

Curriculum Vitae

Bart O. Williams

Education

- 1996 PhD, Massachusetts Institute of Technology, Cambridge, MA;
Course 7 (Biology), Tyler Jacks, Advisor
- 1991 BS, Carroll College, Waukesha, WI;
Biology and Chemistry

Research Positions

- 2014- Director, Center for Cancer and Cell Biology, VARI, Grand Rapids, MI
- 2014- Director, Program for Skeletal Disease and Tumor Microenvironment, VARI,
Grand Rapids, MI
- 2013- Professor, VARI, Grand Rapids, MI
- 2012-2014 Director, Center for Skeletal Disease and Tumor Metastasis, Grand Rapids, MI
- 2010-2012 Director, Center for Skeletal Disease Research, Grand Rapids, MI
- 2010-2013 Associate Professor, VARI, Grand Rapids, MI
- 2006-2010 Senior Investigator, VARI, Grand Rapids, MI
- 1999-2006 Investigator, Van Andel Research Institute (VARI), Grand Rapids, MI
- 1996-1999 Damon Runyon-Walter Winchell Post-doctoral Fellow, Varmus Laboratory,
National Cancer Institute, Bethesda, MD (Harold Varmus, Advisor)
- 1991-1996 Graduate Student, MIT Center for Cancer Research, Cambridge, MA (Tyler
Jacks, Advisor)
- 1990-1991 Undergraduate Intern, Medical College of Wisconsin, Department of
Biochemistry, Milwaukee, WI (Arthur L. Haas, Advisor)
- 1989-1990 Undergraduate Intern, Carroll College, Waukesha, WI (Leslie D. Zettergren,
Advisor)

Honors, Awards, and Prizes

- 2004 Most Outstanding Abstract Award, American Society for Bone and Mineral
Research Annual Meeting, Seattle, WA
- 1996-1999 Damon Runyon-Walter Winchell Cancer Research Fund Post-doctoral
Fellowship
- 1996 Young Investigator Travel Grant Award, American Association of Cancer
Research-Swiss Institute for Experimental Cancer Research
- 1991 Most Outstanding Biology Student, Carroll College, Waukesha, WI
- 1990 & 1991 USA Today's All-USA Academic Third Team

Membership and Service

Societies

2000-	American Association for Cancer Research (AACR)
2015-	American Association for the Advancement of Science (AAAS)
2001-	American Society for Biochemistry and Molecular Biology (ASBMB)
2004-	American Society for Bone and Mineral Research (ASBMR)
2017-	American Society for Investigative Pathology (ASIP)
2005-	International Bone and Mineral Society (IBMS) –now IFMRS
2006-	Advances in Mineral Metabolism (AIMM)
2014-	Osteogenesis Imperfecta Foundation (OIF)

Committee and Scientific Society Service (National and International)

2016	Co-Moderator, ASBMR Annual Meeting, Session on Preclinical Models: Genetics and Pharmacology
2016	Abstract Reviewer, ASBMR Annual Meeting
2016	Harold Frost Young Investigator Award Review Committee, ASBMR
2015	Abstract Reviewer, ASBMR Annual Meeting
2014-	ASBMR Development Work Group
2014-	ASBMR Development Work Group: Private and Corporate Foundations Subgroup
2014	Abstract Reviewer, ASBMR Annual Meeting
2014	Reviewer, ASBMR Young Investigator Travel Award Applications
2013	ASBMR Speed Networking Event, ASBMR Annual Meeting
2013	ASBMR Networking Breakfast, ASBMR Annual Meeting
2013	Late-breaking Abstract Reviewer, ASBMR Annual Meeting
2013	Participant, NIAMS Roundtable Discussion on Anabolic Therapies and Strategies to Regenerate the Musculoskeletal System
2013	Abstract Reviewer, ASBMR Annual Meeting
2013	Category Reviewer, ASBMR Annual Meeting
2013	Section Editor, Current Pathobiology Reports (Volume 2)
2012-	Member, FASEB NIH Issues Subcommittee
2012-	Member, ASBMR Advocacy and Science Policy Committee
2012	Abstract Reviewer, European Symposium on Calcified Tissues
2012	ASBMR Networking Breakfast, ASBMR Annual Meeting
2012	ASBMR Speed Networking Event, ASBMR Annual Meeting
2012	Co-Moderator, ASBMR Annual Meeting, Session on Genetic Disorders of Bone and Mineral Metabolism
2012	Poster Competition Judge, ASBMR Annual Meeting
2011	Abstract Reviewer, European Symposium on Calcified Tissues
2011	Category Reviewer, ASBMR Annual Meeting
2011	ASBMR President's Poster Competition Judge, ASBMR Annual Meeting
2010	Abstract Reviewer, European Symposium on Calcified Tissues
2009-2010	Member (ad hoc), ASBMR Publications Committee

2009 Abstract Reviewer, ASBMR Annual Meeting
 2009 Category Reviewer, ASBMR Annual Meeting
 2009 Co-Chair, Plenary Session on All Roads Wnt to the Nucleus, ASBMR Annual Meeting
 2009 Co-Moderator, ASBMR Annual Meeting, Session on Growth Factors, Cytokines, and Immunomodulators
 2008 Abstract Reviewer, ASBMR Annual Meeting
 2008 Co-Moderator, ASBMR Annual Meeting, Session on Cancer and Bone I
 2007 Abstract Reviewer, ASBMR Annual Meeting
 2007, 2011 External Advisory Board Member, Program Project on Prostate Cancer Skeletal Metastasis (University of Michigan, Evan Keller, PI)
 2004 External Remote Reviewer, University of Melbourne Doctoral Candidate Thesis
 2001-2002 External PhD Thesis Committee Member, Western Michigan University
 2001 Participant, NCI Progress Review Group Roundtable for Kidney and Bladder Cancer, Preparing for Human Studies Subgroup, Chantilly, VA

Committee work (VAI – excluding VAI Graduate School service which is available upon request)

2016- Chair, VARI/MSU Core Advisory Group for Vivarium, Small Animal Imaging, and CRISPR/Cas9 Technology
 2016- Member, VARI/MSU Core Advisory Group for Pathology and Biorespository
 2014- VARI Leadership Reorganization Working Group
 2014 VARI Center for Epigenetics Faculty Search Committee, Chair
 2013 VAI Space Task Force
 2013- VAI Information Technology Project Steering Committee
 2013 VARI Center for Translational Medicine Faculty Search Committee
 2013 VARI Strategic Faculty Recruitment Committee
 2013 VAI-wide Safety Committee
 2012- VARI Advisory Committee to the Director
 2012-2014 VARI Council for Research Affairs (Chair, 2013)
 2012- VAI Radiation Safety Committee
 2012- VAI Executive Crisis Management Team
 2012- VARI Han-mo Koo Lectureship Series Selection Committee
 2012 Center for Skeletal Disease Faculty Search Committee, Chair
 2009-2012 VARI Executive Committee
 2006 VAI Outside Activities Committee
 2005-2007 VARI Xenograft and Monoclonal Antibody IACUC Subcommittee
 2002-2007 VARI Histopathology Core Oversight Committee, Chair (2003-2007)
 2002-2006 VAI Graduate Education Committee (discussed the founding of VAIGS)
 2002-2007 VARI Cytogenetics Core Oversight Committee
 2001-2008 VAI Institutional Animal Care and Use Committee
 2001-2007 VARI Animal Users Core Oversight Committee, Chair (2003-2007)

2001-2004 VARI Space Planning Committee, Chair (2001-2004)
 2000-2006 VARI Seminar Series, Organizer
 2000-2001 Michigan State University All University Committee on Animal Care and Use
 (VARI Representative)

Scientific service

Editorial Board Service

2003-2008; 2015- Editorial Board, Journal of Biological Chemistry
 2013- Editorial Board, Bone Research
 2012- Editorial Board, PLOS ONE
 2012- Consulting Editor, Journal of Clinical Investigation
 2011- Editorial Board, GENE
 2011-2014 Editorial Board, Endocrinology
 2009-2014 Editorial Board, Journal of Bone and Mineral Research

Ad hoc Journal Reviewer (since 2000)

American Journal of Human Genetics	Human Molecular Genetics
BioMedCentral – Developmental Biology	Human Mutation
Bone	International Brazilian Journal of Urology
BoneKEy Reports	International Journal of Molecular
Breast Cancer Research	Sciences
British Journal of Pharmacology	International Journal of Oncology
Calcified Tissue International	Journal of the American College of
Cancer Epidemiology, Biomarkers, and	Cardiology
Prevention	Journal of Biological Chemistry
Cancer Research	Journal of Bone and Mineral Research
Cell and Tissue Research	Journal of Cell Biology
Cell Communication and Signaling	Journal of Cellular Biochemistry
Cell Growth and Differentiation	Journal of Clinical Investigation
Cell Reports	Journal of Experimental and Clinical
Cellular and Molecular Life Sciences	Cancer Research
Current Cancer Therapy Reports	Journal of Genetics and Genomics
Developmental Biology	Journal of Nutrigenetics and
Developmental Dynamics	Nutrigenomics
eLIFE	Journal of Orthopaedic Research
Endocrine	Journal of Rare Diseases Research and
Endocrinology	Treatment
European Journal of Human Genetics	Life Sciences
Expert Opinion on Investigational Drugs	Matrix Biology
FEBS Letters	Molecular Cancer Research
Expert Review of Endocrinology &	Molecular and Cellular Biology
Metabolism	Nature
Genome Biology	Nature Communications

Nature Reviews Cancer	Proceedings of the National Academy of Sciences, USA
Nature Reviews Endocrinology	Science
Nature Reviews Rheumatology	Science Translational Medicine
Nature Reviews Urology	The Prostate
Neoplasia	Trends in Genetics
Oncogene	Trends in Molecular Medicine
Osteoporosis International	Veterinary Sciences
PLOS Genetics	
PLOS One	

Study Sections and Grant Review

2017	NIDDK, Special Emphasis Panel ZDK1 GRB-N, P01 Review Panel (July)
2017	Cancer Research UK, Programme Award Reviewer (July)
2017	NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Permanent member, (June)
2017	Children's Tumor Foundation, Member, Grant Review Panel (April)
2017	Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (April)
2017	National Sciences and Engineering Research Council of Canada (NSERC), External Grant Reviewer
2017	NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Permanent member, (February)
2017	Congressional Directed Medical Research Program (CDMRP), Breast Cancer Research Program, Scientist Reviewer (January)
2017	Natural Sciences and Engineering Research Council of Canada, Discovery Grants Program, External Grant Reviewer (January)
2016	NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Permanent member, (November)
2016	Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (September)
2016	Netherlands Organisation for Scientific Research, Building Blocks of Life grant reviewer (July)
2016	NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Permanent member, (June)
2016	Research Grants Council of Hong Kong, Grant Reviewer (April)
2016	Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (February)
2016	NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Permanent member, (February)
2016	Prostate Cancer UK, Grant Reviewer (January)
2015	NIAMS, Musculoskeletal Biology P30 Review Panel (November)
2015	NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Permanent member, (October)

2015 Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (October)

2015 Netherlands Organisation for Scientific Research, TOP Grant Review (September)

2015 Cancer Research UK, Grant Reviewer (July)

2015 NIDDK, Special Emphasis Panel ZDK1 GRB-N, P01 Review Panel (June)

2015 Children's Tumor Foundation, Member, Grant Review Panel (April)

2015 ASBMR GAP Funding Review Panel (March)

2015 Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (March)

2015 NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Ad hoc member, (February)

2014 Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (November)

2014 NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Ad hoc member, (October)

2014 Cancer Prevention and Research Institute of Texas (CPRIT), Basic Cancer Research Review Panel, Member (May)

2014 Research Grants Council of Hong Kong, Grant Reviewer

2014 Children's Tumor Foundation, Member, Grant Review Panel

2013 NIAMS, Musculoskeletal Biology P30 Review Panel (November)

2013 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Pre-Application Review, Cell Biology-2

2013 NIDDK P01 Renewal Site Review Member (June)

2013 NIH Skeletal Biology Development and Disease (SBDD), Ad hoc member (February)

2013 Netherlands Organisation for Scientific Research, Grant Reviewer

2012 NCI, Clinical and Experimental Therapeutics (CET), Ad hoc member, (November)

2012 Susan G. Komen for the Cure, Career Catalyst Grant, Pre-Application Reviewer

2012 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Scientist Reviewer, Clinical and Experimental Therapeutics

2012 Wellcome Trust, Sir Henry Dale Fellowship Reviewer

2012 NIH Skeletal Biology Development and Disease (SBDD), Charter member (June)

2012 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Pre-Application Reviewer

2012 Shanghai Jiao Tong University, International Remote Reviewer

2012 NIH Skeletal Biology Development and Disease (SBDD), Charter member (February)

2012 Italian Ministry of Health, Grant Review Panel

- 2012 Biomedical Research Council (BMRC): Agency for Science, Technology and Research, Singapore, Grant Reviewer
- 2011 NIH Skeletal Biology Development and Disease (SBDD), Charter member (October)
- 2011 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Scientist Reviewer
- 2011 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Pre-Application Reviewer
- 2011 NIH Skeletal Biology Development and Disease (SBDD), Charter member (June)
- 2011 NIH Skeletal Biology Development and Disease (SBDD), Charter member (February)
- 2011 Association for International Cancer Research, Cancer Research UK, Grant Reviewer
- 2011 Italian Association for Cancer Research (Associazione Italiana per la Ricerca sul Cancro), Grant Reviewer
- 2011 Susan G. Komen for the Cure, Post-doctoral Fellowship Peer Reviewer
- 2010 NIAMS, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, Ad hoc member, (October)
- 2010 NIH Skeletal Biology Development and Disease (SBDD), Charter member (September)
- 2010 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Scientist Reviewer
- 2010 NIH Skeletal Biology Development and Disease (SBDD), Charter member (June)
- 2010 NIH Skeletal Biology Development and Disease (SBDD), Charter member (February)
- 2010 Association for International Cancer Research, Cancer Research UK, Grant Reviewer
- 2010 Italian Association for Cancer Research (Associazione Italiana per la Ricerca sul Cancro), Grant Reviewer
- 2009 NIH Skeletal Biology Development and Disease (SBDD), Charter member (September)
- 2009 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer Research Program, Scientist Reviewer
- 2009 Association for International Cancer Research, Cancer Research UK, Grant Reviewer
- 2009 NIH Skeletal Biology Development and Disease (SBDD), Charter member (June)
- 2009 Italian Association for Cancer Research (Associazione Italiana per la Ricerca sul Cancro), Grant Reviewer

2009 NIH Skeletal Biology Development and Disease (SBDD), Charter member
(February)

2009 NCI Mouse Models of Human Cancer Consortium (MMHCC) Review Panel,
(February)

2009 Prostate Cancer Charity UK, Grant Reviewer

2008 NIH Skeletal Biology Development and Disease (SBDD), Charter member
(October)

2008 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer
Research Program, Scientist Reviewer

2008 American Society for Bone and Mineral Research Bridge Grant Reviewer

2008 NIH Skeletal Biology Development and Disease (SBDD), Ad hoc member
(June)

2008 Cancer Research UK Project Grant Application Reviewer

2008 NIH Skeletal Biology Development and Disease (SBDD), Ad hoc member
(February)

2007 NIH Skeletal Biology Development and Disease (SBDD), Ad hoc member
(October)

2007 Congressional Directed Medical Research Program (CDMRP), Prostate Cancer
Research Program, Scientist Reviewer

2007 NIH Skeletal Biology Structure and Regeneration (SBSR), Ad hoc member
(June)

2007 National Osteoporosis Foundation, Grant Review Panel

2006 NIH Skeletal Biology Structure and Regeneration (SBSR), Ad hoc member
(June)

2006 California Breast Cancer Research Program, Scientific Reviewer

2005 NIH Skeletal Biology Structure and Regeneration (SBSR), Ad hoc member
(June)

2005 California Breast Cancer Research Program, Scientific Reviewer

2005 Broad Medical Research Program, Inflammatory Bowel Disease Grant
Reviewer

2005 Wellcome Trust Research Fellow Program Reviewer

2004 California Breast Cancer Research Program, Scientific Reviewer

2003 Broad Medical Research Program, Inflammatory Bowel Disease Grant
Reviewer

2003 California Breast Cancer Research Program, Scientific Reviewer

Invited Presentations

- 2017 Wnt Signaling, Gordon Research Conference, Stowe, VT
- 2017 Michigan Society for Medical Research Annual Meeting, East Lansing, MI
- 2017 Michigan State University Genetics Graduate Program, Impact and Applications of Genome Editing Technologies Mini-Symposium, East Lansing, MI
- 2017 American Society of Investigative Pathology Annual Meeting, Gone with the Wnt: A Classic Tale of Stem Cells, Cancer, and More, Chicago, IL
- 2017 Carroll University, Dean's Lecture, College of Arts and Sciences and Biology, Waukesha, WI
- 2016 Avioli Musculoskeletal Research Seminar Series, Washington University School of Medicine, St. Louis, MO
- 2016 ASBMR Annual Meeting, Meet-the-Professor Session, Genome Editing: From Patients to Mice with CRISPR/Cas. Atlanta, GA
- 2016 Surrozen, San Francisco, CA
- 2016 46th Sun Valley Workshop on Skeletal Tissue Biology, Sun Valley, ID
- 2016 Mary Free Bed Rehabilitation Hospital Grand Rounds, Grand Rapids, MI
- 2016 Osteogenesis Imperfecta Foundation Scientific Meeting, Chicago, IL
- 2016 Northwestern University Feinberg School of Medicine, Division of Endocrinology, Metabolism and Molecular Medicine Seminar Series, Chicago, IL
- 2016 Vertex Pharmaceuticals, Boston, MA
- 2015 University of Pittsburgh School of Medicine, Division of Pathology Seminar Series, Pittsburgh, PA
- 2015 University of Connecticut, Division of Endocrinology, Farmington, CT
- 2015 University of Michigan, Cell and Developmental Biology Seminar Series, Ann Arbor, MI
- 2015 University of California-Davis Center for Musculoskeletal Health, Sacramento, CA
- 2014 American Society for Bone and Mineral Research Webinar on Wnt Signaling
- 2014 Sanford-Burnham Medical Research Institute, Diabetes and Obesity Research Seminar Series, Lake Nona, FL
- 2014 Amgen, Thousand Oaks, CA
- 2014 University of Missouri-Kansas City; Bone, Muscle, and Tooth Seminar, Kansas City, MO
- 2013 American Society for Bone and Mineral Research, Meet the Professor Session on Wnt Signaling, Baltimore, MD
- 2013 Baylor College of Medicine, Department of Molecular and Human Genetics Seminar, Houston, TX
- 2013 International Research Symposium on Goltz Syndrome, Houston, TX

- 2013 American Veterinary Medical Association Annual Meeting, Impact of Genomic Research on Agricultural Animals Part I (DNA Sequencing), Chicago, IL
- 2013 American Veterinary Medical Association Annual Meeting, Impact of Genomic Research on Agricultural Animals Part II (Genetic Engineering), Chicago, IL
- 2013 Hospital for Special Surgery, Special Guest Lecturer, New York, NY
- 2013 Michigan State University, Integrative and Organ Systems Short Course, East Lansing, MI
- 2013 Grand Rapids Orthopaedic Surgery Residency Program Alumni Day, George T. Aitken Lectureship Series, Grand Rapids, MI
- 2013 Osteogenesis Imperfecta Foundation Scientific Meeting, Chicago, IL
- 2012 West Michigan Regional Undergraduate Science Conference, Grand Rapids, MI
- 2012 Harvard School of Dental Medicine, Harvard Medical School, Boston, MA
- 2012 Wayne State University, Division of Endocrinology, Detroit, MI
- 2012 Rush University, Department of Biochemistry, Chicago, IL
- 2012 Gordon Conference on Lipoprotein Metabolism, Waterville Valley, NH
- 2012 Michigan State University, Integrative and Organ Systems Short Course, East Lansing, MI
- 2012 Mayo Graduate School College of Medicine, Department of Biochemistry and Molecular Biology, Rochester, MN
- 2012 Grand Rapids Medical Education Partners, Orthopaedic Surgery Residency Grand Rounds, Grand Rapids, MI
- 2012 University of Texas Southwestern Medical Center, Department of Pharmacology, Dallas, TX
- 2012 Hope College, Department of Biology, Holland, MI
- 2011 The Rolanette and Berdon Lawrence Bone Disease Program of Texas, Baylor College of Medicine and MD Anderson Cancer Center, Houston, TX
- 2011 Lester and Sue Smith Breast Center, Baylor College of Medicine, Houston, TX
- 2011 University of Michigan, Center for Organogenesis, Ann Arbor, MI
- 2011 Esperion Therapeutics, Ann Arbor, MI
- 2011 Michigan State University, Integrative and Organ Systems Short Course, East Lansing, MI
- 2011 3rd Joint Meeting of European Calcified Tissue Society and the International Bone and Mineral Research Society, Athens, Greece
- 2011 The Ohio State University, Department of Molecular and Cellular Biochemistry, Columbus, OH
- 2010 American Society of Bone and Mineral Research Annual Meeting, Pathways that Modify the Bone Landscape, Toronto, Ontario
- 2010 Southwest Michigan Innovation Center and VAI, Collaboration is Cornerstone to Success, Grand Rapids, MI
- 2010 Michigan State University, Integrative and Organ Systems Short Course, East Lansing, MI

2010 Hospital for Special Surgery, Special Guest Lecturer, New York, NY
2010 University of Kansas Medical Center, Department of Pathology and
Laboratory Medicine, Kansas City, KS

2009 World Osteoporosis Day Summit, Grand Rapids, MI
2009 Wnt Meeting, Washington, DC
2009 Translational Genomics Research Institute Retreat, Phoenix, AZ
2009 Eli Lilly and Company, Indianapolis, IN
2009 MPI Research, Mattawan, MI
2009 Michigan State University, Integrative and Organ Systems Short Course, East
Lansing, MI
2009 University of Alabama-Birmingham, Center for Metabolic Disease,
Birmingham, AL
2009 University of Michigan, Oral Health Sciences, Ann Arbor, MI

2008 University of Iowa, Carver College of Medicine, Iowa City, IA
2008 Sun Yat-Sen University Cancer Center, Guangzhou, P.R. China
2008 National Cancer Center-Singapore, "From Genetics Research to the Practice
of Genomic Medicine, Singapore
2008 American Society of Bone and Mineral Research Annual Meeting, Montreal,
Quebec
2008 Translational Genomics Research Institute, Phoenix, AZ
2008 38th Sun Valley Workshop on Skeletal Tissue Biology, Sun Valley, ID
2008 Michigan State University, Integrative and Organ Systems Short Course, East
Lansing, MI
2008 Louisiana State Health Science Center, Department of Biochemistry and
Molecular Biology, New Orleans, LA

2007 University of Texas Medical Branch, Biochemistry and Molecular Biology
Department, Galveston, TX
2007 Vanderbilt University, Center for Bone Biology, Nashville, TN
2007 Children's Hospital Boston, Department of Orthopaedic Surgery and Harvard
Medical School, Boston, MA
2007 Mt. Sinai Medical Center, Department of Endocrinology, New York, NY
2007 Innovative Minds in Prostate Cancer Today (DOD IMPACT Meeting), Atlanta,
GA
2007 International Bone and Mineral Society 17th Annual Meeting, Montreal,
Quebec
2007 Michigan State University, Integrative and Organ Systems Short Course, East
Lansing, MI
2007 University of Arkansas for Medical Sciences, Little Rock, AR
2007 National Institute for Dental and Craniofacial Research, Bethesda, MD

2006 Spectrum Health, Department of Orthopaedic Surgery Grand Rounds, Grand
Rapids, MI

2006 Indiana University School of Medicine, Department of Orthopaedics,
Indianapolis, IN

2006 American Society for Bone and Mineral Research 17th Annual Meeting,
Philadelphia, PA

2006 Michigan State University, Integrative and Organ Systems Short Course, East
Lansing, MI

2006 Advances in Mineral Metabolism/American Society for Bone and Mineral
Research Young Investigators Meeting, Snowmass, CO

2006 Wayne State University School of Medicine, Department of Pathology,
Detroit, MI

2005 Karmanos Cancer Center Retreat, Detroit, MI

2005 British Society of Developmental Biology Autumn Meeting: Wnt Signaling in
Development, Disease, and Cell Biology, Aberdeen, Scotland, UK

2005 National Institute for Dental and Craniofacial Research, Bethesda, MD

2005 Michigan State University, Integrative and Organ Systems Short Course, East
Lansing, MI

2004 Amgen, Thousand Oaks, CA

2004 American Society for Bone and Mineral Research 17th Annual Meeting
Plenary Oral Presentation, Seattle, WA

2004 American Society for Bone and Mineral Research 17th Annual Meeting
Concurrent Oral Presentation, Seattle, WA

2004 University of Wisconsin, Department of Oncology, Madison, WI

2004 University of Alabama-Birmingham, Department of Pathology, Birmingham,
AL

2003 University of California-San Francisco Cancer Center, San Francisco, CA

2003 Michigan State University Veterinary School, East Lansing, MI

2003 Case Western Reserve University, Department of Genetics, Cleveland, OH

2003 University of Michigan, Cancer Biology Seminar Series, Ann Arbor, MI

2002 Grand Valley State University, Department of Chemistry, Allendale, MI

2002 National Institute for Dental and Craniofacial Research, Bethesda, MD

2001 Hope College, Department of Biology, Holland, MI

2001 Carroll College, Department of Biology, Waukesha, WI

2001 Western Michigan University, Department of Biology, Kalamazoo, MI

2000 Calvin College, Department of Biology, Grand Rapids, MI

1999 Harold Varmus 60th Birthday Symposium, Cold Spring Harbor, NY

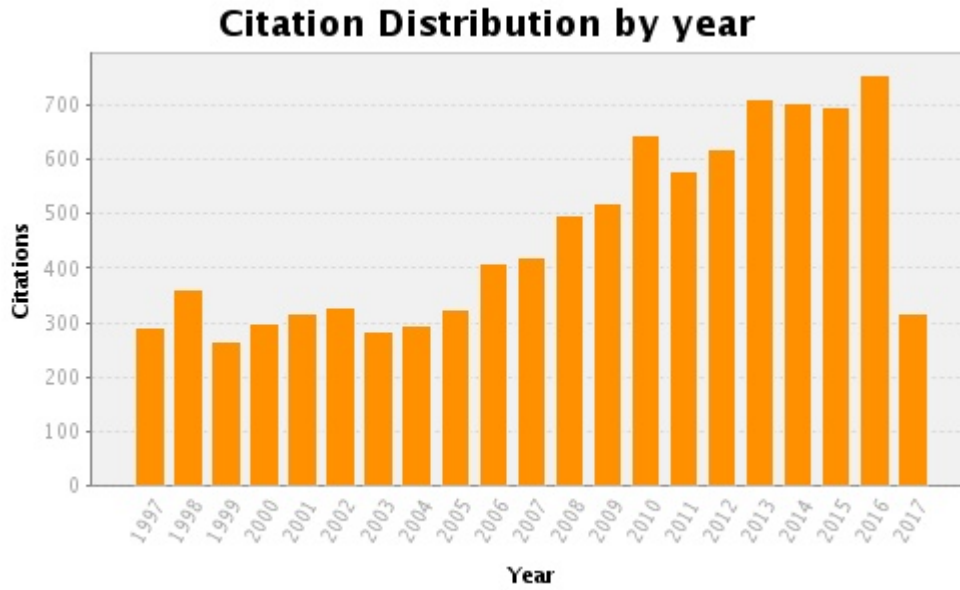
1999 Michigan State University, Department of Microbiology and Molecular
Genetics, East Lansing, MI

1999 Wnt Meeting, Palo Alto, CA

- 1998 Cancer Genetics and Tumor Suppressor Gene Meeting, Cold Spring Harbor,
NY
- 1998 University of Wisconsin, McArdle Laboratory for Cancer Research, Madison,
WI
- 1995 University of Texas Southwestern, Department of Molecular Genetics
- 1995 Washington University in St. Louis, Division of Medical Oncology, St. Louis,
MO
- 1995 National Center for Human Genome Research, Bethesda, MD
- 1995 St. Jude Children's Research Hospital, Tumor Cell Biology, Memphis, TN
- 1995 University of Chicago, Knapp Center, Chicago, IL
- 1995 Mount Sinai Hospital, Samuel Lunenfeld Research Institute, Toronto, Ontario
- 1995 University of Wisconsin, McArdle Laboratory for Cancer Research, Madison,
WI
- 1994 Medical College of Wisconsin, Department of Biochemistry, Milwaukee, WI
- 1994 Boston Mouse Consortium Meeting, Boston, MA
- 1993 Colrain Meeting VI, Livingston Farm, Colrain, MA
- 1992 Colrain Meeting V, Livingston Farm, Colrain, MA

Bibliography

Current H-Index 46
Current i10-Index 86
Total Articles in Publication List 127
Sum of the Times Cited 10118
Last Updated: 1 July 2017



Peer-reviewed primary research articles (99)

- Valkenburg, K.C., A.M. DeMarzo, and B.O. Williams (2017) Deletion of tumor suppressors adenomatous polyposis coli and Smad4 in murine luminal epithelial cells causes invasive prostate cancer and loss of androgen receptor expression. *Oncotarget* (in press)
- DeBruine, Z.J., J. Ke, K.G. Harikumar, X. Gu, P. Borowsky, B.O. Williams, L.J. Miller, H.E. Xu, and K. Melcher (2017) Wnt5a promotes Frizzled-4 signalosome assembly by stabilizing cysteine-rich domain dimerization. *Genes Dev.* (in press)
- Li, J., D. Lu, H. Liu, B.O. Williams, P.A. Overbeek, B. Lee, L. Zheng, and T. Yang (2017) Sclt1 deficiency causes cystic kidney by activating ERK and STAT3 signaling. *Hum. Mol. Genet.* (in press)
- Janda, C. Y., L.T. Dang, C. You, J. Chang, W. de Lau, Z.A. Zhong, K.S. Yan, O. Marecic, D. Siepe, X. Li, J.D. Moody, B.O. Williams, H. Clevers, C.J. Kuo, J. Piehler, D. Baker, and K.C. Garcia (2017) Surrogate Wnt ligands that phenocopy canonical Wnt/B-catenin signaling. *Nature.* (in press)
- Walls, G.V., M. Stevenson, K.E. Lines, P.J. Newey, A.A.C. Reed, M.R. Bowl, J. Jeyabalan, B. Harding, K.J. Bradley, S. Manek, J.Chen, P. Wang, B.O. Williams, B.T. Teh, and R.V. Thakker (2017) Mice deleted for Cell division cycle 73 (Cdc73) gene develop parathyroid and uterine tumors: model for the Hyperparathyroidism-Jaw Tumour Syndrome. *Oncogene.* (in press)
- Droscha, C.J., C.R. Diegel, N.J. Ethen, T.A. Burgers, M.J. McDonald, K.A. Maupin, A.S. Naidu, P.F. Wang, B.T. Teh, and B.O. Williams (2017) Osteoblast-specific deletion of Hrpt2/Cdc73 results in high bone mass and increased bone turnover. *Bone.* 98:68-78.
- Chin, A.M., Y.H. Tsai, S.R. Finkbeiner, N.S. Nagy, E.M. Walker, N.J. Ethen, B.O. Williams, M.A. Battle, and J.R. Spence (2016) A dynamic Wnt/B-catenin signaling environment leads to the Wnt-independent and Wnt-dependent proliferation of embryonic intestinal progenitor cells. *Stem Cell Reports.* 7(5):826-39.
- Burgers, T.A., J.F. Vivanco, J. Zahatnansky, A.J. Moren, J.J. Mason, and B.O. Williams (2016) Mice with a heterozygous Lrp6 deletion have impaired fracture healing. *Bone Res.* 4:16025.
- Schumacher, C.A., D.M. Joiner, K.D. Less, M.O. Drewry, and B.O. Williams (2016) Characterization of genetically engineered mouse models carrying Col2a1-cre-induced deletions of Lrp5 and/or Lrp6. *Bone Res.* 4:15042.
- Weivoda, M.M., M. Ruan, C.M Hachfeld, L. Pederson, A. Howe, R. Davey, J. Zajac, Y. Kobayashi, B.O. Williams, J.J. Westendorf, S. Khosla, and M.J. Oursler (2016) Wnt signaling inhibits osteoclast differentiation by activating canonical and non-canonical cAMP/PKA pathways. *J. Bone Miner. Res.* 31(1):65-75.
- Zhong, Z.A., J. Zahatnansky, J. Snider, E. Van Wieren, C.R. Diegel, and B.O. Williams (2015) Wntless spatially regulates bone development through B-catenin-dependent and independent mechanisms. *Dev. Dyn.* 244(10):1347-55.
- Valkenburg, K.C., G. Hostetter, and B.O. Williams (2015) Concurrent Hepsin overexpression and adenomatous polyposis coli deletion causes invasive prostate carcinoma in mice. *Prostate* 75(14):1579-85.

- Meng, X., A. Vander Ark, P. Lee, G. Hostetter, N.A. Bhowmick, L.M. Matrisian, B.O. Williams, C.K. Miranti, and X. Li (2015) Myeloid-specific TGF- β signaling in bone promotes basic-FGF and breast cancer bone metastasis. *Oncogene*. (epub ahead of print)
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Book chapters (3)

- Zhong, Z.A., N.J. Ethen, and B.O. Williams (2016) Use of primary calvarial osteoblasts to evaluate the function of Wnt signaling in osteogenesis. *Methods Mol Biol.* 1481: 119-25.
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- Barish, G.D. and B.O. Williams. 2000. The Wnt Signalin Transduction Pathway. In *Signaling Networks and Cell Cycle Control*. J. Silvio Gutkind (Ed.), Humana Press, 53-82.

Invited reviews (27)

- Pridgeon, M.G., Grohar, P.J., Steensma, M.R., and B.O. Williams (2017) Wnt signaling in Ewing sarcoma, osteosarcoma, and malignant peripheral nerve sheath tumors. *Curr Osteoporos Rep.* (in press)
- T. Yang and B.O. Williams (2017) Low-density lipoprotein receptor-related proteins in skeletal development and disease. *Physiol. Rev.* (in press)
- B.O. Williams (2017). LRP5: from bedside to bench to bone. *Bone* (in press)
- B.O. Williams and M.L. Warman (2017). CRISPR/Cas9 technologies. *J Bone Miner Res.* (in press)

- B.O. Williams. (2016) Genetically engineered mouse models to evaluate the role of Wnt secretion in bone development and homeostasis. *Am J Med Genet C Semin Med Genet*. 172C(1):24-6.
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- Robinson, D.R., C.R. Zylstra, and B.O. Williams. 2008. Wnt signaling and prostate cancer. *Curr Drug Targets* 9(7): 571-80.

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- Williams, B.O., and T. Jacks. 1996. Mechanisms of carcinogenesis and the mutant mouse. *Curr Opin Genet Dev* 6(1): 65-70.

Patents

Mammary Stem Cell Marker

United States Patent #:US 7,563,619 B2

Bart Williams, Caroline M. Alexander, Charlotta Lindvall, and Nisha McConnell

Filed: May 30, 2007

Low-Density Lipoprotein Receptor 6 (LRP6) as a Mammary Stem Cell Marker and Related Methods

United States Patent #:US 7,622,267 B2

Bart Williams and Charlotta Lindvall

Filed: May 30, 2007

Current and Recent External Funding

NIH R01AR053293 Williams (PI) 08/10/07 – 07/31/17

National Institutes of Health (NIAMS)

Analyzing the Role of Wnt Signaling in Bone Development

The focus of this work is to examine the roles of Lrp5 and Lrp6 in bone development.

Role: Principal Investigator (25% effort)

NIH R21AR068668 Williams (PI) 09/15/15 - 08/31/17

Generation and Initial Characterization of Osteocalcin-Deficient Rats

The goal of this work is to create a rat strain lacking Osteocalcin.

Role: Principal Investigator (20% effort)

N/A (Genentech) Williams (PI) 05/27/11 – 07/31/12

Evaluating the Ability of LRP6-directed Antibodies to Increase Bone Mass In Vivo

The major goal was to evaluate the function of an antibody and whether it can be used to increase bone mass in human patients:

Role: Principal Investigator

BC084808 Williams (PI) 02/01/09 - 01/31/12

Department of Defense

Canonical Wnt Signaling as a Specific Marker of Normal and Tumorigenic Mammary Stem Cells

The focus of this work was to examine whether cells with activated Wnt signaling represent a stem cell enriched fraction within the mammary gland.

Role: Principal Investigator (20% effort)

R21RR024887 Williams (PI) 07/01/09 – 06/30/11

Mouse Models to Characterize the Role of Lrp6 in Metabolic Syndrome

The goal of this work was to develop and characterize a mouse model to understand the role of Lrp6 mutations in metabolic syndrome.

Role: Principal Investigator (20% effort)

RO1DK083350 Wan (PI) 06/01/09 – 05/31/14

PTH signaling through LRP6

National Institutes of Health (NIDDK)

The goal of this work was to define molecular mechanisms by which PTH controls bone development.

Role: Collaborator (5% effort)

BC062777 Resau (PI) 09/01/07 – 08/31/08

Department of Defense

Intravital Imaging of Developing Breast Cancer Lesion of Defined Genomic Profile in a Mouse

The major goal of this project was to determine whether rapamycin is a potential treatment for stem cell derived mammary cancers.

Role: Co-Investigator

DAMD17-03-1-0031 Williams (PI) 04/01/03 - 03/31/06

U.S. Army Medical Research Acquisition Activity (DoD / CDMRP)

Analysis of the Role of the Wnt/ β -Catenin Pathway in Prostate Development and Tumorigenesis

The major goal of this project was to test the hypothesis that alterations in β -Catenin regulation directly contribute to prostate cancer progression and the propensity of prostate cancer to metastasize to the bone.

Role: Principal Investigator

GR-240 Swiatek (PI) 09/01/01 - 08/31/06

Michigan Economic Development Corporation / Michigan Life Sciences Corridor

Michigan Animal Models Consortium / Mutant Mouse Repository

The major goal of this project was to develop animal model core services for the State of Michigan.

Role: Co-Investigator

NOF Research Grant Award Williams (PI) 09/01/03 - 08/31/04

National Osteoporosis Foundation

Analyzing the Relationship of the Wnt Signaling Pathway to Osteoporosis

The major goal of this project was to use conditional knockout approaches to create mice lacking genes of the Wnt signaling pathway specifically in osteoblasts.

Role: Principal Investigator