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## **A. Education, Employment, and Honors**

### **Education**

1984	B.A.	University of Illinois, Urbana, IL	Anthropology
1989	M.A.	Arizona State University, Tempe, AZ	Anthropology
1997	Ph.D.	University of Wisconsin, Madison, WI	Anthropology

### **Postgraduate Training**

1997 – 2000      Postdoctoral Fellow, Osteoporosis Research Center, Creighton University, Omaha, NE

### **Positions**

1984              Primatology Research Assistant, Amazon Basin, Peru, South America  
1985              Archaeologist, National Museum of Costa Rica, Costa Rica, Central America  
1986 – 1989      Teaching/Research Assistant, Department of Anthropology, Arizona State University, Tempe, AZ  
1989 – 1993      Research Assistant, Department of Anthropology, University of Wisconsin, Madison, WI  
1994 – 1995      Instructor, Department of Anthropology, University of Wisconsin, Madison, WI  
2000 – 2005      Assistant Research Scientist, Department of Physiological Sciences, University of Florida, Gainesville, FL  
2005 – 2011      Assistant Professor, Department of Nutrition and Exercise Sciences, Oregon State University, Corvallis, OR  
2011 – 2017      Associate Professor, School of Biological and Population Health Sciences, Oregon State University, Corvallis, OR  
2017 – present   Professor, School of Biological and Population Health Sciences, Oregon State University, Corvallis, OR

### **Awards**

1986              Regents Graduate Academic Scholarship, Arizona State University  
Phi Kappa Phi  
1993              Department of Anthropology Travel and Research Award, University of Wisconsin-Madison  
Department of Anthropology Travel and Research Award, University of Wisconsin-Madison  
Kosciuszko Foundation Domestic Scholarship  
BASF Scholarship  
1995              American Anthropological Association Student Poster Award  
Kosciuszko Foundation Domestic Scholarship  
1995 – 1997      Kohler Fellowship, University of Wisconsin-Madison  
2013              Excellence in Teaching and Mentoring Award, College of Public Health and Human Sciences, Oregon State University  
2015              Faculty Excellence Award, College of Public Health and Human Sciences, Oregon State University

### **Membership in Professional Societies**

1988 – 2002      American Association of Physical Anthropologists

1995 – 2000	American Anthropological Association
2010 – 2015	Endocrine Society
1993 – present	Sigma Xi
1995 – present	American Society of Bone and Mineral Research
2009 – present	International Society for Bone Morphometry
2018 – present	Society for Endocrinology
2019 – present	Research Society on Alcoholism
2020 – present	Bone Marrow Adiposity Society

### Board Membership

2012 – 2015	Sun Valley Hard Tissue Workshop	Advisory Board member
2009 – present	Ecology of Food and Nutrition (journal)	Editorial Advisory Board member
2013 – present	International Society of Bone Morphometry	Board of Directors
2016 – 2019	International Society of Bone Morphometry	Treasurer
2020 – 2020	Bone Marrow Adiposity Society	BMA2020 Advisory Board member

### Peer Review

2008	DOD	Deployment Related Medical Research Program, HAD Wound Infection/Healing/Vaccine #2, USAMRMC/CDMRP
2009	DOD	Breast Cancer Research Program, Concept - Molecular Biology and Genetics #1, USAMRMC/CDMRP
2009	NIH	National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS): Challenge Grants Special Emphasis Panel 21
2010	NIH	National Institute of Alcohol Abuse and Alcoholism (NIAAA): Special Emphasis Panel 10 ZAA1 GG (96)
2011	NIH	NIAMS: Skeletal Biology Development and Disease Study Section
2011		Arthritis Research, United Kingdom
2011		Foundation for Polish Science, Poland
2013 (Feb, June, Oct)	NIH	NIAMS: Skeletal Biology Development and Disease Study Section
2014 (June)	NIH	Musculoskeletal, Oral and Skin Sciences (MOSS): Special Emphasis Panel ZRG1 MOSS-A(02)
2015 (Feb)	NIH	NIAMS: Skeletal Biology Development and Disease Study Section
2015 (June)	NIH	NIAMS: Small Grants for New Investigators (R03) Special Emphasis Panel
2015 (Oct)		National Science Centre, Poland
2015 (Oct)		Austrian Science Fund, Austria
2016 (Feb)	NIH	NIAMS: Skeletal Biology Development and Disease Study Section
2017 (Oct)	NIH	Integrative Physiology of Obesity and Diabetes Study Section
2018 (June)	NIH	Aging Systems and Geriatrics Study Section
2018 (July, Nov)		Austrian Science Fund, Austria
2019 (Feb)	NIH	NIAMS: Skeletal Biology Development and Disease Study Section
2019 (Nov)	NIH	MOSS: Special Emphasis Panel ZRG1 MOSS Q02
2020 (June)	NIH	NIAMS: Skeletal Biology Development and Disease Study Section
2005 – present		Ad hoc reviewer (2005-2021; average 14 reviews/year): Alcohol and Alcoholism, Alcoholism: Clinical and Experimental Research, Anatomical Record, American Journal of Physical Anthropology, Applied Physical Activity Quarterly, Archives of Oral Biology, Biological Procedures Online, Biomechanics and Modeling in Mechanobiology, BMC Musculoskeletal Disorders, Biofactors, Biomolecules, Bone, British Journal of Nutrition, Calcified Tissue International, Canadian Journal of Physiology and Pharmacology, Clinical and Experimental Pharmacology, Endocrine Research, Comprehensive Physiology, Evidence-based Complementary and Alternative Medicine, European Journal of Obstetrics and Gynecology and Reproductive Biology, Frontiers in Endocrinology, Gastroenterology,

Histochemistry and Cell Biology, International Journal of Molecular Sciences, Journal of Applied Physiology, Journal of Biomechanics, Journal of Biomedical Materials Research, Journal of Bone and Mineral Research, Journal of Clinical Endocrinology and Metabolism, Journal of Diabetes and Metabolism Disorders, Journal of Endocrinology, Journal of Musculoskeletal and Neuronal Interactions, Journal of Orthopedic Research, Journal of Orthopedic Research, Journal of Orthopaedic Surgery and Research, Journal of Osteoporosis, Journal of Tissue Science and Engineering, Life Sciences, Medical Principles and Practice, Molecular Nutrition and Food Research, Nutrition Research, Osteoporosis International, Pharmacological Reports, Peptides, PLoSOne, Regulatory Peptides, Scientific Reports, Toxicology Reports

2016 American Society of Bone and Mineral Research (ASBMR); Ad hoc abstract reviewer for the Preclinical Models: Nutrition category for ASBMR 2016 meeting

### Meeting Session Chair

2007 Diet and Optimum Health Symposium (session, Obesity, Exercise, and Gene Regulation), Portland, OR

2015 13<sup>th</sup> Congress of the International Society of Bone Morphometry (session, Oral Presentations 3), Tokyo, Japan

## B. Research

**Peer-reviewed Publications** (total citations as of 7-1-21 = 4,220 (Google Scholar); H-index = 39)

1. Long JC, Williams RC, McAuley JE, Medis R, Partel R, Tregellas WM, South SF, Rea AE, McCormick SB, **Iwaniec U** 1991 Genetic variation in Arizona Mexican Americans: estimation and interpretation of admixture proportions. *Am J Phys Anthropol* 84(2):141-57.
2. Schoeninger MJ, **Iwaniec UT**, Glander KE 1997 Stable isotope ratios indicate diet and habitat use in New World monkeys. *Am J Phys Anthropol* 103(1):69-83.
3. **Iwaniec UT**, Crenshaw TD 1998 Distribution of mineralization indices of modeling and remodeling over eight months in mid-diaphyseal cross sections of femurs from adult swine. *Anat Rec* 250(2):136-45.
4. **Iwaniec UT**, Crenshaw TD, Schoeninger MJ, Stout SD, Ericksen MF 1998 Methods for improving the efficiency of estimating total osteon density in the human anterior mid-diaphyseal femur. *Am J Phys Anthropol* 107(1):13-24.
5. Schoeninger MJ, **Iwaniec UT**, Nash LT 1998 Ecological attributes recorded in stable isotopes of arboreal prosimian hair. *Oecologia* 113:222-230.
6. Fung YK, **Iwaniec U**, Cullen DM, Akhter MP, Haven MC, Timmins P 1999 Long-term effects of nicotine on bone and calciotropic hormones in adult female rats. *Pharmacol Toxicol* 85(4):181-7.
7. Akhter MP, **Iwaniec UT**, Covey MA, Cullen DM, Kimmel DB, Recker RR 2000 Genetic variations in bone density, histomorphometry, and strength in mice. *Calcif Tissue Int* 67(4):337-44.
8. **Iwaniec UT**, Fung YK, Cullen DM, Akhter MP, Haven MC, Schmid M 2000 Effects of nicotine on bone and calciotropic hormones in growing female rats. *Calcif Tissue Int* 67(1):68-74.
9. **Iwaniec UT**, Fung YK, Akhter MP, Haven MC, Nespor S, Haynatzki GR, Cullen DM 2001 Effects of nicotine on bone mass, turnover, and strength in adult female rats. *Calcif Tissue Int* 68(6):358-64.
10. **Iwaniec UT**, Samnegard E, Cullen DM, Kimmel DB 2001 Maintenance of cancellous bone in ovariectomized, human parathyroid hormone [hPTH(1-84)]-treated rats by estrogen, risedronate, or reduced hPTH. *Bone* 29(4):352-60.
11. Samnegard E, **Iwaniec UT**, Cullen DM, Kimmel DB, Recker RR 2001 Maintenance of cortical bone in human parathyroid hormone(1-84)-treated ovariectomized rats. *Bone* 28(3):251-60.
12. **Iwaniec UT**, Haynatzki GR, Fung YK, Akhter MP, Haven MC, Cullen DM 2002 Effects of nicotine on bone and calciotropic hormones in aged ovariectomized rats. *J Musculoskelet Neuronal Interact* 2(5):469-78.
13. Akhter MP, **Iwaniec UT**, Haynatzki GR, Fung YK, Cullen DM, Recker RR 2003 Effects of nicotine on bone mass and strength in aged female rats. *J Orthop Res* 21(1):14-9.

14. Akhter MP, Otero JK, **Iwaniec UT**, Cullen DM, Haynatzki GR, Recker RR 2004 Differences in vertebral structure and strength of inbred female mouse strains. *J Musculoskelet Neuronal Interact* 4(1):33-40.
15. **Iwaniec UT**, Mosekilde L, Mitova-Caneva NG, Thomsen JS, Wronski TJ 2002 Sequential treatment with basic fibroblast growth factor and PTH is more efficacious than treatment with PTH alone for increasing vertebral bone mass and strength in osteopenic ovariectomized rats. *Endocrinology* 143(7):2515-26.
16. Power RA, **Iwaniec UT**, Wronski TJ 2002 Changes in gene expression associated with the bone anabolic effects of basic fibroblast growth factor in aged ovariectomized rats. *Bone* 31(1):143-8.
17. **Iwaniec UT**, Magee KA, Mitova-Caneva NG, Wronski TJ 2003 Bone anabolic effects of subcutaneous treatment with basic fibroblast growth factor alone and in combination with estrogen in osteopenic ovariectomized rats. *Bone* 33(3):380-6.
18. Power RA, **Iwaniec UT**, Magee KA, Mitova-Caneva NG, Wronski TJ 2004 Basic fibroblast growth factor has rapid bone anabolic effects in ovariectomized rats. *Osteoporos Int* 15(9):716-23.
19. Cao JJ, Wronski TJ, **Iwaniec U**, Phleger L, Kurimoto P, Boudignon B, Halloran BP 2005 Aging increases stromal/osteoblastic cell-induced osteoclastogenesis and alters the osteoclast precursor pool in the mouse. *J Bone Miner Res* 20(9):1659-68.
20. Globus RK, Amblard D, Nishimura Y, **Iwaniec UT**, Kim JB, Almeida EA, Damsky CD, Wronski TJ, van der Meulen MC 2005 Skeletal phenotype of growing transgenic mice that express a function-perturbing form of beta1 integrin in osteoblasts. *Calcif Tissue Int* 76(1):39-49.
21. **Iwaniec UT**, Wronski TJ, Amblard D, Nishimura Y, van der Meulen MC, Wade CE, Bourgeois MA, Damsky CD, Globus RK 2005 Effects of disrupted beta1-integrin function on the skeletal response to short-term hindlimb unloading in mice. *J Appl Physiol* (1985) 98(2):690-6.
22. Wamsley HL, **Iwaniec UT**, Wronski TJ 2005 Selected extraskkeletal effects of systemic treatment with basic fibroblast growth factor in ovariectomized rats. *Toxicol Pathol* 33(5):577-83.
23. **Iwaniec UT**, Yuan D, Power RA, Wronski TJ 2006 Strain-dependent variations in the response of cancellous bone to ovariectomy in mice. *J Bone Miner Res* 21(7):1068-74.
24. **Iwaniec UT**, Moore K, Rivera MF, Myers SE, Vanegas SM, Wronski TJ 2007 A comparative study of the bone-restorative efficacy of anabolic agents in aged ovariectomized rats. *Osteoporos Int* 18(3):351-62.
25. **Iwaniec UT**, Wronski TJ, Liu J, Rivera MF, Arzaga RR, Hansen G, Brommage R 2007 PTH stimulates bone formation in mice deficient in Lrp5. *J Bone Miner Res* 22(3):394-402. **Featured on journal cover**

Names of undergraduate student authors in our laboratory at OSU are dot-underlined.

Names of graduate student authors in our laboratory at OSU are underlined.

Names of postdoctoral fellow authors in our laboratory at OSU are double underlined.

26. Almeida EA, Roden C, Phillips JA, Globus RK, Searby N, Vercoutere W, Morey-Holton E, Gulimova V, Saveliev S, Tairbekov M, **Iwaniec UT**, McNamra AJ, Turner RT 2006 Development of the gecko (*Pachydactylus turneri*) animal model during Foton M-2 to study comparative effects of microgravity in terrestrial and aquatic organisms. *J GravitPhysiol* 13(1):P193-P196.
27. Cicek M, **Iwaniec UT**, Goblirsch MJ, Vrabel A, Ruan M, Clohisy DR, Turner RR, Oursler MJ 2007 2-Methoxyestradiol suppresses osteolytic breast cancer tumor progression *in vivo*. *Cancer Res* 67(21):10106-11. **Featured on journal cover**
28. **Iwaniec UT**, Boghossian S, Lapke PD, Turner RT, Kalra SP 2007 Central leptin gene therapy corrects skeletal abnormalities in leptin-deficient *ob/ob* mice. *Peptides* 28(5):1012-9.
29. Sibonga JD, **Iwaniec UT**, Shogren KL, Rosen CJ, Turner RT 2007 Effects of parathyroid hormone (1-34) on tibia in an adult rat model for chronic alcohol abuse. *Bone* 40(4):1013-20.
30. Trevisiol CH, Turner RT, Pfaff JE, Hunter JC, Menagh PJ, Hardin K, Ho E, **Iwaniec UT** 2007 Impaired osteoinduction in a rat model for chronic alcohol abuse. *Bone* 41(2):175-80.
31. Turner RT, Evans GL, Lotinun S, Lapke PD, **Iwaniec UT**, Morey-Holton E 2007 Dose-response effects of intermittent PTH on cancellous bone in hindlimb unloaded rats. *J Bone Miner Res* 22(1):64-71.
32. Hawse JR, **Iwaniec UT**, Bensamoun SF, Monroe DG, Peters KD, Ilharreborde B, Rajamannan NM, Oursler MJ, Turner RT, Spelsberg TC, Subramaniam M 2008 TIEG-null mice display an osteopenic gender-specific phenotype. *Bone* 42(6):1025-31. **Featured on journal cover**
33. Hydock DS, **Iwaniec UT**, Turner RT, Lien CY, Jensen BT, Parry TL, Schneider CM, Hayward R 2008 Effects of voluntary wheel running on goserelin acetate-induced bone degeneration. *Pathophysiology* 15(4):253-9.

34. **Iwaniec UT**, Trevisiol CH, Maddalozzo GF, Rosen CJ, Turner RT 2008 Effects of low-dose parathyroid hormone on bone mass, turnover, and ectopic osteoinduction in a rat model for chronic alcohol abuse. *Bone* 42(4):695-701.
35. **Iwaniec UT**, Wronski TJ, Turner RT 2008 Histological analysis of bone. *Methods Mol Biol* 447:325-41.
36. Jokihäärä J, Porsti IH, Koobi P, Jolma PM, Mustonen JT, Saha HH, Sievanen H, Kannus P, **Iwaniec UT**, Turner RT, Jarvinen TL 2008 Treatment of experimental renal osteodystrophy with pamidronate. *Kidney Int* 74(3):319-27.
37. Lowry MB, Lotinun S, Leontovich AA, Zhang M, Maran A, Shogren KL, Palama BK, Marley K, **Iwaniec UT**, Turner RT 2008 Osteitis fibrosa is mediated by platelet-derived growth factor-A via a phosphoinositide 3-kinase-dependent signaling pathway in a rat model for chronic hyperparathyroidism. *Endocrinology* 149(11):5735-46. **Featured on journal cover**
38. Maddalozzo GF, **Iwaniec UT**, Turner RT, Rosen CJ, Widrick JJ 2008 Whole-body vibration slows the acquisition of fat in mature female rats. *Int J Obes (Lond)* 32(9):1348-54.
39. Rickard DJ, **Iwaniec UT**, Evans G, Hefferan TE, Hunter JC, Waters KM, Lydon JP, O'Malley BW, Khosla S, Spelsberg TC, Turner RT 2008 Bone growth and turnover in progesterone receptor knockout mice. *Endocrinology* 149(5):2383-90.
40. Widrick JJ, Maddalozzo GF, Hu H, Herron JC, **Iwaniec UT**, Turner RT 2008 Detrimental effects of reloading recovery on force, shortening velocity, and power of soleus muscles from hindlimb-unloaded rats. *Am J Physiol Regul Integr Comp Physiol* 295(5):R1585-92.
41. **Iwaniec UT**, Dube MG, Boghossian S, Song H, Helferich WG, Turner RT, Kalra SP 2009 Body mass influences cortical bone mass independent of leptin signaling. *Bone* 44(3):404-12. Translated into Turkish
42. **Iwaniec UT**, Turner RT, Koo SI, Kaur R, Ho E, Wong CP, Bruno RS 2009 Consumption of green tea extract results in osteopenia in growing male mice. *J Nutr* 139(10):1914-9.
43. Kalra SP, Dube MG, **Iwaniec UT** 2009 Leptin increases osteoblast-specific osteocalcin release through a hypothalamic relay. *Peptides* 30(5):967-73.
44. Maddalozzo GF, Turner RT, Edwards CH, Howe KS, Widrick JJ, Rosen CJ, **Iwaniec UT** 2009 Alcohol alters whole body composition, inhibits bone formation, and increases bone marrow adiposity in rats. *Osteoporos Int* 20(9):1529-38.
45. Menagh PJ, Turner RT, Jump DB, Wong CP, Lowry MB, Yakar S, Rosen CJ, **Iwaniec UT** 2010 Growth hormone regulates the balance between bone formation and bone marrow adiposity. *J Bone Miner Res* 25(4):757-68.
46. Turner RT, **Iwaniec UT** 2010 Moderate weight gain does not influence bone metabolism in skeletally mature female rats. *Bone* 47(3):631-5.
47. Turner RT, **Iwaniec UT**, Marley K, Sibonga JD 2010 The role of mast cells in parathyroid bone disease. *J Bone Miner Res* 25(7):1637-49. **Featured in journal's virtual issue on PTH**
48. Turner RT, Rosen CJ, **Iwaniec UT** 2010 Effects of alcohol on skeletal response to growth hormone in hypophysectomized rats. *Bone* 46(3):806-12.
49. Howe KS, **Iwaniec UT**, Turner RT 2011 The effects of low dose parathyroid hormone on lumbar vertebrae in a rat model for chronic alcohol abuse. *Osteoporos Int* 22(4):1175-81.
50. **Iwaniec UT**, Boghossian S, Trevisiol CH, Wronski TJ, Turner RT, Kalra SP 2011 Hypothalamic leptin gene therapy prevents weight gain without long-term detrimental effects on bone in growing and skeletally mature female rats. *J Bone Miner Res* 26(7):1506-16.
51. Jackson MA, **Iwaniec UT**, Turner RT, Wronski TJ, Kalra SP 2011 Effects of increased hypothalamic leptin gene expression on ovariectomy-induced bone loss in rats. *Peptides* 32(8):1575-80.
52. Turner RT, **Iwaniec UT** 2011 Low dose parathyroid hormone maintains normal bone formation in adult male rats during rapid weight loss. *Bone* 48(4):726-32.
53. Turner RT, Wong CP, **Iwaniec UT** 2011 Effect of reduced c-Kit signaling on bone marrow adiposity. *Anat Rec (Hoboken)* 294(7):1126-34.
54. Marrone JA, Maddalozzo GF, Branscum AJ, Hardin K, Cialdella-Kam L, Philbrick KA, Breggia AC, Rosen CJ, Turner RT, **Iwaniec UT** 2012 Moderate alcohol intake lowers biochemical markers of bone turnover in postmenopausal women. *Menopause* 19(9):974-9. **Subject of editorial** [Menopause 2012 19:954-5]

55. Tal TL, Franzosa JA, Tilton SC, Philbrick KA, **Iwaniec UT**, Turner RT, Waters KM, Tanguay RL 2012 MicroRNAs control neurobehavioral development and function in zebrafish. *FASEB J* 26(4):1452-61.
56. Wiren KM, Zhang XW, Olson DA, Turner RT, **Iwaniec UT** 2012 Androgen prevents hypogonadal bone loss via inhibition of resorption mediated by mature osteoblasts/osteocytes. *Bone* 51(5):835-46.
57. Hayward R, **Iwaniec UT**, Turner RT, Lien CY, Jensen BT, Hydock DS, Schneider CM 2013 Voluntary wheel running in growing rats does not protect against doxorubicin-induced osteopenia. *J Pediatr Hematol Oncol* 35(4):e144-8.
58. **Iwaniec UT**, Turner RT 2013 Intraperitoneal injection of ethanol results in drastic changes in bone metabolism not observed when ethanol is administered by oral gavage. *Alcohol Clin Exp Res* 37(8):1271-7.
59. **Iwaniec UT**, Turner RT 2013 Failure to generate bone marrow adipocytes does not protect mice from ovariectomy-induced osteopenia. *Bone* 53(1):145-53.
60. **Iwaniec UT**, Turner RT, Smith BJ, Stoecker BJ, Rust A, Zhang B, Vasu VT, Gohil K, Cross CE, Traber MG 2013 Evaluation of long-term vitamin E insufficiency or excess on bone mass, density, and microarchitecture in rodents. *Free Radic Biol Med* 65:1209-14.
61. Turner RT, **Iwaniec UT**, Andrade JE, Branscum AJ, Neese SL, Olson DA, Wagner L, Wang VC, Schantz SL, Helferich WG 2013 Genistein administered as a once-daily oral supplement had no beneficial effect on the tibia in rat models for postmenopausal bone loss. *Menopause* 20(6):677-86.
62. Turner RT, **Iwaniec UT**, Wong CP, Lindenmaier LB, Wagner LA, Branscum AJ, Menn SA, Taylor J, Zhang Y, Wu H, Sibonga JD 2013 Acute exposure to high dose gamma-radiation results in transient activation of bone lining cells. *Bone* 57(1):164-73.
63. Turner RT, Kalra SP, Wong CP, Philbrick KA, Lindenmaier LB, Boghossian S, **Iwaniec UT** 2013 Peripheral leptin regulates bone formation. *J Bone Miner Res* 28(1):22-34. **Featured on journal cover** Subject of editorial [*J Bone Miner Res* 28(1):18-21].
64. Yang X, Belosay A, Du M, Fan TM, Turner RT, **Iwaniec UT**, Helferich WG 2013 Estradiol increases ER-negative breast cancer metastasis in an experimental model. *Clin Exp Metastasis* 30(6):711-21.
65. Gingery A, Subramaniam M, Pitel KS, Reese JM, Cicek M, Lindenmaier LB, Ingle JN, Goetz MP, Turner RT, **Iwaniec UT**, Spelsberg TC, Hawse JR 2014 The effects of a novel hormonal breast cancer therapy, endoxifen, on the mouse skeleton. *PLoS One* 9(5):e98219.
66. Hawse JR, Pitel KS, Cicek M, Philbrick KA, Gingery A, Peters KD, Syed FA, Ingle JN, Suman VJ, **Iwaniec UT**, Turner RT, Spelsberg TC, Subramaniam M 2014 TGFbeta inducible early gene-1 plays an important role in mediating estrogen signaling in the skeleton. *J Bone Miner Res* 29(5):1206-16.
67. Hydock DS, Parry TL, Wymore JD, **Iwaniec UT**, Turner RT, Schneider CM, Hayward R 2014 Effects of treadmill training on combined goserelin acetate and doxorubicin-induced osteopenia in female rats. *J Musculoskelet Neuronal Interact* 14(1):10-8.
68. Johnson TL, Gaddini G, Branscum AJ, Olson DA, Westerlind K, Turner RT, **Iwaniec UT** 2014 Effects of chronic heavy alcohol consumption and endurance exercise on cancellous and cortical bone microarchitecture in adult male rats. *Alcohol Clin Exp Res* 38(5):1365-72.
69. Turner RT, Philbrick KA, Wong CP, Olson DA, Branscum AJ, **Iwaniec UT** 2014 Morbid obesity attenuates the skeletal abnormalities associated with leptin deficiency in mice. *J Endocrinol* 223(1):M1-15.
70. Gaddini GW, Grant KA, Woodall A, Stull C, Maddalozzo GF, Zhang B, Turner RT, **Iwaniec UT** 2015 Twelve months of voluntary heavy alcohol consumption in male rhesus macaques suppresses intracortical bone remodeling. *Bone* 71:227-36.
71. Keune JA, Branscum AJ, **Iwaniec UT**, Turner RT 2015 Effects of spaceflight on bone microarchitecture in the axial and appendicular skeleton in growing ovariectomized rats. *Sci Rep* 5:18671.
72. Kyrlykova K, **Iwaniec UT**, Philbrick KA, Leid M 2015 BCL11B regulates sutural patency in the mouse craniofacial skeleton *Dev Biol* pii: S0012-1606(15)30228-1.
73. Philbrick KA, Turner RT, Branscum AJ, Wong CP, **Iwaniec UT** 2015 Paradoxical effects of partial leptin deficiency on bone in growing female mice. *Anat Rec* 298(12):2018-29.
74. Turner RT, Dube M, Branscum AJ, Wong CP, Olson DA, Zhong X, Kweh MF, Larkin IV, Wronski TJ, Rosen CJ, Kalra SP, **Iwaniec UT** 2015 Hypothalamic leptin gene therapy reduces body weight without accelerating age-related bone loss. *J Endocrinol* 227(3):129-41.

75. Gaddini GW, Turner RT, Grant KA, **Iwaniec UT** 2016 Alcohol: a simple nutrient with complex actions on bone in the adult skeleton. *Alcohol Clin Exp Res* 40(4):657-71.
76. **Iwaniec UT**, Philbrick KA, Wong CP, Gordon JL, Kahler-Quesada AM, Olson DA, Branscum AJ, Sargent JL, DeMambro VE, Rosen CJ, Turner RT 2016 Room temperature housing results in premature cancellous bone loss in growing female mice: implications for the mouse as a preclinical model for age-related bone loss. *Osteoporos Int.* 2:16016.
77. Keune JA, Philbrick KA, Branscum AJ, **Iwaniec UT**, Turner RT 2016 Spaceflight-induced vertebral bone loss in ovariectomized rats is associated with increased bone marrow adiposity and no change in bone formation. *Npj Microgravity*, vol. 2. Macmillan Publishers Limited, pp 16016.
78. Madak-Erdogan Z, Gong P, Zhao YC, Xu L, Wrobel KU, Hartman JA, Wang M, Cam A, **Iwaniec UT**, Turner RT, Twaddle NC, Doerge DR, Khan IA, Katzenellenbogen JA, Katzenellenbogen BS, Helferich WG 2016 Dietary licorice root supplementation reduces diet-induced weight gain, lipid deposition, and hepatic steatosis in ovariectomized mice without stimulating reproductive tissues and mammary gland. *Mol Nutr Food Res* 60(2):369-80.
79. Shahnazari M, Turner RT, **Iwaniec UT**, Wronski TJ, Li M, Ferruzzi MG, Nissenson RA, Halloran BP 2016 Dietary dried plum increases bone mass, suppresses proinflammatory cytokines and promotes attainment of peak bone mass in male mice. *J Nutr Biochem* 34:73-82.
80. Wang W, Belosay A, Yang X, Hartman JA, Song H, **Iwaniec UT**, Turner RT, Churchwell MI, Doerge DR, Helferich WG 2016 Effects of letrozole on breast cancer micro-metastatic tumor growth in bone and lung in mice inoculated with murine 4T1 cells. *Clin Exp Metastasis* 33(5):475-85.  
Featured on journal cover
81. **Iwaniec UT**, Turner RT 2016 Influence of body weight on bone mass, architecture, and turnover. *J Endocrinol* 230(3):R115-30.
82. Lindenmaier LB, Philbrick KA, Branscum AJ, Kalra SP, Turner RT, **Iwaniec UT** 2016 Hypothalamic leptin gene therapy reduces bone marrow adiposity in ob/ob mice fed regular and high fat diets. *Front Endocrinol* 7:110. doi: 10.3389/fendo.2016.00110. eCollection 2016.
83. Jokihaara J, Pörsti IH, Sievänen H, Kööbi P, Kannus P, Niemelä O, Turner RT, **Iwaniec UT**, Järvinen TL. 2016 Phosphate binding with Sevelamer preserves mechanical competence of bone despite acidosis in advanced experimental renal insufficiency. *PLoS One.* 11(9):e0163022.
84. Poinar G, Philbrick KA, Cohn MJ, Turner RT, **Iwaniec UT**, and Wunderlich J 2017 X-ray microcomputed tomography reveals putative trematode metacercaria in a 100 million year-old lizard (Squamata: Agamidae). *Cretaceous Research* 80: 27-3
85. Gingery A, **Iwaniec UT**, Subramaniam M, Turner RT, Pitel KS, McGovern RM, Reid JM, Marler RJ, Ingle JN, Goetz MP, Hawse JR 2017 Skeletal and uterotrophic effects of endoxifen in female rats. *Endocrinology* 158(10):3354-3368.
86. Wang W, Gordon JL, Philbrick KA, Yang X, Branscum AJ, Löhr CV, Haschek WM, Turner RT, **Iwaniec UT**, Helferich WG 2017 Low calcium diet increases 4T1 mammary tumor carcinoma cell burden and bone pathology in mice. *PLoS One* 27;12(7):e0180886. doi: 10.1371/journal.pone.0180886. eCollection 2017.
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Names of undergraduate student authors in our laboratory at OSU are dot-underlined.

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60. **Iwaniec UT**, Wong CP, Lowry MB, Rosen CJ, Turner RT. Growth hormone regulates the balance between bone formation and bone marrow adiposity. *Keystone Symposia on Molecular and Cellular Biology: Neuronal Control of Appetite, Metabolism and Weight.* 2010;160. Keystone, CO.
61. **Iwaniec UT**, Turner RT. Does weight gain influence bone metabolism in skeletally mature rats? Annual Meeting of the Endocrine Society. 2010;73. San Diego, CA.
62. Philbrick KA, Turner RT, **Iwaniec UT**. Evidence that the "high" vertebral bone mass in leptin-deficient *ob/ob* mice is due to defective skeletal maturation. *J Bone Miner Res.* 2010; 25(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Toronto, Canada.
63. Semirale A, Zhang X, Olson D, **Iwaniec UT**, Turner RT, Wiren K. Androgen prevents hypogonadal bone loss primarily through osteocyte-mediated inhibition of resorption and is not anabolic. *J Bone Miner Res.* 2010; 25(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Toronto, Canada. **Oral presentation**
64. Hawse J, **Iwaniec UT**, Pitel K, Bruinsma E, Peters K, Rajamannan N, Turner RT, Subramaniam, Spelsberg T. KFL10/KFL11 double knockout mice exhibit an osteopenic skeletal phenotype. *J Bone Miner Res.* 2010; 25(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Toronto, Canada.

65. **Iwaniec UT**, Wong CP, Lindenmaier LB, Philbrick KA, Olson DA, Turner RT. Reduced peripheral leptin signaling decreases bone formation. J Bone Miner Res. 2011; 22(Suppl 1):S1. Annual meeting of the American Society for Bone and Mineral Research. San Diego, CA. **Oral presentation**
66. Philbrick KA, Turner RT, **Iwaniec UT**. Divergent effects of partial (*ob/+*) and complete (*ob/ob*) loss of leptin production on cortical bone. J Bone Miner Res. 2011; 26 (Suppl 1):S302. Annual meeting of the American Society for Bone and Mineral Research. San Diego, CA.
67. Turner RT, Philbrick KA, Kalra SP, **Iwaniec UT**. A reappraisal of the skeletal phenotype of leptin signaling-deficient mice: implications for the physiological role of leptin as a regulator of bone metabolism. J Bone Miner Res. 2011; 26(Suppl 1):S301. Annual meeting of the American Society for Bone and Mineral Research. San Diego, CA.
68. Hawse JR, Cicek M, Pitel KS, Grygo SB, Peters KD, Rajamannan NM, **Iwaniec UT**, Turner RT, Oursler MJ, Thomas C. Spelsberg, Malayannan Subramaniam. TGF- $\beta$  inducible early gene-1 plays a critical role in mediating estrogen and canonical Wnt signaling in the growing mouse skeleton. J Bone Miner Res. 2011; 26(Suppl 1):S42. Annual meeting of the American Society for Bone and Mineral Research. San Diego, CA. **Oral presentation**
69. Philbrick KA, Turner RT, Maddalozzo GF, **Iwaniec UT**. Leptin deficiency decreases particle-induced osteolysis. The 41<sup>st</sup> Sun Valley Hard Tissue Workshop. 2011. Sun Valley, ID.
70. Turner RT and **Iwaniec UT**. c-Kit signaling regulates osteoclast differentiation and survival and couples bone formation to bone resorption during bone remodeling. The 41<sup>st</sup> Sun Valley Hard Tissue Workshop. 2011. Sun Valley, ID.
71. Helferich W, **Iwaniec UT**, Turner RT. Breast cancer and metastasis to bone. ERA of Hope Conference. 2011. Orlando FL.
72. Hawse JR, Cicek M, Subramaniam M, Pitel KS, Peters KD, Sarah B. Grygo SB, Wu X, Evans GL, **Iwaniec UT**, Turner RT, Ingle JN, Goetz MP, Spelsberg TC. Endoxifen, a newly developed breast cancer drug, has anabolic actions on the mouse skeleton. San Antonio Breast Cancer Symposium. 2011. San Antonio, TX.
73. Sibonga, JD, **Iwaniec UT**, Turner RT, Wu H. Pilot study: unique response of bone tissue to radio-adaptive effects in mice. NASA Human Research Program Investigators' Workshop. 2012. Houston TX.
74. Parry TL, **Iwaniec UT**, Turner RT, Lien CY, Jensen BT, Hydock DS, Schneider CM, Hayward R. Voluntary wheel running does not protect against doxorubicin-induced osteopenia in growing rats. Medicine and Science in Sports and Exercise 2012; 44:S524. Annual meeting of the American College of Sports Medicine. San Francisco CA.
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76. Gingery A, Subramaniam M, Cicek M, Pitel K, **Iwaniec UT**, Turner RT, Ingle J, Goetz M, Spelsberg T, Hawse J. Endoxifen differs from other selective estrogen receptor modulators *in vitro* and enhances bone mass in ovariectomized mice. J Bone Miner Res. 2012; 27(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Minneapolis, MN.
77. Turner RT, **Iwaniec UT**, Philbrick KA, Lindenmaier LB, Olson DA, Maddalozzo G. Mice like it hot: housing mice at room temperature results in cancellous bone loss. J Bone Miner Res. 2012; 27(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Minneapolis, MN. **Plenary poster**
78. Philbrick KA, Wagner L, Olson DA, Turner RT, **Iwaniec UT**. Polyethylene particles placed over the calvarium reduce cancellous bone formation in the femur. J Bone Miner Res. 2012; 27(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Minneapolis, MN.
79. Hawse H, Cicek M, Gingery A, Pitel K, Grygo S, **Iwaniec UT**, Turner RT, Subramaniam M, Spelsberg T. Tgf- $\beta$  inducible early gene-1 mediates both estrogen and canonical WNT signaling pathways in bone. J Bone Miner Res. 2012; 27(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Minneapolis, MN.
80. Turner RT, Wong CP, Lindenmaier LB, **Iwaniec UT**. Effects of marrow transplantation on bone architecture and turnover. XII Congress of the International Society of Bone Morphometry. 2012. Minneapolis, MN. **Oral presentation**

81. **Iwaniec UT**, Wang W, Yang, X, Gordon J, Olson DA, Wymore J, Turner RT, Helferich WT. Low calcium intake increases 4T1 breast cell tumor growth in bone and metastasis to lung in mice. XII Congress of the International Society of Bone Morphometry. 2012. Minneapolis, MN. **Oral presentation**
82. Bredahl E, Hydock DS, **Iwaniec UT**, Turner RT, Parry TL, Schneider CM, Hayward R. Effects of treadmill training on doxorubicin and goserelin acetate-induced bone degeneration. APS Intersociety Meeting: The Integrated Biology of Exercise VI. 2012. Westminster, CO.
83. Gingery A, Hawse JR, Cicek M, Pitel KS, Gyrgo SB, **Iwaniec UT**, Turner RT, Subramaniam M, Spelsberg TIEG TC. TIEG regulates estrogen and canonical Wnt signaling in bone. International Bone and Mineral Society and the Japanese Society for Bone and Mineral Research Meeting. 2013. Kobe, Japan. **Oral presentation**
84. Gingery A, Subramaniam M, Pitel KS, **Iwaniec UT**, Lindenmaier LB, Turner RT, Ingle JN, Goetz MP, Spelsberg TC, Hawse JR. Endoxifen prevents bone loss in ovariectomized animals. International Bone and Mineral Society and the Japanese Society for Bone and Mineral Research Meeting. 2013. Kobe, Japan. **Oral poster**
85. Philbrick KA, Wong CP, Turner RT, **Iwaniec UT**. Leptin increases polyethylene particle-induced osteolysis in *ob/ob* mice. J Bone Miner Res. 2013; 28(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Baltimore, MD.
86. Gingery A, Subramaniam M, Pitel KS, Lindenmaier LB, Ingle JN, Goetz MP, Turner RT, **Iwaniec UT**, Spelsberg TC, Hawse JR. Novel therapeutic effects of endoxifen in pre-clinical models of type 1 osteoporosis. J Bone Miner Res. 2013; 28(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Baltimore, MD.
87. Hawse H, Gingery A, Subramaniam M, Pitel KS, Lindenmaier LB, **Iwaniec UT**, Turner RT, Spelsberg TC, Ingle JN, Goetz MP. Endoxifen, a novel breast cancer therapy, elicits unique beneficial effects on bone relative to that of other selective estrogen receptor modulators. 2013. San Antonio Breast Cancer Symposium. San Antonio, TX.
88. Turner RT, Philbrick KA, Lindenmaier LB, Wong CP, Olson DA, Branscum AJ, **Iwaniec UT**. Leptin stimulates bone formation at very low circulating levels. 44<sup>th</sup> International Sun Valley Workshop. 2014. Sun Valley, ID. **Oral presentation**
89. **Iwaniec UT**, Turner RT. Alcohol and bone. Symposium on Data Integration from the Monkey Model of Alcohol Drinking. 2014. Portland, OR. **Oral presentation**
90. Keune JA, Olson DA, Branscum AJ, **Iwaniec UT**, Turner RT. Site-specific effects of spaceflight on cancellous bone microarchitecture in ovariectomized rats with established osteopenia. Bone Miner Res. 2014; 29(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Houston, TX. **Plenary poster**
91. Gingery KA, Pitel KS Gaddini GW, Li X, Ke HZ, Turner RT, Rajamannan NM, **Iwaniec UT**, Spelsberg TC, Subramaniam M, Hawse JR. TIEG suppresses SOST expression and mediates the skeletal response to sclerostin antibody therapy. Bone Miner Res. 2014; 29(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Houston, TX.
92. Larson EA, **Iwaniec UT**, Holmgren SC, Turner RT, Recht M, Taylor JA. Age-associated bone disease in factor VIII-deficient mice. American Society of Hematology Annual Meeting. 2014. San Francisco, CA.
93. Turner RT, Philbrick KA, Keune JA, Wong CP, Olson DA, Branscum AJ, **Iwaniec UT**. Housing mice at room temperature results in premature age-related cancellous bone loss: implications for spaceflight studies. Human Research Program Investigator's Workshop: Integrated Pathways to Mars. 2015. Galveston, TX.
94. **Iwaniec UT**, Philbrick KA, Wong CP, Olson DA, Branscum AJ, Turner RT. Housing mice at room temperature results in premature bone loss: implications for the mouse as a model for osteoporosis. 13<sup>th</sup> Congress of the International Society of Bone Morphometry. 2015. Tokyo, Japan. **Oral presentation**
95. Philbrick KA, Turner RT, Branscum AJ, Wong CP, **Iwaniec UT**. Paradoxical effects of partial leptin deficiency on bone in growing rats. 13<sup>th</sup> Congress of the International Society of Bone Morphometry. 2015. Tokyo, Japan.
96. Turner RT, **Iwaniec UT**. Housing mice at room temperature results in premature age-related cancellous bone loss: implications for spaceflight studies. Investigator Working Meeting, NASA. 2015. Mountain View, CA. **Oral presentation**

97. Philbrick KA, Kyrlykova K, **Iwaniec UT**, Leid M. BCL11B: a transcriptional regulator of sutural patency. Bone Miner Res. 2015; 30(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Seattle, WA.
98. Philbrick KA, Turner RT, Wong CP, Kuah A, Olson DA, Branscum AJ, **Iwaniec UT**. Peripheral leptin stimulates bone formation at very low circulating levels. Bone Miner Res. 2015; 30(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Seattle, WA.
99. **Iwaniec UT**, Philbrick KA, Wong CP, Olson DA, Kahler-Quesada A, Branscum AJ, Turner RT. Thermoneutral housing prevents premature age-related cancellous bone loss in mice. Bone Miner Res. 2015; 30(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Seattle, WA.
100. Keune JA, Branscum AJ, **Iwaniec UT**, Turner RT. Inability to generate bone marrow adipocytes does not protect the skeleton from disuse-induced cancellous bone loss in adult male mice. Bone Miner Res. 2015; 30(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Seattle, WA.
101. Gingery A, Subramaniam M, Pitel KS, Ingle JN, Goetz MP, Turner RT, **Iwaniec UT**, Spelsberg TC, Hawse JR. Effects of endoxifen, a selective estrogen receptor modulator, on bone in ovary-intact and ovariectomized rats. Bone Miner Res. 2015; 30(Suppl 1). Annual meeting of the American Society for Bone and Mineral Research. Seattle, WA.
102. Keune JA, Wong CP, Branscum AJ, **Iwaniec UT**, Turner RT. Marrow adipose tissue attenuates bone loss in hindlimb-unloaded adult male mice. The American Society for Gravitational and Space Research Annual Conference. 2015. Alexandria, VA. **Oral Presentation**
103. Kasper K, Leonard S, Wong CP, **Iwaniec UT**, Turner RT, Traber MG. Vitamin E does not dysregulate bone homeostasis in rats fed adequate vitamin K. Diet and Optimum Health Conference. 2015. Corvallis, OR.
104. Collar EM, Huber MJ, **Iwaniec UT**, Duesterdieck-Zellmer K, Stover SM. Third carpal bone fracture is associated with focal subchondral bone porosity in racehorses. Proceedings of the Veterinary Orthopedic Society. 43. 2016. Big Sky, MT.
105. **Iwaniec UI**, Philbrick KA, Wong CP, Olson DA, Branscum AJ, and Turner RT. Housing growing mice at thermoneutral temperature (32°C) increases cancellous bone volume fraction and marrow adiposity. 2nd Bone Marrow Adiposity Meeting. Rotterdam, The Netherlands. 8/25/16 – 8/26/16. **Oral presentation.**
106. Subramaniam M, Pitel K, Turner RT, **Iwaniec UT**, van Wijnen A, Hawse J. Loss of TIEG expression alters the miRNAome and transcriptome of cortical and trabecular bone resulting in impaired estrogen signaling in the mouse skeleton. Annual meeting of the American Society for Bone and Mineral Research. Atlanta, GA. 9/16/16 – 9/19/16.
107. Lee B, **Iwaniec UT**, Turner RT, Wei L, Gingery A. Macrophage progenitor RIP140 knockdown regulates osteoclast differentiation and results in osteopenia. Annual meeting of the American Society for Bone and Mineral Research. Atlanta, GA. 9/16/16 – 9/19/16.
108. Collar EM, Huber MJ, **Iwaniec UT**, Duesterdieck-Zellmer KF, Stover SM. (2016) Third carpal bone fracture is associated with focal subchondral bone porosity in racehorses. Scientific Presentation Abstracts. Veterinary Surgery. 45, E23-E51. Seattle, WA. 10-5-16 – 10-8-16.
109. **Iwaniec UT** and Turner RT. Alcohol: a simple nutrient with complex actions on the skeleton. Gordon Research Conference; Alcohol-induced End Organ Diseases. Ventura, CA. 3-26-17 – 3-30-17. **Oral presentation.**
110. Turner RT, Deyhle R, Wong CP, **Iwaniec UT**. Brown adipose tissue is activated in mice flown aboard ISS. International Space Station Research and Development Conference. Washington, DC. 7/18/2017 – 7/20/2017.
111. **Iwaniec UI**. Effects of alcohol on bone in non-human primates. 2nd Symposium on Data Integration from the Monkey Model of Alcohol Drinking. Portland, OR. 8/25/17. **Oral presentation.**
112. Philbrick K, Lindenmaier L, Colagiovanni A, Olson D, Kalra S, Branscum A, **Iwaniec U**, Turner R. Bone compartment specific effects of long duration hypothalamic leptin gene therapy on osteopetrosis in leptin-deficient *ob/ob* mice. Annual meeting of the American Society for Bone and Mineral Research. Denver, CO. 9/8/17 – 9/11/17.
113. Subramaniam M, Saadalla A, Nelson Holte M, Weivoda M, Ousler MJ, Khazaie K, Turner R, **Iwaniec U**,



Hawse J. Deletion of TIEG in CD4+ T-cells results in a sexually dimorphic bone phenotype. Annual meeting of the American Society for Bone and Mineral Research. Denver, CO. 9/8/17 – 9/11/17.

**Plenary poster**

114. Lee B, **Iwaniec UT**, Turner RT, Lin Y, Clarke BL, Wei L. RIP140 in osteoclast precursors regulates bone homeostasis, growth and osteoclast activity. Annual meeting of the American Society for Bone and Mineral Research. Denver, CO. 9/8/17 – 9/11/17. **Oral presentation**
115. Cheung W, **Iwaniec U**, Hao S, Wang Z, Turner R, Mak R. Leptin signaling blockade ameliorates uremic muscle wasting and bone disease in chronic kidney disease. Annual Meeting of the American Society for Nephrology. New Orleans, LA. 10/31/2017 – 11/5/2017.
116. Keune JA, Branscum AJ, **Iwaniec UT**, Turner RT. Excessive bone marrow adiposity does not exacerbate disuse induced bone loss in male *ob/ob* mice. 33<sup>rd</sup> Annual Meeting of the American Society for Gravitational and Space Research. Seattle, WA. 10/25/2017 – 10/28/2017. **Oral presentation**
117. Turner RT, **Iwaniec UT**, Wong CP. Spaceflight increases adaptive thermogenesis in female C57Bl6 mice. 33<sup>rd</sup> Annual Meeting of the American Society for Gravitational and Space Research. Seattle, WA. 10/25/2017 – 10/28/2017. **Oral presentation**
118. Zhang Y, Wong CP, Gallo RL, Gamboja AR, Olson DA, Lowry MB, Fantacone ML, Maier CS, Stevens JF, Turner RT, **Iwaniec UT**, Gombart AF. Knockout and human transgenic mouse models reveal a role for the cathelicidin antimicrobial peptide (*Camp/CAMP*) gene in bone metabolism. Annual meeting of the American Society for Bone and Mineral Research. Montreal, Quebec, Canada. 9/28/2018 – 10/1/2018.
119. Sattgast HL, Walter NAR, Newman N, Branscum AJ, Grant KA, Turner RT, **Iwaniec UT**. Effects of graded increases in ethanol consumption on biochemical markers of bone turnover in young adult male and female cynomolgus macaques. Gordon Research Conference (GRC) on Alcohol-Induced End Organ Diseases "Inflammation and Cell Death: Mechanisms of Tissue Injury by Alcohol." Ventura, CA. 3/24/2019 – 3/29/2019.
120. Kahler-Quesada AM, Grant KA, Baker EJ, Walter NAR, Newman N, Branscum AJ, Maddalozzo GF, Turner RT, **Iwaniec UT**. Voluntary alcohol consumption in male rhesus macaques suppresses cancellous bone formation and increases bone marrow adiposity. Gordon Research Conference (GRC) on Alcohol-Induced End Organ Diseases "Inflammation and Cell Death: Mechanisms of Tissue Injury by Alcohol." Ventura, CA. 3/24/2019 – 3/29/2019.
121. Kahler-Quesada AM, Grant KA, Baker EJ, Walter NAR, Newman N, Branscum AJ, Maddalozzo GF, Turner RT, **Iwaniec UT**. Voluntary alcohol consumption in male rhesus macaques suppresses cancellous bone formation and increases bone marrow adiposity. 42nd Annual Scientific Meeting of the Research Society on Alcoholism. Minneapolis, MN. 6/22/2019 – 6/26/2019.
122. Sattgast LH, Walter NAR, Newman N, Branscum AJ, Grant KA, Turner RT, **Iwaniec UT**. Effects of graded increases in ethanol consumption on biochemical markers of bone turnover in young adult male and female cynomolgus macaques. American Society for Bone and Mineral Research Annual Meeting, Orlando, FL. 9/20/2019 – 9/23/2019.
123. Sattgast LH, Kuah AF, Walter NAR, Newman N, Branscum AJ, Grant KA, Turner RT, **Iwaniec UT**. Effects of ethanol consumption on intracortical bone remodeling and biochemical markers of bone turnover in young adult male cynomolgus macaques. XIVth Congress of the International Society of Bone Morphometry, Orlando, FL. 9/24/2019 – 9/26/2019. **Oral presentation**
124. Kahler-Quesada AM, Grant KA, Walter NAR, Newman N, Branscum AJ, Maddalozzo GF, Turner RT, **Iwaniec UT**. Voluntary chronic heavy alcohol consumption in male rhesus macaques suppresses cancellous bone formation and increases bone marrow adiposity. XIVth Congress of the International Society of Bone Morphometry, Orlando, FL. 9/24/2019 – 9/26/2019. **Oral presentation by UT Iwaniec**
125. Turner RT, Philbrick KA, Wong CP, Branscum AJ, **Iwaniec UT**. Propranolol antagonizes the adaptive bone marrow adipose tissue response to cold temperature stress induced by room temperature housing. XIVth Congress of the International Society of Bone Morphometry, Orlando, FL. 9/24/2019 – 9/26/2019. **Oral presentation**
126. Martin SA, Wright SL, Smith AB, Wong CP, Jump DB, Anderson RM, Turner RT, **Iwaniec, UT**. Caloric restriction alters bone marrow adiposity and energy metabolism. 2020 American College of Sports Medicine Annual Meeting and World Conference. Virtual meeting. 5/26/2020 – 5/30/2020.
127. Sattgast LH, Wong CP, Doerge DR, Helferich WG, **Iwaniec UT**, Turner RT. Effects of isoliquiritigenin on bone metabolism and uterus in ovariectomized (ovx) rats. American Society for Nutrition Annual Meeting. Virtual meeting. 6/1/2020 – 6/4/2020.

128. Turner RT, Wong CP, Olson DA, Branscum AJ, **Iwaniec UT**. Role of kit signaling in maturation of bone marrow adipocytes in mouse long bones. 6<sup>th</sup> International Meeting on Bone Marrow Adiposity. Virtual meeting. 9/9/2020 – 9/10/2020. **Oral presentation**.
129. Sattgast LH, Gamboa A, Olson DA, Branscum AJ, **Iwaniec UT**, Turner RT. Effects of spaceflight on cancellous and cortical bone in proximal femur in rats. American Society for Bone and Mineral Research Annual Meeting. Virtual meeting. 9/11/2020 – 9/14/2020.
130. Sattgast LH, Gamboa A, Olson DA, Branscum AJ, **Iwaniec UT**, Turner RT. Effects of spaceflight on cancellous and cortical bone in proximal femur in rats. American Society for Gravitational and Space Research Annual Meeting. Virtual meeting. 11/5/2020 – 11/6/2020. **Oral presentation**
131. Sattgast LH, Wong CP, Olson DA, Branscum AJ, Turner RT, **Iwaniec UT**. Hypothalamic leptin gene therapy and caloric restriction have differential effects on energy intake and energy partitioning in adult female rats. American Society for Nutrition Annual Meeting. Virtual meeting. 6/7/2021 – 6/10/2021. **Oral presentation**

## Research Support

### Current Research Support

R01 AR060913, National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)  
 IWANIEC, UT (PI)  
 04/01/21 – 03/31/26 \$1,843,750 (total)

#### **The Role of Leptin in Inflammation-driven Bone Loss**

The goal of this project is to test the hypothesis that: (1) leptin signaling by immune cells is necessary for normal bone growth, maturation and turnover, but (2) in the presence of chronic inflammation, leptin signaling by immune cells promotes net bone loss.

Role: PI

R01 AA026289, National Institute on Alcohol Abuse and Alcoholism (NIAAA)  
 IWANIEC, UT (PI)  
 09/20/2017 – 05/31/2022 \$1,638,419 (total)

#### **Complex Systems Analysis of the Impact of Alcohol on Bone in Non-Human Primates**

The goal of this project is to delineate the primary mechanisms mediating the divergent effects of moderate and heavy alcohol consumption on bone health using non-human primates as a model for humans.

Role: PI

R01 AA026289 Supplement, National Institute on Alcohol Abuse and Alcoholism (NIAAA)  
 IWANIEC, UT (PI)  
 09/01/2020 – 05/31/2022 \$147,603 (total)

#### **Effect of Alcohol Consumption on Molecular Risk Factors for SARS-CoV-2**

The goal of this project is to evaluate the effects of alcohol – in the context of sex, age, and weight – on protein and/or gene expression levels of molecular factors influencing SARS-CoV-2 infection in archived tissues (plasma, lung, liver, abdominal fat, and bone marrow) from male and female rhesus macaques.

Role: PI

80NSSC19K0430, National Aeronautics and Space Administration (NASA)  
 TURNER, RT (PI)  
 02/01/19 – 01/31/22 (NCE) \$291,704 (total)

#### **Housing Temperature: An Important Variable for Simulated Spaceflight Studies Using Mice**

The goal of this project is to evaluate the individual and combined effects of mild cold stress induced by room temperature housing and hindlimb unloading on the skeleton in C57Bl6 mice, a strain commonly used in spaceflight studies.

Role: Co-I

National Aeronautics and Space Administration (NASA)  
 TURNER, RT (PI)  
 02/01/21 – 01/31/24 (end date depends on occurrence of flight) \$321,332 (total)

#### **Time Course for Re-Adaptation of Thermoregulation and Bone Following Spaceflight**

The goal of this project, to be flown on a joint Russian/USA mission, is to evaluate the effects of extended

exposure to microgravity and cosmic radiation during high Earth orbit on thermoregulation and bone metabolism following return to Earth.

Role: Co-I