993
 Planning Committee Clinical and Translational Science Award, University of Connecticut 2007-

Teaching Activities:

Tufts University - New England Medical Center, Boston, Massachusetts
 Endocrine Laboratory for second year medical students, 1972-1974

University of Connecticut School of Medicine, Farmington, Connecticut
 Musculoskeletal Laboratory for first year medical students
 Endocrine Laboratory for second year medical students
 Lecturer, endocrine course, second year medical students
 Teaching of third and fourth year internal medicine clerks
 Post-graduate teaching in internal medicine and endocrinology to medical house officers and endocrine fellows
 Post-graduate teaching of laboratory fellows
 Participant, Endocrinology and Metabolism Training Program funded by Department of Health, Education and Welfare; Director, Dr. L.G. Raisz

University of Hartford, Hartford, Connecticut
 Former Adjunct Faculty and Coordinator of Course, Clinical Endocrinology and Metabolism

Saint Joseph College, West Hartford, Connecticut
 Former Adjunct Faculty

Research Interests:

Skeletal growth factors
 Insulin-like growth factors (IGF) and IGF binding proteins
 Hormonal action in bone
 Mechanisms of glucocorticoid action in bone
 Glucocorticoid-induced osteoporosis
 Stromal cell differentiation

Research Funding Information:**Grant Support:****Investigator**

Studies on the regulation of bone formation by hormones and growth factors. Principal investigator on research grants obtained from the:

Connecticut Research Foundation, Storrs, CT, 1974-1976
 Saint Francis Hospital Association, Hartford, CT, 1976 and 1984
 Easter Seal Research Foundation, Chicago, IL, 1978-1981
 Charles H. Hood Foundation, Boston, MA, 1978-1980
 National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, MD, 1981, renewed in 1984, 1987 and 1992, MERIT Award 1992 to 2002; renewed 2002 to 2007; renewed 2008 to 2013

(AR21707)

National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 1989, renewed 1994 to 1999, 2000 to 2004; 2005-2009 (DK42424)

National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 1991, renewed 1996; 2001 and 2004 to 2008 (DK45227). Currently, pending review.

Core Center for Musculoskeletal Research (Principal Investigator: Joseph Lorenzo, M.D., University of Connecticut Health Center; Co-Director: Ernesto Canalis, M.D.), 2000-2005

Clinical/genetic studies in osteoporosis. Co-investigator on a research grant on osteonectin polymorphisms obtained from:

The Patrick and Catherine Weldon Donaghue Medical Research Foundation, Hartford, CT, 2000-2002

Studies on the regulation of growth by somatomedin and growth hormone fragments. Principal investigator on research grant obtained from the:

Combined Hospitals Fund, Hartford, CT, 1978-1980

Clinical studies on serum and urinary steroids determined by high pressure liquid chromatography. Principal investigator on research grant obtained from the:

Combined Hospitals Fund, Hartford, CT, 1980-1982

Biomedical Research Support Grant (NIH), 1990, 1991

Small Instruments Program (NIH), 1991,1992,1993,1994

Sponsor

Sponsor Fellowship Award to Anne Delany, Ph.D. from NIDDK, DK09038, 1993-1996 - Cortisol Effects on Bone Insulin-Like Growth Factor

Sponsor Fellowship Award to Nathalie Franchimont, M.D. from the Donaghue Foundation, Hartford, CT, 1995-1996 - Interleukin-6 Regulation by Growth Factors in Osteoblasts

Sponsor Fellowship Award to Valerie Gangji, MD, Belgium Bone Club, 1996-1997

Sponsor Doctoral Student Award to Renata Pereira, Ph.D., CAPES, 1997-1998

Sponsor Fellowship Award to Rosa Pereira, M.D., University of Sao Paulo, 1998-2000

Sponsor Fellowship Award to Renata Pereira, Ph.D., Arthritis Foundation, 2000-2003

Sponsor Fellowship Award to Elisabetta Gazzero, M.D., Arthritis Foundation, 2003-2006

Sponsor Fellowship Award to Valerie Deregowski, Ph.D., Belgian American Educational Foundation, 2004-2005 and Arthritis Foundation, 2006

Pharmaceutical Support:

Grants obtained from:

Revlon Pharmaceuticals, 1982

Abbot Laboratories, 1982

Chiesi Farmaceutici, Parma, Italy, 1992, 1993

Servier, Paris, France, 1992, 1993, 1994, 1996

Miles (Bayer), New Haven, CT, 1993

Boehringer Mannheim, Penzberg, Germany, 1994, 1995

CIMOCA, SA, Liege, Belgium, 1995

Roussel Pharmaceuticals, Paris, France, 1997

Eli Lilly Laboratories, Indianapolis, IN, 1998

Merck & Company, Inc., West Point, PA, 1999

Acceleron, 2006, 2007

Active Grant Support, Principal Investigator on the Following Grants:

Growth Factors Effect on Aspects of Bone Formation, NIAMS, AR21707. Direct costs \$200,000/year
 Somatomedin: Autologous Regulator of Bone Formation, NIDDK, DK42424
 Direct costs, current year (2008): \$166,000
 Mechanisms of Cortisol and Notch Action in Bone, NIDDK, DK45227
 Direct costs, current year (2007): \$170,600...Currently, pending renewal

Selected Presentations at National and International Meetings From 1983-Present

1. Bone Derived Growth Factor
 Workshop on Local Mechanisms Regulating Bone Formation
 National Institutes of Health, May 1983
2. Local Regulation of Bone Growth
 Gordon Research Conferences - Bone and Teeth, July 1983
3. Local Skeletal Growth Factors in Osteoporosis
 Consensus Development Conference in Osteoporosis
 National Institutes of Health, April 1984
4. Somatomedins
 Annual Spring Symposium Clinical Ligand Assay Society, May 1984
5. Cultures of Fetal Rat Calvariae to Study Bone Formation
 Workshop on Model Systems for Assessing Function of Bone Matrix Constituents
 American Society for Bone and Mineral Research, June 1984
6. Cell-Cell Interactions - Discussion Leader
 Workshop on Paget's Disease of Bone
 National Institutes of Health, September 1985
7. Bone Growth Factors - Panelist
 International Workshop on Cells and Cytokines in Bone and Cartilage
 Davos, Switzerland, December 1985
8. Growth Factors and Bone Formation - Chairman
 Workshop, American Society for Bone and Mineral Research, June 1986
9. Growth Factors
 Gordon Research Conferences - Bone and Teeth, July 1986
10. Local Regulators of Bone Formation
 Research Directions in Osteoporosis
 National Institutes of Health, February 1987
11. Growth Factors and Bone Formation
 Biology and Regulation of Bone Metabolism: Clinical Significance.
 Satellite Workshop of the XX European Symposium on Calcified Tissues
 Sirmione, Italy, October 1987
12. Cell and Molecular Biology of Vertebrate Hard Tissues - Participant
 The Ciba Foundation
 London, England, October 1987
13. Identification, Function and Regulation of Matrix and Cell Factors from Bone and Cartilage Panelist
 Second International Workshop on Cells and Cytokines in Bone and Cartilage
 Davos, Switzerland, April 1988
14. Bone Growth and Osteoinductive Factors Session - Chairman
 Third International Conference on The Chemistry and Biology of Mineralized Tissues
 Chatham, Massachusetts, October 1988

15. Growth Factors
Symposium on Cellular Mechanisms of Bone Remodeling, The Orthopedic Research Society,
Florida, October 1988
16. Bone-Derived Growth Factors
Bone Graft Symposium, Tampa, Florida, January 1989
17. Factors in Bone Remodeling
Beyond 1990: New Frontiers in Osteoporosis Symposium
Washington, D.C., February 1990
18. The Role of Insulin-Like Growth Factor I in the Local Regulation of Bone Remodeling
American Academy of Orthopaedic Surgery
New Orleans, Louisiana, February 1990
19. Growth Factors in Bone Remodeling
Symposium on Physical and Biochemical Factors in Bone Metabolism
Atlanta, Georgia, August 1990
20. Cytokines and Local Growth Factors in the Regulation of Bone Metabolism
Effects of Space Travel on the Musculoskeletal System
Bethesda, Maryland, October 1990
21. Production, Regulation and Effects of Bone Growth Factors
Symposium on Osteoporosis
Copenhagen, Denmark, October 1990
22. Skeletal Growth Factors - Discussion Leader
Gordon Research Conferences - Bones and Teeth - July 1991
3. Workshop Growth Factors - Chairman
Annual Meeting American Society for Bone and Mineral Research
San Diego, CA, August 1991
24. The Role of Insulin-Like Growth Factors in Bone Remodeling
XIth International Conference on Calcium Regulating Hormones
Florence, Italy, April 1992
25. Role of Growth Factors in the Regulation of Bone Formation
National Institute of Aging
Washington, D.C., September 1992
26. Skeletal Growth Factors and Bone Remodeling
Societa Italiana dell Osteoporosi
Rome, Italy, October 1992
27. Insulin-Like Growth Factor and the Local Regulation of Bone Formation
The Sixth International Congress on Bone Morphometry
Lexington, Kentucky, October 1992
28. Biology of Cartilage and Bone
European Research Conferences
Obernai, France, November 1992
29. Skeletal IGF-I and Its Binding Proteins
Portland Bone Symposium
Portland, Oregon, July 1993
30. Regulation of Skeletal Insulin-Like Growth Factors by Local Regulators of Bone Cell Function
II Workshop on Osteobiology
Parma, Italy, October 1993
31. Skeletal Insulin-Like Growth Factor

Symposium on Growth Factor Interactions During Development
Lawson Research Institute
London, Ontario, October 1993

32. Osteoporosis '93
Science and Technology Bilateral Agreement between Italy and USA
Venice, Italy, November 1993
33. Skeletal Growth Factors
5th National Meeting of the Italian Society of Osteoporosis
Padua, Italy, December 1993
34. Insulin-Like Growth Factor, An Autocrine Regulator of Skeletal Cells
Third International Symposium on Insulin-Like Growth Factors
Sydney, Australia, February 1994
35. Steroids, Growth Factors and Bone Turnover
First International Conference on Steroids and Bone
Florence, Italy, May 1994
36. Actions of Deflazacort and Other Glucocorticoids on Osteoblasts
Satellite of First International Conference on Steroids and Bone
Florence, Italy, May 1994
37. Insulin-like Growth Factors in Various Endocrine Systems
Minisymposium, Annual Meeting Endocrine Society
Anaheim, CA, June 1994
38. Role and Regulation of IGF I and II in Skeletal Cells
Fifth International Insulin and IGF Symposium
Gainesville, FL, March 1995
39. Insulin-like Growth Factors in Bone
29th Annual Scientific Meeting of The European Society for Clinical Investigation and the
Medical Research Society of Great Britain
Cambridge, England, April 1995
40. Workshop on Anabolic Hormones in Bone: Basic Research and Therapeutic Potential
Chairman
National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
Bethesda, MD, May 1995
41. Physiological and Clinical Relevance of Insulin-Like Growth Factor I and Its Binding Proteins
Keynote Speaker
Annual Meeting of the Italian Osteoporosis Society
Genoa, Italy, October 1995
42. Role of Insulin-Like Growth Factor I (IGFI) and IGF Binding Proteins in Bone
20th Birthday of the Belgian Bone Club
Brussels, Belgium, December 1995
43. Skeletal Insulin-Like Growth Factors and Their Binding Proteins
Symposium Pharmaco-Clinique Roussel Uclaf: Role of Growth Factors in Skeletal Tissue
Paris, France 1996
44. Role of Insulin-Like Growth Factor in Bone Metabolism
Gerald Aurbach Lecture Award
10th International Congress of Endocrinology
San Francisco, California, June 1996
45. Growth Factors in Bone Metabolism

IV Congreso Chileno de Osteología y Metabolismo Mineral
Santiago, Chile, August 1996

46. *In Vitro* and *In Vivo* Actions of Growth Factors on the Skeleton
VII International Conference on Bone Morphometry
Sardinia, Italy, October 1996
47. Osteoporosis: Etiology, Pathophysiology and Current Medical Management
Symposium Sponsored by New York State Academy of Family Physicians
Lake Placid, New York, February 1997
48. Assessment of the Growth Hormone/IGF-I Axis in Aging
Symposium Sponsored by the National Institute for Aging
Bethesda, Maryland, April 1997
49. Effect of Glucocorticoids on Insulin-Like Growth Factors and Their Binding Proteins
2nd International Conference on Steroids and Bone
Siena, Italy, May 1997
50. Local Regulators of Bone
Fourth International Symposium - National Osteoporosis Foundation: Osteoporosis Research
Advances and Clinical Applications
Washington, DC, June 1997
51. Growth Factors and Bone
XIX Meeting of International League of Association for Rheumatology
Singapore, June 1997
52. Effects of IL-6 on Matrix Metalloproteinases: Implications to Bone Remodeling and the Insulin-Like
Growth Factor Axis
IV Workshop on Osteobiology
Parma, Italy, June 1997
53. Papel De Los Factores De Crecimiento En El Metabolismo Oseo and Mecanismos De Accion De Los
Glucocorticoides En El Hueso Y Su Implicacion En La Induccion De La Osteoporosis
La Asociacion Mexicana De Metabolismo Mineral Oseo
Mexico City, Mexico, July 1997
54. Skeletal Growth Factors, Session Leader
Bones and Teeth Gordon Conference
Meriden, New Hampshire, July 1997
55. Nuevas Formas de Tratamiento de la Osteoporosis and Regulacion de la Remodelacion Osea Por Factores
de Crecimiento Esqueletico
III International Symposium Sociedad Argentina de Osteoporosis
Mar del Plata, Argentina, November 1997
56. Factores de Crecimiento y Hueso and Osteoporosis inducida por Glucocorticoides
XI Congreso Bolivariano de Endocrinología y VII Congreso Peruano de Endocrinología
Lima, Peru, March 1998
57. Simposio Raloxifeno
III Congreso Argentino de Climaterio
Buenos Aires, Argentina, May 1998
58. Raloxifeno y Osteoporosis
III Congreso Peruano del Climaterio
Lima, Peru, July 1998
59. Terapia No Hormonal en el tratamiento de la Osteoporosis
III Congreso Peruano del Climaterio
Lima, Peru, July 1998

60. Skeletal Growth Factors
Women's Health Symposium Satellite of the VI Chilean Congress of Osteology and Mineral Metabolism
Santiago, Chile, August 1998
61. Glucocorticoid Induced Osteoporosis
Women's Health Symposium Satellite of the VI Chilean Congress of Osteology and Mineral Metabolism
Santiago, Chile, August 1998
62. Raloxifene, a Selective Estrogen Receptor Modulator (SERM) for Menopausal Osteoporosis
23° Congresso Brasileiro de Endocrinologia e Metabologia e do III Congresso Paulista de Endocrinologia e Metabologia
Sao Paulo, Brasil, November 1998
63. New Directions in the Hormonal Management of Osteoporosis
San Diego, California, November 1998
64. Bone Matters: Current Clinical Research in the Management of Osteoporosis
American Society for Bone and Mineral Research and International Bone and Mineral Society
Second Joint Meeting
San Francisco, California, December 1998
65. Mechanisms of Glucocorticoid Action in Bone Relevance to Osteoporosis
Keystone Symposia on Molecular & Cellular Biology
Molecular Pathogenesis of Bone Disease
Tahoe City, California, March 1999
66. Effects of Glucocorticoids on Bone Formation and Coordinator
1st International Congress, Glucocorticoid Induced Osteoporosis
Pathogenesis, Diagnosis and Treatment
Lake Garda, Italy, April 1999
67. Expression and Regulation of Hepatocyte Growth Factor/Scatter Factor in Osteoblast Cultures
International Bone and Mineral Society
V Workshop on Osteobiology
Gallipoli, Italy, June 1999
68. Basic Pathophysiology of Glucocorticoid Action on Bone
81st Annual Meeting of the Endocrine Society
San Diego, California, June 1999
69. Local Factors in the Regulation of Bone Remodeling
7th Congress, Spanish Society for Bone Research and Mineral Metabolism
Sitges, Spain, October 1999
70. Role of Bisphosphonates and Estrogens in the Therapy of Osteoporosis
Annual Meeting of the Sociedad Peruana del Clinaterio
Lima, Peru, November 1999
71. Osteoporosis Inducida por Corticoides
Tratamiento de la Osteoporosis: Recomendaciones de la Fundaci.:n Nacional de Osteoporosis Americana
III Congreso Internacional de Endocrinologia / VIII Congreso Peruano de Endocrinologia
Lima, Peru, May 2000
72. Professor Lecture Program - Osteoporosis
Symposium - Molecular Mechanisms of Glucocorticoid Action
Round Table - Menopause
XVI Congreso Colombiano de Medicina Interna

Bogota, Colombia, October 2000

73. SIBOMM Annual Meeting
Futuro de la Osteoporosis en Iberoamerica
Buenos Aires, Argentina, December 2000
74. Tercer Curso Intensivo de Diabetes, Endocrinologia y Enfermedades Metabolicas
Metabolismo del Calcio - Osteoporosis: Nuevas directivas en diagnostico y tratamiento
University of Southern California, Keck School of Medicine
Miami, Florida, December 2000
75. The Osteoporosis Lectures
Osteoporosi Indotta da Cortisonici: Fisiopatologia e Clinica
University of Brescia Medical School
Brescia, Italy, December 2000
76. 5th International HYPOCCS Symposium
GH and Bone: GH/IGF and Osteoblast Function
Antwerp, Belgium, March 2001
77. II Congreso Latino Americano/IX Congreso Chileno de Osteologia y Metabolismo Mineral
Mechanisms of Glucocorticoid Action in Bone
Mechanisms and New Therapies in Osteoporosis
Santiago, Chile, April 2001
78. 2001 Catherwood Lecture
Glucocorticoid Induced Osteoporosis
Emory University School of Medicine
Atlanta, Georgia, May 2001
79. The Second International Conference on the Neuroendocrine Immune Basis of the Rheumatic Diseases
Mechanisms of Glucocorticoid Action in Bone
University of Genova
Genova, Italy, September 2001
80. Fifth Belgian Congress on Rheumatology
Mechanisms of Glucocorticoid Action in Bone
Royal Belgian Society of Rheumatology
Hasselt, Belgium, September 2001
81. University of Massachusetts Medical School Endocrinology Guest Lecture Series
Osteoporosis
Worcester, Massachusetts, October 2001
82. Rheumatology Grand Rounds - Massachusetts General Hospital
Mechanisms of Glucocorticoid Action in Bone
Boston, Massachusetts, October 2001
83. University of Rochester, Strong Memorial Hospital Orthopedics Grand Rounds
Mechanisms of Glucocorticoid Action in Bone
Rochester, New York, October 2001
84. Brigham and Women's Hospital Endocrinology Grand Rounds
Mechanisms of Glucocorticoid Action in Bone
Boston, Massachusetts, October 2001
85. Bridgeport Hospital Medical Grand Rounds
Update: Diagnosis and Treatment of Osteoporosis
Bridgeport, Connecticut, November 2001
86. Rhode Island Hospital Gastroenterology Grand Rounds

- Osteoporosis in Inflammatory Bowel Disease
Providence, Rhode Island, November 2001
87. Temple University Medical Grand Rounds
Osteoporosis
Philadelphia, Pennsylvania, December 2001
88. Buffalo General Hospital Medical Grand Rounds
Osteoporosis
Buffalo, New York, January 2002
89. Beth Israel Hospital Gastroenterology Grand Rounds
Osteoporosis in Inflammatory Bowel Disease
New York, New York, February 2002
90. IV Curso Intensivo de Diabetes, Endocrinología y Enfermedades Metabólicas
Osteoporosis Inducida por el uso de Glucocorticoides
Acciones de la Hormona de Crecimiento y de Factores de Crecimiento en el Metabolismo Oseo
Miami, Florida, April 2002
91. 33rd Annual Symposium – Growth Hormone and Insulin Like Growth Factors in Endocrinology and
Metabolism
Effect of Glucocorticoids on the Skeleton
Barcelona, Spain, April 2002
92. Lahey Clinic Medical Grand Rounds
Male Osteoporosis and Glucocorticoid Induced Osteoporosis
Burlington, Massachusetts, May 2002
93. Lenox Hill Hospital Gastroenterology Grand Rounds
Glucocorticoid Induced Osteoporosis / Inflammatory Bowel Disease
New York, New York, May 2002
94. 12 corso Nazionale sulle Malattie Metaboliche dell'Osso
Insulin Like Growth Factors and Future Therapies in Osteoporosis
Turin, Italy, June 2002
95. Charlotte Hungerford Hospital Grand Rounds
Update on Osteoporosis
Torrington, Connecticut, June, 2002
96. 24th Annual Meeting of the American Society for Bone and Mineral Research
State of the Art Lecture: Skeletal Growth Factors
San Antonio, Texas, September 2002
97. Baystate Medical Center Medical Grand Rounds
Selected Topics in Osteoporosis
Springfield, Massachusetts, September, 2002
98. 16th Annual Meeting of the Metabolic Bone Disease Society of Colorado
Glucocorticoid Induced Osteoporosis
Denver, Colorado, September, 2002
99. Riverside Regional Medical Center Medical Grand Rounds
Osteoporosis
Newport News, Virginia, October, 2002
100. Center for Women's Health & Medicine at Mercy
Controversies in Women's Health
Baltimore, Maryland, November, 2002
101. Pascack Valley Hospital Medical Grand Rounds

- Glucocorticoid Steroid Induced Osteoporosis
Westwood, New Jersey, November, 2002
102. Hamot Medical Center Medical Grand Rounds
Glucocorticoid Induced Osteoporosis
Erie, Pennsylvania, December, 2002
103. Harrington Memorial Hospital Medical Grand Rounds
Post-Menopausal Osteoporosis
Southbridge, Massachusetts, January 2003
104. VI Congreso Sociedad Iberoamericana de Osteologia y Metabolismo Mineral
Mechanisms of Glucocorticoid Action and Relevance to Glucocorticoid Induced Osteoporosis
Growth Factors as Determinants of Bone Mass
Quito, Ecuador, March 2003
105. Co-President of the 3rd International Congress on Glucocorticoid Induced Osteoporosis
Gruppo Italiano de Studio su Glucocorticoidi e Osso
Turin, Italy, March 2003
106. Second International Conference on Osteoporosis in Men
Mechanisms of Action of Glucocorticoids in Bone: Relevance to Osteoporosis in Men
Genoa, Italy, April 2003
107. The State of the Art in the Management of Osteoporosis
Presented by the Office on Women's Health (Department of Health and Human Services)
A Scientific Approach to Glucocorticosteroid-Induced Osteoporosis
Washington, DC, July 2003
108. Recipient of the Seventh John Ensinn Lectureship Award
Medical Grand Rounds
Management of Osteoporosis in Light of the Women's Health Initiative
University of Washington
Seattle, WA, October 2003
109. Lecturer – Endocrine Days
Bone Quality and the Management of Osteoporosis
University of Washington
Seattle, WA, October 2003
110. Rheumatology Grand Rounds
Mechanisms of Glucocorticoid Action in Bone
University of Washington
Seattle, WA, October 2003
111. Dex Lenci Memorial Lecture
Medical Grand Rounds
Current Approaches to the Management of Osteoporosis
Bridgeport Hospital
Bridgeport, CT, November 2003
112. Rheumatology Grand Rounds
Mechanisms of Glucocorticoid Action in Bone Relevance to Glucocorticoid Induced Osteoporosis
Winthrop-University Hospital
Mineola, New York, January 2004
113. Medical Grand Rounds
Osteoporosis
Bryn Mawr Hospital
Bryn Mawr, Pennsylvania, January 2004

114. Lupus 2004 - 7th International Congress SLE and Related Conditions
Mechanisms of Glucocorticoid Action in Bone
New York, New York, May 2004
115. Rheumatology Rounds
Glucocorticoid Induced Osteoporosis
North Shore Long Island Jewish Health System
Manhasset, NY, June 2004
116. Family Medicine Grand Rounds
New Concepts in the Screening and Treatment of Osteoporosis
National Naval Medical Center
Bethesda, MD, September 2004
117. Medical Grand Rounds
Management of Post-Menopausal Osteoporosis
Washington Hospital Center
Washington, DC, September 2004
118. 4th Global Arthritis Research Network (GARN)
Mechanisms of Glucocorticoid Induced Osteoporosis
Montreal, Canada, September 2004
119. Program Co-Chair
Skeletal Endocrinology 2004
Arzaga, Italy, October, 2004
120. Skeletal Endocrinology 2004
Regulation of Osteoblastogenesis
Arzaga, Italy, October, 2004
121. Rheumatology Grand Rounds
Glucocorticoid Induced Osteoporosis
Yale University
New Haven, CT, January 2005
122. Endocrinology Grand Rounds
Mechanisms of Glucocorticoid Action In Bone
Vanderbilt University
Nashville, TN, February, 2005
123. Medical Grand Rounds
Management of Post-Menopausal Osteoporosis
University of West Virginia
Morgantown, WV, February, 2005
124. Medical Grand Rounds
Glucocorticoid Induced Osteoporosis
Saint Francis Hospital and Medical Center
Hartford, CT, February, 2005
125. Endocrine Grand Rounds
Glucocorticoid Induced Osteoporosis
Stanford University
Palo Alto, CA, March, 2005
126. Third International Conference on Children's Bone Health
Signals Determining Osteoblastic Cell Fate and Function
Sorrento, Italy, May, 2005
127. Third International Conference on Osteoporosis in Men

Mechanisms of Action of Glucocorticoids in Bone
Genoa, Italy, May, 2005

128. XXIV Curso Internacial de Reumatologia
Osteoporosis Severa
Lima, Peru, August, 2005
129. XXIV Curso Internacial de Reumatologia
Osteoporosis por Glucocorticoides
Lima, Peru, August, 2005
130. Co-Chair of the 4th International Congress on Glucocorticoid Induced Osteoporosis
Gruppo Italiano di Studio su Glucocorticoidi e Osso
Trieste, Italy, October, 2005
131. 4th International Congress on Glucocorticoid Induced Osteoporosis
Mechanisms of Glucocorticoid Action on Osteoblasts
Trieste, Italy, October, 2005
133. Endocrine Grand Rounds
Mechanism of Glucocorticoid Action in Bone
University of Colorado Health Sciences Center
Aurora, Colorado 2005
134. Endocrine Grand Rounds
Mechanisms of Glucocorticoid Action in Bone: Relevance to Osteoporosis
Hallet Center for Diabetes and Endocrinology – Rhode Island Hospital
Providence, Rhode Island, December 2005
135. Rheumatology Grand Rounds
Glucocorticoid Induced Osteoporosis
University of Vermont School of Medicine
Burlington, Vermont, March 2006
136. Medical Grand Rounds
Post Menopausal Osteoporosis
Wyndham Hospital
Wyndham, Connecticut, June 2006
137. Visiting Professor
Università degli Studi di Brescia
Nuovi Fattori Di Regolazione Degli Osteoblasti
Brescia, Italy, November 2006
138. Scientific Coordinator
Second International Meeting on Skeletal Endocrinology
Brescia, Italy, March 2007
139. 2nd Conference on Skeletal Biology and Medicine
A New York Academy of Sciences Meeting
Inhibitors of Osteoblast Differentiation
New York, New York, April 2007
140. Nov, A Novel BMP/Wnt Antagonist
Gordon Research Conferences – Small Integrin-Binding Proteins
Biddeford, Maine, August 2007
141. 5th International Congress on Glucocorticoid Induced Osteoporosis
Actions of Glucocorticoids on the Osteoblast and Their Reversal by Anabolic Therapies
Napoli, Italy, October 2007

142. Visiting Professor
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Advanced Course in Osteoporosis
Brescia, Italy, October 2008

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