

Curriculum Vitae

SHANON L. CASPERSON, Ph.D., D.T.R.

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USDA-ARS Grand Forks Human Nutrition Research Center

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QUALIFICATIONS OVERVIEW: Expertise in designing, implementing, and managing complex human clinical research trials. Senior scientific advisor for all whole-room calorimetry protocols. Proficient in the principles and practice of stable isotopes and isotope tracers in metabolic research.

EDUCATION

Ph.D.	2012	Cell Biology, University of Texas Medical Branch, Galveston, TX
B.S.	2004	Fitness and Human Performance, University of Houston, Houston, TX
A.S.	2002	Nutritional Sciences, San Jacinto College, Houston, TX

REGISTRATION

2003-present	Dietetic Technician, Registered (D.T.R.), Academy of Nutrition and Dietetics Registration No. 933199
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PROFESSIONAL EXPERIENCE

2012-present	Research Biologist, USDA-ARS, Grand Forks Human Nutrition Research Center
2006-2012	Graduate Research Assistant, Division of Endocrinology, Department of Internal Medicine, University of Texas Medical Branch
2004-2006	Research Assistant, Division of Endocrinology, Department of Internal Medicine, University of Texas Medical Branch

HONORS AND AWARDS

2021	Research article [<i>J Nutr.</i> 2021 Jun 1;151(6):1665-1672] selected as “Editor’s Pick”
2017	Research article [<i>BMC Nutrition</i> , 2017. 3(1): p. 49] selected as “Editor’s Pick” with Press Release, Blog post and Video Abstract
2014	Research article [<i>J. Anal. At. Spectrom.</i> , 2014, April;29(4):594-598] selected as “Editor’s Pick” with cover artwork
2011	<i>Gail E. Butterfield Nutrition Travel Award</i> (First awardee of this award) American College of Sports Medicine

2010, 2007	<i>Peyton and Lydia Schapper Endowed Scholarship</i> , University of Texas Medical Branch
2010, 2009	<i>First Place Poster Presentation</i> , American Society for Nutrition Energy and Macronutrient Metabolism Research Interest Section, Experimental Biology
2009	<i>Best Student Poster</i> , 13 th Annual Forum on Aging, University of Texas Medical Branch Sealy Center on Aging
2008, 2007	<i>Travel Award</i> , Isotec®, Experimental Biology
2007	<i>Gatorade Young Investigator Award</i> , American Physiological Society Environmental & Exercise Physiology Section, Experimental Biology
2005	<i>Student Research Manuscript Award</i> , American College of Sports Medicine Texas Chapter

PROFESSIONAL MEMBERSHIPS

American Society for Nutrition – 2007 to present

PROFESSIONAL SERVICE

Service to the Discipline

1. Editorial Board Member - Nutrients
2. Committee member - Experimental Foods Database
3. Ad-Hoc Manuscript Reviews
4. Ad-Hoc USDA National Institute of Food and Agriculture Grant Review Panel

Service to University of North Dakota

1. Member, Institutional Review Board, 2014-present
 - a. Vice Chair, 2023-present
2. Adjunct Assistant Professor, College of Nursing and Professional Disciplines, 2018-2023
 - a. Adjunct Associate Professor, 2023-present
3. Advisory Committee, Maximizing Access to Research Careers (MARC) Undergraduate Student Training in Academic Research (U-STAR), 2018-present
4. Advisory Committee, Department of Nutrition and Dietetics, 2023-present

TEACHING AND MENTORING

Postdoctoral Fellows

1. Afrina Brishti, Ph.D. 09/2023-present
2. Angela De Leon, Ph.D. 09/2017-09/2020

Undergraduate Students

1. Davis Kopplinger, MARC U-STAR Scholar, Retinal Dopamine-mediated Response to Highly Reinforcing Foods, Intensive Summer Research Internship, 2019
2. Andie Jackson, MARC U-STAR Scholar, Relative Reinforcing Value Software

- Development, Intensive Summer Research Internship, 2019
3. Brenna Miller, Increasing Spontaneous Non-Exercise Activity with Implicit Priming, Summer Research Project, 2016
 4. Deandria Lavine, Medical Student Summer Research Project, University of Texas Medical Branch, 2011
 5. Linda Yang, Medical Student Summer Research Project, University of Texas Medical Branch, 2011 ****Winner of Student Research Poster Competition ****

INVITED TALKS

- 2021 “Effect of daily protein intake patterns during weight loss on dietary adherence and body composition in women” at the Institute for the Advancement of Food and Nutrition Sciences (IAFNS) Protein Committee virtual meeting
- 2021 “Research Methods in Nutrition” at the University of North Dakota
- 2020 “Career Development in Nutrition Research” at Drexel University

PUBLICATIONS

Peer-reviewed Original Research

<https://www.ncbi.nlm.nih.gov/myncbi/12ogn4wTM4F/bibliography/public/>

1. Anderson, R.E. III, Casperson, S.L., Kho, H., Flack, K.D. The Role of Dietary Protein in Body Weight Regulation among Active-Duty Military Personnel during Energy Deficit: A Systematic Review. *Nutrients*. 2023 Sep 12;15(18):3948. doi: 10.3390/nul5183948
2. Hess, J.M., Comeau, M.E., Casperson, S.L., Slavin, J.L., Johnson, G.H., Messina, M., Raatz, S., Scheett, A.J., Bodensteiner, A., Palmer, D.G. Dietary Guidelines Meet NOVA: Developing a Menu for A Healthy Dietary Pattern Using Ultra-Processed Foods. *J Nutr*. 2023 Aug;153(8):2472-2481. doi: 10.1016/j.tjnut.2023.06.028
3. Casperson, S.L.^, Roemmich, J.N., Larson, K.J., Hess, J.M., Palmer, D.G., Jahns, L. Sensitivity of Pressure-Mediated Reflection Spectroscopy to Detect Changes in Skin Carotenoids in Adults Without Obesity in Response to Increased Carotenoid Intake: A Randomized Controlled Trial. *J Nutr*. 2023 Feb;153(2):588-597. doi: 10.1016/j.tjnut.2023.01.002 ^Corresponding author
4. Casperson, S.L.^, Scheett, A., Palmer, D.G., Jahns, L., Hess, J.M., Roemmich, J.N. Biochemical Validation of a Self-Administered Carotenoid Intake Screener to Assess Carotenoid Intake in Nonobese Adults. *Curr Dev Nutr*. 2022 Dec 23;7(2):100024. doi: 10.1016/j.cdnut.2022.100024 ^Corresponding author
5. Larson, K.J., Bundy, A.N., Kuntz, T., Hur, J., Yeater, K.M., Casperson, S.L., Brunelle, D.C., Roemmich, J.N. Effect of a maternal high fat diet with vegetable substitution on fetal brain transcriptome. *J Nutr Biochem*. 2022 Oct;108:109088. doi: 10.1016/j.jnutbio.2022.109088.
6. De Leon, A., Jahns, L., Roemmich, J.N., Duke, S.E. Casperson, S.L. ^ Consumption of Dietary Guidelines for Americans types and amounts of vegetables increases subjective happiness: A randomized controlled trial. *J Acad Nutr Diet* 2022 Jul;122(7):1355-1362. doi: 10.1016/j.jand.2021.11.009. ^Corresponding author

7. Nelson, A.M., Casperson, S.L., Jahns, L., Palmer, D.G., Roemmich, J.N. Seasonal Increases in Sedentary Behavior and Energy Intake are Associated with Increases in Percentage Body Fat of Midlife Women: A 1-Year Cohort Study. *J Aging Res & Lifestyle*. 2022;11:20-25. doi: 10.14283/jarlife.2022.4.
8. Casperson, S.L.^, Jahns, L., Duke, S.E., Nelson, A.M., Appleton, K.M., Claycombe-Larson, K.J., Roemmich, J.N. Incorporating Dietary Guidelines for Americans vegetable recommendations into the diet alters dietary intake patterns of other foods and improves diet quality in adults with overweight and obesity. *J Acad Nutr Diet* 2022 Jul;122(7):1345-1354.e1. doi: 10.1016/j.jand.2022.03.008 ^Corresponding author
9. Claycombe-Larson, K.J., Bundy, A., Lance, E.B., Darland, D.C., Casperson, S.L., Roemmich, J.N. Postnatal exercise protects offspring from high-fat diet-induced reductions in subcutaneous adipocyte beiging in C57Bl6/J Mice. *J Nutr Biochem*. 2022 Jan;99:108853. doi: 10.1016/j.jnutbio.2021.108853
10. Rust, B.M., Raatz, S.K., Casperson, S.L., Duke, S.E., Picklo, M.J. Dietary Fat Chain Length, Saturation, and PUFA Source Acutely Affect Diet-Induced Thermogenesis but Not Satiety in Adults in a Randomized, Crossover Trial. *Nutrients* 2021, 13(8), 2615. doi.org/10.3390/nu13082615
11. Casperson, S.L.* ^, Jahns, L.* , Temple, J.L., Appleton, K.M., Duke, S.E., Roemmich, J.N. Consumption of a variety of vegetables to meet Dietary Guidelines for Americans recommendations does not induce sensitization of vegetable reinforcement among adults with overweight and obesity: a randomized controlled trial. *J Nutr*. 2021 Jun 1;151(6):1665-1672. doi: 10.1093/jn/nxab049 *Co-First Authors ^Corresponding author
12. De Leon, A., Roemmich, J.N., Casperson, S.L.^ Identification of Barriers to Adherence to a Weight Loss Diet in Women Using the Nominal Group Technique. *Nutrients* 2020, 12(12), 3750; doi.org/10.3390/nu121237502020, 12, 3750 ^Corresponding author
13. Casperson, S.L.^, Conrad, Z., Raatz, S.K., Derner, J., Roemmich, J.N., Jahns, L., Picklo, M.J. Impact of beef consumption on saturated fat intake in the United States adult population: Insights from modeling the influences of bovine genetics and nutrition. *Meat Sci*. 2020;Nov;169:108225. doi: 10.1016/j.meatsci.2020.108225 ^Corresponding author
14. De Leon, A., Jahns, L., Casperson, S.L.^ Barriers and facilitators to following the dietary guidelines for vegetable intake: Follow-up of an intervention to increase vegetable intake. *Food Quality and Preference*. 2020;83:103903. doi:10.1016/j.foodqual.2020.103903 ^Corresponding author
15. De Leon, A., Burnett, D.J., Rust, B.M., Casperson, S.L., Horn, W.F., Keim, N.L. Liking and Acceptability of Whole Grains Increases with a 6-Week Exposure but Preferences for Foods Varying in Taste and Fat Content Are Not Altered: A Randomized Controlled Trial. *Curr Dev Nutr*. 2020;4(3):nzaa023. doi:10.1093/cdn/nzaa023
16. McGrath, R., Stastny, S., Casperson, S.L., Jahns, L., Roemmich, J., Hackney, K. Daily Protein Intake and Distribution of Daily Protein Consumed Decreases Odds for Functional Disability in Older Americans. *J Aging Health*. 2019:898264319881864. doi:10.1177/0898264319881864
17. Flack, K.D., Uffholz, K., Casperson, S.L., Jahns, L., Johnson, L. and Roemmich, J.N.

- Decreasing the Consumption of Foods with Sugar Increases Their Reinforcing Value: A Potential Barrier for Dietary Behavior Change. *J Acad Nutr Diet*. 2019;119(7):1099-1108. doi:10.1016/j.jand.2018.12.016
18. **Casperson, S.L.**[^], Lanza, L., Albajri, E. and Nasser, J.A. Increasing Chocolate's Sugar Content Enhances Its Psychoactive Effects and Intake. *Nutrients* 2019;11(3):596. doi:10.3390/nu11030596 [^]Corresponding author
 19. **Casperson, S.L.**[^] and Roemmich, J.N. Impact of Dietary Protein and Gender on Food Reinforcement. *Nutrients* 2017;9(9):957. doi:10.3390/nu9090957 [^]Corresponding author
 20. **Casperson, S.L.**[^], C. Hall, and Roemmich, J.N. Postprandial energy metabolism and substrate oxidation in response to the inclusion of a sugar- or non-nutritive sweetened beverage with meals differing in protein content. *BMC Nutrition*, 2017;3(49). doi:10.1186/s40795-017-0170-2 [^]Corresponding author
 21. **Casperson, S.L.**[^], Johnson, L.K., and Roemmich, J.N. The relative reinforcing value of sweet versus savory snack foods after consumption of sugar- or non-nutritive sweetened beverages. *Appetite*. 2017;112:143-149. doi:10.1016/j.appet.2017.01.028 [^]Corresponding author
 22. **Casperson, S.L.**, Reineke, J.E., Sieling, J., Moon, J., Roemmich, J. and Whigham, L. A mobile phone food record app to digitally capture dietary intake for adolescents in a free-living environment: usability study. *JMIR Mhealth Uhealth*. 2015;3(1):e30. doi:10.2196/mhealth.3324
 23. Mamerow, M.M., Mettler, J.A., English, K.L., **Casperson, S.L.**, Arentson-Lantz, E., Sheffield-Moore, M., Layman, D.K., and Paddon-Jones, D. Dietary protein distribution positively influences 24h muscle protein synthesis. *J Nutr*. 2014;144(6):876-80. doi:10.3945/jn.113.185280
 24. Butz, D., **Casperson, S.L.**, and Whigham, L. The emerging role of carbon isotope ratio determination in health research and medical diagnostics. *J. Anal. At. Spectrom.*, 2014;29(4):594-598. doi: 10.1039/C3JA50327E
 25. Sheffield-Moore, M., Dillon, E.L., Randolph. K.M., **Casperson, S.L.**, White, G.R., Jennings, K., Rathmacher, J., Schuette, S., Janghorbani, M., Urban, R.J., Hoang, V., Willis, M., and Durham, W.J. Isotopic decay of urinary or plasma 3-methylhistidine as a potential biomarker of pathologic skeletal muscle loss. *J Cachexia Sarcopenia Muscle*, 2014;5(1):19-25. doi:10.1007/s13539-013-0117-7
 26. Sheffield-Moore, M., Wiktorowicz, J.E., Soman, K.V., Danesi, C.P., Kinsky, M.P., Dillon, E.L., Randolph, K.M., **Casperson, S.L.**, Gore, D.C., Horstman, A.M., Lynch, J.P., Doucet, B.M., Mettler, J., Ryder, J.W., Ploutz-Snyder, L.L., Hsu, J.W., Jahoor, F., Jennings, K., and Durham, W.J. Sildenafil increases muscle protein synthesis and reduces muscle fatigue. *Clin Transl Sci*, 2013;6(6):463-8. doi: 10.1111/cts.12121
 27. Dillon E.L., Basra G., Horstman A.M., **Casperson S.L.**, Randolph K.M., Durham W.J., Urban R.J., Diaz-Arrastia C., Levine L., Hatch S.S., Willis M., Richardson G., and Sheffield-Moore M. Cancer Cachexia and Anabolic Interventions: A Case Report. *J Cachexia Sarcopenia Muscle*, 2012;3(4):253-63. doi:10.1007/s13539-012-0066-6

28. **Casperson, S.L.**, Sheffield-Moore, M., Hewlings, S.J. and Paddon-Jones, D. Leucine supplementation chronically improves the anabolic response to meals in older adults consuming the RDA for protein. *Clinical Nutrition*, 2012;31(4):512-9. doi:10.1016/j.clnu.2012.01.005
29. Dillon, E.L., **Casperson, S.L.**, Durham, W.J., Randolph, K.M., Sanford, A.P., Kinsky, M.P. and Sheffield-Moore, M. Muscle Protein Metabolism Responds Similarly to Exogenous Amino Acids in Healthy Younger and Older Adults during NO-Induced Hyperemia. *Am J Physiol Regul Integr Comp Physiol*, 2011;301(5):R1408-17. doi:10.1152/ajpregu.00211.2011
30. Sheffield-Moore, M. *, Dillon, E.L. *, **Casperson, S.L.**, Gilkison, C., Grady, J.J., Paddon-Jones, D., and Urban, R.J. A Randomized Pilot Study of Monthly Cycled Testosterone Replacement or Continuous Testosterone Replacement vs. Placebo in older Men. *J. Clin. Endocrinol. Metab*, 2011;96(11):E1831-7. doi:10.1210/jc.2011-1262 *Co-First Authors
31. Durham, W.J. *, **Casperson, S.L.** *, Dillon, E.L., Keske, M.A., Paddon-Jones, D., Sanford, A.P., Lakshman, K.M., Hickner, R.C. Hong, C., Grady, J.J. and Sheffield-Moore, M. Age-related anabolic resistance after endurance type exercise in humans. *FASEB J*. 2010;24(10):4117-27. doi:10.1096/fj.09-150177 *Co-First Authors
32. Dillon, E.L. *, Sheffield-Moore, M. *, Paddon-Jones, D., Gilkison, C., Sanford, A.P., **Casperson, S.L.**, Jiang, J., Chinkes, D.L. and Urban, R.J. Amino acid supplementation increases lean body mass, basal muscle protein synthesis and IGF-I expression in older women. *J. Clin. Endocrinol. Metab*. 2009;94(5):1630-7. doi:10.1210/jc.2008-1564 *Co-First Authors
33. Dillon, E.L., Janghorbani, M., Angel, J.A., **Casperson, S.L.**, Grady, J.J., Urban, R.J., Volpi, E. and Sheffield-Moore, M. Novel noninvasive breath test method for screening individuals at risk for diabetes. *Diabetes Care*, 2009;32(3):430-5. doi:10.2337/dc08-1578
34. Dillon E.L., Volpi E., Wolfe R.R., Sinha S., Sanford A.P., Arrastia C.D., Urban R.J., **Casperson S.L.**, Paddon-Jones D., and Sheffield-Moore M. Amino acid metabolism and inflammatory burden in ovarian cancer patients undergoing intense oncological therapy. *Clin Nutr*. 2007;26(6):736-43. doi: 10.1016/j.clnu.2007.07.004
35. Sheffield-Moore M., Paddon-Jones D., **Casperson S.L.**, Gilkison C., Volpi E., Wolf S.E., Jiang J., Rosenblatt J.I., Urban R.J. Androgen therapy induces muscle protein anabolism in older women. *J Clin Endocrinol Metab*. 2006;91(10):3844-9. doi: 10.1210/jc.2006-0588

Book Chapters and Review Articles

Sheffield-Moore, M., **Casperson, S.**, and Urban, R.J. Androgens and lean body mass in the aging male. *Textbook of Men's Health*, B. Lunenfeld and L. Gooren, Parthenon Publishing, New York, NY, 2007

Abstracts

1. A De Leon, JN Roemmich, SL Casperson (2023) Change in Skin Carotenoid Status Is Associated with Changes in Body Composition During Moderate Weight Loss in Women. ASN Annual Meeting July 2023
2. JM Hess, ME Comeau, SL Casperson, J Slavin, GH Johnson, M Messina, S Raatz, A

- Scheet, A Bodensteiner (2023) Dietary guidance, meet NOVA: developing a menu for a healthy dietary pattern using ultra processed foods. ASN Annual Meeting July 2023
3. A De Leon, JN Roemmich, **SL Casperson** (2022) Consuming 30g of protein at each of 3 meals daily improves diet satisfaction and promotes eating behaviors that support weight loss in women consuming an energy restricted diet. ASN Annual Meeting June 2022
 4. **SL Casperson**, JN Roemmich, K Claycombe-Larson, JM Hess, D Palmer, L Jahns (2022) Sensitivity of pressure-mediated reflection spectroscopy to detect dose-dependent changes in skin carotenoids: A randomized controlled trial. ASN Annual Meeting June 2022
 5. A De Leon, L Jahns, JN Roemmich, **SL Casperson** (2021) Consumption of Dietary Guidelines for Americans types and amounts of vegetables increases subjective happiness: A randomized controlled trial. ASN Annual Meeting June 2021
 6. AM Nelson, L Jahns, **SL Casperson**, JN Roemmich (2021) Seasonal increases in sedentary behavior and energy intake are associated with increases in percentage body fat of midlife women: A 1-year cohort study. ASN Annual Meeting June 2021
 7. **SL Casperson**, Z Conrad, SK Raatz, J Derner, JN Roemmich, L Jahns, MJ Picklo (2020) Impact of beef consumption on saturated fat intake in the United States adult population: insights from modeling the influences of bovine genetics and nutrition. ASN Annual Meeting June 2020
 8. A De Leon, JN Roemmich, **SL Casperson** (2020) Barriers to Adherence to a Weight Loss Diet Using the Nominal Group Technique. ASN Annual Meeting June 2020
 9. A De Leon, JN Roemmich, **SL Casperson** (2020) Consuming 30 Grams of High-Quality Protein at Breakfast, Lunch, and Dinner Does Not Protect against Loss of Fat-Free Mass during Weight Loss in Women. ASN Annual Meeting June 2020
 10. A De Leon, JN Roemmich, **SL Casperson** (2019) Responses on the Three Factor Eating Questionnaire Restraint and Disinhibition Scales Change after a Controlled Energy-Restricted Diet. ASN Annual Meeting June 2019
 11. JA Nasser, E Albajri, L Lanza, **SL Casperson** (2019) Objective assessment of brain response to tasting high sugar/high fat chocolate by RETeval electroretinography. ASN Annual Meeting June 2019
 12. A De Leon, L Jahns, JN Roemmich, **SL Casperson** (2018) Fixed Dietary Carotenoid Intake, Weight Loss and Skin Carotenoid Level. ASN Annual Meeting June 2018
 13. L Jahns, LK Johnson, J Temple, **SL Casperson**, JN Roemmich (2018) The Reinforcing Value of Vegetables Does Not Increase During a Randomized Controlled Intervention Among Overweight and Obese Adults. ASN Annual Meeting June 2018
 14. **SL Casperson**, L Johnson, JN Roemmich (2017) Sex Differences in Snack Food Reinforcement in Response to Increasing Dietary Protein. FASEB J April 2017 31:652.15
 15. L Jahns, LK Johnson, J Temple, NL Keim, **SL Casperson**, JN Roemmich (2017) The reinforcing value of vegetables does not increase with repeated exposure during a randomized controlled provided vegetable intervention among overweight and obese

adults. FASEB J April 2017 31:794.4

16. SL Casperson, C Hall, JN Roemmich (2016) Sugar-sweetened beverages decrease postprandial fat utilization in healthy weight adults after consuming test meals with different protein content. Obesity Week
17. SL Casperson, L Johnson, JN Roemmich (2016) The Relative Reinforcing Value of Snack Foods in Response to Consumption of Sugar- or Non-Nutritive-Sweetened Beverages. FASEB J April 2016 30:418.2 ***Oral presentation**
18. SL Casperson, D Schoeller, L Johnson, L Whigham (2014) Calculation of total meal $\delta^{13}\text{C}$ from individual food $\delta^{13}\text{C}$. FASEB J April 2014 28:813.2
19. SL Casperson, J Reineke, J Sieling, J Roemmich, L Whigham (2013) Usability of mobile phone food records to assess dietary intake in adolescents. FASEB J April 2013 27:230.2 ***Oral presentation**
20. E Hoang, W Durham, SL Casperson, C Gilkison, EL Dillon, M Sheffield-Moore, RJ Urban (2012) Elevation of Testosterone Concentrations in the Low Normal Range Reduces Fatigue in Older Men. Endocrine Society Annual Meeting
21. J Lynch, W Durham, M Jangorbani, S Schuette, EL Dillon, C Danesi, K Randolph, SL Casperson, J Rathmacher, A Horstman, G White, RJ Urban, M Sheffield-Moore (2012) Spot Determinations of Urinary 3-Methylhistidine Isotope Enrichment Decay To Identify Age-Related Differences in Protein Degradation. Endocrine Society Annual Meeting
22. SL Casperson, WJ Durham, EL Dillon, R Hickner, D Paddon-Jones, M Sheffield-Moore (2011) Substrate Exchange during Aerobic Exercise and Provision of Amino Acids in Older and Younger Men. American College of Sports Medicine Annual Meeting ****Abstract chosen as the first winner of Gail E. Butterfield Nutrition Travel Award**
23. E Hoang, W Durham, SL Casperson, C Gilkison, EL Dillon M Sheffield-Moore, RJ Urban (2011) Subjective Fatigue Response In Adult Males Following Short-Term Testosterone Treatment. Endocrine Society Annual Meeting
24. SL Casperson, WJ Durham, KM Randolph, EL Dillon, M Sheffield-Moore (2010) Anabolic and energetic signaling in human skeletal muscle in response to amino acids and endurance exercise. FASEB J April 2010 24:1046.5
25. EL Dillon, KM Randolph, SL Casperson, WJ Durham, RJ Urban, L Levine, C Diaz-Arrastia, M Sheffield-Moore (2010) Oral amino acids and testosterone therapy to improve muscle mass and quality of life during chemotherapy in recurrent cervical cancer: A case study. FASEB J April 2010 24:929.1
26. SL Casperson, M Sheffield-Moore, D Paddon-Jones (2010) Nutrient sensing anabolic pathway is increased in the elderly following chronic dietary leucine supplementation. FASEB J April 2010 24:331.2 ***Oral presentation **Abstract chosen as winner of ASN EMM RIS Poster Award**
27. W Durham, SL Casperson, EL Dillon, MA Keske, D Paddon-Jones, A Sanford, KM Lakshman, RC Hickner, C Hong, J Grady, M Sheffield-Moore (2010) Age-related anabolic resistance after endurance type exercise in humans. FASEB J April 2010 24:997.14

28. W Durham, **SL Casperson**, EL Dillon, D Paddon-Jones, RC Hickner, M Sheffield-Moore (2010) Response Of Leg Protein Metabolism To Acute Endurance Exercise In Younger And Older Healthy Men. American College of Sports Medicine Annual Meeting
29. **SL Casperson**, EL Dillon, D Paddon-Jones, W Durham, M Sheffield-Moore (2009) Peripheral vasodilation and aerobic exercise equally affect skeletal muscle substrate utilization in older and younger adults. *FASEB J* April 2009 23:777.10
30. **SL Casperson**, M Sheffield-Moore, and D Paddon-Jones (2009) Leucine supplemented meals improve muscle protein synthesis in older adults. *FASEB J* April 2009 23:738.17
****Abstract chosen as winner of ASN EMM RIS Poster Award**
31. EL Dillon, RJ Urban, JA Angel, **SL Casperson**, D Paddon-Jones, M Sheffield-Moore (2008) Continuous testosterone administration for 5 months reduces markers of bone turnover in older men. *FASEB J* March 2008 22:1188.3
32. **SL Casperson**, EL Dillon, JA Angel, A Sanford, M Ahmad, D Paddon-Jones, E Volpi, M Sheffield-Moore (2008) Pharmacologic vasodilation increases muscle perfusion and muscle protein anabolism similarly in elderly and young. *FASEB J* March 2008 22:949.5
33. **SL Casperson**, EL Dillon, JA Angel, CR Gilkison, J Jiang, S Beca, D Paddon-Jones, M Sheffield-Moore, RJ Urban (2008) Cyclic Testosterone Administration Improves Muscle Anabolism in Hypogonadal Men. The Endocrine Society Annual Meeting
34. EL Dillon, RJ Urban, **SL Casperson**, M Drummond, BB Rasmussen, M Sheffield-Moore (2007) Chronic essential amino acid supplementation in the elderly increases basal muscle protein synthesis and S6K1 phosphorylation. *FASEB J* April 2007 21:A838
35. EL Dillon, M Janghorbani, JA Angel, **SL Casperson**, RJ Urban, E Volpi, M Sheffield-Moore (2007) Glucose-derived breath CO₂ kinetics in IGT and NGT subjects following an oral glucose load. *FASEB J* April 2007 21:A835
36. **SL Casperson**, EL Dillon, R Hickner, N Newberry, K Lakshman, M Mujeeb, JA Angel, RJ Urban, D Chinkes, M Sheffield-Moore (2007) Exercise-Stimulated Blood Flow in Older and Younger Men: A Methodological Comparison. *FASEB J* April 2007 21:A1237
***Oral presentation**
37. **SL Casperson**, EL Dillon, JA Angel, A Sanford, E Volpi, D Paddon-Jones, M Sheffield-Moore (2007) Exercise-Mediated Increases in Muscle Perfusion in Older Men: Interaction of Amino Acids and Muscle Protein Metabolism. *FASEB J* April 2007 21:A838 ****Abstract chosen as winner of the Gatorade Young Investigator Award**
38. M Sheffield-Moore, **SL Casperson**, EL Dillon, M Ahmad, P Jammula, D Paddon-Jones, RR Wolfe, DL Chinkes, MA Vincent, LH Clerk (2006) Nitric oxide-stimulated skeletal muscle capillary flow and glucose uptake in healthy elderly. *FASEB J* March 6, 2006 20:A142-A143
39. **SL Casperson**, EL Dillion, JA Angel, M Sheffield-Moore (2005) A methodological comparison of nitric oxide-stimulated leg blood flow in healthy elderly. Workshop on Investigation of Human Muscle Function *In Vivo*
40. **SL Casperson**, WE Amonette, JR Bentley, JK DeWitt, MA Guilliams, CA Twine, RD Hagan (2005) Evaluation of a Commercial Linear Encoder System to Predict Leg Press

1-RM and Measure Power Output. NSCA National Conference

4. SL Casperson, WE Amonette, JR Bentley, JK DeWitt, MA Guilliams, CA Twine, RD Hagan (2005) Free Weight Power Testing with Muscle Lab. Texas Chapter of the American College of Sports Medicine Annual Meeting ***Oral presentation **Chosen as 2nd place winner of the Student Research Manuscript Award**

RESEARCH SUPPORT

Active Grant Awards:

North Dakota Beef Commission #58-3062-6-006

06/15/2016 - 12/31/2022

This proposal aims to determine if protein intake patterns, specifically increasing beef consumption to meet the Dietary Guidelines for American, in overweight and obese women of child-bearing age influences dietary adherence during weight loss.

Role: PI

USDA-ARS Project # 3062-51000-057-00D

10/01/2019 - 09/30/2024

This research will test Dietary Guidelines for American and Physical Activity Guidelines for Americans induced changes in chronic low-grade inflammation (CLGI) and weight control. We will also determine the relation of change in CLGI with changes in novel putative physiological (metabolic rate, cell signaling molecules) and behavioral (food and exercise reinforcement, executive function) factors on the association of reduced CLGI that moderate weight control efficacy.

Role: Co-PI

Completed Grant Awards:

USDA-ARS Plains Area Co-Funded Internship Program

05/2016-08/2016

Increasing Spontaneous Non-Exercise Activity with Implicit Priming

Role: PI

USDA-ARS Project # 5450-51000-049-00D

10/01/2014 - 09/30/2019

Dietary Guidelines Adherence and Healthy Body Weight Maintenance

Role: Co-PI