

CURRICULUM VITA

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Education and Degrees

August 2000 – July 2004. Postdoctoral Research Fellowship in Cardiology, Department of Molecular Genetics, University of Texas Southwestern Medical Center, Dallas, TX.

June 2000 – Doctor of Philosophy in Kinesiology, University of Maryland, College Park, MD.

May 1993 - Masters in Public Management, University of Maryland, College Park, MD.

May 1990 - Bachelor of Science in Nutritional Sciences, University of Maryland, College Park, MD.

Personal Statement

My current research is focused on examining the individual and combined effects of exercise training and nutritional factors on the health and quality of life of patients with kidney failure undergoing chronic hemodialysis therapy. My lab recently completed an NIH-funded RCT examining the efficacy of intradialytic whey protein supplementation and exercise training (cycling) on cardiovascular disease risk and physical function (NCT#01234441). More recently, my research has focused on developing more comprehensive lifestyle intervention strategies to improve the health of this critically ill patient population. Toward this goal, we are currently conducting a pilot study to test the feasibility of a multifactorial intervention focused on reducing chronic volume overload and improving physical function in hemodialysis patients using non-pharmacological means (NCT#2627066). Our comprehensive intervention strategy involves a combination of dietary salt restriction to control the patients thirst, combined with changes to patient's dialysis and blood pressure medication prescriptions to facilitate reductions in their post-dialysis weights and symptoms. It also incorporates a comprehensive physical activity program to further improve cardiovascular function and prevent muscle wasting. My lab also has recently initiated several related projects aimed at improving our understanding of the mechanisms by which exercise and nutrition may improve the health and quality of life of hemodialysis patients. This includes new pilot projects that aim to investigate the effects of a low sodium diet and acute exercise on the accumulation of sodium in the skeletal muscles of hemodialysis patients and its downstream effects on muscle function, CVD risk, and the structure and function of the intestinal microbiome. Lastly, we are utilizing novel stable isotope methodologies to characterize the kinetics of dietary protein digestion, absorption, and amino acid uptake and synthesis in skeletal muscle in hemodialysis patients. These projects each support the overall research goal in my lab of examining the efficacy of novel approaches for improving the health and quality of life of patients with kidney failure.

Professional Experience:

1990-93 Graduate Research Asst., Department of Geography, University of Maryland, College Park, MD
1993-96 Legislative Analyst, Argonne National Laboratory, Washington, DC
1996-2000 Graduate Teaching and Research Asst, Department of Kinesiology, University of Maryland College Park, MD
2000-2004 Post-Doctoral Fellow (National Research Service Award) in Molecular Genetics, University of

- Texas Southwestern Medical Center, Dallas, TX
- 2004-2010 Assistant Professor, Department of Kinesiology and Community Health, Division of Nutritional Sciences, University of Illinois, Champaign, IL
- 2010 - Associate Professor, Department of Kinesiology and Community Health, Division of Nutritional Sciences, University of Illinois, Champaign, IL
- 2017 - Affiliate, Carle-Illinois College of Medicine, Urbana, IL
- 2017 - Affiliate, Department of Kinesiology and Nutrition, University of Illinois- Chicago

Awards/Honors

- 1998 – 2000 Phi Alpha Epsilon member – honor society for the College of Health and Human Performance, University of Maryland – College Park, MD
- 1999-2000 Awarded NIH/NIA predoctoral fellowship, Department of Kinesiology, University of Maryland - College Park, MD
- 2000-2004 Awarded NIH post-doctoral fellowship in Cardiology, Department of Molecular Genetics, University of Texas Southwestern Medical Center, Dallas, TX
- 2005 Selection for the National Institute on Aging's Summer Institute on Aging Research program.
- 2011 Appointed Research Fellow in the Center for Advanced Studies, University of Illinois
- 2014 College of Applied Health Sciences, UIUC, Undergraduate Research Mentoring Award

Professional Activities

- 1) Society Member: American Society of Nephrology (2010 – present), International Society of Nephrology (2010 – present), International Society of Renal Nutrition and Metabolism (2010 – present). European Renal Association (2015 – present).
- 2) American College of Sports Medicine Grant and Fellowship Review Committee (2011 – 2017).
- 3) Director of the Lifetime Fitness Program, University of Illinois at Urbana-Champaign (2011- present).

Teaching Experience:

Undergraduate Courses Taught:

- Bioscience of Human Movement
- Physical Activity and Aging
- Advanced Exercise Physiology
- Exercise Instruction in the Elderly
- Master Athletes
- Exercise and Nutrition in Chronic Kidney Disease
- Physical Activity and Health

Graduate Courses Taught:

- Cardiovascular Exercise Physiology
- Nutrition, Exercise, and Cardiovascular Disease Prevention
- Nutritional Considerations for Hemodialysis Patients
- Exercise Metabolism and Biochemistry
- Pathophysiology of Renal Failure
- Pathophysiology of Cardiovascular Disease
- Cardiovascular Measurement Techniques
- Nutrition in Renal Failure

Supervision of Graduate Students

Doctoral Dissertations Directed (completed):

1. Emily Jane Tomayko. Ph.D. Nutritional Sciences, May, 2011. Dissertation Title: "Effects of Soy and Whey Protein on Co-Morbidities in Renal Failure Patients". Completed post-doctoral fellowship in the Department of Family Medicine and Community Health, University of Wisconsin (Mentor: Alexandra Adams). Current position: Assistant Professor, College of Public Health, Oregon State University.
2. Pei-Tzu Wu. Ph.D. Kinesiology, August, 2013. Dissertation Title: "Effects of Pomegranate Extract Supplementation on Cardiovascular Disease Risk and Physical Function in Patients with Chronic Renal Failure." Completed postdoctoral research fellowship at UCLA Schools of Nursing (Mentor: Dr. Christian Roberts), Public Health (Dr. Alexander Ortega), and Medicine (Dr. Maureen McMahon) from 2013-2017.
3. Hae Ryong Chung. Ph.D. Kinesiology, May, 2014. Dissertation title: "The Impact of Hypercholesterolemia and Physical Activity on Statin-Associated Skeletal Muscle Myopathy." Current position: Assistant Professor, Department of Health and Fitness Management, Clayton State University, Atlanta, GA.
4. Peter Fitschen, Ph.D. Kinesiology, May 2014. Dissertation Title: "HMB Supplementation in Hemodialysis Patients". Current Position: Professional Bodybuilder and fitness consultant.
5. Brandon Kistler, Ph.D. Kinesiology, May 2016. Dissertation title: "Acute effects of nutrition supplementation on hemodynamics, treatment efficiency, and gastrointestinal symptoms during hemodialysis". Current Position: Assistant Professor, Assistant Professor of Nutrition and Dietetics, Department of Nutrition & Health Science, Ball State University
6. Jin Hee Jeong. Ph.D. Kinesiology, May 2017. Dissertation title: "Current position: Postdoctoral Research Fellow, Department of Population Health Science, Medical College of Georgia, Augusta, GA.
7. Annabel Biruete. Ph.D. Nutritional Sciences, May 2017. Dissertation title: Current Position: completing dietetic internship program at Ball State University.

Doctoral Dissertations Directed (In progress):

1. Alana Harris. Dissertation Title: "Impact of a Dialysis Clinic Staff Workplace Wellness Program on Staff and Patient Health." In progress.
2. Luis Perez. Dissertation Title: "Impact of Dietary Sodium Restriction on Muscle Sodium Levels in Hemodialysis Patients." In Progress.
3. Gwen Derk: Dissertation Title: "Development of an Antihypertensive Medication Deprescribing Protocol for Hemodialysis Patients." In Progress.
4. Brett Burrows. Dissertation Title: "Development and Implementation of a student intern-managed hemodialysis clinic physical activity program." In Progress.
5. Shelly Fang. Dissertation Title: "Assessing the Impact of Muscle Sodium on Physical Function and Strength". In Progress

Masters Students Directed:

1. Laura Feeney. M.S. Kinesiology, May, 2007. Thesis Title: "Effect of Endurance Exercise Training on Gallstone Development in Mice."
2. Andrea Cachi. M.S. Nutritional Science, May, 2009. (non-thesis degree).
3. Filand Cortez. M.S. Kinesiology, May, 2011. Thesis title: Effects of Exercise Training on Inflammation and Peri-aortic Fat in Mice".
4. Anna Masinelli. M.S. Nutritional Science, May, 2011. (non-thesis degree)
5. Kyle Leyshon M.S. Kinesiology, May 2013. (non-thesis degree)
6. Mason West. M.S. Kinesiology, May 2015 (non-thesis degree)
7. Kirsten Mitchell. M.S. Kinesiology, Dec 2016 (non-thesis degree)
8. Sarah Silva. M.S. Kinesiology. TBD

Publications

1. "Falls and Fall Related Injuries in Older Americans with Chronic Kidney Disease". Kistler BM, Kjubchandani J, Jakubowicz G, **Wilund KR**, Sosnoff J. Preventing Chronic Disease. *In Press*.
2. "Comparison of Methods Study between a Photonic Crystal Biosensor and Certified ELISA to Measure Biomarkers of Iron Deficiency in Chronic Kidney Disease Patients." Peterson RD, **Wilund KR**, Cunningham BT, Andrade JE. *Sensors (Basel)*. 2017 Sep 25;17(10). pii: E2203.
3. "The relationship between intradialytic nutrition and gastrointestinal symptoms using a modified version of the Gastrointestinal Symptom Rating Scale". Kistler B, Biruete A, Chapman KM, **Wilund KR**, *Journal of Renal Nutrition*. *In Press*.
4. "Exercise and CKD: Skeletal Muscle Dysfunction and Practical Application of Exercise to Prevent and Treat Physical Impairments in CKD." Roshanravan B, Gamboa J, **Wilund K**. *Am J Kidney Dis*. 2017 June; 69(6):837-852.
5. "Effect of Acute Aerobic Exercise and Histamine Receptor Blockade on Arterial Stiffness in African-Americans and Caucasians." Yan H, Ranadive SM, Lane-Cordova AD, Kappus RM, Behun MA, Cook MD, Woods JA, **Wilund KR**, Baynard T, Halliwill JR, Fernhall B. *J Appl Physiol* 2017 Feb 1;122(2):386-395.
6. "The Impact of Exercise on Statin-Associated Skeletal Muscle Myopathy". Chung HR, Vakil M, Munroe M, Parikh A, Meador BM, Wu PT, Jeong JH, Woods JA, **Wilund KR**, Boppart MD. *PLoS One*. 2016 Dec 9;11(12):e0168065
7. "Aging, not age-associated inflammation, determines blood pressure and endothelial responses to acute inflammation." Lane-Cordova AD, Ranadive SM, Kappus RM, Cook MD, Phillips SA, Woods JA, **Wilund KR**, Baynard T, Fernhall B. *J Hypertension*. 2016 Dec; 34(12): 2402-2409.
8. "Modified Nutritional Recommendations to Improve Dietary Patterns and Outcomes in Hemodialysis Patients." Biruete a, Jeong JH, Barnes JL, **Wilund KR**. *J Ren Nutr* 2017 Jan; 27(1):62-70.
9. "Efficacy of beta-hydroxy beta-methyl butyrate (HMB) supplementation in maintenance hemodialysis patients." Fitschen PJ, Biruete A, Jeong J, **Wilund KR**. *Hemodial Int*. 2017 Jan;21(1):107-116.
10. "In-Center Nutrition Practices of Clinics within a Large Hemodialysis Provider in the United States." Benner D, Burgess M, Stasios M, Brosch B, **Wilund K**, Shen S, Kistler B. *Clin J Am Soc Nephrol*. 2016 May 6; 11(5):770-5.
11. "Differential Post-Exercise Blood Pressure Responses between Blacks and Caucasians." Yan H, Behun MA, Cook MD, Ranadive SM, Lane-Cordova AD, Kappus RM, Woods JA, **Wilund KR**, Baynard T, Halliwill JR, Fernhall B. *PLoS One*. 2016 Apr 13;11(4):e0153445
12. "Eating during treatment can be a cost-effective way to improve outcomes: a letter to the editor." Kistler BM, **Wilund KR**. *Contemp Nurse*. 2016 Mar 16:1-3.
13. "Formation of an Exercise in CKD Working Group." **Wilund KR**, Painter P. *Am J Kidney Dis*. 2016 May;67(5):812.
14. "Sex differences in autonomic function following maximal exercise." Kappus RM, Ranadive SM, Yan H, Lane-Cordova AD, Cook MD, Sun P, Harvey IS, **Wilund KR**, Woods JA, Fernhall B. *Biol Sex Differ*. 2015 Dec 1; 6:28.
15. "The effects of exercise on the lipoprotein subclass profile: A meta-analysis of 10 interventions." Sarzynski MA, Burton J, Rankinen T, Blair SN, Church TS, Després JP, Hagberg JM, Landers-Ramos R, Leon AS, Mikus CR, Rao DC, Seip RL, Skinner JS, Slentz CA, Thompson PD, **Wilund KR**, Kraus WE, Bouchard C. *Atherosclerosis*. 2015 Oct 17;243(2):364-372
16. "Aerobic Exercise Training and Arterial Changes in African-Americans versus Caucasians. Ranadive SM, Yan H, Lane AD, Kappus RM, Cook MD, Sun P, Harvey I, Ploutz-Synder R, Woods JA, **Wilund KR**, Fernhall B. *Med Sci Sports Exerc*. 2016 Jan;48(1):90-7.
17. "Effects of Tomato and Soy Germ on Lipid Bioaccumulation and Atherosclerosis in ApoE^{-/-} Mice. Smith BW, Miller RJ, **Wilund KR**, O'Brien WD Jr, Erdman JW Jr. *J Food Sci*. 2015 Aug;80(8):H1918-25.
18. "Effects of Pomegranate Extract Supplementation on Cardiovascular Risk Factors and Physical Function in Hemodialysis Patients. Wu PT, Fitschen PJ, Kistler BM, Jeong JH, Chung HR, Aviram M, Phillips SA, Fernhall B, **Wilund KR**. *J Med Food*. 2015 Sep;18(9):941-9
19. "The presence and impact of diastolic dysfunction on physical function and body composition in hemodialysis patients. Jeong JH, Wu PT, Kistler BM, Fitschen PJ, Biruete AG, Phillips SA, Ali MM, Fernhall B, **Wilund KR**. *J Nephrol*. 2015 Dec;28(6):739-47

20. "Intradialytic protein supplementation reduces inflammation and improves physical function in maintenance hemodialysis patients." Tomayko, EJ, Kistler BM, Fitschen PJ, Wu PT, Chung HR, **Wilund KR**. *J Ren Nutr*. 2015 May;25(3):276-83.
21. "It's a Non-Dialysis Day...Do You Know How Your Patient Is Doing? A Case for Research into Interdialytic Activity." Mendoza M, Han M, Meyring-Wösten A, **Wilund K**, Kotanko P. *Blood Purif*. 2015;39(1-3):74-83.
22. "Rethinking the restriction on nutrition during hemodialysis treatment." Kistler BM, Fitschen PJ, Ikizler TA, **Wilund KR**. *J Ren Nutr*. 2014 Nov;24(6):349-352.
23. "To Eat or Not To Eat - International Experiences with Eating During Hemodialysis Treatment". Kistler BM, Benner D, Burgess M, Stasios M, Kalantar-Zadeh K, **Wilund KR**. *J Ren Nutr*. 2014 Nov;24(6):349-352.
24. "Sex differences in ventricular-vascular coupling following endurance training." Lane AD, Yan H, Ranadive SM, Kappus RM, Sun P, Cook MD, Harvey I, Woods J, **Wilund K**, Fernhall B. *Eur J Appl Physiol*. 2014 Dec;114(12):2597-606.
25. "Case Study: Natural Bodybuilding Contest Preparation." Kistler BM, Fitschen PJ, Ranadive SM, Fernhall B, **Wilund KR**. *Int J Sport Nutr Exerc Metab*. 2014 Dec;24(6):694-700
26. "Perceptual effects and efficacy of intermittent or continuous blood flow restriction resistance training." PJ Fitschen, BM Kistler, JH Jeong, HR Chung, P Wu, MJ Walsh, RW Motl, **KR Wilund**. *Clin Physiol Funct Imaging*. 2014 Sept; 34(5):356-63.
27. "Resveratrol Supplementation Reduces Aortic Atherosclerosis and Calcification and Attenuates Loss of Aerobic Capacity in a Mouse Model of Uremia." EJ Tomayko, A Cachia, HR Chung, **KR Wilund**. *Journal of Medicinal Foods*. 2014 Feb; 17(2):278-83.
28. Effect of Acute Moderate Exercise on Induced Inflammation and Arterial Function in Older Adults. Ranadive SM, Kappus RM, Cook MD, Yan H, Lane AD, Woods JA, **Wilund KR**, Iwamoto G, Vanar V, Tandon R, Fernhall B. *Exp Physiol*. 2014 Feb; 17(2):278-83.
29. "Postural Control in Hemodialysis Patients." Shin S, Chung HR, Fitschen PJ, Kistler BM, Park HW, **Wilund KR**, Sosnoff JJ. *Gait Posture*. 2014 Feb;39(2):723-7.
30. "Hemodynamic and arterial stiffness differences between African-Americans and Caucasians following maximal exercise." H Yan, SM Ranadive, AD Lane, RM Kappus, KS Heffernan, JA Woods, P Sun, P Wu, **KR Wilund**, I Harvey, B Fernhall. *American Journal of Physiology – Heart and Circulatory Physiology*. 2014 Jan; 306(1):H60-8.
31. "Elderly person with ICU-acquired weakness: The potential role for B-hydroxy-B-methylbutyrate (HMB) supplementation." Rahman A, **Wilund K**, Koo K, Martin C, Jeejeebhoy K, Agarwala R, Fitschen P, Mourtzakis M. *Journal of Parenteral and Enteral Nutrition*. *J Parenter Enteral Nutr*. 2013 Sept 26; 38(5):567-575.
32. "Effect of Acute Aerobic Exercise on Vaccine Efficacy in Older Adults". SM Ranadive, RM Kappus, M Cook, H Yan, AD Lane, JA Woods, **K Wilund**, G Iwamoto, V Vanar, R Tandon, B Fernhall. *Medicine and Science in Sports and Exercise*. *Med Sci Sports Exerc*. 2014 Mar; 46(3): 455-61.
33. "Effect of Muscle Strength on Gait in Hemodialysis Patients with and without Diabetes." Shin S, Chung HR, Kistler BM, Fitschen PJ, **Wilund KR**, Sosnoff JJ. *Int J Rehabilitation Research*. 2014 March;37(1):29-33.
34. "Arterial Stiffness and Walk Time in Patients with End-Stage Renal Disease." Lane AD, Wu PT, Kistler B, Fitschen P, Tomayko E, Jeong JH, Chung HR, Yan H, Randadive SM, Phillips S, Fernhall B, **Wilund K**. *Kidney Blood Press Res*. 2013 April 30; 37(2-3):142-50.
35. "Effect of Sex on Wasted Left Ventricular Effort Following Maximal Exercise." Lane, AD, Ranadive SM, Yan H, Kappus RM, Cook MD, Sun P, Woods JA, **Wilund K**, Fernhall B. *Int J Sports Med*. 2013; 34(9):770-6.
36. "Resting and post exercise arterial-ventricular coupling in endurance-trained men and women." Fahs CA, Rossow LM, Yan H, Ranadive SM, Agiovlasitis S, **Wilund KR**, Baynard T, Fernhall B. *J Hum Hypertens*. 2013 Sep;27(9):552-6.
37. "Efficacy of B-hydroxy-B-methylbutyrate supplementation in elderly and clinical populations." Fitschen PJ, Wilson GJ, Wilson JM, **Wilund KR**. *Nutrition*. 2013 Jan;29(1):29-36
38. "Walking and Talking in Maintenance Hemodialysis Patients." Shin S, Chung HR, Kistler BM, Fitschen PJ, **Wilund KR**, Sosnoff JJ. *Arch Phys Med Rehabil*. 2013 Jan;94(1):127-31

39. "Aortic Reservoir function, estimated myocardial demand and coronary perfusion pressure following steady state and interval exercise." Lane AD, Heffernan KS, Rossow LM, Fahs CA, Ranadive SM, Yan H, Baynard T, **Wilund K**, Fernhall B. *Clin Physiol Funct Imaging*. 2012 Sep; 32(5): 353-60.
40. "Validity of predicting left ventricular end systolic pressure changes following an acute bout of exercise." Kappus RM, Ranadive SM, Yan H, Lane AD, Cook MD, Hall G, Harvey IS, **Wilund KR**, Woods JA, Fernhall B. *J Sci Med Sport*. 2013 Jan;16(1):71-5.
41. "Exercise, inflammation and aging." Woods JA, **Wilund KR**, Martin SA, Kistler BM. *Aging Dis*. 2012 Feb; 3(1):130-40.
42. "Soy protein diet and exercise training increase relative bone volume and enhance bone microarchitecture in a mouse model of uremia." Tomayko EJ, Chung HR, **Wilund KR**. *J Bone Miner Metab*. 2011 Nov; 29(6): 682-90.
43. "The effect of acute fish-oil supplementation on endothelial function and arterial stiffness following a high-fat meal." Fahs CA, Yan H, Ranadive S, Rossow LM, Agiovlasitis S, **Wilund KR**, Fernhall B. *Appl Physiol Nutr Metab*. 2010 Jun; 35(3):294-302.
44. "Intradialytic Exercise Training Reduces Oxidative Stress and Epicardial Fat: A Pilot Study." **Wilund KR**, Tomayko EJ, Wu PT, Chung HR, Vallurupalli S, Lakshminarayanan B, and Fernhall B. *Nephrology, Dialysis and Transplantation*. 2010 Aug; 25 (8): 2695-701.
45. "Post exercise Hypotension in an Endurance-Trained Population of Men and Women Following High-Intensity Interval and Steady-State Cycling." Rossow L, Yan H, Fahs CA, Ranadive SM, Agiovlasitis S, **Wilund KR**, Baynard T, Fernhall B. *Am J Hypertens*. 2010 April; 23(4): 358-67.
46. "Macrophages from alpha 7 nicotinic acetylcholine receptor knockout mice demonstrate increased cholesterol accumulation and decreased cellular paraoxonase expression: A possible link between the nervous system and atherosclerosis development." **Wilund KR**, Rosenblat M, Chung HR, Volkova N, Kaplan M, Woods JA, Aviram M. *Biochem Biophys Res Commun*. 2009 Dec 4; 390(1):148-54.
47. "Resistance exercise training reduces central blood pressure and improves microvascular function in African American and white men." Heffernan KS, Fahs CA, Iwamoto GA, Jae SY, **Wilund KR**, Woods JA and Fernhall B. *Atherosclerosis*. 2009 Nov; 207(1):220-6.
48. "Effects of Diet and Exercise on Metabolic Disturbances in High Fat Diet-Fed Balb/c Mice." Vieira V, Valentine R, **Wilund KR**, Woods JA. *Cytokine*. 2009 Jun;46(3):339-45.
49. "Effects of Exercise and Low-Fat Diet on Adipose Tissue Inflammation and Metabolic Complications in Obese Mice." Vieira V, Valentine R, **Wilund KR**, Antao N, Baynard T. *Am J Physiol Endoc Metab*. 2009 May;296(5):E1164-71.
50. "Influence of arterial wave reflection on carotid blood pressure and intima-media thickness in older endurance trained men and women with pre-hypertension." Heffernan KS, Jae SY, Tomayko EJ, Ishaque MR, Fernhall B, **Wilund KR**. *Clinical Physiology and Functional Imaging*. 2009 May;29(3):193-200..
51. "C-reactive protein and cardiac vagal activity following resistance training in young African American and white men." Heffernan, KS, Woods JA, Vieira VJ, Jae SY, **Wilund KR**, Iwamoto GA, Fernhall B. *Am J Physiol Regul Integr Comp Physiol*. 2009 Apr;296(4):R1098-105.
52. "Racial differences in central blood pressure and vascular function in young men." Heffernan KS, Jae SY, **Wilund KR**, Woods JA, Fernhall B. *Am J Physiol Heart Circ Physiol*. 2008 Dec;295(6):H2380-7.
53. "Effects of endurance exercise training on markers of cholesterol absorption and synthesis." **KR Wilund**, LA Feeney, EJ Tomayko, EP Weiss, JH Hagberg. *Physiol Res*. 2009;58(4):545-52.
54. "Physical activity, coronary artery calcium, and bone mineral density in elderly men and women: a preliminary investigation." **KR Wilund**, EJ Tomayko, EM Evans, K Kim, MR Ishaque, B Fernhall. *Metabolism*. 2008 Apr;57(4):584-91.
55. "Endurance Exercise Training Reduces Gallstone Development in Mice." **KR Wilund**, LA Feeney, EJ Tomayko, HR Chung, K Kim. *Journal of Applied Physiology*. 2008 Mar;104(3):761-5.
56. "The association between regional body composition and metabolic outcomes in athletes with spinal cord injury." Mojtahedi MC, Valentine RJ, Arngrimsson SA, **Wilund KR**, Evans EM. *Spinal Cord*. 2008;46:192-197.
57. "Is the Anti-inflammatory Effect of Regular Exercise Responsible for Reduced Cardiovascular Disease?" **KR Wilund**. *Clinical Science*. 2007; 112(11): 543-55.
58. "Endurance exercise training raises high-density lipoprotein cholesterol and lowers small low-density lipoprotein and very low-density lipoprotein independent of body fat phenotypes in older men and

- women." A Halverstadt, DA Phares, **KR Wilund**, AP Goldberg, JM Hagberg. *Metabolism: Clinical and Experimental* 2007; 56: 444– 450.
59. "No Association Between Plasma Levels of Plant Sterols and Atherosclerosis in Mice and Men." **KR Wilund**, L Yu, F Xu, GL Vega, SM Grundy, JC Cohen and HH Hobbs. *Arteriosclerosis Thrombosis and Vascular Biology*. 2004 Dec; 24(12):2326-32
 60. Autosomal recessive hypercholesterolemia in three sisters with phenotypic homozygous familial hypercholesterolemia: diagnostic and therapeutic procedures." HP Thomas, A Vogt, **KR Wilund**, C Schliesser, E Steinhagen-Thiessen, U Kassner. *Ther Apher Dial*. 2004 Aug;8(4):275-80.
 61. "High Level Expression of ABCG5 and ABCG8 Attenuates Diet-Induced Hypercholesterolemia and Atherosclerosis in LDLr^{-/-} Mice." **KR Wilund**, LQ Yu, F Xu, JC Cohen, and HH Hobbs. *Journal of Lipid Research* 2004 August;45(8):1429-36.
 62. "B2 and B3 Adrenergic Receptor Gene Polymorphisms and Exercise Hemodynamics in Postmenopausal Women." SD McCole, AR Shuldiner, MD Brown, GE Moore, RE Ferrell, **KR Wilund**, A Huberty, LW Douglass, and JM Hagberg. *Journal of Applied Physiology*, 2003; 96: 526-530.
 63. "High Density Lipoprotein-Cholesterol, its Subfractions, and Responses to Exercise Training are Dependent on Endothelial Lipase Genotype." A Halverstadt, DA Phares, RE Ferrell, **KR Wilund**, AP Goldberg, and JM Hagberg. *Metabolism: Clinical and Experimental*, 2003 Nov; 52(11): 1505-11.
 64. "Genetic Defenses Against Hypercholesterolemia." HH Hobbs, GA Graff, **KR Wilund**, L Yu, and JC Cohen. *Cold Spring Harbor Symposia on Quantitative Biology*, 2002 Vol. LXVII (499-505).
 65. "Physical Activity, Hormone Replacement Therapy, and Plasma Lipoprotein-lipid Levels in Postmenopausal Women." JM Hagberg, SD McCole, RE Ferrell, JM Zmuda, KS Rodgers, **KR Wilund**, and GE Moore. *International Journal of Sports Medicine*. 2003 Jan;24(1):22-9.
 66. "Molecular Mechanisms of Autosomal Recessive Hypercholesterolemia." **KR Wilund**, M Ying, JV Garcia, HH Hobbs, and JC Cohen. *Human Molecular Genetics*. 2002 Nov 15; 11(24):3019-3030.
 67. "Angiotensinogen M235T Gene Polymorphisms and Exercise Hemodynamics in Postmenopausal Women." SD McCole, MD Brown, GE Moore, RE Ferrell, **KR Wilund**, and JM Hagberg. *Physiological Genomics*. 2002 Aug 14; 10(2):63-9.
 68. "The Effects of Endurance Exercise Training on Plasma LpAI and LpAI:All Levels in Sedentary Older Adults." **KR Wilund**, PL Colvin, DA Phares, AP Goldberg, and JM Hagberg. *Metabolism: Clinical and Experimental*. 2002 Aug; 51(8):1053-60.
 69. "Changes in HDL-C Subfractions With Exercise Training May be Dependent on CETP Genotype." **KR Wilund**, RE Ferrell, DA Phares, AP Goldberg, and JM Hagberg. *Metabolism: Clinical and Experimental*. 2002 Jun;51(6):774-778.
 70. "Autosomal Recessive Hypercholesterolemia in Sardinia, Italy, and Mutations in ARH: a Clinical and Molecular Genetic Analysis." M Arca, G Zuliani, **K Wilund**, F Campagna, R Fellin, M Ricci, N Glorioso, S Bertolini, S Calandra, P Pintus, C Carru, F Cossu, J Cohen, and HH Hobbs. *Lancet*. 2002 Mar 9; 359(9309):841-7.
 71. "ACE Insertion/Deletion Polymorphism and Submaximal Exercise Hemodynamics in Postmenopausal Women." JM Hagberg, SD McCole, RE Ferrell, **KR Wilund**, and GE Moore. *Journal of Applied Physiology*. 2002 Mar;92(3):1083-8.
 72. "Moderate Physical Activity is Associated with Higher Bone Mineral Density in Postmenopausal Women." JM Hagberg, JM Zmuda, SD McCole, KS Rodgers, RE Ferrell, **KR Wilund**, and GE Moore. *Journal of the American Geriatric Society*. 2001 Nov; 49(11): 1411-1417.
 73. "Acute Resistance Exercise Does Not Affect 24-Hour Ambulatory Blood Pressure." MH Roltsch, T Mendez, **KR Wilund**, and JM Hagberg. *Medicine and Science in Sports and Exercise*. 2001 Jun;33(6):881-6.
 74. "Autosomal Recessive Hypercholesterolemia Caused by Mutations in a Putative LDL Receptor Adaptor Protein." CK Garcia, **K Wilund**, M Arca, G Zuliani, R Fellin, M Maioli, S Calandra, S Bertolini, F Cossu, N Grishin, R Barnes, JC Cohen, and HH Hobbs. *Science*. 2001 May 18; 292: 1394-1398.
 75. "Apo E gene and gene-environment effects on plasma lipoprotein-lipid levels." JM Hagberg, **KR Wilund**, and RE Ferrell. *Physiological Genomics*. 2000 Dec 18; 4(2):101-108.
 76. "Determinants of Body Composition in Postmenopausal Women." JM Hagberg, JM Zmuda, SD McCole, KS Rodgers, **KR Wilund**, and GE Moore. *Journal of Gerontology: Medical Sciences*. 2000, Vol. 55A, No. 10, M607-M612.

77. "Exercise Training-Induced Blood Pressure and Plasma Lipid Improvements in Hypertensives May Be Genotype Dependent." JM Hagberg, RE Ferrell, DR Dengel, and **KR Wilund**. Hypertension. 1999; 34:18-23.
78. "VO₂max is Associated with ACE Genotype in Postmenopausal Women." JM Hagberg, RE Ferrell, and **KR Wilund**. Journal of Applied Physiology. 1998; 85(5): 1842-46.

Research Grants:

1. Renal Research Institute. "Dietary Intervention to reduce tissue Sodium Accumulation in hemodialysis patients". Role: Principle Investigator. Direct Costs: \$95,047. Performance period: 1/1/17 – 12/31/17.
2. UIUC College of ACES Vision 20/20 Grant Program. "Gut Microbiota Mediated Effects of Inulin Supplementation on Mineral Metabolism in Maintenance Hemodialysis Patients. Role: Principal Investigator. Direct Costs = \$20,000. Performance period: January 2016 – December 2017.
3. UIUC College of ACES Vision 20/20 Grant Program. "Hepatic Steatosis as a Novel Target for a Dietary Fiber Intervention in Overweight and Obese Adults. Role: Co-Investigator (PI: Hannah Holscher). Direct Costs = \$20,000. Performance Period: January 2017 – December 2017.
4. CAST Grant Program, Ball State University. "The acute effects of intradialytic nutrition supplementation on markers of intestinal damage during hemodialysis treatment". Role: Co-I (Brandon Kistler – PI). Direct costs = \$2000. Performance period: February 2016 – January 2017.
5. Renal Research Institute. "Gut Microbiota Mediated Effects of Inulin Supplementation on Mineral Metabolism in Maintenance Hemodialysis Patients." Role: Principle Investigator. Direct Costs = \$18,968. Performance period: June 2015 – December 2015.
6. National Multiple Sclerosis Society. Functional Electrical Stimulation Cycling in Severe Multiple Sclerosis. Role: Co-I. (Lara Pilluti- PI). Direct Costs: \$43,230.00. Performance period: October 1, 2015 - September 30, 2016.
7. Renal Research Institute. "The Hemodialysis Lifestyle Interventionist Trial." Role: Principle Investigator. Direct Costs = \$82,000. Performance period: May 2015 – April 2016.
8. University of Illinois Campus Research Board. "Heat and Aerobic Training (HEAT) with Pre-hypertensive Middle-Aged Adults." Role: Co-I (PI: Sean Mullen). Direct Costs = \$26,000. Performance period: January 2015 – December 2015.
9. University of Illinois College of ACES. "A model system for the disruption of one carbon metabolism and the subsequent effects of creatine deficiency on skeletal muscle strength and cognitive function". Role: Co-I (PI: Tim Garrow). Direct Costs = \$50,000. Performance period: May 2013 – April 2015.
10. National Multiple Sclerosis Society. "Kaatsu Training in Multiple Sclerosis." Role: Principle Investigator. Direct Costs = \$100,000. Performance period: August 2014 – July 2015.
11. Renal Research Institute. "Effects of Beta-Hydroxy-Beta-MethylButyrate Supplementation on Physical Function in Hemodialysis Patients". Role: Principle Investigator. Direct Costs = \$47,500. Performance period: January 2013 – December 2013.
12. UIUC College of ACES Vision 20/20 Grant Program. "Acute Effects of Intradialytic Feeding and Exercise on Hemodialysis Efficiency and Hemodynamic Response". Role: Principal Investigator. Direct Costs = \$20,000. Performance period: January 2012 – December 2012.
13. UIUC Center on Health, Aging and Disability. "Efficacy of Functional Electrical Stimulation-Enhanced Ergometry in Disabled Populations." Role: Principal Investigator. Direct costs = \$25,000. Performance period: January 2011 – December 2011.
14. PomWonderful, Inc. "Effects of Pomegranate Extract Supplementation on Arterial Structure and Function in Hemodialysis Patients." Role – Principal Investigator. Direct costs = \$85,000. Performance period: March 2011 – February 2012.

15. NIH/NIDDK. "Efficacy of Intradialytic Protein Supplementation and Exercise Training in Hemodialysis Patients. 1-R01-DK084016. Role: Principal-Investigator. Total Direct costs = \$2,094,442. Performance period: September 1, 2010 – August 31, 2015.
16. NIH/NHLBI. "Vascular and Neuroinflammatory Effects of Endurance Training in African-Americans." 1-R01-HL93249-01. Role: Co-Investigator (Bo Fernhall, PI). Total direct costs = \$756,183. Performance period: September 1, 2009 – August 31, 2011.
17. University of Illinois Research Board. "Atherosclerosis and the Cholinergic Anti-Inflammatory Reflex." Role: Principle Investigator. Direct Costs: \$17,600. Performance Period: January – December 2008.
18. Illinois Soybean Association, Principle Investigator, "Effects of Soy Protein on Vascular Calcification and Bone Mineral Density in a Model of Uremia." Role: Principle Investigator. Direct Costs: \$13,000. Performance Period: May 2008 – April 2009.
19. Illinois Soybean Association. Role: Principle Investigator. "Effects of Soy Protein on Vascular Calcification and Bone Mineral Density in a Model of Uremia." Direct costs: \$18,500. Performance Period: May 2007 – April 2008.
20. Purdue- UAB Botanicals Research Center. "Effect of Grape Seed Extract on Vascular Calcification in Uremic Mice." Role: Principle Investigator. Direct Costs: \$42,343. Performance Period: August 2007 – July 2008.
21. Mary Jane Neer Research Foundation. "Effects of a Polyphenol-Enriched Diet on Aortic Calcification in Uremic Mice." Role: Principle Investigator. Direct Costs: \$10,640. Performance period: November 2006 – October 2017.
22. University of Illinois Research Board. "Effect of Physical Activity on Coronary Artery Calcification in Older Adults." Role: Principle Investigator. Direct Costs: \$15,268. Performance period: September 2006 – August 2007.
23. University of Illinois Initiative on Aging. "Effect of Dietary Macronutrient Content on Markers of Cholesterol Absorption and Synthesis." Role: Principle Investigator. Direct costs: \$10,000. Performance period: October 2005 – September 2006.
24. University of Illinois Research Board. "Effect of Endurance Exercise Training on Gallstone Development and Biliary Lipid Metabolism in Mice". Role: Principle Investigator. Direct Costs: \$25,000. Performance period: December 2004 – November 2005.

Academic Presentations/Invited Lectures

1. "Comprehensive Lifestyle Change in Hemodialysis Patients: Moving Beyond the Bike." Invited Lecture at the International Symposium: Exercise in Chronic Kidney Disease, Research and Clinical Implementation. Porto, Portugal. June 1, 2017.
2. "Improving Cardiovascular and Physical Function in Hemodialysis Patients through Volume Control and Exercise." Renal Research Institute Board Meeting. Las Vegas, NV. January 30, 2017.
3. "Exercise in Hemodialysis Patients: where do we go from here? Pre-conference symposium at American Society of Nephrology Annual Meeting, Chicago, IL. November 16, 2016
4. "The Intra-Hemodialytic Oral Protein and Exercise (IHOPE) Trial". Oral Presentation at the European Renal Association – European Dialysis and Transplant Association Annual Meeting, Vienna, Austria. May 23, 2016.
5. "Kidney Disease: How do We Implement Exercise in the Dialysis Clinic"? Invited Symposium. American College of Sports Medicine Annual Meeting, Boston. June 4, 2016
6. "Evaluating the Efficacy of a Multifactorial Lifestyle Intervention in Hemodialysis Patients." Invited Lecture at Fresenius Medical Corporation, Waltham, MA. June 3, 2016.

7. "Strategies for Improving the Efficacy of Exercise Interventions in Hemodialysis Patients". Keynote lecture for: Symposium on Exercise in Hemodialysis. Ignacio Chavez National Institute of Cardiology, Mexico City, Mexico. July 6, 2015.
8. "Optimizing cardiovascular health and physical function in hemodialysis patients through intensive volume control and exercise". Keynote Lecture for: Symposium on Sports Therapy During Hemodialysis. Bischofswerda, Germany. September 24th, 2015.
9. "Formation of an Exercise in CKD Working Group." American Society of Nephrology annual meeting. San Diego, CA. November 7, 2015.
10. "Effects of Pomegranate Extract Supplementation on CVD Risk and Physical Function in Hemodialysis Patients." International Congress on Nutrition and metabolism in Renal Disease. May 2014.
11. "Intradialytic Oral Protein Supplementation (OPS) Reduces Inflammation and Improves Physical Function in Hemodialysis Patients" International Congress on Nutrition and Metabolism in Renal Disease. Honolulu, HI. May 2014.
12. "Why exercise interventions in hemodialysis patients have failed, and what we can do about it?" Invited Lecture, Leicester University, UK. May 2014.
13. "Challenges with Improving Vascular Health in Hemodialysis Patients through Exercise". Invited Lecture, ACSM Conference on Integrative Physiology of Exercise. Miami, FL, September 18, 2014
14. "Strategies for Improving the Efficacy of Physical Activity Interventions in Hemodialysis Patients". Invited Lecture, Mid-Atlantic ACSM meeting, Harrisburg, PA, October 31, 2014.
15. "The Hemodialysis Lifestyle Interventionist Trial". Invited Lecture, Renal Research Institute, New York. November 3, 2014.
16. "Strategies for Improving the Efficacy of Physical Activity Interventions in Hemodialysis Patients". Invited Lecture, University of Illinois-Chicago College of Applied Health Sciences. February 2015.
17. "Intradialytic protein supplementation reduces inflammation and improves physical function in maintenance hemodialysis patients." International Society of Renal Nutrition and Metabolism Annual Meeting. Wurzburg, Germany, June 2014.
18. "Vascular Calcification in Renal Failure: Can Exercise Inhibit It's Effects?" American College of Sports Medicine's Integrative Physiology of Exercise Conference. Miami, FL September 2014.
19. "Objective Quantification of Fall Risk in Hemodialysis Patients." American Society of Nephrology Annual Meeting, Philadelphia, PA, November 2014
20. "Strategies for Improving the Efficacy of Exercise Training in Hemodialysis Patients." Research Symposium for Restorative Therapies, Inc., Baltimore, MD. April 2014.
21. "Contribution of cognitive interference to decrements in walking performance in hemodialysis patients." International Society of Renal Nutrition and Metabolism Annual Meeting. Honolulu, HI, June 2012.
22. "Muscle Wasting in End Stage Renal Disease." University of Dublin Muscle Physiology Research Symposium. October, 2012. Dublin, Ireland.
23. "Tips for Managing the Tenure Process". American College of Sports Medicine Annual Meeting. San Fran., CA, June 2012.
24. "Pathophysiology of Vascular Calcification in Renal Failure: *Can Exercise Inhibit Its Progression?*" American College of Sports Medicine Annual Meeting. Indianapolis, IN, June 2013.
25. "Life on the Tenure Track – How to juggle research, teaching, and service to ensure that you go up not out." American College of Sports Medicine Annual Meeting. Indianapolis, IN, June 2013.
26. "Effects of Pomegranate Extract Supplementation on Cardiovascular Disease Risk and Physical Function in Hemodialysis Patients." American Society of Nephrology Annual Meetings, Atlanta, November 2012.
27. "Efficacy of Exercise Training in CKD Patients: Does The Stage of Disease Matter?" American College of Sports Medicine Annual Meeting, June 2010, Baltimore, MD.
28. "Potential Role of Pomegranate Supplementation in Hemodialysis Patients." PomWonderful International Research Summit, Beverly Hills, CA. February 2011.
29. "Intradialytic Protein Supplementation Attenuates Dialysis-Associated Inflammation and Reduces Co-Morbid Disease Risk." American Society of Nephrology Annual Meetings, Philadelphia, November 8-13, 2011.
30. "Physical Activity and Markers of Sterol Metabolism." KR Wilund, LA Feeney, EJ Tomayko. Oral Presentation at the Midwest American College of Sports Medicine Annual Meeting. Columbus, OH. October 2007.

31. "Inflammation and Atherosclerosis." Oral Presentation. Annual Meeting of the American College of Sports Medicine, Denver, CO. May 30, 2006.
32. "Efficacy of Grape Seed Extract for Preventing Vascular Calcification in a Mouse Model of Uremia."Purdue University Botanicals Center; Botanicals Seminar, October 31, 2006.
33. "Physical Activity and Bone Mineral Density." American College of Sports Medicine's Integrative Physiology Meeting. "Indianapolis, IN, September, 2006.
34. "Plant Sterol Levels are Not Associated with Atherosclerosis in Mice and Men." Experimental Biology National Conference, San Diego, CA. April 4, 2005.