



UNIVERSITY OF HAWAI'I  
**CANCER CENTER**

Cancer Biology Seminar Series

# **Seed and Soil for Breast Cancer Bone Metastasis**

Thursday, February 14, 2019  
12:00 noon



## **Dr. Yihong Wan** **Associate Professor**

Department of Pharmacology  
Lawrence Raisz Professor in Bone Cell Metabolism  
Virginia Murchinson Linthicum Scholar in Medical Research

*University of Texas Southwestern Medical Center*

**University of Hawai'i Cancer Center**  
**701 Ilalo Street**  
**Sullivan Conference Center**

*Light refreshments to follow*

## Curriculum Vitae

### Yihong Wan, PhD

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Associate Professor, Department of Pharmacology	6001 Forest Park Road, Rm ND9.502
Lawrence Raisz Professor in Bone Cell Metabolism	Dallas, TX 75390-9041
Virginia Murchison Linthicum Scholar in Medical Research	214-645-6062
University of Texas Southwestern Medical Center	yihong.wan@utsouthwestern.edu

#### EDUCATION

1990-1994 B.S. in Biochemistry, NanKai University, Tianjin, P. R. China  
 1994-1996 M.S. in Chemistry and Biochemistry, Southern Illinois University, Carbondale, IL  
 1996-2001 Ph.D. in Molecular Biology, Biophysics & Genetics, Univ. of Colorado HSC, Denver, CO  
 2002-2008 Postdoctoral Research Associate, Salk Institute, La Jolla, CA

#### RESEARCH EXPERIENCE

1993-1994 Development of a novel shuttle vector for *Bacillus Subtilis*.  
 Advisor: Dr. Dechang Gao, Institute of Molecular Biology, Tianjin, P.R.China  
 1994-1996 Physical mapping of Linkage Group VI and genetic identification of genes involved in carotenoid synthesis in *Neurospora crassa*.  
 Advisor: Dr. Thomas Schmidhauser, Southern Illinois University at Carbondale, IL  
 1996-2001 Differential gene regulation and subcellular localization of glucocorticoid receptor and progesterone receptor.  
 Advisor: Dr. Steve Nordeen, Univ. of Colorado Health Sciences Center, Denver, CO  
 2002-2008 Novel functions of the nuclear receptor PPAR $\gamma$  in bone and mammary gland.  
 Advisor: Dr. Ronald Evans, Howard Hughes Medical Institute, Salk Institute, La Jolla, CA

#### TEACHING EXPERIENCE

2003 Mentor for the MSTP Summer Research Program, Univ of California, San Diego, CA  
 2007 Instructor for the 17<sup>th</sup> annual High School Science Program, Salk Institute, CA  
 2009-2011 UTSW Graduate Core Course Discussion Group Leader  
 2011- UTSW Advances in Germ and Stem Cell Biology (BSCI 5172)  
 2011- UTSW Graduate School Ethics Course Discussion Leader  
 2013- Course Director of Integrative Biology Special Topics-An Independent Study (IB 5096-01, Fall, Spring and Summer)  
 2015- UTSW Graduate School Responsible Conduct of Research (RCR) Course Lecturer  
 2016- UTSW Medical School Teaching, Medical Pharmacology

#### FACULTY APPOINTMENTS

2008-2015 Assistant Professor (tenure-track), Department of Pharmacology, UTSW  
 2015- Associate Professor with tenure, Department of Pharmacology, UTSW  
 2008- Member and faculty, Integrative Biology Program at UTSW  
 2010- Member and faculty, Cancer Biology Program at UTSW  
 2010- Member and faculty, Simmons Cancer Center at UTSW  
 2010- Member and faculty, Cecil H. and Ida Green Center for Reproductive Biology, UTSW  
 2012- Adjunct faculty, Texas A&M Health Science Center  
 2013- Member and faculty, Kidney Cancer Program at UTSW  
 2016- Member and faculty, Charles and Jane Pak Center for Mineral Metabolism  
 2016- Member and faculty, Hamon Center for Regenerative Science and Medicine

**AWARDS AND HONORS**

1990-1994 ZhangShiChang Distinguished Scholar Award, NanKai University, Tianjin, P.R.China  
 1999 Univ. of Colorado HSC scholarship for the Annual Meeting of The Endocrine Society  
 2002 Keystone Symposia scholarship for the meeting “Chromatin Structure and Activity”  
 1999-2002 U.S. Dept. of Defense Breast Cancer Research Program predoctoral fellowship  
 2003-2005 American Cancer Society postdoctoral fellowship  
 2008 Best Abstract Award for “Salk Science Day & Faculty Symposium”  
 2008-2012 Becton Dickinson Biosciences Research Grant Award  
 2008-2012 Virginia Murchison Linthicum Scholar Award in Medical Research  
 2009 ASBMR John Haddad Young Investigator Award  
 2010- Marquis “Who’s Who in America”  
 2010-2012 March of Dimes Basil O’Connor Starter Scholar Research Award  
 2010-2021 Cancer Prevention and Research Institute of Texas Individual Investigator Award  
 2011 Eugenia Rosemberg Award from The Endocrine Society  
 2012 Protégé of The Academy of Medicine, Engineering and Science of Texas (TAMEST)  
 2013-2014 The Charles and Jane Pak Center Innovative Research Award  
 2013 Awardee of Leadership Emerging in Academic Departments (LEAD) Program at UTSW  
 2013-2016 March of Dimes Research Grant Award  
 2013-2016 Department of Defense Breast Cancer Research Program Idea Award  
 2013 Selected Scientist for Inaugural Texas FreshAIR Roundtable Conference and GSK Day  
 2014-2016 The Mary Kay Foundation Grant Award  
 2014 First GSK Pre-DPAc (Discovery Partnerships with Academia) Award at UTSW  
 2015 UTSW Friends of the Cancer Center Award  
 2015- Thomson Reuters Highly Cited Researchers (top 1% in the field)  
 2016- Lawrence Raisz Endowed Professor in Bone Cell Metabolism  
 2016- Advisory Panel for International Osteoimmunology Conference in Greece  
 2017- Lifetime Member in International Chinese Musculoskeletal Research Society (ICMRS)  
 2017- Elected Faculty Senator at UT Southwestern

**PRESENT FUNDING:**

2016-2019 The Welch Foundation  
 2016-2018 Kidney Cancer SPORE Developmental Research Program Award  
 2008- Endowed Scholar Start-up Fund, UT Southwestern Medical Center  
 2017-2019 Charles Y.C. Pak Foundation Breast Cancer - Bone Initiative Grant  
 2018-2020 Department of Defense Breast Cancer Research Program Breakthrough Award  
 2018-2021 Cancer Prevention and Research Institute of Texas Individual Investigator Award  
 2018-2023 NIH, NCI, R01

**COMPLETED FUNDING:**

2008-2012 Becton Dickinson Biosciences Research Grant Award  
 2010 American Cancer Society IRG (UTSW Simmons Cancer Center)  
 2010-2012 March of Dimes Basil O’Connor Starter Scholar Research Award  
 2010-2013 Cancer Prevention and Research Institute of Texas Individual Investigator Award  
 2010-2016 The Welch Foundation  
 2012-2013 CPRIT Postdoctoral Training Grant (Hoang D. Huynh)  
 2013 Research Grant from Acerta Pharma  
 2013-2014 The Charles and Jane Pak Center Innovative Research Award  
 2014 GSK Pre-DPAc Sponsored Research Award  
 2015-2016 NIH T32 Postdoctoral Training Grant  
 2015-2016 Friends of the Comprehensive Cancer Center Grant Award  
 2014-2016 The Mary Kay Foundation Research Grant

2011-2017 NIH, NIDDK, R01  
 2013-2017 March of Dimes Research Grant Award  
 2013-2017 Department of Defense Breast Cancer Research Program Idea Award  
 2013-2018 Cancer Prevention and Research Institute of Texas Individual Investigator Award

**AFFILIATIONS**

1996-2002 Member of the American Association for the Advancement of Science  
 1999- Member of the Endocrine Society  
 2008- Member of the American Society for Bone and Mineral Research  
 2011- Member of European Calcified Tissue Society  
 2011- Member of American Society of Microbiology  
 2012- Member of American Association for Cancer Research  
 2016- Member of Australian and New Zealand Bone and Mineral Society  
 2017- Lifetime Member in International Chinese Musculoskeletal Research Society (ICMRS)

**PROFESSIONAL ACTIVITIES**

2009- Reviewer for Proceedings of the National Academy of Sciences  
 2009- Reviewer for Expert Opinion on Therapeutic Targets  
 2010- Reviewer for PPAR Research  
 2010- Reviewer for Journal of Leukocyte Biology  
 2010- Reviewer for Cell Death and Differentiation  
 2010- Reviewer for Molecular Endocrinology  
 2011- Reviewer for European Journal of Pharmacology  
 2011- Reviewer for Molecular and Cellular Biology  
 2011- Reviewer for American Journal of Pathology  
 2012- Reviewer for Genes & Development  
 2012- Reviewer for Journal of Cell Biology  
 2012- American Society for Bone and Mineral Research Scientific Program Committee  
 2012- Grant Reviewer for Swiss National Science Foundation, Sinergia Grant  
 2012- Guest Associate Editor for PLoS Genetics  
 2012- Reviewer for Journal of Cellular Biochemistry  
 2012- Reviewer for Endocrinology  
 2012- Reviewer for Oncogene  
 2013- Guest Associate Editor for Proceedings of the National Academy of Sciences  
 2013- Consultant for Guidepoint Global, New York, NY  
 2013- Consultant for Amgen  
 2013- Reviewer for International Journal of Biochemistry and Cell Biology  
 2013- Grant reviewer for NIDDK funded Diabetic Complications Consortium  
 2013- Reviewer for Cell Metabolism  
 2014- Reviewer for Nature Medicine  
 2014- Reviewer for Journal of Clinical Investigation  
 2014- NIH Grant Reviewer – ODCS Study Section; ZRG1 MOSS-C (80) Special Emphasis Panel  
 2014- Reviewer for Clinical and Experimental Metastasis  
 2014- Grant Reviewer for Agency for Science, Technology and Research (A\*STAR) in Singapore  
 2014- Consultant for The Longevity Fund, San Francisco, CA  
 2014- Consultant for GlaxoSmithKline  
 2015- Grant Reviewer for Geneva University Hospitals and Faculty of Medicine Research Foundation, Geneva, Switzerland  
 2015- Consultant for COI Pharmaceuticals and Avalon Venture  
 2015- Consultant for Texas Tech University Health Sciences Center

- 2015- Reviewer for FEBS Letters
- 2015- Reviewer for Cell Reports
- 2015- Invited Session Chair for ASBMR annual meeting
- 2016- NIH Grant Reviewer - Integrative Nutrition and Metabolic Processes (INMP) Study Section
- 2016- Reviewer for Science Translational Medicine
- 2016- Reviewer for EBioMedicine
- 2016- Reviewer for eLife
- 2016- Grant reviewer for Research Grants Council (RGC) of Hong Kong
- 2016- Consultant for Weill Medical College of Cornell University and Hospital for Special Surgery, New York, NY
- 2016- Grant reviewer for Fondazione Pisa of Italy
- 2016- Advisory Panel for International Osteoimmunology Conference in Greece
- 2016- Organizing Committee for World Congress on Cancer Research & Therapy
- 2017- NIH Grant Reviewer - Cancer Drug Development & Therapeutics (CDDT) Study Section
- 2017- Invited PhD thesis external examiner for University of Sydney, Australia
- 2017- Grant reviewer for National Science Center, Poland
- 2018- Guest Editor for Frontiers in Pharmacology
- 2018- Advisory Board Member for Current Pharmaceutical Design
- 2018- Editorial Board Member for Journal of Stem Cells and Molecular Biology

#### **UTSW COMMUNITY SERVICE**

- 2008- Ph.D. Qualifying Exam Committee (\* denotes committee chair): Misty Watson, Xi Wu\*, Zhihong Xue, Ziyang Liu, Chi-Lun Chang, Kristina Aguilera, Jonathan Xia, Alexander Ng, Nicole Varnado\*, Xiaolei Shi, Joshua Johnson, Yu-San Yang, Alexandra Ghaben\*, Wenting Du\*, Brittany Johnson, Subhajit Das Gupta
- 2009- Graduate Student Recruitment Interviewer
- 2009- Pharmacology Seminar Series Committee
- 2010- Faculty recruitment interviewer for Pharmacology & Green Center for Reproductive Biology
- 2010- Judge for the Annual UTSW Postdoctoral Research Symposium
- 2011- Ph.D. Dissertation Committee (\* denotes committee chair): Jaideep Chaudhary; Matthew Esparza, Yuhao Wang, Brittany Johnson\*
- 2009- Outside speaker host for Alan Saghatelian (Harvard), Patricia Ducy (Columbia), Bart Williams (Van Andel Institute), Chris Glass (UC San Diego), Brendan Lee (Baylor College of Medicine, HHMI), Thomas Clemens (Johns Hopkins Medical School), Pepper Schedin (University of Colorado), Carol Lange (University of Minnesota Cancer Center), Matthew Warman (Harvard Medical School, HHMI), Jerry Feng (Baylor School of Dentistry), John Wysolmerski (Yale), Yibin Kang (Princeton Univ), Jefferey Rosen (Baylor College of Medicine), Ben Cravatt (Scripps Institute), Xu Cao (Johns Hopkins Univ), Fanxin Long (Washington Univ), Cliff Tabin (Harvard Medical School), Rebecca Simmons (U Penn), Lisa Coussens (Oregon Health Science Univ), Theresa Guise (Indiana Univ), Jing Yang (UCSD), Karen Luger (Univ of Colorado Boulder), Yuhua Di (MD Anderson), Emily Wang (UCSD), Filippo Giancotti (MD Anderson), Lin He (UC Berkeley), Heide Ford (U Colorado HSC), Wei Gu (Columbia), Danesh Moazed (Harvard Medical School/HHMI)
- 2013- Judge for the Medical Student Research Forum
- 2013- Women's MSTP Luncheon Speaker Series Sponsored by MSTP
- 2013- Women in Science Mentoring Series Speaker Sponsored by WISMAC
- 2014- UTSW Table Host for Carolyn P. Horchow Women's Health Symposium
- 2014- UTSW Research Compliance Committee Member
- 2014- Faculty Representative for UTSW MSTP External Advisory Board

- 2014- Pharmacology Faculty Recruitment Committee
- 2015- UTSW Cancer Biology Retreat Poster Judge
- 2017- UTSW Medical School Scholarly Activity Faculty Representative
- 2017- UTSW Faculty Senator
- 2017- UTSW Shared Governance Subcommittee Member

## **MENTORING**

### Current

- 2008- Xueqian (Sherry) Wang, M.D., Research Associate
- 2011- Jing Yan Krzeszinski, Ph.D., Postdoctoral Fellow (NIH T32 Postdoctoral Training Grant)
- 2011- Hoang D. Huynh, Ph.D., Postdoctoral Fellow (CPRIT Postdoctoral Training Grant)
- 2015- Hao Zuo, Ph.D., Postdoctoral Fellow
- 2016- Qiwen (Kevin) Yang, Ph.D., Research Associate
- 2016- Dengbao Yang, Ph.D., Research Associate
- 2018- Zufeng Ding, Ph.D., Research Associate

### Past

- 2009-2010 Marie Yang, Ph.D., Postdoc (currently Scientist at University of Liverpool, UK)
- 2010-2012 Yang Du, Ph.D., Postdoc (currently Associate Professor at Chinese Academy of Sciences Institute, Beijing)
- 2011 Cecilia Vargas, STARS Summer Student, Eastfield College
- 2014 Christina Collier, SURF Summer Student, Southern Methodist University
- 2009-2014 Wei Wei, Ph.D., Postdoc (currently Senior Data Analyst and Developer)
- 2011-2014 Zixue Jin, Ph.D., Postdoc (currently Scientist at Baylor College of Medicine, Houston, TX)
- 2010-2014 Xunde Wang, Ph.D., Postdoc (currently in computer IT and bioinformatics)
- 2011-2015 Xiaoxiao Li, MD/PhD Student (2014 ASBMR meeting travel award & oral presentation; 2015 American Physician Scientists Association travel award, Chicago, IL; 2016 inductee of Gold Humanism Honor Society; 2016 UTSW Ida M. Green Award, currently back to UTSW Medical School)
- 2014-2015 Shengjun Fan, Ph.D., Postdoctoral Fellow (currently scientist at University of Minnesota Medical School, Minneapolis, MN)
- 2014-2015 Yubao Wang, Ph.D., Postdoctoral Fellow
- 2014-2015 Samuel Peña-Llopis, Instructor (currently faculty at German Cancer Research Center – DKFZ, Heidelberg, Germany)
- 2015-2016 Scott Baier, Ph.D., Postdoctoral Fellow (currently Clinical Research Coordinator, Children’s Hospital, Dallas, TX)
- 2015-2016 Shigao Yang, Ph.D., Postdoctoral Fellow (currently Scientist at Duke University, NC)
- 2015-2016 Peiwen Chen, Ph.D., Postdoctoral Fellow (currently Scientist at MD Anderson Center)
- 2011-2016 Wing (Winnie) Cheng, Graduate Student (currently in Dental School, NY)
- 2008- Rotation students: Daxing Gao, Min He, Menglu Zhang, Wenting Du, Qian Yang, Zachary Gallegos

## **INVITED LECTURES**

- 1999 81st Annual Meeting of The Endocrine Society, San Diego, CA
- 2001 83rd Annual Meeting of The Endocrine Society, Denver, CO
- 2007 Atherosclerosis & Vascular Biology Seminars, Univ. of California, San Diego, CA
- 2008 Functional Development of the Mammary Gland Conference, University of Colorado Denver and Health Sciences Center, Aurora, CO
- 2008 Charles and Jane Pak Center for Mineral Metabolism Research, UTSW, Dallas, TX
- 2008 Medical Science Training Program Seminar Series, UTSW, Dallas, TX

- 2009 ASBMR John Haddad Young Investigator Lecture, The Advances in Mineral Metabolism Meeting, Snowmass, CO
- 2009 New Faculty Research Forum, UTSW, Dallas, TX
- 2009 The 9th In vivo Cancer Cellular and Molecular Imaging Symposium: Innovations in Optical Imaging of Cancer, UTSW, Dallas, TX
- 2010 Keystone Symposium - Nuclear Receptors: Development, Physiology and Disease, Keystone, CO
- 2011 3rd Joint Meeting of the European Calcified Tissue Society and the International Bone and Mineral Society, Athens, Greece
- 2011 93rd Annual Meeting of The Endocrine Society, Boston, MA
- 2011 CSHL Eukaryotic Gene Expression Course, Cold Spring Harbor, NY
- 2011 Gordon Research Conferences - Hormone Action in Development & Cancer, Smithfield, RI
- 2011 Reproductive Biology Seminar Series, UT Southwestern Medical Center, Dallas, TX
- 2012 Biochemistry Seminar Series, University of Texas Health Science Center at San Antonio, TX
- 2012 Keystone Symposium on Nuclear Receptor Matrix: Reloaded, Whistler, British Columbia
- 2012 Cold Spring Harbor Asia Conference on Bone and Cartilage: from Development to Human Diseases, Suzhou, China
- 2012 FASEB Summer Research Conference, Snowmass, CO
- 2012 Obesity Alliance Seminar Series on Nutrition, Metabolism and Obesity, UTSW, Dallas, TX
- 2012 Cancer Imaging Seminar Series, UTSW, Dallas, TX
- 2012 Baylor College of Medicine & MD Anderson Cancer Center Bone Group, Houston, TX
- 2012 Charles and Jane Pak Center for Mineral Metabolism Research, UTSW, Dallas, TX
- 2012 CPRIT Annual Conference, Austin, TX
- 2013 Baylor College of Dentistry, Texas A&M Health Science Center, Dallas, TX
- 2013 Division of Endocrinology and Metabolism, Univ of Arkansas Medical Sciences, Little Rock, AR
- 2013 Inaugural Texas FreshAIR Roundtable Conference
- 2014 Simmons Cancer Center Prostate Cancer Seminar Series, UTSW, Dallas, TX
- 2014 Gordon Research Conference on Bones and Teeth, Galveston, TX
- 2014 Department of Genetics and Development, Columbia University, New York, NY
- 2014 Hamon Cancer Center Seminar Series, UTSW, Dallas, TX
- 2014 15th International Biennial Congress of the Metastasis Research Society, Heidelberg, Germany
- 2014 Avioli Musculoskeletal Seminar, Washington University School of Medicine, St Louis, MO
- 2014 Outstanding Scientist Seminar Series, M.D. Anderson Cancer Center, Houston, TX
- 2014 Endocrinology and Metabolism Seminar, Yale University School of Medicine, New Haven, CT
- 2015 Fusion Conference on Musculoskeletal Development and Regeneration, Cancun, Mexico
- 2015 15<sup>th</sup> International Symposium for Society of Chinese Bioscientists in America, Taipei, Taiwan
- 2015 Keynote Speaker, Skeletal Biology Symposium by Oklahoma Medical Research Foundation, Oklahoma City, OK
- 2015 Endocrine Grand Rounds, Baylor College of Medicine, Houston, TX
- 2015 Singapore Bioimaging Consortium, A\*STAR Institute, Singapore
- 2015 Department of Immunology, The University of Tokyo, Tokyo, Japan
- 2015 Breast Oncology and Endocrinology, Juntendo University School of Medicine, Tokyo, Japan
- 2015 Department of Molecular Biosciences, University of Texas, Austin, TX
- 2016 Department of Cancer Biology, Beckman Research Institute of City of Hope, Duarte, CA
- 2016 Tumor Microenvironment and Metastases Seminar, Indiana University SOM, Indianapolis, IN
- 2016 VARI Seminar Series, Van Andel Research Institute, Grand Rapids, Michigan
- 2016 6<sup>th</sup> International Conference on Osteoimmunology, Crete, Greece
- 2016 Department of Embryology Seminar – student-invited speaker, Carnegie Institution, Johns Hopkins University, Baltimore, MD
- 2016 World Congress on Cancer Research & Therapy, Miami, Florida
- 2017 Gordon Research Conference on IGF & Insulin System in Physiology & Disease, Ventura, CA
- 2017 Hospital for Special Surgery, Weill Medical College of Cornell University, New York, NY

- 2017 99th Annual Meeting of The Endocrine Society, Symposium on Novel Regulators of Bone Mass Accrual, Orlando, FL
- 2017 State Key Laboratory, China Pharmaceutical University, Nanjing, China
- 2017 Nanjing Biomedical Research Institute, Nanjing University, Nanjing, China
- 2017 ANZAC Research Institute, University of Sydney, Sydney, Australia
- 2017 2nd World Congress on Cancer Research & Therapy, San Diego, CA
- 2018 Pak Center for Mineral Metabolism Research Endowed Professor Meeting, Dallas, TX
- 2018 Kidney Cancer SPORE program conference, Dallas, TX
- 2018 Keystone Symposia on Novel Aspects of Bone Biology, Snowbird, Utah
- 2018 7<sup>th</sup> International Conference on Osteoimmunology, Crete, Greece
- 2018 7<sup>th</sup> International Breast Cancer Stem Cell Symposium, Shanghai, China
- 2018 School of Chemical and Biological Engineering, Seoul National University, Seoul, South Korea
- 2018 Korea Advanced Institute of Science and Technology, Daejeon, South Korea
- 2019 University of Hawaii Cancer Center, Honolulu, Hawaii
- 2019 FASEB Conference on NAD<sup>+</sup> metabolism and signaling, Dublin, Ireland

## PUBLICATIONS

1. **Wan Y**, Liu H, Li C and Schmidhauser TJ (1997) Genome analysis on linkage group VI of *Neurospora crassa*. *Fungal Genetics and Biology* 21(3):329-336
2. Schmidhauser TJ, Chen D and **Wan Y** (1999) Identification of a cosmid clone containing the *Neurospora crassa lys-5* and *un-4* genes, isolation of a partial *lys-5* cDNA and associated chromosome walking. *Fungal Genetics Newsletter* 46:23-24
3. Day RN, Nordeen SK and **Wan Y** (1999) Visualizing protein-protein interactions in the nucleus of the living Cell. *Molecular Endocrinology* 13(4):517-526
4. Schaufele F, Chang C, Liu W, Baxter JD, Nordeen SK, **Wan Y**, Day RN and McDonnell DP (2000) Temporally distinct, ligand-specific recruitment of nuclear receptor interacting peptides and co-factors to the estrogen receptor in the cellular environment. *Molecular Endocrinology* 14(12):2024-2039
5. **Wan Y**, Coxe KK, Thackray VG, Housley PR and Nordeen SK (2001) Separable features of the ligand-binding domain determine the differential subcellular localization and ligand-binding specificity of glucocorticoid receptor and progesterone receptor. *Molecular Endocrinology* 15:17-31
6. Nordeen SK, Housley PR, **Wan Y** and Day RN (2001) Application of Green Fluorescent Protein to study of dynamic protein-protein interactions and subcellular trafficking of steroid receptors. *Methods in Molecular Biology*, vol.176: Steroid Receptor Methods: Protocol and Assays: 179-199
7. **Wan Y** and Nordeen SN (2002) Overlapping but distinct gene regulation profiles by glucocorticoids and progestins in human breast cancer cells. *Molecular Endocrinology* 16(6):1204-1214
8. **Wan Y** and Nordeen SN (2002) Identification of genes differentially regulated by glucocorticoids and progestins using a Cre/*loxP* mediated retroviral promoter-trapping strategy. *Journal of Molecular Endocrinology* 28(3):177-92
9. **Wan Y** and Nordeen SN (2003) Overlapping but distinct profiles of gene expression elicited by glucocorticoids and progestins. *Recent Progress in Hormone Research* 58:199-226
10. Kino T, Souvatzoglou E, De Martino MU, Tsopanomihalu M, **Wan Y** and Chrousos GP (2003) Protein 14-3-3 $\sigma$  interacts with and favors cytoplasmic subcellular localization of the glucocorticoid receptor, acting as a negative regulator of the glucocorticoid signaling pathway. *Journal of Biological Chemistry* 278(28):25651-25656. PMID:12730237
11. **Wan Y**, Saghatelian A, Chong LW, Zhang CL, Cravatt BF and Evans RM (2007) Maternal PPAR $\gamma$  Protects Nursing Neonates by Suppressing the Production of Inflammatory Milk. *Genes & Development* 21:1895-1908. PMID: 17652179 [Editors' Choice in Science & Sci. STKE](#); [HHMI News, Faculty of 1000](#)



12. **Wan Y**, Chong LW and Evans RM (2007) PPAR $\gamma$  Regulates Osteoclastogenesis in Mice. *Nature Medicine* 13:1496-1503. PMID: 18059282 [Commentary in Cell Metabolism, Faculty of 1000](#)
13. **Wan Y\*** and Evans RM\* (2010) Rosiglitazone Activation of PPAR $\gamma$  Suppresses Fractalkine Signaling. *Journal of Molecular Endocrinology* 44(2):135-142 (\* co-corresponding author)
14. Wei W, Wang X, Yang M, Smith LC, Dechow PC, Sonoda J, Evans RM and **Wan Y** (2010) PGC1 $\beta$  Mediates PPAR $\gamma$  Activation of Osteoclastogenesis and Rosiglitazone-Induced Bone Loss. *Cell Metabolism* 11(6):503-516. PMID: 20519122 [Faculty of 1000](#)
15. **Wan Y** (2010) PPAR $\gamma$  in Bone Homeostasis. *Trends in Endocrinology and Metabolism* 21(12):722-728. PMID: 20863714 [Cover Image](#)
16. Wei W, Zeve D, Suh JM, Wang X, Du Y, Zerwekh JE, Dechow PC, Graff JM and **Wan Y** (2011) Biphasic and Dosage-Dependent Regulation of Osteoclastogenesis by  $\beta$ -Catenin. *Molecular and Cellular Biology* 31(23): 4706-4719. PMID: 21876000 [Cover Image](#)
17. Wei W, Zeve D, Wang X, Du Y, Tang W, Dechow PC, Graff JM and **Wan Y** (2011) Osteoclast Progenitors Reside in PPAR $\gamma$ -Expressing Bone Marrow Cell Population. *Molecular and Cellular Biology* 31(23): 4692-4705. PMID: 21947280
18. Wei W and **Wan Y** (2011) Thiazolidinediones on PPAR $\gamma$ : the Roles in Bone Remodeling. *PPAR Research* 2011:867180. PMID: 22135675
19. Wei W, Dutchak PA, Wang X, Ding X, Wang X, Bookout AL, Goetz R, Mohammadi M, Gerard RD, Dechow PC, Mangelsdorf DJ, Kliewer SA and **Wan Y** (2012) Fibroblast Growth Factor 21 Promotes Bone Loss by Potentiating the Effects of PPAR $\gamma$ . *Proc Natl Acad Sci U S A.* 109(8): 3143-3148. PMID: 22315431 [UTSW News & Faculty of 1000](#)
20. Zeve D, Seo J, Suh JM, Stenesen D, Tang W, Berglund ED, **Wan Y**, Williams LJ, Lim A, Martinez MJ, McKay RM, Millay DP, Olson EN and Graff JM (2012) Wnt Signaling Activation in Adipose Progenitors Promotes Insulin-Independent Muscle Glucose Uptake. *Cell Metabolism* 15(4):492-504. PMID: 22482731
21. Du Y, Yang M, Lee S, Behrendt CL, Hooper LV, Saghatelian A and **Wan Y** (2012) Maternal Western Diet Causes Inflammatory Milk and TLR2/4-Dependent Neonatal Toxicity. *Genes & Development*, 26(12):1306-11. PMID: 22713870. [UTSW News](#)
22. Du Y, Yang M, Wei W, Huynh HD, Herz J, Saghatelian A and **Wan Y** (2012) Macrophage VLDL Receptor Promotes PAFAH Secretion in Mother's Milk and Suppresses Systemic Inflammation in Nursing Neonates. *Nature Communications*, 3:1008. PMID: 22910354.
23. Zhang Y, Xie Y, Berglund ED, Coate KC, He TT, Katafuchi T, Xiao G, Potthoff MJ, Wei W, **Wan Y**, Yu RT, Evans RM, Kliewer SA and Mangelsdorf DJ (2012) The Starvation Hormone, Fibroblast Growth Factor-21, Extends Lifespan in Mice. *eLife*, 1:e00065. PMID: 23066506. [UTSW News](#)
24. **Wan Y** (2012) Bone Marrow Mesenchymal Stem Cells: Fat On and Blast Off by FGF21. *The International Journal of Biochemistry and Cell Biology*, 45(3):546-549. PMID: 23270727
25. Jin Z, Wei W, Dechow PC and **Wan Y** (2013) HDAC7 Inhibits Osteoclastogenesis by Reversing RANKL-Triggered  $\beta$ -Catenin Switch. *Molecular Endocrinology*, 27(2): 325-335. PMID: 23204328 [Editors' Choice](#)
26. Gautron L, Rutkowski JM, Burton MD, Wei W, **Wan Y**, Elmquist JK (2013) Neuronal and Nonneuronal Cholinergic Structures in the Mouse Gastrointestinal Tract and Spleen. *J Comp Neurol*, 521(16):3741-3767. PMID: 23749724
27. **Wan Y** (2013) iBAT on Bone. *Endocrinology*, 154(8):2579-2580. PMID: 23873771
28. Wei W, Motoike T, Krzeszinski JY, Jin Z, Xie XJ, Dechow PC, Yanagisawa M and **Wan Y** (2014) Orexin Regulates Bone Remodeling via a Dominant Positive Central Action and a Subordinate Negative Peripheral Action. *Cell Metabolism*, 19: 927-940. PMID: 24794976. [UTSW News](#), [NPR Radio "Vital Signs" News](#), [IBMS BoneKey Watch](#)
29. Krzeszinski JY, Wei W, Huynh HD, Jin Z, Wang X, Chang TC, Xie XJ, He L, Mangala LS, Lopez-Berestein G, Sood AK, Mendell JT and **Wan Y** (2014) miR-34a Blocks Osteoporosis and Bone

- Metastasis by Inhibiting Osteoclastogenesis and Tgif2. *Nature*, 512:431-435. [UTSW News & Research Highlights in Nature Reviews Rheumatology](#)
30. Bornstein S, Brown SA, Le PT, Wang X, DeMambro V, Horowitz M, MacDougald O, Baron R, Lotinun S, Karsenty G, Wei W, Ferron M, Kovacs CS, Clemmons D, **Wan Y\*** and Rosen CJ\* (2014) FGF-21 and Skeletal Remodeling During and After Lactation in C57BL6 Mice. *Endocrinology*, 155(9):3516-3526. (\* co-corresponding author)
  31. Jin Z, Wei W, Yang M, Du Y and **Wan Y** (2014) Mitochondrial Complex I Activity Suppresses Inflammation and Enhances Bone Resorption by Tipping the Balance of Macrophage-Osteoclast Polarization. *Cell Metabolism*, 20(3):483-498. [Cover Image & Research Highlights in Immunity](#)
  32. Jin Z, Li X and **Wan Y** (2015) Nuclear Receptor Regulation of Osteoclast and Bone Remodeling. *Molecular Endocrinology*, 29(2):172-186.
  33. Jin Z, Du Y, Schwaid AG, Asterholm IW, Scherer PE, Saghatelian A and **Wan Y** (2015) Maternal Adiponectin Controls Milk Composition to Prevent Neonatal Inflammation. *Endocrinology*, 156(4):1504-1513.
  34. Wang X, Wei W, Zinn AR and **Wan Y** (2015) Sim1 Inhibits Bone Formation by Enhancing the Sympathetic Tone in Male Mice. *Endocrinology*, 156(4):1408-1415.
  35. Jin Z, Wei W, Huynh HD and **Wan Y** (2015). HDAC9 Inhibits Osteoclastogenesis via Mutual Suppression of PPAR $\gamma$ /RANKL Signaling. *Molecular Endocrinology*, 29(5):730-738.
  36. Krzeszinski JY and **Wan Y** (2015) New Therapeutic Targets for Cancer Bone Metastases. *Trends in Pharmacological Sciences*, 36(6):360-373.
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