

Associate Professor
University of Michigan
School of Kinesiology
3736 CCRB
401 Washtenaw Ave
Ann Arbor, MI 48109
jmhaus@umich.edu

EDUCATION & TRAINING

- 2007 – 2011 **Postdoctoral Research Fellow, Diabetes, Obesity & Metabolism**
Department of Pathobiology, Lerner Research Institute, Cleveland Clinic, and
Department of Physiology & Biophysics, Case Western Reserve University School of
Medicine, Cleveland, OH
Mentor: John P. Kirwan, Ph.D.
- 2004 – 2007 **Ph.D., Human Bioenergetics**
Ball State University, Human Performance Laboratory, Muncie, IN
Mentor: Todd A. Trappe, Ph.D.
Dissertation Title: The Effects of Age and Unloading on Human Skeletal Muscle
Connective Tissue
- 2002 – 2004 **M.S., Exercise Physiology**
Ball State University, Human Performance Laboratory, Muncie, IN
Mentor: Bruce W. Craig, Ph.D.
Thesis Title: Amp-Activated Protein Kinase (AMPK) and Calcium/Calmodulin-Dependent
Protein Kinase II (CAMKII) Activation in Exercising Human Skeletal Muscle
- 1997 – 2001 **B.S., Exercise Science**
Youngstown State University, Youngstown, OH
Advisors: Jennifer A. Pintar, Ph.D. and Frank J. Bosso, Ph.D.
Project: Submaximal and Maximum Isokinetic Knee Extensions are discriminated by
Global Variability

PROFESSIONAL POSITIONS

- 01/2018 – current **Associate Professor with Tenure**, School of Kinesiology, University of Michigan, Ann
Arbor, MI
- 08/2017 – 12/2017 **Associate Professor with Tenure**, Department of Kinesiology and Nutrition and
Department of Medicine, Section of Endocrinology, Diabetes and Metabolism, University
of Illinois at Chicago, Chicago, IL
- 08/2011 – 07/2017 **Assistant Professor**, Department of Kinesiology and Nutrition and Department of
Medicine, Section of Endocrinology, Diabetes and Metabolism, University of Illinois at
Chicago, Chicago, IL
- 2010 – 2011 **Adjunct Instructor**, Department of Health, Physical Education, Recreation and Dance,
Cleveland State University, Cleveland, OH
- 2008 – 2011 **Lecturer**, Molecular Medicine Ph.D. Program, Lerner College of Medicine, Cleveland
Clinic, Cleveland, OH
- 2007 – 2011 **Postdoctoral Research Fellow**, Department of Pathobiology, Lerner Research Institute,
Cleveland Clinic, Cleveland, OH
Mentor: John P. Kirwan, Ph.D.

- 2002 – 2007 **Graduate Research Assistant**, Human Performance Laboratory, Ball State University, Muncie, IN
- 2001 – 2002 **Research Assistant**, Biomechanics, Department of Biomedical Engineering, Lerner Research Institute, Cleveland Clinic, Cleveland, OH
Mentors: Mark D. Grabiner, Ph.D., and Tammy M. Owings, Ph.D.
- 1998 – 2001 **Athletic Trainer**, Athletics Department, Youngstown State University, Youngstown, OH
Mentor: Dan Wathen, M.S., CSCS

ACTIVE RESEARCH SUPPORT

The focus of my research has centered on strategies for the prevention and treatment of complications and co-morbidities associated with obesity, insulin resistance and diabetes. I place special emphasis on integrative physiology and how intensive lifestyle interventions elicit positive metabolic and molecular changes in these metabolic conditions. My education and training have focused primarily on bioenergetics and applied human metabolic research, as well as biotechnology. I have extensive and focused training in methods of human metabolic research such as stable isotope tracers, magnetic resonance spectroscopy, hyperinsulinemic-euglycemic clamps, skeletal muscle biopsy, tissue microdialysis and methods of exercise testing from renowned leaders in these areas. In addition, I use primary human skeletal muscle cell cultures, and tissue/blood samples acquired from our research participants, to investigate molecular mechanisms related to our clinical observations.

Currently, my lab is examining the role of advanced glycation endproducts (AGEs) and their associated receptors (RAGE) in the pathology of obesity, insulin resistance and type 2 diabetes. I have been successful in competing for extramural funding in this area having recently been awarded an NIH R01 as a PI (DK109948-01) and the former recipient of an American Diabetes Association- Junior Faculty award, as well as other local and intramural funding. Briefly, these projects focus on examining the effects of acute and chronic exercise on generating soluble RAGE isoforms and reducing RAGE-mediated inflammation, as well as exploration of putative protective effects of soluble RAGE isoforms in the microvasculature of individuals with type 2 diabetes.

5R01DK109948-02 (**Haus, PI**) 7/16 – 6/21
NIH NIDDK 2.25 academic; 1.5 summer
“Strategies and Functional Outcomes of Enhancing In Vivo Production of Soluble RAGE Isoforms.”

RESEARCH SUPPORT-COMPLETED

9/15–8/17: SPIRE F0834-R (Forman, PI; **Haus, Co-I**)
Veterans Health Administration
“Exercise Therapy to Reduce Heart Failure Symptoms: Sorting Mechanisms of Benefit.”

1/17 – 12/17: AHS College pilot grant (Tzen, PI; **Haus Co-I**)
University of Illinois at Chicago
“Isolated Knee Extensor Exercise in the Treatment of Diabetic Foot Ulcers.”

1/17 – 12/17: UIC CCTS Pilot (**MPI: Haus**, Lazarov, Bonini, Minshall)
University of Illinois at Chicago
“Molecular pathways underlying cognitive deterioration in diabetes.”

1/16 – 12/16: UIC AHS Pilot Award: (PI: **Haus**)
University of Illinois at Chicago
“Novel Mechanisms of Insulin Resistance Mediated Vascular Dysfunction.”

7/15 – 6/17: 15POST24480172: (PI: Mahmoud; Sponsor: **Haus**)
American Heart Association Postdoctoral Fellowship.
“Effect of Hyperinsulinemia on Vasomotor Function in Isolated Human Skeletal Muscle Arterioles.”

1/1/14 – 12/31/16: 1-14-JF-32; Junior Faculty Award. (PI: **Haus**)
American Diabetes Association
“Role of Exercise on ADAM10 Activation and RAGE Ectodomain Shedding.”

2/1/15 – 1/31/16: **RENEWAL** - DRTC Pilot Award (PI: **Haus**)
University of Chicago - Diabetes Research Training Center Pilot Award
“Links between Skeletal Muscle Contractions and RAGE Ectodomain Shedding.”

2/1/14 – 1/31/15: DRTC Pilot Award (PI: **Haus**)
University of Chicago - Diabetes Research Training Center Pilot Award
“Links between Skeletal Muscle Contractions and RAGE Ectodomain Shedding.”

5/1/13 – 4/30/14: Early Career Development Award (PI: **Haus**)
Central Society for Clinical and Translational Research
“Novel Mechanisms of ADAM10 activation and RAGE Ectodomain shedding.”

5/1/12 - 4/30/14: 5-UL1RR029879-03 CCTS Pilot Award (PI: **Haus**)
University of Illinois at Chicago
“Chronic Hyperglycemia, Advanced Glycation End-products and Peripheral Insulin Resistance with Type 2 Diabetes.”

2/1/11 - 1/31/12: Applied Psychology Center, Grant Development Research Award (PI: Kirwan; Co-I: **Haus**)
Kent State University
“Linking Cognition and Functional Brain Imaging to Insulin Sensitivity.”

7/1/10 – 6/31/11: Research Endowment Award (PI: **Haus**)
American College of Sports Medicine Foundation
“Effect of Exercise and Diet on Protein Glycation.”

6/1/10 – 9/31/11: 5-UL1RR024989-05 CTSC Pilot Award (**PI: Haus**)
Research Programs Committee, Cleveland Clinic.
“Advanced Glycation Endproducts and Peripheral Insulin Resistance with Type 2 Diabetes.”

6/1/07 - 5/31/10: HL007887-05 T32 Postdoctoral Training Grant (Trainee: **Haus**)
NIH NHLBI
“Heart-Lung Physiology: Molecular-Systemic Integration.”

PEER REVIEWED PUBLICATIONS

1. Malin SK, Kullman EL, Scelsi AR, Haus JM, Filion J, Pagadala MR, Godin JP, Kochhar S, Ross AB, Kirwan JP. A Whole-Grain Diet Reduces Peripheral Insulin Resistance and Improves Glucose Kinetics in Obese Adults: A Randomized-Controlled Trial. *Metabolism*. 2018 Jan 3. [Epub ahead of print] PMID: 29305946
2. Mey JT, Blackburn BK, Miranda ER, Chaves AB, Briller J, Bonini MG, **Haus JM**. Dicarbonyl Stress and Glyoxalase Enzyme System Regulation in Human Skeletal Muscle. *Am J Physiol Regul Integr Comp Physiol*. PMID: 29046313
3. Miranda ER, Somal VS, Mey JT, Blackburn BK, Wang E, Farabi S, Karstoft K, Fealy CE, Kashyap SR, Kirwan JP, Quinn L, Solomon TPJ, **Haus JM**. Circulating Soluble RAGE Isoforms are Attenuated in Obese, Impaired Glucose Tolerant Individuals and are Associated with Type 2 Diabetes. *Am J Physiol Endocrinol Metab*. 2017 Aug 15:ajpendo.00146.2017. doi: 10.1152/ajpendo.00146.2017. PMID:28811295
4. Mahmoud AM, Ali MM, Miranda ER, Mey JT, Blackburn BK, **Haus JM**, Phillips SA. Nox2 contributes to hyperinsulinemia-induced redox imbalance and impaired vascular function. *Redox Biol*. 2017 Jun 3;13:288-300. doi: 10.1016/j.redox.2017.06.001. PMID:28600985.
5. Kappus RM, Bunsawat K, Brown MD, Phillips SA, **Haus JM**, Baynard T, Fernhall B. Effect of oxidative stress on racial differences in vascular function at rest and during hand grip exercise. *J Hypertension* 2017 Jun 7. PMID:28594709.

6. Mulya A, **Haus JM**, Solomon TP, Kelly KR, Malin SK, Kirwan JP. Exercise Training Induced Improvement in Skeletal Muscle PGC-1 α Mediated Fat Metabolism is Independent of Dietary Glycemic Index. *Obesity (Silver Spring)*. 2017 Apr;25(4):721-729. doi: 10.1002/oby.21799.PMID: 28349667
7. Kirwan JP, Malin SK, Scelsi AR, Kullman EL, Navaneethan SD, Pagadala MR, **Haus JM**, Filion J, Godin JP, Kochhar S, Ross AB. A Whole-Grain Diet Reduces Cardiovascular Risk Factors in Overweight and Obese Adults: A Randomized Controlled Trial. *J Nutr*. 2016 Nov;146(11):2244-2251. PMID: 27798329
8. Mahmoud A, Szczurek M, Blackburn B, Mey J, Chen Z, Robinson A, Bian J, Unterman T, Minshall R, Brown M, Kirwan J, Phillips S, **Haus JM**. Hyperinsulinemia Augments Endothelin-1 Release and Impairs Vasodilation of Human Skeletal Muscle Arterioles. *Physiol Rep*. 2016 Aug;4(16). pii: e12895. PMID: 27796268
9. Kullman EL, Kelly KR, **Haus JM**, Fealy CE, Scelsi AR, Pagadala MR, Flask CA, McCullough AJ, Kirwan JP. Short-Term Aerobic Exercise Training Improves Gut Peptide Regulation in Nonalcoholic Fatty Liver Disease. *J Appl Physiol (1985)*. 2016 Mar 31:jap.00693.2015. PMID: 27032902
10. Perez SL, **Haus JM**, Sheean P, Patel B, Mar W, Chaudhry V, McKeever L, Braunschweig C. Measuring Abdominal Circumference and Skeletal Muscle From a Single Cross-Sectional Computed Tomography Image: A Step-by-Step Guide for Clinicians Using National Institutes of Health ImageJ. *Gomez- JPEN J Parenter Enteral Nutr*. 2015 Sep 21. pii: 0148607115604149. PMID:26392166
11. Williamson DL, Dungan CM, Mahmoud AM, Mey JT, Blackburn BK, **Haus JM**. Aberrant REDD1-mTORC1 responses to insulin in skeletal muscle from type 2 diabetics. *Am J Physiol Regul Integr Comp Physiol*. 2015 Aug 12. PMID:26269521
12. Kasumov T, Solomon TP, Hwang C, Huang H, **Haus JM**, Zhang R, Kirwan JP. Improved insulin sensitivity after exercise training is linked to reduced plasma C14:0 ceramide in obesity and type 2 diabetes. *Obesity (Silver Spring)*. 2015 Jul;23(7):1414-21. PMID:25966363
13. Mahmoud AM, Brown MD, Phillips SA, **Haus JM**. Skeletal Muscle Vascular Function: A Counterbalance of Insulin Action. *Microcirculation*. 2015 Jul;22(5):327-47. PMID:25904196.
14. Solomon TP, Malin SK, Karstoft K, Knudsen SH, **Haus JM**, Laye MJ, Kirwan JP. Association between cardiorespiratory fitness and the determinants of glycemic control across the entire glucose tolerance continuum. *Diabetes Care*. 2015 May;38(5):921-9. PMID:25784661
15. Phillips SA, Mahmoud AM, Brown MD, **Haus JM**. Exercise interventions and peripheral arterial function: implications for cardio-metabolic disease. *Prog Cardiovasc Dis*. 2014 Dec 18. PMID: 25529367
16. Solomon TP, Malin SK, Karstoft K, Knudsen SH, **Haus JM**, Laye MJ, Pedersen M, Pedersen BK, Kirwan JP. Determining pancreatic beta cell compensation for changing insulin sensitivity using an oral glucose tolerance test. *Am J Physiol Endocrinol Metab*. 2014 Sep 2. PMID:25184989
17. Kelly KR, Navaneethan SD, Solomon TP, **Haus JM**, Cook M, Barkoukis H, Kirwan JP. Lifestyle-induced decrease in fat mass improves adiponectin secretion in obese adults. *Med Sci Sports Exerc*. 2014 May. PMID:24614337
18. Varady KA, Bhutani S, Klempel MC, Kroeger CM, Trepanowski JF, **Haus JM**, Hoddy KK, Calvo Y. Alternate day fasting for weight loss in normal weight and overweight subjects: a randomized controlled trial. *Nutr J*. 2013 Nov 12. PMID:24215592
19. Malin SK, **Haus JM**, Solomon TP, Blaszcak A, Kashyap SR, Kirwan JP. Insulin sensitivity and metabolic flexibility following exercise training among different obese insulin resistant phenotypes. *Am J Physiol Endocrinol Metab*. 2013 Sep 24. PMID:24064339
20. Solomon TP, Malin SK, Karstoft K, Kashyap SR, **Haus JM**, Kirwan JP. Pancreatic beta-cell function is a stronger predictor of changes in glycemic control after an aerobic exercise intervention than insulin sensitivity. *J Clin Endocrinol Metab*. 2013 Aug 21. PMID:23966244

21. Malin SK, Mulya A, Fealy CE, **Haus JM**, Pagadala MR, Scelsi AR, Huang H, Flask CA, McCullough AJ, Kirwan JP. Fetuin-A is linked to improved glucose tolerance after short-term exercise training in non-alcoholic fatty liver disease. *J Appl Physiol*. 2013 Aug 8. PMID:23928114
22. Solomon TP, Malin SK, Karstoft K, **Haus JM**, Kirwan JP. The influence of hyperglycemia on the therapeutic effect of exercise on glycemic control in patients with type 2 diabetes. *JAMA Internal Medicine* 2013 Jul 1, 2013. PMID:23817567
23. **Haus JM**, Solomon TP, Kelly KR, Fealy CE, Louis ES, Scelsi AR, Lu L, Pagadala M, McCullough AJ, Flask CA, Kirwan JP. Improved Hepatic Lipid Composition Following Short-Term Exercise in Non-Alcoholic Fatty Liver Disease. *J Clin Endocrinol Metab*. 2013 Apr 24. PMID: 23616151
24. Solomon TP, **Haus JM**, Cook MA, Flask CA, Kirwan JP. A low glycemic diet lifestyle intervention improves fat utilization during exercise in older obese humans. *Obesity*. 2013 Mar 20. PMID: 23512711.
25. Malin, SK, Niemi, N, Solomon, TP, **Haus, JM**, Kelly, KR, Filion, J, Rocco, M, Kashyap, SR, Barkoukis, H, Kirwan, JP. Exercise training with weight loss and a high or low glycemic diet reduces metabolic syndrome severity in older adults. *Ann Nutr Metab*. 2012 Sep 28;61(2):135-141. PMID:23036993
26. Fealy CE, **Haus JM**, Solomon TP, Pagadala M, Flask CA, McCullough AJ, Kirwan JP. Short-term exercise reduces markers of hepatocyte apoptosis in nonalcoholic fatty liver disease. *J Appl Physiol*. 2012 Jul;113(1):1-6. PMID:22582214
27. **Haus JM**, Solomon TP, Lu L, Jesberger JA, Malloy CR, Flask CA, Kirwan JP. Intramyocellular lipid content and insulin sensitivity are increased following a short-term low-glycemic index diet and exercise intervention. *AJP Endo* 2011 Jun 28. PMID:21712533.
28. Kelly KR, Blaszczyk A, **Haus JM**, Melin AP, Fealy CE, Solomon TP, Kalinski MI, Kirwan JP. A 7-day Exercise Program Increases High Molecular Weight Adiponectin in Obese Adults. *Med Sci Sports Ex* 2011 Jun 16. PMID:21685815.
29. Carroll CC, Dickinson JM, LeMoine JK, **Haus JM**, Weinheimer EM, Hollon CJ, Aagaard P, Magnusson SP, Trappe TA. Influence of acetaminophen and ibuprofen on in vivo patellar tendon adaptations to knee extensor resistance training in older adults. *J Appl Physiol* 2011 May 19. PMID:21596925.
30. Kelly KR, **Haus JM**, Solomon TP, Patrick-Melin AJ, Cook M, Rocco M, Barkoukis H, Kirwan JP. A Low Glycemic Index Diet and Exercise Intervention Reduces TNF-alpha in Isolated Mononuclear Cells of Older Obese Adults. *J Nutr*. 2011 Jun;141(6):1089-94. PMID:21525252.
31. Solomon TP, **Haus JM**, Li Y, Kirwan JP. Progressive hyperglycemia across the glucose tolerance continuum is related to skeletal muscle capillarization and nitric oxide bioavailability. *J Clin Endocrinol Metab*. 2011 Feb 2. PMID:21289242.
32. Trappe TA, Carroll CC, Dickinson JM, LeMoine JK, **Haus JM**, Sullivan BE, Lee JD, Jemiolo B, Weinheimer EM, and Hollon CJ. Influence of acetaminophen and ibuprofen on skeletal muscle adaptations to resistance exercise in older adults. *Am J Physiol Regul Integr Comp Physiol*. 2011 Mar;300(3):R655-62. PMID:21160058.
33. Solomon TP, **Haus JM**, Kelly KK, Cook MD, Filion J, Rocco M, Kashyap SR, Watanabe RM, Barkoukis H, Kirwan JP. A low glycemic diet combined with exercise reduces insulin resistance, postprandial hyperinsulinemia, and GIP responses in obese pre-diabetic humans. *Am J Clin Nutr*. 2010 Oct 27. PMID 20980494.
34. Li Y, Solomon TP, **Haus JM**, Saidel G, Cabrera M, Kirwan JP. Computational model of cellular metabolic dynamics: In vivo effect of insulin on glucose uptake in skeletal muscle. *Am J Physiol Endocrinol Metab*. 2010 Mar 23. PMID: 20332360.
35. Solomon TP, **Haus JM**, Kelly KR, Rocco M, Kashyap SR, Kirwan JP. Postprandial insulin secretion is increased following weight loss in type 2 diabetics: a potential role for glucose-dependent insulinotropic polypeptide. *Diabetes Care*. 2010 Mar 3. PMID: 20200305.

36. **Haus JM**, Solomon TP, Marchetti CM, Edmison JM, González F, Kirwan JP. Free fatty acid-induced hepatic insulin resistance is attenuated following lifestyle intervention in obese individuals with impaired glucose tolerance. *J Clin Endo Metab.* 2010 Jan; 95(1):323-7. PMID: 19906790.
37. Burd NA, Dickinson JM, LeMoine JK, Carroll CC, Sullivan BE, **Haus JM**, Jemiolo B, Trappe SW, Hughes GM, Sanders CE, Trappe TA. Effect of a cyclooxygenase-2 inhibitor on postexercise muscle protein synthesis in humans. *Am J Physiol Endocrinol Metab.* 2009 Nov 24. PMID: 19934404.
38. Patrick-Melin AJ, Kalinski MI, Kelly KR, **Haus JM**, Solomon TP, Kirwan JP. Nonalcoholic fatty liver disease: biochemical and therapeutic considerations. *Ukrainian Biochemical Journal.* Accepted for publication, 2009 Nov 18. *Ukr Biokhim Zh.* 2009 Sep-Oct;81(5):16-25. PMID: 20387643.
39. Solomon TP, **Haus JM**, Kelly KR, Cook MD, Riccardi M, Rocco M, Kashyap SR, Barkoukis H, Kirwan JP. Randomized trial on the effects of a 7-d low glycemic diet and exercise intervention on insulin resistance in older obese humans. *Am J Clin Nutr.* 2009 Sep 30. PMID: 19793849.
40. Solomon TP, **Haus JM**, Marchetti CM, Stanley WC, Kirwan JP. Effects of exercise training and diet on lipid kinetics during free fatty acid-induced insulin resistance in older obese humans. *Am J Physiol Endocrinol Metab.* 2009 Jun 16. PMID: 19531640.
41. **Haus JM**, Kashyap SR, Kasumov T, Zhang R, Kelly KR, DeFronzo RA, Kirwan JP. Plasma Ceramides Are Elevated in Obese Subjects with Type 2 Diabetes and Correlate with the Severity of Insulin Resistance. *Diabetes.* 2009 Feb;58(2):337-43. PMID: 19008343.
42. **Haus JM**, Solomon TPJ, Marchetti CM, O'Leary VB, Brooks, LM, Gonzalez F, Kirwan JP. Namp1/PBEF/Visfatin is Reduced by Exercise Training and is Associated with the Insulin Response to Glucose. *Med Sci Sports Exerc.* 2009 Jun; 41(6):1255-60. PMID: 19461540.
43. LeMoine JM, **Haus JM**, Trappe SW, Trappe TA. Muscle proteins during 60d bedrest in women: Impact of exercise or Nutrition. *Muscle Nerve.* 2009 Apr; 39(4):463-71. PMID: 19229964.
44. Carroll CC, Dickinson JM, **Haus JM**, Lee GA, Hollon CJ, Aagaard P, Magnusson SP, Trappe TA. The Influence of Aging on the In Vivo Properties of Human Patellar Tendon. *J Appl Physiol.* 2008, Oct 16. PMID: 18927271.
45. **Haus JM**, Carrithers JA, Trappe SW, Trappe TA. Collagen, cross-linking, and advanced glycation end products in aging human skeletal muscle. *J Appl Physiol.* 2007 Dec; 103(6):2068-76. PMID: 17901242.
46. **Haus JM**, Carrithers JA, Carroll CC, Tesch PA, Trappe TA. Contractile and connective tissue protein content of human skeletal muscle: effects of 35 and 90 days of simulated microgravity and exercise countermeasures. *Am J Physiol Regul Integr Comp Physiol.* 2007 Oct; 293(4):R1722-7. PMID: 17670860.
47. Weinheimer EM, Jemiolo B, Carroll CC, Harber MP, **Haus JM**, Burd NA, LeMoine JK, Trappe SW, Trappe TA. Resistance exercise and cyclooxygenase (COX) expression in human skeletal muscle: implications for COX-inhibiting drugs and protein synthesis. *Am J Physiol Regul Integr Comp Physiol.* 2007 Jun; 292(6):R2241-8. PMID: 17322116.
48. **Haus JM**, Miller BF, Carroll CC, Weinheimer EM, Trappe TA. The effect of strenuous aerobic exercise on skeletal muscle myofibrillar proteolysis in humans. *Scand J Med Sci Sports.* 2007 Jun; 17(3):260-6. PMID: 16787442.

INVITED LECTURES, SYMPOSIA

- 2017 "Resolution of RAGE-Mediated Inflammation via Aerobic Exercise: Acute and Chronic Effects." 2017 IMPACT (Integrative Medicine: Physical Activity is a Core Tip) meeting – Joint Meeting with Korean Physiological Society and Korean Society of Exercise Physiology, Busan and Seoul, South Korea, Nov 3-4, 2017.

"Exploiting Cellular Bioenergetics as an In Vivo Strategy for Reducing Diabetes-Mediated Inflammation." University of Michigan, School of Kinesiology, Ann Arbor, MI Aug 23rd 2017.

"Strategies and Functional Outcomes for Increasing In Vivo Production of Soluble RAGE Isoforms." University of Pittsburgh, Division of Endocrinology, May 12th 2017.

"RAGE and soluble RAGE: Potential Therapeutic Targets for Prevention and Treatment of Diabetic Complications." Purdue University, Department of Kinesiology, West Lafayette, IN, April 7th 2017.

"Lifestyle Interventions and Production of Solubilized Inflammatory Receptors." Pennington Biomedical Research Center, Baton Rouge, LA, March 23rd 2017.

2016 "Novel targets in tissue remodeling and attenuated inflammation with exercise in type 2 diabetes." University of Birmingham, Birmingham, England Sept 21st 2016.

"Methods and Techniques in Clinical Diabetes Research." R25 Diabetes Summer Program. University of Illinois at Chicago, Chicago, IL, July 7th 2016.

"A microvascular journey across the glucose tolerance continuum." University of Pittsburgh, Vascular Medicine Institute, Pittsburgh, PA, Jan 15th 2016.

2015 "Role of exercise in combatting advanced glycation and insulin resistance in obesity and diabetes." University of Michigan, School of Kinesiology, Ann Arbor, MI Dec 14th 2015.

"Mechanisms of Ectodomain Shedding." Mid-Atlantic Regional Conference – American College of Sports Medicine, Harrisburg, PA, November 4th, 2015.

"Metabolic systems and the control of APT synthesis in skeletal muscle." DePaul University, Chicago IL, Department of Exercise Science, Chicago, IL April 13th 2015.

"Links between Skeletal Muscle Contraction and RAGE Ectodomain Shedding." University of Missouri, Department of Nutrition and Exercise Science, Columbia Missouri, Feb 26th 2015

2014 "RAGE receptors and Human Insulin Resistance: Resolution of RAGE-Mediated Inflammation with Aerobic Exercise." SUNY Buffalo, Department of Kinesiology, Buffalo NY April 11th 2014.

2013 "Glyoxalase 1 protein expression in human skeletal muscle is normalized following aerobic exercise training in obese insulin resistant adults." Glyoxalase Centennial: 100 Years of Glyoxalase Research and Emergence of Dicarbonyl Stress, Warrick University, Coventry, England. Nov 26th, 2013.

"Physical Activity in the Energy Balance Equation." Session on: Stemming the Tide: The role of physical activity in reversing the obesity and diabetes epidemic. American Heart Association Scientific Sessions, Dallas TX Nov 17th 2013.

"Resolution of RAGE-Mediated Inflammation with Aerobic Exercise" American Society of Exercise Physiologists, Annual Conference, Chicago, IL. Oct 25th, 2013

"RAGE receptors and Human Insulin Resistance" UIC Diabetes Day, Chicago, IL. Oct 8th, 2013.

"Excess Glycolytic Flux Promotes Mitochondrial Damage and Oxidative Stress: Exercise as a Cellular Defense Mechanism." Youngstown State University, Department of HPES. Sep 2013, Youngstown OH

"Glycation and Insulin Resistance: Novel Mechanisms and Unique Targets?" Combined Endocrine Rounds, University of Illinois at Chicago, RUSH University, Jesse Brown VA, May 2013, Chicago, IL

"Strategies for optimal fitness and injury prevention in USA rugby referees." Midwest Rugby Referee Society Annual Meeting. Feb 2013 Cleveland Ohio.

2012 "Methods and Techniques in Clinical Metabolic Research." Center for Clinical and Translational Services, Clinical Research Center. University of Illinois at Chicago, Chicago, IL

"Exercise in the Treatment and Prevention of Glyco-Oxidation Induced Diabetes Complications." Department of Kinesiology and Community Health, University of Illinois, Urbana-Champaign, Urbana-Champaign, IL.

"Lifestyle Modifications for Obesity & Diabetes Management: Therapeutic Effects & Mechanisms of Action." Department of Endocrinology, University of Illinois at Chicago, Chicago, IL.

"Macronutrients as Tools to Counter Age-Related Changes in Skeletal Muscle: Dietary Carbohydrates." 2012 Scientific Sessions and Annual Meeting of the American Society for Nutrition. Experimental Biology. San Diego, CA.

2011 "Transcriptional Regulation of Glucose and Lipid Metabolism in Human Skeletal Muscle: Veterans and Rookies". Mid-Atlantic Regional Chapter of the American College of Sports Medicine, Harrisburg, PA.

"Lifestyle Modifications for Obesity and Diabetes Management: Therapeutic Effects and Mechanisms of Action." Department of Exercise Science, University of South Carolina

"Lifestyle Modifications for Obesity and Diabetes Management: Therapeutic Effects and Mechanisms of Action." Department of Foods and Nutrition, Purdue;

"Lifestyle Modifications for Obesity and Diabetes Management: Therapeutic Effects and Mechanisms of Action." University; Department of Kinesiology and Nutrition, University of Illinois at Chicago, Chicago, IL;

"Lifestyle Modifications for Obesity and Diabetes Management: Therapeutic Effects and Mechanisms of Action." Department of Kinesiology, University of Toledo, Toledo, OH;

"Lifestyle Modifications for Obesity and Diabetes Management: Therapeutic Effects and Mechanisms of Action." Department of Health, Sport and Exercise Science, University of Kansas, Lawrence, KS;

"Lifestyle Modifications for Obesity and Diabetes Management: Therapeutic Effects and Mechanisms of Action." Endocrine Division, University of Rochester Medical School, Rochester, NY.

2010 "Age, Exercise, and Diet: Effects on Insulin Resistance." Department of Nutrition and Dietetics Seminar Series, Kent State University, Kent, OH.

"Fitness vs Fatness: Independent Effects of Exercise in Nonalcoholic Fatty Liver Disease." Fellows Seminar Series, Department of Pathobiology, Cleveland Clinic, Cleveland OH.

"Diet and Exercise Therapies in Patients with NAFLD." 46th Annual Gastroenterology Update & 2nd Annual Hepatic-Pancreatic-Biliary Course, Cleveland Clinic, Cleveland, OH

"Ectopic Lipids in Muscle and Liver: Dynamics of an Insulin Resistance Biomarker." 5th Annual Obesity Research Day, Cleveland Clinic, Cleveland, OH

2009 "Combating Insulin Resistance and Diabetes with Physical Activity: Exercise is Medicine." Alumni Research Symposium, Youngstown State University, Youngstown, OH

2008 "Combating Insulin Resistance and Diabetes with Physical Activity: Exercise is Medicine." Humility of Mary Health Partner's Diabetes Education Day, Youngstown, OH

- 2006 "The Effect of Aging and Unloading on Human Skeletal Muscle Connective Tissue", Alumni Research Symposium, Youngstown State University, Youngstown, OH
- 2002 "Diabetes and Exercise", Diabetes Day, Anderson Hospital, Anderson, IN
- 2001 "Diabetes, Exercise and Sport", Alumni Research Symposium, Youngstown State University, Youngstown, OH

OTHER SCHOLARLY WORKS

Book Chapters

Book name: Genes, Environment and Alzheimer's Disease

Chapter name: Diabetes type 2 as a risk factor for Alzheimer's Disease

Authors: Orly Lazarov, Richard Minshall, Marcelo Bonini, **Jacob Haus**, Jacqueline Bonds

Editors: Tesco and Lazarov

Publisher: Elsevier 2016

Other peer reviewed publications

Alec B Chaves, **Jacob M Haus** and Joseph A Houmard. Role of TXNIP Biology in Glucose. Int J Diabetes Clin Res 2018, 5:080. Volume 5 | Issue 1. DOI: 10.23937/2377-3634/1410080

Daniela Bassi, Vivian Maria Arakelian, Renata Gonçalves Mendes, Flávia Cristina Rossi Caruso, José Carlos Bonjorno, Katiany Thays Lopes Zangrando, Cláudio Ricardo de Oliveira, **Jacob M. Haus**, Ross Arena, Audrey Borghi-Silva. Poor Glycemic Control Impacts Linear And Nonlinear Dynamics Of Heart Rate In DM Type 2. Brazilian Journal of Sports Medicine. Vol. 21, No 4 – Jul/Aug, 2015.

Scientific Abstracts and Conference Proceedings (National & International)

(*competitive selection by peer review)

1. Fuller KNZ, Miranda ER, Morris JK, **Haus JM**. Metabolic Derangements Contribute to Reduced sRAGE Isoforms in Subjects with Impaired Cognition. American Diabetes Association, San Diego, CA 2017
2. **Miranda ER**, Varady K, **Haus JM**. Weight Loss Via Alternate Day Fasting Increases Circulating Endogenous Secretory RAGE and is Associated with Markers of Adipocyte Health. Experimental Biology, Chicago IL 2017 – ORAL ABSTRACT
3. Mey JT, **Haus JM**. Hyperglycemia Increases MG-directed Protein Damage, Which Induces Dysregulation of AMPK-Activity in Human Skeletal Muscle Cells. Experimental Biology, Chicago IL 2017
4. Kelly N. Z. Fuller, Robert W. Motl, Rachel E. Klaren, Garett Griffith, **Haus JM**, Tracy Baynard, Bo Fernhall. Effect of a home-based aerobic exercise program on VO₂ peak, and cellular inflammation in individuals with Multiple Sclerosis. American College of Sports Medicine, Denver CO 2017
5. Mahmoud M, Ali M, Miranda E, Mey J, Blackburn B, Robinson A, **Haus J**, Phillips S. NADPH Oxidase Contributes to Oxidative Stress and Reduced eNOS Phosphorylation during Hyperinsulinemia in Human Skeletal Muscle Arterioles and Microvascular Endothelial Cells. Experimental Biology, San Diego CA 2016
6. Mahmoud, Solomon, Phillips, Kirwan J, **Haus J**. Aerobic Exercise Reduces NOX2 in Skeletal Muscle of Obese Insulin-resistant Adults via Interfering with RAGE/p-IkB- α Axis. Experimental Biology, San Diego CA 2016
7. Miranda E, Mey J, Blackburn B, Farabi S, Quinn L, **Haus J**. Production of Soluble Receptor for Advanced Glycation End-Products Following Acute Aerobic Exercise is Gender Specific. Experimental Biology, San Diego CA 2016

8. Mey J, Mahmoud A, **Haus J**. Human Skeletal Muscle Glyoxalase-1 Protein Expression is Attenuated with Type 2 Diabetes. Experimental Biology, San Diego CA 2016
9. Petersen S, Sheean P, Taylor U, Sclamberg J, **Haus J**, Lateef O, Braunschweig C. Computed Tomography Scans in the ICU Closet Cloaked in Adiposity and Undetected by Subjective Global Assessment. ESPEN 2015.
10. Kappus R, Shafer B, Wee S, Baynard T, Brown M, **Haus J**, Phillips S, Fernhall B. Racial Differences in Macrovascular and Microvascular Function Following Acute Antioxidant Supplementation. Experimental Biology, Boston MA 2015
11. Gomez-Perez SL, Chaudhry V, **Haus J**, Mar W, Patel B, Llor X, Jung B, Braunschweig C. Race/Ethnic Differences of Body Composition in Males with Colorectal Cancer. ASCRS 2015
12. *Mahmoud A, Mey J, Solomon T, Kirwan J, **Haus J**. Aerobic exercise reduces pro-inflammatory cytokines in skeletal muscle via down regulation of RAGE in obese insulin resistant adults. American Diabetes Association, Boston MA 2015
13. Bunsawat K, Kappus R, Rosenberg A, Shafer B, Wee S, Baynard T, Brown M, **Haus J**, Phillips S, Fernhall B. Autonomic Function during Exercise in Older Adults: The Influence of Antioxidant Supplementation. American College of Sports Medicine, San Diego CA 2015
14. Rosenberg A, Bunsawat K, Kappus R, Shafer B, Wee S, Baynard T, Brown M, **Haus J**, Phillips S, Fernhall B. Racial Differences in HRV in Response to an Acute Bout of Forearm Exercise. American College of Sports Medicine, San Diego CA 2015
15. Kappus R, Rosenberg A, Bunsawat K, Shafer B, Wee S, Baynard T, Brown M, **Haus J**, Phillips S, Fernhall B. The Effects of Acute Antioxidant Supplementation on Vascular Dysfunction with Aging. American College of Sports Medicine, San Diego CA 2015
16. *Mahmoud A, Mey J, Blackburn B, Bian J, Szczurek M, Robinson A, Brown M, Phillips S, **Haus J**. Hyperinsulinemia Disrupts Vascular Homeostasis, Enhances Oxidative Stress and Impairs Flow Induced Dilation of Human Skeletal Muscle Arterioles. American Heart Association, Dallas 2014.
17. Mahmoud AM, Blackburn BK, Coleman K, Mey JT, Somal VS, Solomon PJ, Fealy CE, Malin SK, Kirwan JP, **Haus JM**. Aerobic Exercise Training Induces RAGE Shedding Pathways in Human Skeletal Muscle. Advances in Skeletal Muscle Biology In Health & Disease Conference, University of Florida, Gainesville, FL March 2014.
18. Somal VS, Fealy CE, Mey JT, Blackburn BK, Coleman K, Malin SK, Solomon PJ, Kashyap S, Kirwan JP, **Haus JM**. Soluble Receptor of Advanced Glycation Endproducts (sRAGE) is decreased across the Glucose Tolerance Continuum and Correlates with Severity of Insulin Resistance. Central Society for Clinical and Translational Research, Chicago, IL. April 2014.
19. *Malin SK, Kullman E, Scelsi AR, **Haus JM**, Filion J, Godin JP, Kochhar S, Ross AB, Kirwan JP. Whole Grain Diet Improves Glucose Tolerance, Insulin Sensitivity, and Beta-Cell Function in Overweight Prediabetic Adults. American Diabetes Association, San Francisco CA, June 2014.
20. *Mahmoud AM, Mey JT, Blackburn BK, Coleman K, Somal VS, Bian JT, Szczurek MR, Robinson AT, Brown MD, Phillips SA, **Haus JM**. Hyperinsulinemia Augments Endothelin-1 Release and Impairs Vasodilation of Human Skeletal Muscle Arterioles. American Diabetes Association, San Francisco CA, June 2014.
21. ***Haus J**, Mao M, Bonini M. Methylglyoxal induced impairment in AMP-activated protein kinase promotes a glycolytic shift in human lung microvascular endothelial cells. Glyoxalase Centennial: 100 Years of Glyoxalase Research and Emergence of Dicarbonyl Stress, Warrick University, Coventry, England. Nov, 2013.
22. *Mahmoud A, Mey J, Solomon T, Fealy C, Malin S, Kirwan J, **Haus J**. Glyoxalase 1 protein expression in human skeletal muscle is normalized following aerobic exercise training in obese insulin resistant

adults. Glyoxalase Centennial: 100 Years of Glyoxalase Research and Emergence of Dicarbonyl Stress, Warrick University, Coventry, England. Nov 26th, 2013.

23. *Somal V, Solomon T, Kirwan J, **Haus J**. Soluble RAGE (sRAGE) and Endogenous Secretory RAGE (esRAGE) are correlated with Insulin Sensitivity and Glucose Tolerance in Older Obese Adults. American Diabetes Association, Chicago 2013
24. *Nadolski L, Solomon T, Fealy C, Malin S, Kirwan J, **Haus J**. Diminished Glyoxalase I Activity in Skeletal Muscle of Obese Individuals is Associated with Determinants of Metabolic Health. American Diabetes Association, Chicago 2013
25. *Mahmoud A, Somal S, Solomon T, Kasumov T, Fealy C, Malin S, Kirwan J, **Haus J**. RAGE Expression in Human Skeletal Muscle is Normalized Following Aerobic Exercise Training. American Diabetes Association, Chicago 2013 – ORAL ABSTRACT
26. *Malin SK, Fealy CE, **Haus JM**, Pagadala M, Scelsi AR, Huang H, Lu L, McCullough AJ, Flask CA, Kirwan JP. Decreased fetuin-A correlates with improved glucose tolerance after short-term exercise training in adults with NAFLD. American Diabetes Association, Philadelphia, PA 2012
27. *Mulya A, **Haus JM**, Solomon TP, Kelly KR, Malin SK, Kirwan JP. Upregulation of PGC-1 α and fat transport/oxidation genes in skeletal muscle is linked to improved insulin sensitivity following a lifestyle intervention in obese humans. American Diabetes Association, Philadelphia, PA 2012
28. **Haus JM**, Mey J, Solomon TP, Kasumov T, Zhang R, Kirwan JP. Methylglyoxal and glyoxal-derived hydroimidazolone-AGEs are reduced with aerobic exercise training plus a glycemic index diet in obese subjects. American College of Sports Medicine, San Francisco, CA, 2012
29. Scelsi AR, **Haus JM**, Fealy CE, Huang H, Solomon TP, Kashyap SR, Kirwan JP. Effect of exercise training on plasma visfatin and β -cell function in obese adults. The Obesity Society, Orlando, FL 2011
30. Fealy CE, **Haus JM**, Solomon TP, Pagadala M, Flask CA, McCullough AJ, Kirwan JP. Anti-apoptotic effect of short term exercise in obese individuals with NAFLD. The Obesity Society, Orlando, FL 2011
31. Kelly KR, Blaszcak A, **Haus JM**, Patrick-Melin AJ, Fealy CE, Solomon TP, Kalinski MI, Kirwan JP. 7-Days of Aerobic Exercise Increases High Molecular Weight Adiponectin and Improves Fat Oxidation in Obese Adults. American College of Sports Medicine, Denver 2011
32. ***Haus JM**, Yip K, Kirwan JP, Kashyap SR. Intensive insulin therapy attenuates systemic N-epsilon-carboxymethyllysine and reduces HbA1c in poorly controlled African American patients with type 2 diabetes. American Diabetes Association, San Diego, CA 2011
33. ***Haus JM**, Solomon TP, Lu L, Jesberger JA, Flask CA, Kirwan JP. Intramyocellular lipid content and insulin sensitivity are increased following a short-term low-glycemic index diet and exercise intervention. American Diabetes Association, San Diego, CA 2011 (President's Poster)
34. *Kasumov T, Huang H, Solomon TP, **Haus JM**, Kirwan JP. Exercise Induced Improvements in Insulin Sensitivity Are Related to Changes in Muscle Ceramides and Sphingosine 1-Phosphate in Obesity and Diabetes. American Diabetes Association, San Diego, CA 2011
35. **Haus JM**, Solomon TP, Louis ES, Kelly KR, Patrick-Melin AJ, Fealy CE, Scelsi AR, Lu L, McCullough AJ, Flask CA, Kirwan JP. Short-term aerobic exercise improves hepatic lipid composition, insulin sensitivity, and circulating HMW adiponectin independent of weight loss in patients with non-alcoholic fatty liver disease, Experimental Biology, Washington DC 2011 (Featured Press Release)
36. Kalinski MI, Patrick-Melin AJ, Kelly KR, **Haus JM**, Solomon TP, Kirwan JP. Nonalcoholic Fatty Liver Disease And Nonalcoholic Steatohepatitis: Potential Role For Exercise As A Treatment Modality. Ukrainian Physiological Society, Odessa, Ukraine 2010

37. Kelly KR, Solomon TP, **Haus JM**, Cook M, Rocco M, Barkoukis H, Kirwan JP. A low-glycemic diet and exercise intervention favorably alters appetite and reduces glucose-stimulated GLP-1 secretion in obese adults. The Obesity Society, San Diego, CA October, 2010
38. ***Haus JM**, Solomon TP, Tilot AK, Cook MD, Kirwan JP. Nur77 gene expression is normalized in skeletal muscle of obese insulin resistant patients following aerobic exercise training. American Diabetes Association, Orlando FL June 2010
39. *Solomon TP, **Haus JM**, Li Y, Kirwan JP. Progressive insulin resistance across the glucose tolerance continuum is related to impaired skeletal muscle perfusion. American Diabetes Association, Orlando FL, June 2010
40. *Kirwan JP, Solomon TP, **Haus JM**, Kelly KR, Cook MD, Filion J, Watanabe RW, Kashyap SR, Barkoukis H. A Low Glycemic Diet and Exercise Intervention Reduces Insulin Resistance and Suppresses Compensatory Hyperinsulinemia via an Incretin Related Mechanism. American Diabetes Association, Orlando FL, June 2010
41. *Kelly KR, Solomon TP, **Haus JM**, Cook MD, Kashyap SR, Kirwan JP. Increased HMW adiponectin is related to improved glucose tolerance following 12 weeks of low glycemic diet and aerobic exercise training in older, obese, insulin resistant individuals. American Diabetes Association, Orlando FL, June 2010
42. Lee JD, Sullivan BE, Carroll CC, Dickinson JM, LeMoine JK, **Haus JM**, Weinheimer EM, Hollon CJ, Trappe TA. Muscle composition with resistance training and cyclooxygenase inhibitor consumption in the elderly. American College of Sports Medicine, Baltimore, MD, June 2010
43. Sullivan BE, Lee JD, Carroll CC, Dickinson JM, LeMoine JK, **Haus JM**, Weinheimer EM, Hollon CJ, Trappe TA. Muscle cyclooxygenase enzyme content with resistance training and cyclooxygenase inhibitor consumption in the elderly. American College of Sports Medicine, Baltimore, MD, June 2010.
44. **Haus JM**, Solomon TP, Lu L, McCulloch AJ, Flask CA, Kirwan JP. Hepatic lipid saturation indices and insulin resistance in non-alcoholic fatty liver disease (NAFLD). Experimental Biology, Anaheim, CA, April 2010
45. Li Y, Solomon TP, **Haus JM**, Cabrera ME, Saidel GM, Kirwan JP. In silico experiments of insulin-mediated glucose uptake in skeletal muscle. Biomedical Engineering Society. Pittsburgh, PA, October, 2009
46. **Haus JM**, Solomon TP, Kirwan JP. Adaptations in NR4A3 isoforms following exercise training in obese humans. Appl Phys Nutr Metab. 34(5), 2009
47. Solomon TP, **Haus JM**, Marchetti CM, Stanley WC, Kirwan JP. Effects of exercise training and diet on free fatty acid kinetics during lipid-induced insulin resistance in obese humans. Appl Phys Nutr Metab. 34(5), 2009
48. *Kasumov T, Hwang C, Solomon TP, Huang H, Kelly KR, **Haus JM**, Renliang Z, Kirwan JP. Exercise Training Reduces Insulin Resistance and Plasma Ceramides in Obese Subjects, Including Type 2 Diabetics. Diabetes 58:A244, 2009
49. CC Carroll, JK LeMoine, JM Dickinson, **Haus JM**, EM Weinheimer, JD Lee, BE Sullivan, CJ Hollon, TA Trappe. Influence of resistance training alone or combined with cyclooxygenase inhibitor consumption on skeletal muscle proteolysis in older humans. Integrative Physiology of Exercise, Hilton Head, SC 2008
50. JM Dickinson, NA Burd, JK LeMoine, CC Carroll, **Haus JM**, B Jemiolo, SW Trappe, GM Hughes, CE Sanders Jr, TA Trappe Influence of cyclooxygenase-2 inhibitor on cyclooxygenase mRNA expression after resistance exercise in humans: Implications for muscle protein synthesis. Integrative Physiology of Exercise, Hilton Head, SC 2008

51. Carroll CC, Dickinson JM, LeMoine JK, **Haus JM**, Weinheimer EM, Hollon CJ, Aagaard P, Magnusson SP, Trappe TA. Acetaminophen but not ibuprofen consumption during 12-weeks of knee extensor resistance training alters in vivo patellar tendon properties in older humans. Integrative Physiology of Exercise, Hilton Head, SC 2008
52. **Haus JM**, Kashyap S, Kasumov T, Defronzo RA, Kirwan JP. Plasma Ceramide Subspecies are elevated in obese subjects with type 2 diabetes and are associated with the level of insulin resistance. Obesity 16:S216, 2008
53. Solomon TP, **Haus JM**, Kelly KR, Cook M, Kirwan JP. Dietary glycemic index does not influence insulin sensitivity and substrate metabolism following short-term exercise training in older obese humans. Obesity 16:S155, 2008
54. Carroll CC, Dickinson JM, LeMoine JK, **Haus JM**, Weinheimer EM, Hollon CJ, Trappe TA. Ibuprofen and acetaminophen promote muscle hypertrophy and strength gains during resistance exercise in the elderly. FASEB J. 22:753.31, 2008 (Featured Press Release)
55. Dickinson JM, Carroll CC, **Haus JM**, Lee GA, Hollon CJ, Aagaard P, Magnusson SP, Trappe TA. The influence of aging on the in vivo properties of human patellar tendon. FASEB J. 22:753.33, 2008.
56. Burd NA, Dickinson JM, LeMoine JK, Carroll CC, **Haus JM**, Hughes G, Sanders CA, Trappe TA. Consumption of a COX-2 inhibitor stimulates muscle protein synthesis after resistance exercise in humans. FASEB J. 22:958.15, 2008
57. **Haus JM**, Covey K, Jessberger JA, Brooks LM, Kashyap SR, Dasarathy S, Flask CA, Kirwan JP. Effects of short-term exercise combined with either high or low glycemic diets on skeletal muscle lipid content in insulin resistant adults. FASEB J. 22:1226.38, 2008
58. ***Haus JM**, Marchetti CM, Brooks LM, O'leary VB, Gonzalez F, Kirwan JP. Nampt/PBEF/Visfatin is Related to the Insulin Response to Oral Glucose Following Exercise Training in Obese, Elderly Individuals. Diabetes 57:A304, 2008
59. *Li Y, Solomon TP, **Haus JM**, Saidel G, Cabrera M, Kirwan JP. Computational Model to Predict Insulin-Mediated Glucose Utilization in Skeletal Muscle. Diabetes 57:A718, 2008
60. Weinheimer EM, Jemiolo B, Carroll CC, Harber MP, **Haus JM**, Burd NA, LeMoine JK, Trappe SW, Trappe TA. Resistance exercise and cyclooxygenase (COX) expression in human skeletal muscle: Implications for COX-inhibiting drugs and protein synthesis. FASEB J. 21(6):A937, 2007
61. Carroll CC, Dickinson JM, **Haus JM**, Lee GA, Hollon CJ, Aagaard P, Magnusson SP, Trappe TA. The influence of gender on patellar tendon mechanical properties and MRI determined intratendinous signal intensity. FASEB J. 21(6):A552, 2007
62. **Haus JM**, Carrithers JA, Miller BI, Trappe TA. Intramuscular collagen cross-linking in aging men and women. FASEB J. 21(6): A553, 2007
63. **Haus JM**, Carrithers JA, Miller BI, Trappe TA. The effects of aging and gender on human skeletal muscle collagen. FASEB J. 21:922.9, 2007
64. **Haus JM**, Miller BF, Carroll CC, Weinheimer EM, Trappe TA, Trappe SW. The effect of strenuous aerobic exercise on skeletal muscle myofibrillar proteolysis in humans. Med Sci Sport Exer. 38(5):S549, 2006
65. **Haus JM**, Gallagher PM, Olesen JB, Craig BW. AMP-activated protein kinase (AMPK) and calcium/calmodulin-dependent protein kinase II (CAMKII) activation in exercising human skeletal muscle. FASEB J.19(4):A132, 2005

TEACHING AND MENTORSHIP

Courses at University of Michigan

<u>Semester/Term</u>	<u>Course #</u>	<u>U/G</u>	<u>Credits</u>	<u>Course Title</u>
Winter 2018	KIN 413	Un/Grad	3	Physical activity and Type 2 Diabetes

Courses at University of Illinois at Chicago

<u>Semester/Term</u>	<u>Course #</u>	<u>U/G</u>	<u>Credits</u>	<u>Course Title</u>
Spring 2013	KN 594	Grad	3	Biochemistry of Exercise
Fall 2013	KN 545	Grad	3	Advanced Exercise Programming and Assessment
Fall 2013	KN 545Lab	Grad	0	Advanced Exercise Programming and Assessment
Spring 2014	KN 552	Grad	3	Human Bioenergetics
Spring 2015	KN 552	Grad	3	Human Bioenergetics
Fall 2015	KN 552	Grad	3	Human Bioenergetics
Fall 2015	HN 594	Grad	1	Cells to Community Seminar
Spring 2016	KN 594	Grad	3	Exercise Biochemistry and Metabolic Disease
Fall 2016	KN552	Grad	3	Human Bioenergetics
Spring 2017	KN494	Un/Grad	3	Techniques for Assessment of Metabolic Fitness
Fall 2017	KN552	Grad	3	Human Bioenergetics

Courses at Cleveland State University

<u>Semester/Term</u>	<u>Course #</u>	<u>U/G</u>	<u>Credits</u>	<u>Course Title</u>
Fall 2010	PEP470/570	U&G	3	Exercise Testing and Prescription

Courses at Cleveland Clinic Lerner College of Medicine: Molecular Medicine Ph.D. Program

<u>Semester/Term</u>	<u>Role</u>	<u>Course Title</u>
2008-2010	Lectures in Fatty Acid and Liver Metabolism Metabolism and Introduction to the Principles of Pharmacology	

Doctoral or Master's Thesis Committees

Hae Ryong Chung. PhD in Kinesiology, Department of Kinesiology and Community Health, UIUC
Thesis: The Impact of Hypercholesterolemia and Physical Activity on Statin-Associated Skeletal Muscle Myopathy.
Degree May 2013

Sarah Peterson. PhD in Kinesiology, Nutrition and Rehabilitation; Integrative Pathophysiology, Nutrition and Health Track. Thesis: Influence of calorie/protein delivery on outcomes and body composition changes in ICU.
Degree May 2015

Rebecca Kappus. PhD in Kinesiology, Nutrition and Rehabilitation; Integrative Pathophysiology, Nutrition and Health Track. Thesis: Effects of Race and Age on Acute Antioxidant Supplementation. Degree May 2015

John Trepanowski. PhD in Kinesiology, Nutrition and Rehabilitation; Integrative Pathophysiology, Nutrition and Health Track. Thesis: Alternate-day fasting vs daily calorie restriction for weight loss. Degree May 2015

Jan Kretzschmar. PhD in Kinesiology, Nutrition and Rehabilitation; Integrative Pathophysiology, Nutrition and Health Track. Thesis: Effect of race in response to novel and established fractions of black cohosh in an endothelial cell hot flush model. Degree Dec 2014

Jacob Mey. PhD in Kinesiology, Nutrition; Integrative Pathophysiology, Nutrition and Health Track
Thesis: Glyoxalase-1 and dicarbonyl stress in skeletal muscle with aging and exercise. **Primary advisor**

Austin Robinson. PhD in Kinesiology and Nutrition; Rehabilitation Sciences Track
Thesis: Exercise and endothelium dependent vasodilation

Edwin Miranda, MS in Kinesiology and Nutrition. Thesis: Effects of Acute Aerobic Exercise Intensity on Soluble RAGE production in Humans. **Primary Advisor**

Brian Blackburn. PhD in Kinesiology, Nutrition; Integrative Pathophysiology, Nutrition and Health Track, Thesis: NOX2-RAGE cross-talk and inflammation in insulin resistant skeletal muscle. **Primary Advisor**

Alec Chaves. MS in Kinesiology and Nutrition. Thesis: Role of acute aerobic exercise on the regulation of human skeletal muscle thioredoxin enzymatic system. **Primary Advisor**

Alexander Rosenberg. PhD in Kinesiology, Nutrition; Integrative Pathophysiology Nutrition and Health Track, Thesis: Aging, resistance exercise and cerebral blood flow. **Committee Member**

Shivam Patel. PhD in Kinesiology, Purdue University. Diabetes, advanced glycation, and tendinopathy. **Committee Member**

MS/PHD Student Advising

Name of Student	Role	Degree; Project/Research Title	Dates
Lee Nadolski	Primary Advisor:	MS in Kinesiology; Applied Exercise Physiology Track; Research Project: <i>Characterizing the Role of Glyoxalase I enzymatic activity in Human Skeletal Muscle</i>	7/2012 - 4/2013
Karia Coleman	Primary Advisor	MS in Kinesiology; Applied Exercise Physiology Track; Masters project: <i>Literature Review on Acute Exercise and sRAGE</i>	8/2012 - 5/2014
Vikram Somal	Primary Advisor	MS in Kinesiology; Applied Exercise Physiology Track; Masters project: <i>Role of Obesity and Insulin Resistance in Circulating Soluble Receptor of Advanced Glycation Endproducts</i>	8/2012 - 5/2014
Edwin Miranda	Primary Advisor	MS in Kinesiology; Exercise Physiology Track; Master's thesis: <i>Effects of acute exercise on sRAGE isoforms</i> APS Travel award CSCTR New Investigator Award	8/2014 - 5/2016
Ervin Velic	Primary Advisor	MS in Kinesiology; Exercise Physiology Track; <i>Type 2 Diabetes and Ketone Metabolism</i>	8/2015 - 5/2016
Jacob Mey	Primary Advisor	PhD in Kinesiology, Nutrition; Integrative Pathophysiology, Nutrition and Health Track. Thesis: <i>Glyoxalase-1 and dicarbonyl stress in skeletal muscle with aging and exercise.</i> Sigma Xi Grant-in-Aid	8/2012 – 5/2017
Brian Blackburn	Primary Advisor	PhD in Kinesiology, Nutrition; Integrative Pathophysiology, Nutrition and Health Track. Thesis: <i>NOX2-RAGE cross-talk and inflammation in insulin resistant skeletal muscle</i>	8/2012 - current
Victoria Meyers	Primary Advisor	MS in Kinesiology; Exercise Physiology – course work only	8/2015 – 5/2017
Alec Chaves	Primary Advisor	MS in Kinesiology; Exercise Physiology Track; Thesis: <i>Role of acute aerobic exercise on the regulation of human</i>	8/2015 – 8/2017

		<i>skeletal muscle thioredoxin enzymatic system</i>	
Edwin Miranda	Primary Advisor	PhD in Kinesiology, Nutrition; Integrative Pathophysiology, Nutrition and Health Track: TBD	8/2016 - current
Kelly Fuller	Primary Advisor	PhD in Kinesiology, Nutrition Integrative Pathophysiology, Nutrition and Health Track;TBD	8/2016 – current
AJ Rosenberg	Committee member	PhD in Kinesiology, Nutrition Integrative Pathophysiology, Nutrition and Health Track;TBD	8/2016 – current
Elizabeth Schroeder	Committee member	PhD in Kinesiology, Nutrition Integrative Pathophysiology, Nutrition and Health Track;TBD	5/2017 – current
Shivam Patel	Committee member and F31 Co-Sponsor	PhD in Kinesiology – Purdue University	4/2017 - current

Postdoctoral Fellow Supervision

Name of Student	Dates	Nature of Supervision
Baker Machhadieh, MD; T32 Endocrinology Fellow	10/2013 – 10/2014	Research Mentor: <i>Diabetes Obesity and Metabolism T32 Training Grant.</i> Methods, training and professional development in human metabolic research with emphasis on obesity and diabetes
Abeer M. Mahmoud, MD, PhD; Postdoctoral Research Fellow	5/2013 - Present	Primary Mentor/Sponsor; Methods, training and professional development in human physiology and metabolism with emphasis on obesity, diabetes and cardiovascular disease <i>7/2015: Recipient of AHA Postdoctoral fellowship</i>
Ryan Perkins, PhD; Postdoctoral Research Fellow	8/2017 – Present	Primary Mentor/Sponsor; Methods, training and professional development in human physiology and metabolism with emphasis on obesity, diabetes and cardiovascular disease

Medical Student Advising

Name of Student	Role	Degree; Research Project	Dates
Ruth Anne Whitfield	Primary Mentor: <i>Craig Fellow for Medical Student Summer Research 2014</i>	MD; Research Project: <i>The Effects of Hyperinsulinemia on circulating nitric oxide</i>	5/2014 – 9/2015

Research Assistant Supervision

Name of Student	Role	Dates
Vikram Somal	Supervisor	1/2012 – 8/2012
Melissa Taylor	Supervisor	4/2013 – 8/2013
Victoria Meyers	Supervisor	8/2014 – 8/2015
Christopher Alvarez	Supervisor	4/2017 – 12/2017
Victoria Meyers	Supervisor	8/2017 - present

Undergraduate Advising and Supervision

Name of Student	Dates	Nature of Advising/Supervision
Maritza Moreno	1/2012 - 5/2012	Independent Study in Research Degree Credits Chancellor's Award for Undergraduate Research
Ryan Murphy	1/2012 – 5/2012	Independent Study for Undergraduate Research Degree Credits; Research Supervisor
Gary Farkas	5/2012 – 8/2012	Summer Research Opportunity; Research Supervisor
Erin Bohne	5/2014 – 5/2015	Honors college capstone project supervisor Honors College Research Award Helen Barton Summer Research Scholarship
Finney Bhupanipad	8/2015 – current	Honors College Fellow
Halaneh Nighoghosian	8/2015 – current	Honors College Fellow
Blake Stermer	8/2015 – current	Honors College Fellow
Aayush Shah	8/2014 – current	Honors College Fellow
Renzmark Vallesteros	8/2016 – current	Honors College Fellow
Pamela Palisoc	8/2016 – current	Honors College Fellow
Tiffany Cheng	5/2016 – current	R25 Summer Diabetes Program Honors College Research Award Best R25 Presentation Honors College Travel Award

International Student Supervision

Name of Student	Dates	Nature of Supervision
Daniela Bassi University of São Carlos, San Palo, Brazil	8/14 – 5/15	Supervisor: Provided mentorship and research opportunity in the area of obesity and metabolism for her study abroad program Project: <i>Role of Hyperglycemia and reactive oxygen species in modulating vascular reactivity.</i>
Eveline Menezes Federal University of Vale do São Francisco in Petrolina, Pernambuco, Brazil	5/2015 – 9/2015	Supervisor: Provided mentorship and research opportunity in the area of obesity and metabolism Project: <i>Hyperinsulinemia and electrolyte balance</i> Brazil Scientific Mobility Program

Technician Supervision

Name of Technician	Dates	Nature of Supervision
Brian K. Blackburn, MS	8/12 – 7/13	Primary Supervisor of the following duties: Laboratory manager, lab assays, ordering, maintenance, documentation, professional development.

TRAINING GRANT/ FELLOWSHIP INVOLVEMENT

2017 - Current: 1T32AG057468-01 Contact PI / Project Leader: LAZAROV, ORLY
Title: TRAINING PROGRAM IN THE BIOLOGY AND TRANSLATIONAL RESEARCH ON ALZHEIMER'S DISEASE AND RELATED DEMENTIAS
Awardee Organization: UNIVERSITY OF ILLINOIS AT CHICAGO
Role: Training Faculty – Clinical Science Track

2011-2014: 3T32DK080674-05S1 Contact PI / Project Leader: UNTERMAN, TERRY G.
Title: DIABETES, NUTRITION AND OBESITY RESEARCH TRAINING PROGRAM
Awardee Organization: UNIVERSITY OF ILLINOIS AT CHICAGO
Role: Training Faculty

09/01/2017 - 08/31/2021: 1 F30 AG058381-01 PI: Amanda Randolph
Advanced Glycation End-products, Exercise, and Sarcopenia
University of Texas - Galveston

Role: Collaborator

06/01/2018 - 05/31/2021: Individual Predoctoral Fellowship (Parent F31) – TBD, PI: Shivam Patel
Diabetes, advanced glycation, and tendinopathy

Purdue University

Role: Co-Sponsor

AWARDS, HONORS AND SCHOLARSHIPS

2015	NIH Loan Repayment Program - Renewal
2014	American Diabetes Association – Junior Faculty Award
2013	NIH Loan Repayment Program
2013	Central Society for Clinical Research, Junior Faculty Travel Award
2013	Central Society for Clinical Research, Early Career Development Award
2011	American Diabetes Association Young Investigator Travel Award
2011	Alumni of the Year Award, Bitonte College of Health and Human Services, Youngstown State University
2007	Best Clinical Research Presentation, Cleveland Clinic
2003	Sigma Xi Scientific Research Society Grant, Ball State University
2003	Ball State University Internal Research Grant
2001	Cum Laude Graduate, Youngstown State University
2000	Scholarship, Department of HPES, Youngstown State University
1997	American Diabetes Association Undergraduate Scholarship
1997	Ruritan National Undergraduate Scholarship

PROFESSIONAL & PUBLIC SERVICE

National Peer Review Panels

- 2013-2016 American Heart Association, Grant Peer Review: Molecular Signaling 3/4 Committee
- 2014-present American Diabetes Association, Scientific Sessions Abstract Reviewer
- 2017 American Heart Association Strategically Focused Research Network: Obesity

National Committees

- 2016-present American Diabetes Association Exercise Program Subcommittee

Guest Editor

- 2017-2018 Frontiers in Cardiovascular Medicine – Cardiovascular metabolism
 - Mechanisms by Which Acute and Chronic Exercise Promote Cardiometabolic Health.

Manuscript Review (Ad-hoc)

Diabetes, Diabetologia, Journal of Applied Physiology; American Journal of Physiology: Endocrinology and Metabolism; American Journal of Physiology: Heart and Circulatory; American Journal of Physiology: Regulatory; Medicine Science Sport and Exercise; Exercise and Sport Science Reviews; Nutrients; Endocrine; Mediators of Inflammation; Prostaglandins, Leukotrienes and Essential Fatty Acids; Scandinavian Journal of Medicine and Science in Sports, Obesity, International Journal of Obesity; International Journal of Sports Medicine, Current Therapeutic Research, Journal of Gerontology: Medical Sciences, PLOS ONE, Lipids, Journal of Diabetes and its Complications, FASEB, Journal of Clinical Endocrinology and Metabolism. Journal of Alzheimer's Disease, Metabolism, Journal of Physiology, European Journal of Physiology, Experimental Physiology, Physiological Reports

Membership in Professional Organizations

- 2002 - Present The American Physiological Society
 - Environmental and Exercise Physiology Section
 - Endocrinology and Metabolism Section
- 2007 - Present American Diabetes Association
 - Professional Section
- 2007 - Present American College of Sports Medicine
- 2011 – Present International Maillard Reaction Society
- 2014 – Present American Heart Association
 - Councils on Lifestyle and Cardiometabolic Health
 - Council on Peripheral Artery Disease

Public Service

- 2008 – Present USA Rugby Referee’s Society
- 2008 – 2011 Ohio Rugby Union Referee’s Society
- 2011 – Present Chicago Area Rugby Union Referee’s Society
- 2011 – present Illinois Youth Rugby Association
- 2013 – Present Chicago Parks District, Rookie Rugby Program
- 2015 – present Diabetes Partnership Mahoning Valley – Student Scholarship Selection Committee
- 2016 – present American Diabetes Association Diabetes Camp Volunteer

COMMUNITY OUTREACH – HEALTH PROMOTION

AWARE for All – Chicago. Diabetes education as inviter research speaker. Chicago, IL, October 2017

American Diabetes Association – Diabetes is Primary – Chicago Metropolitan Area Continuing Medical Education Program According to ADA guidelines. Topic = Prediabetes and Prevention of Type 2 Diabetes, October 2017

American Diabetes Association EXPO Chicago – Sponsor and Exhibitor, May 2017

American Diabetes Association EXPO Chicago – Donor Interface, April 2016

American Diabetes Association CAMP Crossroads volunteer, July 2016

Merchandise Mart Chicago and the American Diabetes Association, Discussions with tech industry to integrate technology into diabetes treatment and management. July 18th 2015

CBS 2 Chicago and the American Diabetes Association, On the Table: Discussions to Improve the Lives of Individuals with Diabetes. May 12th 2015

“Exercise is Medicine: Keys to Optimal Health and Longevity.” Kiwanis Club, Elm Grove, WI, Nov 14th 2013.

Northeast Ohio Science Fair, Cleveland State University, Cleveland, OH: Judge, 2010, 2011.

Humility of Mary Health Partner’s Diabetes Education Day, Youngstown, OH, October 30, 2008. Guest Speaker, *“Combating Insulin Resistance and Diabetes with Physical Activity: Exercise is Medicine.”*

Shaker Heights High School, Shaker Heights, OH. December 2009, Guest Lecturer, *“Combating Insulin Resistance and Diabetes with Physical Activity: Exercise is Medicine.”*

Youngstown Community Health Center: Diabetes Outreach Project. Served on Allocations and Funding Committee and co-authored funding application to the Ohio Department of Health, 2001-2002.

Organizational Committee, Fitness and Wellness Exposition, Youngstown State University, 2001.

REFERENCES

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