Curriculum Vitae

Robert Hickner

Last five years

General Information

University address: Department of Health, Nutrition, and Food Sciences

College of Education, Health and Human Sciences

120 Convocation Way Florida State University

Tallahassee, Florida 32306-1493

Phone: (850) 644-1375

E-mail address: rhickner@fsu.edu

Professional Preparation

1994 Ph.D., Karolinska Inst., Stockholm, Sweden. Major: Physiology. Supervisor:

Jan Henriksson, MD.

Professional Experience

2023–present	Linda Grizzard Owens Professor, Health, Nutrition, and Food Sciences,
	Florida State University.

2021–present Adjunct Professor, Faculty of Health, University of Canberra, Australia.

2019–present Honorary Professor, College of Health Sciences, University of

KwaZulu-Natal, South Africa.

2017–present Adjunct Professor, Department of Kinesiology, East Carolina University.

2019–2023 Linda Grizzard Owens Professor, Nutrition and Integrative Physiology,

Florida State University.

2017–2019 Associate Dean for Research and Graduate Studies, College of Human

Sciences, Florida State University.

2017–2018 Professor, Department of Nutrition, Food and Exercise Sciences, Florida State

University.

Fractional Professor, Department of Biokinetics, Exercise and Leisure Science, University of KwaZulu-Natal, South Africa.

Current Membership in Professional Organizations

American Physiological Society American Society of Nutrition National American College of Sports Medicine Southeast American College of Sports Medicine

Teaching

Courses Taught

Diet and ROS Production (BMS4903) Directed Individual Study (HUN4905) Dissertation (HUN6980) Dissertation Defense Examination (HUN8985) Hyperglycemia & ROS (HUN6906) Master's Comprehensive Examination (HUN8966) Master's Thesis Defense (HUN8976) Preliminary Doctoral Examination (HUN8964) Supervised Research (HUN6911) Supplements in Exercise (APK5166) Thesis (HUN5971) Exercise and Muscle Blood Flow (HUN4905) NOX Activity in Adipose Tissue (BMS4903) Physical activity measurement (BSC4901) Accelerometry studies (BSC4900) Nutrition Supplements (HUN5938)

Energetics, Blood Flow & PAD (HUN6906)

Doctoral Committee Chair

Meza, C. A., graduate. (2023). Clarke, H. E., graduate. (2021). Baker, P. A., doctoral candidate.

Doctoral Committee Member

Dunlap, K. R., graduate. (2023).

Mullins, A. P., graduate. (2023).

Tice, A. L., graduate. (2023).

Barney, D., graduate. (2022).

Dawson, M. A., graduate. (2022).

Martenson, M., graduate. (2022).

Behl, T. A., graduate. (2022).

Fuller, Shiloah Anna-Sara, graduate. (2022).

Ragland, T. J., graduate. (2021).

Rossetti, M. L., graduate. (2021).

Munoz, J., graduate. (2020).

Foley, E. M., graduate. (2020).

Saracino, P. G., graduate. (2020).

George, K. S., graduate. (2019).

Akhavan, N. S., graduate. (2018).

Murphy, R., doctoral candidate.

Renteria-Laskin, L. I., doctoral candidate.

Bridges, B., doctoral student.

Griest, T. D., doctoral student.

Bridges, B., doctoral student.

Doctoral Committee University Representative

Alvarez-Alvarado, S., graduate. (2019).

Master's Committee Chair

Blestel, A. E., graduate. (2022). Gipson, S., graduate. (2020).

Master's Committee Member

Dawkins, K. E., graduate. (2022).

Mackinnon-Greenwalt, C., graduate. (2022).

Cheung, S. N., graduate. (2021).

McBain, M. A., graduate. (2021).

Kluger, A. N., graduate. (2020).

Saylor, H., graduate. (2019).

Samarah, L., student.

Research and Original Creative Work

Publications

Refereed Journal Articles

- Kviatkovsky, S. A., Hickner, R. C., Cabre, H. E., Small, S. D., & Ormsbee, M. J. (2023). Collagen peptides supplementation improves function, pain, and physical and mental outcomes in active adults. *J Int Soc Sports Nutr*, 20(1), 2243252.
- Dunlap, K. R., Steiner, J. L., Hickner, R. C., Chase, P. B., & Gordon, B. S. (2023). The duration of glucocorticoid treatment alters the anabolic response to high-force muscle contractions. *J Appl Physiol* (1985), 135(1), 183-195.
- Nigro, P., Vamvini, M., Yang, J., Caputo, T., Ho, Li-Lun, Carbone, N. P., Papadopoulos, D., Conlin, R., He, J., Hirshman, M. F., White, J., Robidoux, J., Hickner, R. C., Nielsen, S., Pedersen, B. K., Kellis, M., Middelbeek, R. J. W., & Goodyear, L. J. (2023). Exercise training remodels inguinal white adipose tissue through adaptations in innervation, vascularization, and the extracellular matrix. *Cell Rep*, 42(4), 112392.
- George, K. S., Munoz, J., Ormsbee, L. T., Akhavan, N. S., Foley, E. M., Siebert, S. C., Kim, Jeong-Su, Hickner, R. C., & Arjmandi, B. H. (2022). The Short-Term Effect of Prunes in Improving Bone in Men. *Nutrients*, *14*(2).
- Rossetti, M. L., Dunlap, K. R., Salazar, G., Hickner, R. C., Kim, Jeong-Su, Chase, B. P., Miller, B. F., & Gordon, B. S. (2021). Systemic delivery of a mitochondria targeted antioxidant partially preserves limb muscle mass and grip strength in response to androgen deprivation. *Mol Cell Endocrinol*, *535*, 111391.
- Cabre, H. E., Schuster, J. G., Hickner, R., Chow, G. M., Shelton, A., & Ormsbee, M. J. (2021). Characterization of the Relationship Between Workload and Collegiate Track and Field Performances: A Pilot Study. *Journal of Exercise Physiology Online*, 24(5), 48-57.
- Saracino, P. G., Saylor, H. E., Hanna, B. R., Hickner, R. C., Kim, J-S., & Ormsbee, M. J. (2020). Effects of pre-sleep whey vs. plant-based protein consumption on muscle recovery following damaging morning exercise. *Nutrients*, *12*(7), 2049. Retrieved from https://www.mdpi.com/2072-6643/12/7/2049 doi:doi: 10.3390/nu12072049
- Allman, B. R., Morrissey, M. C., Kim, J.-S., Panton, L. B., Contreras, R. J., Hickner, R. C., & Ormsbee, M. J. (2020). Lipolysis and Fat Oxidation Are Not Altered with Presleep Compared with Daytime Casein Protein Intake in Resistance-Trained Women. *J. Nutr*, 150(1), 47-54. Retrieved from https://www.sciencedirect.com/science/article/pii/S0022316622020053?via%3Dihub doi:10.1093/jn/nxz186.

- Akhavan, N. S., Pourafshar, S., Johnson, S. A., Foley, E. M., George, K. S., Mavaei, N., Munoz, J., Seibert, S., Clark, E. A., Basiri, R. B., Hickner, R., Levenson, C. W., Panton, L. B., Daggy, B. P., & Arjmandi, B. H. (2020). The relationship between protein intake and source on factors associated with glycemic control in individuals with prediabetes and type 2 diabetes. *Nutrients*, *12*(7), 2031. doi:https://doi.org/10.3390/nu12072031
- Alvarez-Alvarado, S., Chow, G. M., Gabana, N. T., Hickner, R. C., & Tenenbaum, G. (2019). Interplay between workload and functional perceptual-cognitive- affective responses: An inclusive model. *Journal of Sport and Exercise Psychology*, 41(2), 107-118.
- Kwak, H.-B., Woodlief, T. L., Green, T. D., Cox, J. H., Hickner, R. C., Darrell Neufer, P., & Cortright, R. N. (2019). Overexpression of long-chain Acyl-CoA synthetase 5 increases fatty acid oxidation and free radical formation while attenuating insulin signaling in primary human skeletal myotubes. *International Journal of Environmental Research and Public Health*, 16(7).
- Huang, T.-Y., Zheng, D., Hickner, R. C., Brault, J. J., & Cortright, R. N. (2019). Peroxisomal gene and protein expression increase in response to a high-lipid challenge in human skeletal muscle. *Metabolism: Clinical and Experimental*, 98, 53-61.
- Zhang, J., Bhattacharyya, S., Hickner, R. C., Light, A. R., Lambert, C. J., Gale, B. K., Fiehn, O., & Adams, S. H. (2019). Skeletal muscle interstitial fluid metabolomics at rest and associated with an exercise bout: Application in rats and humans. *American Journal of Physiology Endocrinology and Metabolism*, 316(1), E43-E53.
- Morrissey, M. C., Kisiolek, J. N., Ragland, T. J., Willingham, B. D., Hunt, R. L., Hickner, R. C., & Ormsbee, M. J. (2019). The effect of cold ambient temperature and preceding active warm-up on lactate kinetics in female cyclists and triathletes. *Applied Physiology, Nutrition and Metabolism*, 44(10), 1043-1051.
- Yan, H., Pierce, J. R., Myers, K. B., Dubose, K. D., Dubis, G. S., Tanner, C. J., & Hickner, R. C. (2018). Exercise Effects on Adipose Tissue Postprandial Lipolysis and Blood Flow in Children. *Medicine and Science in Sports and Exercise*, 50(6), 1249-1257.
- Allman, B. R., Morrissey, M. C., Kim, J.-S., Panton, L. B., Contreras, R. J., Hickner, R. C., & Ormsbee, M. J. (2018). Fat metabolism and acute resistance exercise in trained women. *Journal of Applied Physiology*, 126(3), 739-745.
- Moraska, A. F., Hickner, R. C., Rzasa-Lynn, R., Shah, J. P., Hebert, J. R., & Kohrt, W. M. (2018). Increase in Lactate Without Change in Nutritive Blood Flow or Glucose at Active Trigger Points Following Massage: A Randomized Clinical Trial. *Archives of Physical Medicine and Rehabilitation*, 99(11), 2151-2159.

Invited Reviews

- Clarke, H., Hickner, R. C., & Ormsbee, M. J. (2021). The Potential Role of Creatine in Vascular Health. *Nutrients*, 13(3).
- Clarke, H., Kim, Do-Houn, Meza, C. A., Ormsbee, M. J., & Hickner, R. C. (2020). The Evolving Applications of Creatine Supplementation: Could Creatine Improve Vascular Health? *Nutrients*, *12*(9).
- Meza, C. A., La Favor, J. D., Kim, D.-H., & Hickner, R. C. (2019). Endothelial dysfunction: Is there a hyperglycemia-induced imbalance of NOX and NOS? *International Journal of Molecular Sciences*, 20(15).

Refereed Reviews

- Kviatkovsky, S. A., Hickner, R. C., & Ormsbee, M. J. (2022). Collagen peptide supplementation for pain and function: is it effective? *Curr Opin Clin Nutr Metab Care*, 25(6), 401-406.
- Hicks, D., Hickner, R., Govinden, U., & Sookan, T. (2021). Acute effects of single-bout exercise in type 2 diabetes: a systematic review of randomised controlled trials and controlled crossover trials. *Journal of Endocrinology, Metabolism and Diabetes of South Africa*, 26(4), 1-5. Retrieved from https://doi.org/10.1080/16089677.2020.1850033
- Steiner, J. L., Johnson, B. R., Hickner, R. C., Ormsbee, M. J., Williamson, D. L., & Gordon, B. S. (2020). Adrenal stress hormone action in skeletal muscle during exercise training: An old dog with new tricks? *Acta Physiol (Oxf)*, 231(1), e13522.

Presentations

Invited Lectures and Readings of Original Work

- Hickner, R. (2019, May). *Collagen: Potential health and performance benefits in sports*. Delivered at Vitafoods conference. Geneva, Switzerland. (International)
- Hickner, R. (2019, May). Grant Writing Tips for Young Investigators Applying for ACSM Foundation Grants. Delivered at ACSM Conference. (National)
- Hickner, R. (2019, April). Use of microdialysis in peripheral tissues to study cardiometabolic health across the lifespan. Delivered at ACNC, Little Rock, AR. (National)

Contracts and Grants

Contracts and Grants Funded

- Reyes, Elena (Co-I), Rosado, Javier I (Co-PI), Killian, Michael (Co-I), Ye, Ming (Co-I), Abbott, Laurie Lynn (Co-I), Schwartz, Joseph Allan (Co-I), Bahorski, Jessica (Co-I), Uejio, Christopher K (Co-I), Hammock, Elizabeth Anne Dunn (Co-I), Holmes, Christopher D (Co-I), Stanwood, Gregg (PI), Graham, Devon Lee (Co-I), He, Zhe (Co-I), Hickner, Robert (Co-I, PI on Project 1), & Nagpal, Ravinder Kumar (Co-I). (Sep 2023–Aug 2027). *The Bioecological Center for Rural Children's Health (BeRCH)*. Funded by Environmental Protection Agency. (84063201). Total award \$1,900,000.
- Todd, Gregory K (Co-I), Sutin, Angelina R. (Co-I), Hickner, Robert (PI), & Cao, Hongyuan (Co-I). (May 2023–Apr 2024). *Effects of daily low oxygen exposure on weight status, body composition, and metabolic health*. Funded by Louisiana State University. (DK127162-FSU01). Total award \$79,989.
- Hickner, Robert (PI). (Sep 2021–Sep 2022). *HEERF Research Funding*. Funded by FSU. (NONE). Total award \$32,300.
- Arjmandi, Bahram H (PI), & Hickner, Robert (Co-I). (Aug 2021–Jul 2024). The effects of fresh mango consumption on glucose homeostasis and cardiovascular health in overweight and obese individuals with prediabetes. Funded by National Mango Board. (None). Total award \$129,863.
- Todd, Gregory K (Co-I), Sutin, Angelina R. (Co-I), Ray, Chester A (Co-I), Hickner, Robert (Co-I), Cao, Hongyuan (Co-PI), Berryman, Claire Elizabeth (PI), & Hennigar, Stephen R (Co-I). (Jul 2021–Apr 2023). Effects of Daily Low Oxygen Exposure on Weight Status, Body Composition, and Metabolic Health. Funded by National Institutes of Health. (R01DK127162). Total award \$881,479.
- Sweeney, Michael J (Co-I), Ormsbee, Michael J (MPI), Hickner, Robert (PI), Ledermann, Thomas (Co-I), & Berryman, Claire Elizabeth (Co-I). (May 2021–Apr 2026). *Resistance Training Modulation of Fat Metabolism in Obese Postmenopausal Women*. Funded by National Institute of Diabetes. (R01DK125728). Total award \$3,252,835.
- Ralston, Penny A (PI), Harman, Jeffrey S (Co-I), Hickner, Robert (Co-I), & Mills, Jon Carlton (Co-I). (May 2021–Jan 2024). *The Health for Hearts United Collaborative*. Funded by National Institutes of Health. (R01MD015074). Total award \$1,630,033.
- Hickner, Robert (Primary Mentor), & Meza, Cesar (PI). (Sep 2020–Aug 2021). *Investigation of NADPH Oxidase as a Link between Vascular and Metabolic Dysfunction*. Funded by American Physiological Society. (NONE). Total award \$28,300.

- Hickner, Robert (Primary Mentor), & Clarke, Holly Elizabeth (PI). (Jul 2020–Sep 2021). *Impact of Creatine Supplementation on Vascular Endothelial Function, Blood Flow and Functional Capacity*. Funded by American College of Sports Medicine. (NONE). Total award \$5,000.
- Panton, Lynn B (Co-I), Arjmandi, Bahram H (PI), Hickner, Robert (Co-I), & Berryman, Claire Elizabeth (Co-I). (May 2020–Nov 2023). *The Effects of Almond Consumption on Functional Performance, Aerobic Capacity, and Physical Activity in Active Older Adults*. Funded by Almond Board of California. (OTR-19-ARJMANDIB-NR-01). Total award \$300,716.
- Kim, Jeong-Su (Co-I), Ormsbee, Michael J (PI), Bahorski, Jessica (Co-I), Hickner, Robert (Co-I), Berryman, Claire Elizabeth (Co-I), & Hennigar, Stephen R (Co-I). (May 2020–May 2021). *EIEG:Purchase of a Horizon W Dual X-ray Absorptiometry (DXA) Body Composition Analyzer*. Funded by FSU CRC. (None). Total award \$69,999.
- Arjmandi, Bahram H (CoPI), Akhavan, Neda Sara (PI), Hickner, Robert (Co-PI), & Berryman, Claire Elizabeth (Co-I). (Oct 2019–Nov 2023). *effects of white potato consumption on measures of cardiometabolic health individuals with type 2 diabetes*. Funded by Alliance for Potato Research & Education. (NONE). Total award \$175,000.
- Hickner, Robert (P.I.). (Aug 2018–Jul 2021). *NADPH Oxidase Activity and Muscle Microvascular Endothelial Function in Obesity (Renewal)*. Funded by National Institutes of Health/NHLBI. Total award \$435,000.
- Arjmandi, Bahram H (Co-I), Ormsbee, Michael J (PI), & Hickner, Robert (Co-I). (Jun 2018–Sep 2022). *The Impact of Solugel on Joint Pain and Fat-Free Mass in Lifelong Athletes*. Funded by Tessenderlo Group. Total award \$298,026.
- Hickner, Robert (PI). (Dec 2016–Apr 2020). *Start Up Funding for Robert Hickner*. Funded by FSU. (None). Total award \$58,333.

Contracts and Grants Denied

- Rao, Qinchun (Co-I), Hickner, Robert (Co-I), Ledermann, Thomas (Co-I), Arjmandi, Bahram H (PI), Singh, Prashant (Co-I), & Nagpal, Ravinder Kumar (Co-I). (Aug 2023). Flaxseed improves Cardiovascular Function by Modulation of the Gut Microbiome in Pre-Hypertensive Individuals A Randomized Single-Blind Placebo-Controlled Clinical Trial. Submitted to United States Department of Agriculture.
- Ormsbee, Michael J (PI), & Hickner, Robert (Co-I). (Mar 2023). Daily Peanut Butter Consumption Improves Adipose Tissue Inflammation and Glycemic Control in Overweight and Obese Individuals. Submitted to The Peanut Institute.

- Rao, Qinchun (Co-I), Hickner, Robert (Co-I), Ledermann, Thomas (Co-I), Arjmandi, Bahram H (PI), Singh, Prashant (Co-I), & Nagpal, Ravinder Kumar (C-PI). (Sep 2022). Flaxseed improves Cardiovascular Function by Modulation of the Gut Microbiome in Pre-Hypertensive Individuals A Randomized Single-Blind Placebo-Controlled Clinical Trial. Submitted to United States Department of Agriculture.
- Meza, Cesar (PI), & Hickner, Robert (Primary Mentor)). (Sep 2022). *Investigation of NADPH oxidase as a link between vascular and metabolic dysfunction*. Submitted to American Heart Association.
- Arjmandi, Bahram H (Co-I), Hickner, Robert (Co-I), Sheffler, Julia (Co-I), & Clarke, Holly Elizabeth (PI). (Feb 2022). *The impact of blueberry consumption on oxidative stress, vascular health, and neurological health in older adults with mild cognitive impairment*. Submitted to U.S. Highbush Blueberry Council.
- Hickner, Robert (Co-I), Nagpal, Ravinder Kumar (Co-I), Delp, Judy Muller (Co-I), Machin, Daniel (PI), & Gaillard, Philippe Robert (Co-I). (Jan 2022). *The Gut Microbiome as a Contributor to COVID-19-Induced Arterial Dysfunction*. Submitted to American Heart Association.
- Hickner, Robert (PI). (Jun 2020). *Creatine supplementation for vascular and functional health in older adults*. Submitted to NIH/NIA (RO1 1AG071757-01).

Service

Florida State University

FSU University Service

- Committee Member, FSU Community Engagement Leadership Committee (2022–present).
- Committee Member and Mentor, CTSA K-Scholar Internal Advisory Committee member and K-Scholar mentor (2019–present).
- Committee Member, FSU CTSA Executive Committee for UF-FSU CTSA (2019–present).
- Committee Member, FSU Translational Health Research Steering Committee for UF-FSU CTSA (2019–present).
- Committee Member, FSU Council on Research and Creativity (CRC) (2021–2024).
- Committee Chair, FSU Community Engagement Infrastructure, Facilities and Resources Committee (2023).

Committee Member, FSU College of Medicine Dean Search Committee (2022–2023).

Committee Member, FSU Community Engagement Infrastructure, Facilities and Resources Workgroup (2022–2023).

Committee Member, FSU Health Research Committee (2022–2023).

Committee Member, University Human Subjects Committee, Institutional Review Board (2018–2023).

Member, Entrepreneurship Tenure and Promotion Committee (2020–2022).

Guest Speaker, FSU NIG Grant Writing Retreat. Office of Proposal Development (2019).

Committee Member, University Council of Associate Deans for Research (2017–2019).

FSU College Service

Committee Chair, 15. College of Health and Human Sciences Promotion and Tenure Committee (2022).

Committee Chair, College of Human Sciences Curriculum Committee Chair (2017–2019). (2017–2019).

Faculty Liaison, College of Human Sciences Graduate Student Organization Faculty Liaison

Speaker for distribution of awards, College of Human Sciences Awards Day Speaker (2018).

Committee Member, College of Human Sciences search committee for grants officer (2018).

FSU Department Service

Chair, Department of Health, Nutrition and Food Sciences Search Committee (2023–2024).

Member, Departmental Bylaws Committee (2023–2024).

Chair, NIP Department Exercise Physiology Search Committee (2022–2023).

Chair, Departmental Executive Committee (2022–2023).

Committeen Metaber 2001 trition 2 and Integrative Physiology (NIP) Sports Nutrition Search

Committee Member, Retail, Merchandising and Product Development Promotion and Tenure Committees (2018–2022).

The Profession

Editor for Refereed Journals

Guest Editor, Nutrients Journal. Dietary Supplements and vascular function Special Issue (2019).

Guest Reviewer for Refereed Journals

Aids and Behavior (2017–present).

American Journal of Clinical Nutrition (2017–present).

Clinical Endocrinology (2017–present).

Free Radical Biology and Medicine (2017–present).

Hormone and Metabolic Research (2017–present).

Journal of Science and Medicine (2017–present).

Redox Biology (2017–present).

Respiratory Research (2017–present).

British Journal of Nutrition (2015–present).

Prostaglandins, Leukotrines & Essential Fatty Acids (2015–present).

Cellular Physiology and Biochemistry (2014–present).

Canadian Journal of Applied Physiology (2012–present).

Nutrition, Metabolism, and Cardiovascular Disease (2012–present).

Applied Physiology, Nutrition and Metabolism (2010–present).

IUMBM Life (2009–present).

Journal of Nutritional Biochemistry (2009–present).

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Pediatric Research (2008–present).
Pfluegers Archive (2008–present).
Nutrition Research (2007–present).
PLOS ONE (2006–present).
International Journal of Sport Nutrition and Exercise Metabolism (2005–present).
International Journal of Sports Medicine (2005–present).
Journal of Nutrition and Exercise Metabolism (2005–present).
Nutrition (2005–present).
Scientific Reports (2004–present).
Journal of Lipid Research (2002-present).
Sports Medicine (2002–present).
International Journal of Obesity (2000–present).
Journal of Physiology (2000–present).
Journal of the American Geriatrics Society (2000–present).
Obesity Research (2000–present).
Diabetes (1997–present).
Diabetologia (1997–present).
Journal of Applied Physiology (1997–present).
Journal of Clinical Endocrinology and Metabolism (1997–present).
Medicine and Science in Sports and Exercise (1996–present).
Metabolism (1996–present).
American Journals of Physiology (1990–present).
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Reviewer or Panelist for Grant Applications

ACSM (2018–present). NIH (2022). NIH HSDO study section reviewer (2022). NIH (2022). ACSM (2006–2022). NIH (2021). European Science Foundation for Research Foundation Flanders (2021). University of Florida (2021). University of Florida (2021). NHLBI (2020). NHLBI (2020). NHLBI (2020). University of Florida (2020). NIH (2019). NIH (2019).

Service to Other Universities

External Review of Tenure/Promotion or Rating, *University of Texas El Paso* (2022).

External Review of Tenure/Promotion or Rating, *University of Houston* (2021).

External Review of Tenure/Promotion or Rating, University of Miami (2021).

External Review of Tenure/Promotion or Rating, Rutgers University (2020).

External Review of Tenure/Promotion or Rating, *University of the Witwatersrand, South Africa* (2020).

External Review of Tenure/Promotion or Rating, Florida Atlantic University (2019).

External Review of Tenure/Promotion or Rating, Arizona State University (2018).

External Review of Tenure/Promotion or Rating, University of South Carolina (2018).