

Robert Daniel Blank, M.D., Ph.D.

Date of Preparation: July 16, 2018

A. General Information

Present Position: Professor of Medicine and Chief, Division of Endocrinology,
Metabolism, and Clinical Nutrition, Medical College of Wisconsin

Birth Date: October 25, 1956

Birth Place: Antwerp, Belgium

Citizenship: U.S.

Licensure:

New York: #178828

Date of issue: 1989

Date of last registration: 2016

Wisconsin: #36590

Date of issue: 1995

Date of last registration: 2017

Illinois: #036-094397 (inactive status as of 8/1/2014)

Date of issue: 1996

Date of last registration: 2011

DEA Number: 1989 BB2123406 (current registration expires 7/31/19)

Board Certifications: Internal Medicine - 1991 #137155

2001 (recertification)

Endocrinology, Diabetes, & Metabolism - 1995 #137155

2005, 2015 (recertification)

International Society for Clinical Densitometry - 2002

2007, 2012 (recertification)

B. Addresses

Office Address: Room E4410
9200 West Wisconsin Ave.
Milwaukee, WI 53226

C. Educational Background

1974-1978	Columbia University New York, N.Y.	A.B.	Awarded 1978
1978-1980	University of Cambridge Cambridge, U.K.	B.A.	Awarded 1980
1981-1988	New York University New York, N.Y.	M.D., Ph.D.	Awarded 1988
2013	Harvard University School of Public Health, “Leadership Development Program for Physicians in Academic Medical Centers”		
2014	Medical College of Wisconsin-University of Wisconsin-Milwaukee, “Leadership Academy”		

D Professional Positions

Post-Doctoral Training

1988-1989	Intern, Internal Medicine New York Hospital, New York, N.Y.
1989-1990	Resident, Internal Medicine New York Hospital, New York, N.Y.
1990-1995	Fellow, Endocrinology and Metabolism New York Hospital/Memorial Sloan-Kettering Cancer Center New York, N.Y.
1990-1996	Post-Doctoral Fellow Rockefeller University, New York, N.Y.

Academic Appointments

1996-2000	Assistant Scientist The Hospital for Special Surgery New York, N.Y. 10021
1997-2000	Assistant Attending Physician, The Hospital for Special Surgery
1998-2000	Assistant Professor of Medicine Weill Medical College of Cornell University 1300 York Ave. New York, N.Y. 10021
1998-2000	Assistant Attending Physician, New York Presbyterian Hospital 525 York Ave. New York, N.Y. 10021
2000	Associate Scientist, The Hospital for Special Surgery
2000-2007	Assistant Professor of Medicine,
2007-2013	Associate Professor of Medicine, The University of Wisconsin 600 Highland Ave. Madison, WI 53792
2000-present	Visiting Scientist, The Hospital for Special Surgery
2001-2013	Staff Endocrinologist, William S. Middleton Veterans’ Hospital, 2500 Overlook Terrace

- Madison, WI 53705
- 2001-2013 Investigator, Geriatrics Research, Education, and Clinical Center
William S. Middleton Veterans' Hospital
- 2007-present Adjunct Scientist, The Marshfield Clinic Research Foundation
- 2013-present Professor of Medicine, Medical College of Wisconsin
- 2013-present Professor of Cell Biology (secondary), Medical College of Wisconsin
- 2013-present Professor of Physiology (secondary), Medical College of Wisconsin
- 2013-present Chief, Division of Endocrinology, Metabolism, and Clinical Nutrition,
Medical College of Wisconsin
- 2013-present Director, TOPS Obesity Center, Medical College of Wisconsin
- 2013-present Staff Endocrinologist, Clement J. Zablocki VAMC

E. Professional memberships

- 1991-present American College of Physicians (Fellow)
- 1997-present American Society for Bone and Mineral Research
- 1999-present Advances in Mineral Metabolism
- 2001-present The Endocrine Society
- 2001-present Central Society for Clinical Research
- 2002-present International Society for Clinical Densitometry
- 2007-present American Society for Human Genetics
- 2007-present Genetics Society of America
- 2008-present International Bone and Mineral Society
- 2012-present American Heart Association
- 2014-present American Physiological Society

F. Honors and Awards

- 1977 Adam Leroy Jones Prize in Logic and Philosophy of Science
Columbia University
- 1988 AOA
New York University
- 1994 National Research Service Award F32-HG00084
National Institutes of Health/Rockefeller University sponsorship
- 1996 Development and Feasibility Award 5 P60 AR3850, subproject 0028
National Institutes of Health/Cornell Multipurpose Arthritis and Musculoskeletal
Diseases Center sponsorship
- 1997 Arthritis Foundation Osteoporosis Research Grant
Arthritis Foundation, New York Chapter
- 1997 AFAR Research Grant A970038
American Federation for Aging Research
- 1997 Elected to Fellowship, American College of Physicians
- 1998 Children's Brittle Bone Foundation Research Fellowship
- 1998 Dean's Pin, Columbia University
- 1998 Travel Award, American Society for Bone and Mineral Research
- 1998 John Haddad Memorial Young Investigator, American Society for Bone and
Mineral Research
- 1999 Participant, 7th Annual Summer Research Course in Experimental Aging
- 2000 Research Grant DAMD17-00-1-0071

- US Army Medical Research & Materiel Command
- 2001 University of Wisconsin-Howard Hughes Medical Institute Faculty Development Program Award
- 2002 VA Merit Award
- 2007 Wisconsin Network for Health Research Project Grant
- 2007 Best Case Presentation, Wisconsin Bone Club
- 2007 Mentorship Award, American College of Physicians, Wisconsin Chapter
- 2007 VA Merit Award
- 2009 NIH Research Grant R01 AR54753
- 2014 VA SPiRe Grant 1I21 RX001440
- 2014 Castle-Connolly Top Doc
- 2015 Best Doctors
- 2018 Fellow (inaugural class), American Society for Bone and Mineral Research

G. Institutional Responsibilities

Teaching

- 1993-2000 Annual Presenter, New York Hospital/Memorial Sloan-Kettering Cancer Center Endocrinology Grand Rounds (various topics)
- 1995-2000 Annual Presenter, Hospital for Special Surgery Metabolic Bone Diseases Conference (various topics)
- 1995 Genetics Research Conference, Memorial Sloan-Kettering Cancer Center “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2”
- 1995 Clinical Research Seminar, Rockefeller University, “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2”
- 1995 Pediatrics Grand Rounds, Memorial Sloan-Kettering Cancer Center, “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2”
- 1995-1997 Preceptor, endocrinology clinical case studies, Cornell University 2nd year medical school class
- 1996 Pathology House Staff Conference, New York Hospital, “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2”
- 1996 Pediatrics House Staff Conference, New York Hospital, “Multiple Endocrine Neoplasia Type 2”
- 1997 Instructor, Recombinant DNA Safety Course, Hospital for Special Surgery
- 1997 Preceptor, genetics of osteogenesis imperfecta, Hospital for Special Surgery Orthopedics Residency Basic Science Curriculum
- 1997-2000 Preceptor, Genes and Development, Cornell University 1st year medical school class
- 1998-2000 Preceptor, Molecules to Cells, Cornell University 1st year medical school class
- 1998 *Health Connection* and *PhysicianLink* articles on treatment of osteoporosis
- 1998-2000 Preceptor, Basis of Disease, Cornell University 2nd year medical school class
- 1998-2000 Clinical Preceptor, Outpatient Clinic, Endocrinology & Metabolism

- Division, New York Hospital-Cornell Medical Center
- 1999-2000 Clinical Preceptor, Inpatient Service, Endocrinology & Metabolism Division, New York Hospital-Cornell Medical Center
- 1999 Gender, Biology, and Human Disease Conference, “A Genomic Approach to Scoliosis Pathogenesis”
- 1999 Lecture on Genomics to 1st year medical school class, CUMC
- 2000 Geriatrics Grand Rounds, “Genetic Analysis of Bone Strength,” CUMC
- 2000 Lecture on Metabolic Bone Disease to 2nd year medical school class, CUMC
- 2001 Clinical Preceptor, Gastroenterology Inpatient Service, U. W. Hospital
- 2001 Endocrinology Grand Rounds, UW, “Osteogenesis Imperfecta”
- 2001 Endocrinology Fellows’ Conference, UW, “G-Protein Endocrinopathies”
- 2001-2012 Preceptor, Pathophysiology of the Endocrine System to 2nd year medical school class, University of Wisconsin.
- 2001-2013 Clinical Preceptor, Endocrinology Inpatient Service, U. W., V. A., and Meriter Hospitals
- 2001-2013 Clinical Preceptor, Endocrinology Outpatient Clinic, U. W. Clinics
- 2001-2013 Clinical Preceptor, Diabetes Clinic, V.A. Hospital
- 2001-2013 Faculty Mentor, Undergraduate Research in Biological Sciences, University of Wisconsin, conducted in V. A. laboratory
- 2001-2013 Trainer, MD-PhD program, University of Wisconsin
- 2001-2013 Faculty Mentor, Medical Scientist Training Program, University of Wisconsin
- 2001-2002 Faculty Mentor, MD program, University of Wisconsin
- 2002-2004 Medical School Lecture for 2nd year Pathophysiology of the Endocrine System “Bone Cells, Matrix, and Turnover”
- 2002 “Pathophysiology of Type 2 Diabetes Mellitus,” in-service conference for nursing staff at VA hospital.
- 2002-2013 Investigator, Geriatrics Research, Education, and Clinical Center, William S. Middleton Veterans’ Hospital

- 2002-2003 Clinical Preceptor, William S. Middleton Veterans' Hospital Medical Inpatient Service
- 2002-2013 Trainer, Molecular and Cellular Biology Training Program
- 2002 Endocrinology Grand Rounds, University of Wisconsin, "Genetics of Autoimmune Thyroid Disease"
- 2003-present Geriatrics Teaching Conference, University of Wisconsin and GRECC, "Fragility Fractures"
- 2003-2005 VA Diabetes Patient Education Conferences, William S. Middleton Veterans' Hospital, "Pathogenesis and Natural History of Type 2 Diabetes"
- 2003 Research Seminar, University of Wisconsin Materials Science Center, "Murine Osteogenesis Imperfecta: A Biological System for Studying Composite Materials"
- 2003-2012 Mentor, Intensive Introduction to Clinical Medicine for MD-PhD Students
- 2003 Faculty for Osteoporosis: Answers to the Tough Clinical Questions, Continuing Medical Education Program, University of Wisconsin Medical School, "Stopping HRT," "What Is a Treatment Failure," "Cushing's Syndrome Presenting as Skeletal Fragility"
- 2003 Mentor, Samantha Conroy, NASA Sharp Summer Research Program for High School Students
- 2003 Fellows' Teaching Conference, U. of Wisconsin Endocrinology Section, "Overview of Bone Cell and Developmental Biology."
- 2003 MD-PhD Seminar (12/10/03), U. of Wisconsin Medical/Graduate Schools, "What Makes Bone Strong?"
- 2004 Grand Rounds (1/30/04), U. of Wisconsin Dept. of Medicine, "Overview of Genetics, part 1"
- 2004 Grand Rounds (2/6/04), U of Wisconsin Dept. of Medicine, "Overview of Genetics, part 2"
- 2004-2008 Thesis Advisor, Neema Saless, PhD Candidate in Cellular and Molecular Biology
- 2004 Endocrinology Teaching Conference (7/12/04) "Bone Turnover Markers"

- 2004 Pathology Seminar, University of Wisconsin (10/13/04), "Bones and Teeth in *Colla2^{oim}* Mice: A Model for Osteogenesis Imperfecta."
- 2004 Diabetes Patient Education Conference (11/13/04), William S. Middleton Veterans' Hospital, "Pathogenesis and Natural History of Type 2 Diabetes"
- 2004-2012 Fellows' Bone Densitometry Workshop, Preceptor
- 2005 The Bare Bones of Osteoporosis Care, CME Program (6/24/05) "Bisphosphonates: how long to treat and when to use IV" and "It's the Fracture, Stupid!"
- 2006-2012 Geriatrics Teaching Conference, University of Wisconsin and GRECC, "Overview of Bone Biology"
- 2006 Endocrinology Grand Rounds, University of Wisconsin, "Finding Bone Strength Genes: Intercross of HcB/13 and HcB/14"
- 2006 Quality Improvement Project for Fellows, University of Wisconsin, "Metabolic Bone Disease and Skeletal Fragility: What Do the Guidelines Say?"
- 2007-2012 Course Co-Director, Medicine 903, "Transitional Clerkship in Medicine"
- 2007 Medical Scientist Training Program Symposium, Welcome and Opening Remarks
- 2007 Endocrinology Grand Rounds, "QTLs for Biomechanical Performance: Intercross of HcB/8 and HcB/23"
- 2007 Endocrinology Fellows' Teaching Conference, "Genetics of Pheochromocytoma"
- 2007-2012 Course Director, Medicine 901, "Intensive Introduction to Medicine"
- 2008-2012 Presentation for Responsible Conduct of Research course for graduate students in the biological sciences, "Human Subjects Research (2008-2010)" and "Animal Subjects Research (2011-2012)"
- 2008 Endocrinology Grand Rounds, "Genetics of Congenital Vertebral Malformations"
- 2009 Genetics Colloquium, "Genetics of Biomechanical Performance in Recombinant Congenic Mice." (2/4/09)
- 2009 Endocrinology and Reproductive Physiology Seminar, "Genetics of Biomechanical Performance in Recombinant Congenic Mice." (2/12/09)

- 2009 MD-PhD Seminar, “Genetics of Biomechanical Performance in Recombinant Congenic Mice.” (2/25/09)
- 2009 University of Wisconsin Short Course in Clinical Research, “Writing Case Reports” (6/11/09)
- 2009 Endocrinology Grand Rounds, “Quantitative Trait Loci for Bone Biomechanical Performance in Mice.”
- 2009 University of Wisconsin Continuing Medical Education Program on Osteoporosis, Presentations on Pathophysiology of Osteoporosis and Individualizing Treatment Plans (6/19/09)
- 2009-2012 University of Wisconsin Population Health Sciences 794 “Biological Basis of Disease” lectures on Bone Biology
- 2009-2012 William S. Middleton Veterans’ Memorial Hospital Geriatrics Core Lectures on “Basic Science of Metabolic Bone Disease” (12/22/09)
- 2010-2015 Thesis Advisor for Jasmin Kristianto, Endocrinology and Reproductive Physiology PhD student.
- 2010-2012 William S. Middleton Veterans’ Memorial Hospital Geriatrics Core Lectures on “Fragility Fractures”
- 2010 Endocrinology Grand Rounds “Parallels Between Bone and Blood Vessel Modeling in Mice.”
- 2011 University of Wisconsin Short Course in Clinical Research, “Translating Laboratory Findings to the Clinical Setting.”
- 2011-2015 Thesis Advisor for Michael Johnson, Endocrinology and Reproductive Physiology PhD student.
- 2011 Endocrinology Grand Rounds “*Ecel* as a Candidate Gene for Bone and Blood Vessel Modeling in Mice.”
- 2011 University of Wisconsin Pathology 751 “Age Related Diseases” lecture on Bone Biology (11/11/11)
- 2011-2012 University of Wisconsin Institute for Clinical and Translational Research, Moderator for KL2 Scholars’ Manuscript Writing Workshop
- 2012 University of Wisconsin Physics 207 “Honors Freshman Physics” lecture on application of physical principles to vascular and bone biology
- 2012 Endocrinology Fellows’ Teaching Conference, “Statistical Genetic Research Methods”

- 2012 M3 student remediation (name withheld for student's privacy)
- 2012-16 DXA Workshop for Residents, Preceptor
- 2012 University of Wisconsin Endocrinology Fellows' Teaching Conference "Metabolic Bone Diseases Other than Osteoporosis and Osteomalacia"
- 2012-2013 University of Wisconsin Institute for Clinical and Translational Research, Moderator for KL2 Scholars' Grant Writing Workshop
- 2013 University of Wisconsin Endocrinology Fellows' Teaching Conference "Genetics of Pheochromocytoma"
- 2013 Clinical Update in Endocrinology, "Bone and Mineral Physiology and their Common Disorders"
- 2013-present Endocrine Physiology Graduate Course, "Bone Physiology" (alternate years 2013 and 2015, annual since then)
- 2013 Clinical and Translational Science Institute Women's Health Forum, "Low Trauma Fracture"
- 2013 Fellows' Teaching Conference, "Bone Physiology and Its Disorders"
- 2014 Gynecologic Oncology Seminar, "Fractures After Cancer Therapy in Women"
- 2014 Endocrinology Fellows' Core Curriculum, "Low Trauma Fractures"
- 2014 Medical Grand Rounds, Froedtert Hospital, "Low Trauma Fractures"
- 2014 Medicine Residency Core Curriculum, "Low Trauma Fractures"
- 2014 Medical College of Wisconsin and MD Anderson Cancer Center Endocrine Surgery Symposium, "Management of Osteoporosis Following Parathyroidectomy"
- 2014 Medical College of Wisconsin M1 Curriculum, "Fundamentals of Bone Biology"
- 2014-6 Medical College of Wisconsin M2 Curriculum, "Pathophysiology of Skeletal Fragility"
- 2014 Medical College of Wisconsin Internal Medicine Residency Program, Clinical-Pathological Conference, "Insulinoma"
- 2015 Medical College of Wisconsin Clinical and Translational Institute Translational Science Curriculum, "Bedside to Bench and Back, with Bones"

- 2015 Medical College of Wisconsin and MD Anderson Cancer Center Endocrine Surgery Symposium, “Medical Therapy of Parathyroid Disease”
- 2015 Endocrinology Fellows’ Core Curriculum, “How To Be a Consultant”
- 2015-present Endocrinology Fellows’ Core Curriculum, “Skeletal Fragility”
- 2015-present Endocrinology Fellows’ Core Curriculum, “Metabolic Bone Disease”
- 2015-6 Medicine Interns’ Core Curriculum, “Osteoporosis”
- 2015-6 Medicine Residents’ Core Curriculum, “Fracture Risk Calculation”
- 2015-present Medical Students’ M2 Musculoskeletal Disease Unit, “Bone as a Tissue and Organ
- 2016-present Organizing Committee (chair), Milwaukee Diabetes Symposium (annual)
- 2016 Physiology Research Seminar, “Endothelin Signaling in Bone”
- 2017 M1 Curriculum: Molecules to Cells: Cytogenetics
- 2017 M1 Curriculum: Molecules to Cells: Molecular Diagnostics

Administrative Duties, including committees

- 1996-2000 Institutional Biosafety Committee, Hospital for Special Surgery (chair, 1998-2000)
- 1996-2000 Assistant Director, Molecular Biology Core Laboratory, Hospital for Special Surgery
- 1996-2000 Molecular Biology Steering Committee, Hospital for Special Surgery
- 1996-1998 Biomedical Research Steering Committee, Cornell Multipurpose Arthritis and Musculoskeletal Disease Center
- 1998-2000 Scientific Advisory Committee, General Clinical Research Center, The New York Hospital-Cornell Medical Center
- 1998-2000 Safety Committee, Hospital for Special Surgery Research Division
- 1999-2000 Information Services Steering Committee, Hospital for Special Surgery
- 2001-2005 Research Committee, V. A. Hospital
- 2001-2003 Search Committee, Diabetes Physician-Scientist Faculty Position, U. W.

2001-present Admissions Committee, MD-PhD program, U. W.

2001-2004 Alternate, University of Wisconsin Faculty Senate

2001-2004 Chief, Diabetes Service, VA Hospital

2002-2007 Organizer, GRECC Research in Progress Seminar Series

2003-2005 Dept. of Medicine Research Committee

2003-2008 University Committee on Women (co-chair, 2007-2008)

2004-2006 University of Wisconsin, Madison, Faculty Senate

2005-2012 Course Coordinator, MD-PhD laboratory/clinical transition curriculum

2005 Endocrine Surgery Faculty Search Committee

2006-2013 Associate Director, Medical Scientist Training Program

2006-2013 Alternate, University of Wisconsin Faculty Senate

2007-2013 Medical Scientist Training Program Steering Committee

2008-2013 Department of Medicine post-promotion review committee

2008-2009 Chair, Medical Scientist Training Program Admissions Committee

2009-2015 Trainer, Endocrinology and Reproductive Physiology Graduate Training Program, University of Wisconsin

2009-2011 Provost's Diversity and Equity Advisory Committee

2010-2011 Chair, Medical Scientist Training Program Admissions Committee

2010-2013 William S. Middleton Memorial Veterans' Hospital Research Committee

2010-2012 Peer Review, University of Wisconsin Medical Education and Research Committee New Investigator Program

2011-2012 Chair, Medical Scientist Training Program Admissions Committee

2013-2014 Co-Chair Research Planning Workgroup on Diabetes and Obesity

2013-present Chief, Division of Endocrinology, Metabolism, and Clinical Nutrition

2013-present Member, Froedtert Hospital Ambulatory Services Steering Committee

- 2013-present Trainer, Interdisciplinary Program in Biomedical Sciences
- 2014-present Department of Medicine Research Committee
- 2014-present Member, Froedtert Hospital Hospital Advisory Committee
- 2014-present Faculty Mentoring Committee, Carmen Bergom, MD, PhD
- 2015-present Faculty Mentoring Committee, Michael Yeboah, MD, PhD
- 2015 Department of Medicine Bonus Compensation Task Force
- 2015-2017 Department of Medicine Residency Program Evaluation Committee
- 2016 Peer Review, Advancing Healthier Wisconsin

Research

- 1982-1988 Bayesian Multilocus Linkage Mapping and Behavior of Introgressed Chromosome Segments in the Mouse
- 1990-1996 Correlation of Genetic and Physical Maps of Mouse Chromosome 4
- 1994-1996 Denaturing Gradient Gel Electrophoresis Diagnosis of Multiple Endocrine Neoplasia Type 2
- 1996-present Genetics of Bone Strength in the Mouse
- 1996-1998 Regulation of Type I Collagenase Transcription
- 1996-present Genetics and Molecular Biology of Connective Tissue Diseases
- 1998-present Material Properties of Calcified Tissues
- 2008-present Mechanisms of Mechanotransduction in Bone and Arteries
- 2008-present Mechanisms and Consequences of Hypophosphatemia
- 2012-present Pleiotropic Effects of Endothelin Signaling
- 2014-present Individual Variation in Vitamin D Metabolism
- 2015-2016 Site Investigator, DEVOTE (Novo-Nordisk)

Present Percentage of Effort

Clinical care	25%
Teaching	5%
Administration	50%

Research

20%

H. Research Support History

Medical Scientist Training Program, New York University, PHS NRSA 5 T32GM 07308-12, 9/81-6/87

Physical Mapping of a Mammalian Chromosome, Individual NRSA 1 F32 HG00084-01 7/1/94-3/31/96

Postdoctoral Fellow: Robert D. Blank

Faculty Sponsor, Jeffrey M. Friedman, MD, PhD

The Rockefeller University, 1230 York Ave., New York, NY 10021

Genetics of Steroid-Induced Osteoporosis in Inbred Mice

Cornell Multipurpose Arthritis & Musculoskeletal Diseases Center P60 AR3850, subproject 0028

Principal Investigator of Subproject: Robert D. Blank

Amount: \$21,500 direct costs/year, 7/96-6/98

30% effort as PI

Genetics of Steroid-Induced Osteoporosis in Inbred Mice

New York Chapter of the Arthritis Foundation Osteoporosis Research Grant

Principal Investigator: Robert D. Blank

Amount: \$25,000 direct costs/year, 7/97-6/98

Genetics of Bone Mineral Content and Quality in Inbred Mice: Analysis of the HcB/Dem Recombinant Congenic Strain Set.

American Federation for Aging Research A970038

Principal Investigator: Robert D. Blank

Amount: \$20,000 direct costs/year, 7/1/97-6/30/99

30% effort as PI

Modifiers of *oim*. Children's Brittle Bone Foundation Research Fellowship

Principal Investigator: Robert D. Blank

Amount: \$50,000 direct costs/year to run 7/1/98-6/30/00

50% effort as PI

In Vitro Initiation of Biological Calcification: NIH 5 R01 AR 037661

Principal Investigator: Adele L. Boskey, Ph.D.

Amount: \$131,841 direct costs/year, RDB participation 8/1/97 - 8/31/01

5% effort on grant to assist with overexpression of bone sialoproteins in tissue culture cells

Mechanism of Prostaglandin E1 Repression of Collagenase I Expression: Patricia Grossman Fund

Principal Investigator: Richard S. Bockman, M.D., Ph.D.

Amount: variable, ~\$30,000 direct costs/year

10% effort on project to assist with experimental design and execution

Genetic, Cellular, and Molecular Studies of Fas in SLE. NIH AR45482

Principal Investigator: Keith Elkon

Amount: \$207,744 direct costs/year to run 6/1/98-5/31/03
5% effort on grant to assist with design and execution of human and mouse genetic studies between 6/1/98 and 11/15/00.

Genetics of Bone Mineralization and Morphology in Inbred Mice DAMD 17-00-1-0071

Principal Investigator: Robert D. Blank

Amount: \$150,000 direct costs/year to run 04/1/00-03/31/04

30% effort as PI

Genetics of Bone Properties in Mice: U. of Wisconsin-HHMI Faculty Development Program

Principal Investigator: Robert D. Blank

Amount: \$40,000 total over 7/01/01-6/30/03

Supplemental funds to accelerate existing research efforts

Genetics of Bone Tissue Material Properties in Mice VA Merit Award

Principal Investigator: Robert D. Blank

Amount: \$135,000 direct costs/year 10/1/02-9/30/06

Mutation Analysis in Human Congenital Scoliosis and Vertebral Malformations Scoliosis Research Society Grant

Principal Investigator: Philip F. Giampietro

Amount: \$50,000 over period 10/1/04-9/30/07

The Identification of a Locus for Adolescent Idiopathic Scoliosis on Chromosome 12p Orthopaedics Research and Education Foundation Grant

Principal Investigator: Philip F. Giampietro

Amount: \$89,858 direct costs over period 7/1/2007-6/30/2009

Genetics of Adolescent Idiopathic Scoliosis Wisconsin Network for Health Research Grant

Principal Investigators: Philip F. Giampietro and Robert D. Blank

Amount: \$50,000/year 7/1/2007-6/30/2009

Genetics of Klippel-Feil Syndrome, Marshfield Clinic Research Foundation Grant

Principal Investigator: Philip F. Giampietro

Co-Investigators: Enid Neptune (Johns Hopkins) and Robert D. Blank

Amount: \$38,027 direct costs 7/1/2007-6/30/08

Genetics of Bone Tissue Material Properties in Mice VA Merit Award

Principal Investigator: Robert D. Blank

Amount: \$125,000 direct costs/year 10/1/07-9/30/11

Congenetic Mice Harboring Quantitative Trait Loci for Biomechanical Performance, National Institute of Arthritis, Musculoskeletal, and Skin Diseases R01-AR054753.

Principal Investigator: Robert D. Blank

Amount: \$250,000 direct costs/year 7/15/09-5/31/15

Pathogenesis of Vitamin D Refractory Diseases
National Institute of Arthritis, Musculoskeletal, and Skin Diseases R01- AR27032
Principal Investigator: Marc K. Drezner
Amount: \$300,000 direct costs/year 8/1/80-present
Role: Co-I (since 9/1/09)

Interaction of Mechanical Loading and Teriparatide on Bone Mass
Veterans Affairs Rehabilitation Research Service 1I21 RX001440
Principal Investigator: Robert D. Blank
Amount: \$78,000 direct costs/year 6/1/2014-11/30/2018 (no cost extension)

Personalized Vitamin D Supplementation in European and African Americans
Wisconsin Collaborative Health Sciences Program 2897
Principal Investigator: Corinne Engelman
Amount: \$147,089 direct costs/year 7/1/2015-6/30/2018
Role: Co-I, MCW PI

Role of Ece1 in Maternal Vascular Remodeling During Pregnancy
American Heart Association 15GRNT25700126
Principal Investigator: Robert D. Blank
Amount: \$65,000 direct costs/year 7/1/2015-6/30/2017

I. Extramural professional responsibilities

- 1986 Presentation at Biochemical Genetics of the Mouse Workshop, The Jackson Laboratory, Bar Harbor, ME, "Behavior of Introgressed Chromosomal Segments on Inbreeding" by Blank, R.D., Campbell, G.R., and D'Eustachio, P.
- 1987 Presentation at The First International Workshop on Mouse Genome Mapping, Paris, "Bayesian Multilocus Linkage Mapping" by Blank, R.D., G.R. Campbell, and P. D'Eustachio.
- 1991 Presentation at The 17th Molecular and Biochemical Genetics Conference, The Jackson Laboratory, Bar Harbor, ME, "A mouse chromosome 4-specific YAC Library" by Blank, R.D., N. Bahary, D. Siegel, and J.M. Friedman.
- 1991 Presentation at The 5th International Workshop on Mouse Genome Mapping, Lunten, The Netherlands, (1991) "Correlation of Mouse Chromosome 4's Genetic and Physical Maps by Analysis of Chromosome Specific YACs" by Blank, R.D., N. Bahary, D. Seigel, and J.M. Friedman
- 1994 Endocrinology Grand Rounds, University of Southern California, "Correlation of Mouse Chromosome 4's Linkage and Physical Maps"
- 1994 Endocrinology Grand Rounds, Washington University, "Correlation of Mouse Chromosome 4's Linkage and Physical Maps"
- 1994 Endocrinology Grand Rounds, Medical College of Wisconsin, "Genomic Approaches to Disease"
- 1994 Medicine Grand Rounds, University of California, Los Angeles, "Genomic Approaches to Disease"
- 1994 Endocrinology Research Conference, University of Michigan, "Genomic Approaches to Disease"
- 1995 Endocrinologist, Marshall Islands Medical Program, Department of Energy
- 1995 Presentation, Marshall Islands Medical Program, "Molecular Biological Mechanisms in Differentiated Thyroid Carcinoma"
- 1995 Endocrinology Grand Rounds, St. Vincent's Medical Center, "Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2"
- 1995 Presentation at The 5th International Congress on Hormones and Cancer, Quebec, Canada, by Blank, R.D., Sklar, C.A., Dimich, A.B., Imperato-McGinley, J., and Brennan, M.

- 1995 Endocrinology Research Conference, University of Illinois, Chicago, “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2”
- 1996 Endocrinology Research Conference, University of Chicago, “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2”
- 1996 Presentation at The New York Thyroid Club, “Use of Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2” by Blank, R.D., Sklar, C.A., Dimich, A.B., Imperato-McGinley, J., and Brennan, M.
- 1996 Internal Medicine House Staff Conference, Metropolitan Hospital, “Multiple Endocrine Neoplasia Type 2”
- 1996-2001 Contributor, American Board of Internal Medicine Certifying Examination
- 1997 Presentation at The 19th Meeting of the American Society for Bone and Mineral Research, “Bone Mineralization And Morphology In The HcB/Dem Recombinant Congenic Mouse Strains” by Martin, M.L. Martin, R.S. Miller, R.S. Bockman, and R.D. Blank.
- 1997-1999 Consultant, Geo-Med Pharmaceuticals, 39300 Civic Center Dr., Suite 260, Fremont, CA 94538
- 1998 Discussion Group Leader, Columbia University Summer Undergraduate Research Program
- 1998 Presentation at The 2nd Joint Meeting of the American Society for Bone and Mineral Research and the International Bone and Mineral Society, “Genes Affecting Biomechanical Performance Segregate in the HcB/Dem Recombinant Congenic Mouse Strains” by S. Villagomez, T. Young, Y. Yershov, J. Oldan, R. Haber, D. Jethanamest, M. Sobel, P. Demant, R.S. Bockman, and R.D. Blank
- 1999 Endocrinology Grand Grand Rounds, St. Vincent’s Hospital, New York, NY “Genetics of Bone Strength in HcB/Dem Recombinant Congenic Mice”
- 1999 Presentation at 7th Annual Summer Training Course in Experimental Aging, NIA/U. of Michigan, Sponsors, “Genetic Analysis of Bone Strength in HcB/Dem Recombinant Congenic Mice” by Y. Yershov, T.H. Baldini, E.S. Paschalis, R.S. Bockman, and R.D. Blank
- 1999 Presentation at The 21st Meeting of the American Society for Bone and Mineral Research, “Biomechanical Performance of HcB/Dem Recombinant Congenic Mice as Determined by 3-Point Bend Testing” by

Y. Yershov, T. Baldini, R. Gupta, E.P. Paschalis, R.S. Bockman and R.D. Blank

- 1999 Presentation at The 21st Meeting of the American Society for Bone and Mineral Research, “Localization of Genes Contributing to Failure Load And Related Phenotypes in HcB/Dem Recombinant Congenic Mice” by R.D. Blank, Y. Yershov, T.H. Baldini, P. Demant, and R.S. Bockman
- 1999 Presentation at The VIIIth Congress of the International Society of Bone Morphometry, “Bone Phenotypes of the HcB/Dem Recombinant Congenic Mice” by Y. Yershov, E.P. Paschalis, R. Gupta, T.H. Baldini, M.G.E. Peterson, R.S. Bockman, P. Demant, and R.D. Blank
- 1999 Endocrinology Research Conference, Creighton University
- 2000 Endocrinology Grand Rounds, Columbia University College of Physicians and Surgeons
- 2000 Endocrinology Grand Rounds, University of Wisconsin Medical School
- 2000 Presentation at the 22nd Meeting of the American Society for Bone and Mineral Research, “Emergence of Fracture Resistant *Cola2^{oim/oim}* Mice” by N.P. Camacho, E.A. McCarthy, S. Jain, R. Gupta, R. Wurzbarger, C.L. Raggio, and R.D. Blank
- 2000 Presentation at the 22nd Meeting of the American Society for Bone and Mineral Research, “Bone Strength Variability in Mice Heterozygous for the *Cola2^{oim}* Mutation” by J.A. Wexler, R. Gupta, Y. Yershov, A. Kumar, and R.D. Blank
- 2001 Search Committee, St. Giles Chair in Musculoskeletal Genetics, Hospital for Special Surgery
- 2001 Presentation to Osteoporosis Support Group, Madison, WI, Relationship of Osteoporosis and Bone Biomechanical Performance
- 2001 Presentation at the 23rd Meeting of the American Society for Bone and Mineral Research, “Geometry as a Heritable Determinant of Bone Strength” by D.H. Goddard, C. Goddard, J. Hecht, E. Kim, E.R. Myers, R.D. Blank, and R.S. Bockman
- 2001 Presentation at the 23rd Meeting of the American Society for Bone and Mineral Research, “Use of Representational Difference Analysis to Identify Candidate RFLPs Linked to Modifiers of the Murine *Cola2^{oim/oim}* Osteogenesis Imperfecta Phenotype” by A.N. Patani, A. Pincavage, J. Bankston, N.P. Camacho, and R.D. Blank

- 2001 Presentation at NIH/Children's Brittle Bone Foundation Osteogenesis Imperfecta Workshop, "Genetic Modifiers of Disease Severity in Murine Osteogenesis Imperfecta" by R.D. Blank
- 2001 "Principles of Genetics for Orthopedists," Orthopedics Residency Basic Science Curriculum, Hospital For Special Surgery
- 2002 "Genotypic and Phenotypic Analysis of Mouse Bone," Presentation at NIH-OLAW/C. L. Davis, DVM Foundation co-conferences on Care and Characterization of Genetically Engineered Mice and Comparative Pathology in Functional Genomics.
- 2002 "Genetics of Bone Strength in Mice," Presentation at Marshfield Clinic Research Conference.
- 2002 "Genetic Variability of Bone Strength: Lessons from Murine Osteogenesis Imperfecta," Presentation at the Wisconsin Bone Club.
- 2002 Member, Special Study Section to review Program Project Application on Biology of *Lrp5*, submitted by Creighton University, RR Recker, PI.
- 2002 Reviewer of NASA Research Grant Application FSB-0073-0038, The Genetic Basis Of The Loss Of Musculo-Skeletal Tissue During Weightlessness: Towards The Identification Of Individuals That Are At Greatest Risk, PI S. Judex
- 2002-2004 Board of Directors, University Ave. Discovery Center
- 2002 "Fragility Fractures," Presentation at Mercy Hospital, Janesville, WI
- 2003 "Fragility Fractures and Gender Differences in Bone," Presentation for prostate cancer support group at American Cancer Society's Madison office
- 2003 "Genetic Analysis of Fracture Susceptibility," Endocrinology Research Conference, Ohio State University, Columbus, OH
- 2003 "A Man with Mosaic Klinefelter's Syndrome," Presentation to the Wisconsin Bone Club, Green Lake, WI
- 2003 Reviewer for Biomedical and Bioengineering Research Council, UK
- 2003-2006 Board of Directors, Advances in Mineral Metabolism
- 2003-2009 ASBMR representative to FASEB Research Conference Advisory Board
- 2003 "Supermice: Mapping Modifiers of *Colla2^{oim}*," Presentation for the 2003 Osteogenesis Imperfecta Workshop, New York, NY

- 2003 Site visitor, NIH review of Indiana University General Clinical Research Center, 11/12-11/13/2003
- 2003 “Thyroid Disease for the Primary Care Practitioner,” CME Conference at Rockford Memorial Hospital, Rockford, IL
- 2004-2012 Reviewer for American Federation for Aging Research, Research Grants Program
- 2004 Reviewer for NCI-OSB-AVON “Progress for Patients” SPORE Supplemental Awards in Breast Cancer Program.
- 2004 Reviewer for Medical Research Council, UK
- 2005 “Bones and Teeth in Mice Harboring the *Colla2^{oim}* Mutation,” Hospital for Special Surgery, Metabolic Bone Disease Research Conference
- 2005 Session Chair, “Bone Quality” at Advances in Mineral Metabolism/Haddad Young Investigators’ 20th Annual Meeting, Snowmass, CO 3/28-4/2
- 2005 “Highlights of Skeletal Genetics,” Wisconsin Bone Club 10th Annual Meeting, Green Lake, WI 4/29-4/30
- 2005 “Genetics of Bone Strength in Mice” Kavli Institute for Theoretical Physics (UC Santa Barbara) Conference on “Friction, Fractures, and Earthquakes,” 8/15-8/19
- 2005-2008 Publications Committee, American Society for Bone and Mineral Research
- 2006 “Bones and Teeth in *Colla2^{oim}* Mice” Indiana University Bone Club
- 2006 Reviewer for the Medical Research Council, UK
- 2006-present Editorial Board, *Endocrine Today*
- 2007 Content reviewer for the International Society for Clinical Densitometry Annual Meeting
- 2007 Presentation at Wisconsin Bone Club, Green Lake, WI, “Hypercalcemia Resulting from a Granulomatous Skin Rash,”
- 2007-present Chair, FASEB Research Conferences Advisory Board
- 2008 Presentation at State of the Science Stress Fracture Research Conference, “Genetic Predisposition to Skeletal Injury”

- 2008 Presentation at the Royal Veterinary College, London, UK, “Quantitative Trait Loci for Bone Biomechanical Performance in Mice”
- 2008 Presentation at Advances in Mineral Metabolism meeting, “*T* Mutations Contribute to Varied Congenital Vertebral Malformations”
- 2008 Presentation at Wisconsin Bone Club, Green Lake, WI, “Fibrous Dysplasia?”
- 2008 Reviewer for the Saudi Arabian Medical Research Council
- 2008 Presentation at Marshfield Clinic Research Foundation, “Quantitative Trait Loci for Bone Biomechanical Performance in Mice”
- 2008-2013 Personalized Medicine Oversight Committee, Marshfield Clinic Research Foundation
- 2008-2014 Editorial Board, *Endocrine Research*
- 2008-2009 International Society for Clinical Densitometry Web Committee
- 2009 Invited Speaker, International Society for Clinical Densitometry Annual Meeting. “Cellular Targets for Future Osteoporosis Drugs.” (3/13/09)
- 2009 Invited Speaker, International Society for Clinical Densitometry Annual Meeting. “Mechanism Matters: Tailoring Therapy to Pathophysiology.” (3/13/09)
- 2009 Peer Review, National Institutes of Health ZDE JH24, Facebase Consortium RFA DE09-003, Functional genomics of Craniofacial Development and Disease
- 2009-present Editorial Board, *Clinical Reviews in Bone and Mineral Metabolism*
- 2009-2016 Science Advisory Committee (chair), International Society for Clinical Densitometry
- 2009 Peer Review, National Institutes of Health, *ad hoc* review of ARRA applications
- 2009-2010 Peer Review, National Institutes of Health, special emphasis panel ZAG1 ZIJ-9, “Genetics of Osteoporosis” Program Project
- 2010 Peer Review, National Institutes of Health, NAME Study Section
- 2010 Peer Review, US-Israel Binational Research Grants
- 2010 Peer Review, Singapore Medical Research Council

- 2010 Peer Review, Department of Defense, Congressionally Directed Military Research Program
- 2010 Expert Panelist, International Society for Clinical Densitometry and International Osteoporosis Foundation Position Development Conference on Refining FRAX model.
- 2011-present Editorial Board, *Translational Research*
- 2011 Peer Review, International Society for Clinical Densitometry, Young Investigator Awards (chair)
- 2011 Peer Review, Department of Defense, Congressionally Directed Military Research Program (chair, molecular pathogenesis of osteoporosis panel and chair, molecular therapies for osteoporosis panel)
- 2011 Endocrinology Grand Rounds, Medical College of Wisconsin (11/3/2011) "Pleiotropic Effects of Endothelin Signaling in Mice."
- 2011 Research Conference, Marshfield Clinic + Marshfield Clinic Research Foundation (11/16/2011) "Pleiotropic Effects of Endothelin Signaling in Mice."
- 2012 Aspen Center for Physics workshop on Pattern Formation in Biological Systems, "Loading-Induced Modeling in Bones and Arteries" (1/4/2012)
- 2012 Peer Review, ZDE1 MH 13, Facebase Revision Application 3 U01 DE020052-04S1
- 2012 International Society for Clinical Densitometry Annual Meeting, "Office Hours Workshop" (3/9/2012)
- 2012 Marquette General Health System Conference on New Directions in Oncology, "Differentiated Thyroid Cancer" (5/4/2012)
- 2012 Peer Review, Department of Defense, Congressionally Directed Military Research Program (chair, molecular therapies for osteoporosis panel, and reviewer, clinical trials panel)
- 2012-2015 American Society for Bone and Mineral Research, Finance Committee
- 2013 Peer Review, National Institutes of Health, ZRG1-MOSS-C02
- 2013 Medical College of Wisconsin and MD Anderson Cancer Center Endocrine Surgery Symposium, "Parathyroid Hormone and Bone"
- 2013 University of Wisconsin Osteoporosis Symposium, "Fracture Risk Calculators" and "Phosphate Homeostasis and Renal Bone Disease"

- 2013 Presentation at the American Society for Bone and Mineral Research annual meeting, “Whole Exome Sequencing Reveals a Pathogenic Mutation in a Kindred with Congenital Kyphosis and Anterior Fontanelle Patency”
- 2014 University of Wisconsin Endocrinology Fellows’ Teaching Conference, “Metabolic Bone Diseases other than Osteoporosis”
- 2014, 2015 Judge, American Society of Human Genetics High School Essay Contest
- 2014, 2015 Peer Review, American Heart Association Collaborative Science Award
- 2015 Program Chair, International Society for Clinical Densitometry Annual Meeting
- 2015 Expert Panelist, International Society for Clinical Densitometry Position Development Conference
- 2015 Clinical Workshop, International Society for Clinical Densitometry Annual Meeting, “Neurological Disease and Skeletal Fragility”
- 2015 Clinical Workshop, International Society for Clinical Densitometry Annual Meeting, “Breast Cancer and Skeletal Fragility”
- 2015 US Bone and Joint Initiative, “The Low Trauma Fracture Treatment Gap”
- 2015 Milwaukee Academy of Medicine, “The Women’s Health Initiative and the Limits of Utilitarianism”
- 2015 Wisconsin Bone Club, “Skeletal Fragility in a Woman with Breast Cancer”
- 2016-present Editorial Board, *Osteoporosis International*
- 2016-2017 Vice President, International Society for Clinical Densitometry
- 2016-2019 Advocacy and Science Policy Committee, American Society for Bone and Mineral Research
- 2016-present Peer Review, American Heart Association Basic Science Panel RCB1
- 2017-present Editorial Board, *Journal of Bone and Mineral Research* and *JBMR Plus*
- 2017 Meeting Co-Chair, National Osteoporosis Foundation-International Society for Clinical Densitometry Joint Annual Meeting
- 2017 Invited participant, National Institute for Neurological Diseases and Stroke, “Increasing Transparency in Scientific Meeting Presentations.”

- 2017 Peer Review, National Science Foundation, “Smart and Connected Health” P171028
- 2017 “Correlation Functions to Assess Bone,” Oral presentation at “Different is Different,” Aspen Center for Physics
- 2017 Peer Review, University of Wisconsin Institute for Clinical and Translational Research Pilot Grant Program
- 2017-2018 President Elect, International Society for Clinical Densitometry
- 2017 “Notable Articles of the Past Year,” presentation at the Milwaukee Diabetes Symposium
- 2017 “Bone Quality,” presentation at “The Bare Bones of Osteoporosis” CME program
- 2017 “Endothelin-Mediated Osteosclerosis in Meningioma,” presentation at Wisconsin Bone Club
- 2017 “Endothelin Signaling in Bone,” presentation at Wisconsin Bone Club
- 2017-present International Osteoporosis Foundation Council of Scientific Advisors
- 2017-present Academic Editor, *PLoS One*
- 2018 Meeting Chair, International Society for Clinical Densitometry Annual Meeting
- 2018-present President, International Society for Clinical Densitometry
- 2018-present ASBMR Secondary Fracture Prevention Task Force Member
- 2018 “Notable Articles of the Past Year,” presentation at the Milwaukee Diabetes Symposium
- 2018 “Intra-Familial Variability of Osteogenesis Imperfecta,” presentation at Wisconsin Bone Club
- 2018-present Editor, *Bone*

Reviewer for: American Journal of Medicine, Arthritis & Rheumatism, BMC Medical Genetics, Bone, Calcified Tissue International, Cancer Convergence, Endocrine Practice, Clinical Medicine and Research, Endocrine Research, Endocrinology, Human Heredity, Journal of Clinical Investigation, Journal of Experimental Medicine, Journal of Clinical Endocrinology and Metabolism, Journal of Clinical Densitometry, Journal of Bone and Mineral Research, Journal of Orthopedic Research, Lancet Case Reports, Mammalian Genome, Nature, Nature Scientific Reports, New England Journal of Medicine, Nutrition Research, Osteoporosis International, Pharmacological Reviews, Physiological Reviews, PLoS One, Translational Research

Students/Technicians

Melissa L. Martin (technician, 1995-1998) Weill Medical College of Cornell University, Class of '02

Russell Miller (undergraduate summer student, 1996 and independent study student, spring 1997) Columbia University College of Physicians and Surgeons, Class of '01

Seagram Villagomez (undergraduate summer student, 1997) New York University School of Medicine, Class of '03

Todd Young (medical summer student, 1997) New York Medical College, Class of '00

Meredith Sobel (undergraduate summer student, 1997) Arthur Andersen & Co. Consulting

Rajarsi Gupta (undergraduate summer student, 1997-1998, technician 1999-2000) MD, PhD student, University of Illinois/Urbana-Champaign, Class of '07

Yevgeniy Yershov (technician, 1997-1999) State University of New York at Stony Brook School of Medicine, Class of '03

Hyung Moon (high school Intel science talent search student, 1997-1998 academic year) Carnegie-Mellon University, Class of '03

Jorge Oldan (undergraduate summer student, 1998) Columbia University, Class of '01

Robin Haber (undergraduate summer student, 1998) Columbia University, Class of '01

Daniel Jethanamest (undergraduate summer student, 1998) NYU School of Medicine, Class of '06

Abhisek Kumar (undergraduate independent study student, 1998-1999 academic year) New York University, Class of '99, Project Manager, Bigfoot Communications, Inc.

Angela Sofronis (high school Intel talent search student, 1998-1999 academic year) Hofstra University, class of '03

Jason Wexler, MD (endocrinology fellow, 1998-2000) Assistant Clinical Professor, Endocrinology Section, University of California at Davis School of Medicine

Vaibhav Mangrulkar (medical summer student, 2000) New Jersey University of Medicine and Dentistry, class of '02.

Yun (Stella) Xu (high school Intel talent search student, 2000-2001 academic year) Bronx High School of Science Class of '01, Barnard College Class of '05

John Bankston (technician, 2000) employed at MIT, laboratory of Vernon Ingram, beginning PhD program in Biochemistry and Biophysics at Columbia University 9/03

Anand Patani (2001) Medical College of Wisconsin, class of '05

Gloria Estella Lopez-Franco, DDS (research assistant and associate, 2001-2005) Marquette University Advanced Preparation in General Dentistry Program.

Sarah Amend, (undergraduate student, fall 2001) University of Wisconsin, class of '05

Lade Oduala (undergraduate student, fall 2001) University of Wisconsin, class of '05

Joel Franco (undergraduate student, fall 2001 and spring 2002)

Emily Chao (undergraduate student, spring 2002; student hourly, summer 2002 and 2003; independent study student 02-03 and 03-04 years) University of Wisconsin, class of '05

Alexandra Anderson (medical student, student hourly summer 2002)

Tyrrina O'Neill (undergraduate student, fall 2002-2007)

Jonathan Lynch Vu (undergraduate student, fall 2002-6)

Kurt Prins (undergraduate student, fall 2002)

Kathleen Agard (undergraduate student, 2003)

Stephanie Wallace (undergraduate student, 2003)

Samantha Conroy (high school student, 2003) NASA-Sharp Program

Andrew Young Chang (undergraduate student, 2003-2004)

Dean Tibouris (undergraduate student, 2004-2005)

Lauren Hensley (undergraduate student, fall 2003-2006)
Neema Saless (PhD student, 2/1/04-9/1/08) Cellular and Molecular Biology Program, PhD awarded
Allison Rao (high school student, 2004) Research Apprentice Program
Thae Yang, (undergraduate student)
Julie Ann Beans, (undergraduate student, 2005-2007)
Khalid Ghazi Abdul Raheem, (undergraduate student, 2005-2008)
Katherine Leigh Kozarek, (undergraduate student, 2005-2007)
Meghan Houlihan, (undergraduate student, 2006-2008)
Shaan Sadhakaran, (undergraduate student, 2006-2008)
Aadil Saeed Ahmed, (undergraduate student, 2006-2008)
Sang Han, (undergraduate student, 2006-2008)
Brandi Dupree, (high school student, 2007), Research Apprentice Program
Robbie Kattapuram, (undergraduate student, 2007-2008)
Sven Olson, (undergraduate student, 2007-2008)
In Kyu Han (undergraduate student, 2008-2011)
Kelsey Hodge (undergraduate student, 2008-2009)
Glenn Macapaguay (undergraduate student, 2009-2012)
Derek Wilson (undergraduate student, 2009), Integrated Biological Sciences Summer Research Program
Dionna James-Jones (high school student, 2009) Research Apprentice Program
Reid Woolworth (undergraduate student, 2009) Medical Scholars Summer Research Program
Seung Pyo Han (undergraduate student, 2009-2010)
Katherine Lazarz (undergraduate student, 2009-2010)
Rachel Garbo (undergraduate student, 2009-2012)
Samantha Skavicus (undergraduate student, 2009-2012)
Jasmin Kristianto (graduate student, 2010-2015, Endocrine & Reproductive Physiology, postdoctoral fellow Medical College of Wisconsin 2015-present)
Jacqueline Fischer (undergraduate student, 2010-2013)
John Floberg (PhD student, thesis committee member)
Philip Mudd (PhD student, thesis committee member)
Shaina Desai (undergraduate student, 2010), Integrated Biological Sciences Summer Research Program
Mital Patel (undergraduate student, 2010-2013)
Keith Hanson (PhD student, thesis committee member)
Jeffrey Jensen (PhD student, thesis committee member)
Michael Johnson (graduate student, 2011-2015, Endocrine & Reproductive Physiology)
Jing Wu (undergraduate student (2011-2013)
Bryan Ampey (graduate student, thesis committee member)
Kathryn Konicke (undergraduate student, 2011-2013, technician 2013-2014)
Brennan Leong (undergraduate student, 2011-2013)
Hyosuk Cho (undergraduate student, 2011-2013)
Anne Gustavson (undergraduate student, 2012-2013)
Walter Bialkowski (graduate student Marquette University, thesis committee, 2013-present)
Jeyantt Sankaran (graduate student Stony Brook University, thesis committee, 2013-2016)
Xiaohu Wang (lab manager 2014-present)
Anna McCormick (maternal-fetal medicine fellow, Medical College of Wisconsin, research mentor)

II. BIBLIOGRAPHY

A. Research Articles

Blank, R.D. and D.B. Wilson (1982) Isolation and Characterization of a 2000 bp Derivative of pBR 322. *Plasmid* **7**: 287.

Blank, R.D., G.R. Campbell, and P. D'Eustachio (1986) Possible Derivation of the Laboratory Mouse Genome from Multiple Wild *Mus* Species. *Genetics* **114**: 1257.

Blank, R.D., G.R. Campbell, M. Pollak, and P. D'Eustachio (1988) Bayesian Multilocus Linkage Mapping. *Current Topics in Microbiology and Immunology* **137**: 25.

Blank, R.D., G.R. Campbell, A. Calabro, and P. D'Eustachio (1988) A Linkage Map of Mouse Chromosome 12: Localization of Igh and Effects of Sex and Interference on Recombination. *Genetics* **120**: 1073.

Campbell, G.R., K. Zimmerman, R.D. Blank, F.W. Alt, and P. D'Eustachio (1989) Chromosomal Location of N-myc and L-myc Genes in the Mouse. *Oncogene Research* **4**: 47.

Blank, R.D., J. Eppig, F.T. Fiedoreck, Jr., W. Frankel, J.M. Friedman, K. Huppi, I. Jackson, and B. Mock (1991) Report on Mouse Chromosome 4. *Mammalian Genome* **2**: S51.

Abbott, C. M., R. Blank, J. T. Eppig, F. T. Fiedoreck, Jr., W. Frankel, J. M. Friedman, K.E. Huppi, I. Jackson, B. A. Mock, J. Stoye, and R. Wiseman (1992) Mouse Chromosome 4. *Mammalian Genome* **3**: S55.

Abbott, C. M., R. Blank, J.T. Eppig, F.T. Fiedoreck, Jr., W. Frankel, J. M. Friedman, K. E. Huppi, I. Jackson, B. A. Mock, J. Stoye, and R. Wiseman (1993) Mouse Chromosome 4. *Mammalian Genome* **4**: S58.

Blank, R.D., C.A. Sklar, and M.L. Martin (1996) Denaturing Gradient Gel Electrophoresis to Diagnose Multiple Endocrine Neoplasia Type 2. *Clinical Chemistry* **42**: 598-603.

Blank, R. D., C. A. Sklar, A. B. Dimich, M.P. LaQuaglia, and M. Brennan (1996) Clinical Presentations and *RET* Protooncogene Mutations in 7 Multiple Endocrine Neoplasia Kindreds. *Cancer* **78**: 1996-2003.

Giampietro, P. F., C. L. Raggio, and R. D. Blank (1999) Synteny-Defined Candidates for Congenital and Idiopathic Scoliosis. *Am. J. Med. Genet.* **83**: 164-177.

Coppersmith, S. N., R. D. Blank, and Leo P. Kadanoff (1999) Analysis of a population genetics model with mutation, selection, and pleiotropy. *J. Stat. Phys.* **97**:429-457.

Boskey, A.L., R.D. Blank, and S.B. Doty (2001) Vitamin C Sulfate Inhibits Mineralization in Chondrocyte Cultures. *Matrix Biol* **20**: 99-106.

Yershov, Y., T.H. Baldini, S. Villagomez, T. Young, Martin, M. L. Martin, M.G.E. Peterson, R. S. Bockman, and R.D. Blank (2001) Bone Strength and Related Phenotypes in HcB/Dem Recombinant Congenic Mice. *J Bone Miner. Res.* **16**: 992-1003.

Wurzburger, R., R. Gupta, A.P. Parnassa, S. Jain, J.A. Wexler, J.-L. Chu, K.B. Elkon, and R.D. Blank (2003) Utility of GC Clamps In Mutation Detection By Denaturing High Performance Liquid Chromatography. *Clin Med Res* **1**:111-118.

Blank, R.D., T.H. Baldini, M. Kaufman, S. Bailey, R. Gupta, Y. Yershov, A.L. Boskey, S.N. Coppersmith, P. Demant, and E.P. Paschalis (2003) Collagen Cross-Link Maturity and Crystallinity Indices Differ Markedly in Recombinant Congenic Mice Having Divergent Calculated Bone Tissue Strength. *Connect Tissue Res* **44**:134-142.

Lopez-Franco, G.E., T.K. O'Neil, S.J. Litscher, M.J. Urban-Piette, and R.D. Blank (2004) Accuracy and Precision of PIXImus Densitometry for *ex vivo* Mouse Long Bones: Comparison of Technique and Software Version. *J Clin Densitom* **7**: 326-333.

Lopez-Franco, G.E., M.J. Urban-Piette, Litscher, S., T.K. O'Neil, P. Demant, and R.D. Blank (2005) Dual Energy X-Ray Absorptiometry of *ex vivo* HcB/Dem Mouse Long Bones: Left Are Denser Than Right. *Calcif Tissue Internat* **76**: 26-31.

Hansen, K.E., N. Binkley, R. Christian, N. Vallarta-Ast, D. Krueger, M.K. Drezner, R.D. Blank (2005) The Inter-Observer Reproducibility of Criteria for Vertebral Body Exclusion. *J Bone Miner Res* **20**: 501-508.

Lopez-Franco, G.E., A. Huang, N.P. Camacho, and R.D. Blank (2005) Dental Phenotypes of Homozygous and Heterozygous *Colla2^{oim}* Mice. *Bone* **36**:1039-1046.

Giampietro, P.F., C.L. Raggio, C.E. Reynolds, S.K. Shukla, E. McPherson, N. Ghebranius, F.S. Jacobsen, V. Kumar, T. Faciszewski, R.M. Pauli, K. Rasmussen, J.K. Burmester, C. Zaleski, S. Merchant, D. David, J.L. Weber, I. Glurich, R.D. Blank (2005) An Analysis of *PAX1* mutations in the Development of Vertebral Malformations. *Clin Genet* **68**:448-453.

Blank, R.D., D.G. Malone, R.C. Christian, N.L. Vallarta-Ast, D.C. Krueger, M.K. Drezner, N. C. Binkley, K.E. Hansen (2006) Patient Variables Impact Lumbar Spine Dual Energy X Ray Absorptiometry Precision. *Osteopor Int* **17**:768-74.

Ghebranius N., J.K. Burmester, I. Glurich, E. McPherson, L. Ivacic, J. Kislow, K. Rasmussen, V. Kumar, C.L. Raggio, R.D. Blank, F.S. Jacobsen, T. Faciszewski, J.E. Womack, P.F. Giampietro (2006) Evaluation of *SLC35A3* as a Candidate Gene for Human Vertebral Malformations. *Am J Med Genet. A* **140**:1346-8.

Lopez Franco, G.E, A. Huang, N. Pleshko Camacho, D.S. Stone, and R.D. Blank (2006) Increased Young's Modulus and Hardness of *Colla2^{oim}* Dentin. *J Dent Res* **85**:1032-6.

Giampietro, P.F., C. L. Raggio, C. Reynolds, N. Ghebraniou, J.K. Burmester, I. Glurich, K. Rasmussen, E. McPherson, R.M. Pauli, S.K. Shukla, S. Merchant, F.S. Jacobsen, T. Faciszewski, and R. D. Blank (2006) DLL3 as a Candidate Gene for Vertebral Malformations. *Am J Med Genet A* **140**:2447-53.

Hansen K. E., N. Binkley, R. D. Blank, D. C. Krueger, D. G. Malone, R. C. Christian, and S. Baim (2007) An Atlas Improves Interobserver Agreement Regarding Application of the ISCD Vertebral Body Exclusion Criteria. *J Clin Densitom* **10**:359-364.

Ghebraniou, N., C. L. Raggio, R. D Blank, E. McPherson, J. K. Burmester, L. Ivacic, K. Rasmussen, J. Kislow, I. Glurich, F. S. Jacobsen, T. Faciszewski, R. Pauli, O. Boachie-Adje, and P. F Giampietro (2007) Lack of evidence of WNT3A as a candidate gene for congenital vertebral malformations. *Scoliosis* **2**:13.

Ghebraniou, N.; R. D. Blank, .C. L. Raggio, J. Staubli; E. McPherson; L. Ivacic, K. Rasmussen, F. S. Jacobsen, T. Faciszewski, J. K. Burmester, R. M. Pauli, O. Boachie-Adjei, I. Glurich, and P. F. Giampietro (2008) A Missense T (Brachyury) Mutation Contributes to Vertebral Malformations *J Bone Miner Res* **23**:1576-83.

Saless, N., S. J. Litscher, G. E. Lopez Franco, M. J. Houlihan, S. Sudhakaran, K. Abdul-Raheem, T. K. O'Neil, R. Vanderby, P. Demant, and R. D. Blank (2009) Quantitative Trait Loci for Biomechanical Performance and Femoral Geometry in an Intercross of Recombinant Congenic Mice: Restriction of the *Bmd7* Candidate Interval. *FASEB J* **23**:2142-54.

Raggio, C. L., P. F. Giampietro, S. Dobrin, N. Ghebraniou, J. L. Weber, and R. D. Blank (2009) A Novel Locus for Adolescent Idiopathic Scoliosis on Chromosome 12p. *J Orthopaed Res* **27**:1366-72.

Jones, A. N., R. D. Blank, M. J. Lindstrom, K. L. Penniston, and K. E. Hansen (2010) Adjustment for Body Mass Index and Calcitropic Hormone Levels Improves the Diagnostic Accuracy of the Spot Urine Calcium to Creatinine Ratio. *Osteopor Int* **21**:1417-25.

Saless, N., G. E. Lopez Franco, S. J. Litscher, R.S. Kattappuram, M. J. Houlihan, R. Vanderby, P. Demant, and R. D. Blank (2010) Linkage mapping of femoral material properties in a reciprocal intercross of HcB-8 and HcB-23 recombinant congenic mouse strains. *Bone* **46**:1251-9.

Lopez Franco G.E., R.D. Blank, and M.P.Akhter (2011) Intrinsic material properties of cortical bone. *J Bone Miner Metab* **29**:31-6.

Saless, N., S. J. Litscher, R. Vanderby, P. Demant, and R. D. Blank (2011) Linkage mapping of principal components for femoral biomechanical performance in a reciprocal HCB-8 x HCB-23 intercross. *Bone* **48**:647-53.

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