

CURRICULUM VITAE

Terry J. Housh PhD, FACSM, FNCSA

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PROFESSIONAL PREPARATION

BA 1977 Physical Education, Doane College, Crete, Nebraska
MPE 1979 Exercise Science, University of Nebraska-Lincoln
PhD 1984 Exercise Physiology, University of Nebraska-Lincoln

PROFESSIONAL EXPERIENCE

2005-Present University of Nebraska-Lincoln, Professor, Department of Nutrition and Health Sciences
2003-2005 University of Nebraska-Lincoln, Associate Professor, Continuous Appointment, Department of Nutrition and Health Sciences
1992-2003 University of Nebraska-Lincoln, Associate Professor, Continuous Appointment, Department of Health and Human Performance
1986-1992 University of Nebraska-Lincoln, Assistant Professor, Graduate Faculty Fellow, Director of Human Performance Laboratory and Co-Director of Center for Youth Fitness and Sports Research, School of Health, Physical Education and Recreation
1984-1986 Portland State University, Assistant Professor, School of Health and Physical Education
1981-1984 University of Nebraska-Lincoln, Graduate Assistant
1979-1981 University of Nebraska-Lincoln, Fitness-Testing Technician
1978-1979 University of Nebraska-Lincoln, Graduate Assistant
1977-1978 Lincoln, Nebraska YMCA, Assistant Physical Director

PROFESSIONAL AWARDS AND HONORS

2020 National Strength and Conditioning Association Lifetime Achievement Award
2009 National Strength and Conditioning Association Annual Award "Terry J. Housh Young Investigator Award"
2008 National Strength and Conditioning Association President's Award
2002 Doane College Honor D Award for Outstanding Professional Achievement

TEACHING AWARDS AND HONORS

2016 Omicron Delta Kappa Professor of the Month (November)
2010 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
2006 National Strength and Conditioning Association Educator of the Year Award
2006 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award

- 2006 University of Nebraska-Lincoln Student-Athlete Advisory Committee Staff Recognition Award
- 2005 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 2002 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 2001 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1996 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1995 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1994 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1993 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1992 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1991 University of Nebraska-Lincoln Teaching Council & Parents Assoc. Recognition Award
- 1991 University of Nebraska-Lincoln Teaching and Learning Center, Demonstration Teacher of Large Classes
- 1990 University of Nebraska-Lincoln Teachers College Distinguished Teaching Award
- 1990 University of Nebraska-Lincoln Teaching and Learning Center's List of Lecture Classes for New Faculty to Observe

RESEARCH AWARDS AND HONORS

- 2008 Journal of Strength and Conditioning Research Editorial Excellence Award
- 1998 National Strength and Conditioning Association Outstanding Sport Scientist Award

BOOKS

Housh, T.J., D.J. Housh, and G.O. Johnson (Editors). *Introduction to Exercise Science (Fifth Edition)*. New York: Routledge, 2018.

Housh, T. J., J. T. Cramer, J. P. Weir, T. W. Beck, and G. O. Johnson. *Laboratory Manual for Exercise Physiology, Exercise Testing, and Physical Fitness*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2016.

Housh, T. J., D. J. Housh, and H. A. deVries. *Applied Exercise and Sport Physiology with Labs (Fourth Edition)*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2016.

Housh, T. J., D. J. Housh, and G. O. Johnson (Editors). *Introduction to Exercise Science (Fourth Edition)*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2012.

Housh, T. J., D. J. Housh, and H. A. deVries. *Applied Exercise and Sport Physiology with Labs (Third Edition)*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2012.

Housh, T. J., J. T. Cramer, J. P. Weir, T. W. Beck, and G. O. Johnson. *Physical Fitness Laboratories on a Budget*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2009.

Housh, T. J., D. J. Housh, and G. O. Johnson (Editors). *Introduction to Exercise Science (Third Edition)*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2008.

Housh, T. J., D. J. Housh, and H. A. deVries. *Applied Exercise and Sport Physiology (Second Edition)*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2006.

Housh, T. J., D. J. Housh, and H. A. deVries. *Applied Exercise and Sport Physiology*. Scottsdale, AZ: Holcomb Hathaway Publishers, 2003.

Housh, T. J., D. J. Housh, and G. O. Johnson (Editors). *Introduction to Exercise Science (Second Edition)*. San Francisco, CA: Benjamin Cummings Publishers, 2003.

Housh, T. J. and D. J. Housh (Editors). *Introduction to Exercise Science*. Needham Heights, MA: Allyn and Bacon Publishers, 2000.

deVries, H. A. and T. J. Housh. *Physiology of Exercise for Physical Education, Athletics and Exercise Science (Fifth Edition)*. Madison, WI: Brown-Benchmark Publishers, 1994.

Weir, L. L., H. A. deVries, and T. J. Housh. *Student Study Guide for Physiology of Exercise for Physical Education, Athletics and Exercise Science (Fifth Edition)*. Madison, WI: Brown-Benchmark Publishers, 1996.

[CHAPTERS, NARRATIVE REVIEWS, AND META-ANALYTIC REVIEWS \(PEER-REVIEWED\)](#)

Bergstrom, H.C., T.K. Dinyer, P.J. Succi, C.C. Voskuil, and T.J. Housh. Applications of the Critical Power Model to dynamic constant external resistance exercise: A brief review of the Critical Load test. *MDPI Sports* 9, 15. 2021. [DOI: 10.3390/sports9020015](https://doi.org/10.3390/sports9020015).

Coburn, J.W., T.W. Beck, H.A. deVries, T.J. Housh, K.C. Cochrane-Snyman, and E.E. Schick. The Neuromuscular System. In: T.J. Chandler and L.E. Brown (Eds.), *Conditioning for Strength and Human Performance*. New York, NY: Routledge, 2019, pp. 50-74. [DOI: 10.4324/9781315438450](https://doi.org/10.4324/9781315438450)

Coburn, J.W., T.W. Beck, H.A. deVries, and T.J. Housh. The Neuromuscular System: Anatomical and Physiological Bases and Adaptations to Training. In: T.J. Chandler and L.E. Brown (Eds.), *Conditioning for Strength and Human Performance*. Philadelphia, PA: Lippincott, Williams, and Wilkins, 2013, pp. 45-64. [DOI: 10.4324/9781315438450-4](https://doi.org/10.4324/9781315438450-4)

Ratamess, N.A., B.A. Alvar, T.K. Evetovich, T.J. Housh (Chair), W.B. Kibler, W.J. Kraemer, and N.T. Triplett. ACSM Position Stand "Progression Models in Resistance Training for Healthy Adults." *Medicine and Science in Sports and Exercise* 41:687-708, 2009. [DOI: 10.1249/MSS.0b013e3181915670](https://doi.org/10.1249/MSS.0b013e3181915670)

Beck, T.W. and T.J. Housh. Use of electromyography in studying human movement. In: Y. Hong and R. Bartlett (Eds.), [Routledge Handbook of Biomechanics and Human Movement Science](#). Milton Park, UK: Routledge, 2008, pp. 214-230.

Malek, M.H., D.E. Berger, W.D. Marelich, J.W. Coburn, T.W. Beck, and T.J. Housh. Pulmonary function following surgical repair of pectus excavatum: A meta-analysis. *European Journal of Cardio-Thoracic Surgery* 30:637-643, 2006. [DOI: 10.1016/j.ejcts.2006.07.004](https://doi.org/10.1016/j.ejcts.2006.07.004)

Coburn, J.W., T.W. Beck, H.A. deVries, and T.J. Housh. [The Neuromuscular System](#). In: T.J. Chandler and L.E. Brown (Eds.), *Conditioning for Strength and Human Performance*. Philadelphia, PA: Lippincott, Williams, and Wilkins, 2008, pp.40-59.

Malek, M.H., D.E. Berger, T.J. Housh, W.D. Marelich, J.W. Coburn, and T.W. Beck. Cardiovascular function following surgical repair of pectus excavatum: A meta-analysis. *Chest* 130:506-516, 2006. [DOI: 10.1378/chest.130.2.506](https://doi.org/10.1378/chest.130.2.506)

Weir, J.P., T.W. Beck, J.T. Cramer, and T.J. Housh. Is fatigue all in your head? A critical review of the Central Governor Model. *British Journal of Sports Medicine* 40:573-586, 2006. [DOI: 10.1136/bjism.2005.023028](https://doi.org/10.1136/bjism.2005.023028)

Beck, T.W., T.J. Housh, G.O. Johnson, J.T. Cramer, J.P. Weir, J.W. Coburn, and M.H. Malek. Does the frequency content of the surface mechanomyographic signal reflect motor unit firing rates? A brief review. *Journal of Electromyography and Kinesiology* 17:1-13, 2007. [DOI: 10.1016/j.jelekin.2005.12.002](https://doi.org/10.1016/j.jelekin.2005.12.002)

Beck T.W., T.J. Housh, J.T. Cramer, J.P. Weir, G.O. Johnson, J.W. Coburn, M.H. Malek, and M. Mielke. Mechanomyographic amplitude and frequency responses during dynamic muscle actions: A comprehensive review. *BioMedical Engineering OnLine* 4:67, 2005.

Thorland W.G., G.O. Johnson, G.D. Tharp, and T.J. Housh. Comparative characteristics of elite junior and senior level athletes. In: Brown E.W. and C.F. Branta (Eds.), *Competitive Sports for Children and Youth: an Overview of Research and Issues*. Champaign, IL: Human Kinetics Books, 1988, pp.129-142.

[RESEARCH PUBLICATIONS \(PEER-REVIEWED JOURNALS\)](#)

Arnett, J.E., R.W. Smith, T.J. Neltner, J.P.V. Anders, D.G. Ortega, T.J. Housh, R.J. Schmidt, and G.O. Johnson. "Effects of joint angle in inter- and intra-individual variability for women during isometric fatiguing tasks anchored to a perceptual intensity". *American Journal of Sports Science and Medicine*, 2023. [DOI: 10.12691/ajssm-11-1-2](https://doi.org/10.12691/ajssm-11-1-2).

Smith, R.W., T.J. Housh, J.E. Arnett, J.P.V. Anders, T.J. Neltner, D.G. Ortega, R.J. Schmidt, and G.O. Johnson. The effects of anchor scheme and sex on performance fatigability and neuromuscular responses following sustained, isometric forearm flexion tasks to failure. *Journal of Exercise Physiology Online* 26:69-92, 2023: [DOI: 10.3390/jfmk8020049](https://doi.org/10.3390/jfmk8020049).

Ortega, D.G., T.J. Housh, R.W. Smith, J.C. Arnett, T.J. Neltner, J.P.V. Anders, R.J. Schmidt, and G.O. Johnson. The effects of a sustained, isometric forearm flexion task to failure on torque and neuromuscular responses at three elbow joint angles. *Journal of Strength and Conditioning Research* (In Press).

Smith, R.W., T.J. Housh, J.E. Arnett, J.P.V. Anders, T.J. Neltner, D.G. Ortega, R.J. Schmidt, and G.O. Johnson. The effects of anchor scheme on performance fatigability, neuromuscular responses, and the perceived sensations that contribute to task termination. *Journal of Functional Morphology and Kinesiology* 8, 2023: [DOI: 10.3390/jfmk8020049](https://doi.org/10.3390/jfmk8020049).

Smith, R.W., T.J. Housh, J.E. Arnett, J.P.V. Anders, T.J. Neltner, D.G. Ortega, R.J. Schmidt, and G.O. Johnson. Utilizing the RPE-Clamp model to examine interactions among factors associated with perceived fatigability and performance fatigability in women and men. *European Journal of Applied Physiology*, 2023: [DOI: 10.1007/s00421-023-05163-x](https://doi.org/10.1007/s00421-023-05163-x).

Arnett, J.E., R.W. Smith, T.J. Neltner, J.P.V. Anders, D.G. Ortega, T.J. Housh, R.J. Schmidt, and G.O. Johnson. (2023) The effects of joint angle and anchoring scheme on performance fatigability and neuromuscular responses following isometric forearm flexion tasks to failure. [*Neurosports Vol. 1, Issue 2, Article 7.*](#)

Neltner, T.J, P.K. Sahoo, R.W. Smith, J.P.V. Anders, J.E. Arnett, R.J. Schmidt, G.O. Johnson, S.K. Natarajan, and T.J. Housh. Effects of 8 weeks of Shilajit supplementation on serum pro-c1alpha1, a biomarker of type 1 collagen synthesis: A randomized control trial. *Journal of Dietary Supplements*, 2022 DOI: [10.1080/19390211.2022.2157522](#).

Neltner, T.J, P.K. Sahoo, R.W. Smith, J.P.V. Anders, J.E. Arnett, D.G. Ortega, R.J. Schmidt, G.O. Johnson, S.K. Natarajan, and T.J. Housh. Effects of high-intensity, eccentric-only muscle actions on serum biomarkers of collagen degradation and synthesis. *Journal of Strength and Conditioning Research* (In Press).

Smith, R.W., T.J. Housh, J.P.V. Anders, T.J. Neltner, J.E. Arnett, D.G. Ortega, R.J. Schmidt, and G.O. Johnson. Torque and neuromuscular responses are not joint angle dependent during a sustained, isometric task anchored to a high perceptual intensity. *American Journal of Sports Science and Medicine* 10:29-39, 2022: DOI: [10.12691/ajssm-10-2-1](#).

Salmon, O.F., T.J. Housh, E.C. Hill, J.L. Keller, J.P. Anders, G.O. Johnson, R.J. Schmidt, and C.J. Smith. Changes in neuromuscular response patterns following 4-weeks of leg press training during isokinetic leg extensions. *Journal of Strength and Conditioning Research*: DOI: [10.1519/JSC.0000000000004418](#)

Gillen, Z.M., T.J. Housh, R.J. Schmidt, T.J. Herda, R.J. DeAyala, M.E. Shoemaker, and J.T. Cramer. Differences in neuromuscular responses during isometric muscle actions before and after pubescence. *Journal of Science in Sport and Exercise* 2022: DOI: [10.1007/s42978-022-00199-5](#).

Smith, R.W., T.J. Housh, J.P.V Anders, T.J. Neltner, J.E. Arnett, R.J. Schmidt, and G.O. Johnson. Application of the RPE-Clamp model to examine the effects of joint angle on the time-course of torque and neuromuscular responses during a sustained, isometric forearm flexion task to failure. *Journal of Strength and Conditioning Research* 37:1023-1033, 2023. DOI: [10.1519/JSC.0000000000004357](#).

Smith, R.W., T.J. Housh, J.P.V Anders, T.J. Neltner, J.E. Arnett, R.J. Schmidt, and G.O. Johnson. Time course of changes in torque and neuromuscular parameters during a sustained isometric forearm flexion task to fatigue anchored to a constant rating of perceived exertion. *Journal of Musculoskeletal and Neuronal Interactions* 22:455-464, 2022. PMID: [36458383](#) PMCID: [PMC9716304](#)

Neltner, T.J., J.P.V. Anders, R.W. Smith, J.E. Arnett, J.L. Keller, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Coactivation does not contribute to fatigue-induced decreases in torque during reciprocal, isokinetic muscle actions. [*Isokinetics and Exercise Science* 30:311-324, 2022.](#)

Neltner, T.J., R.W. Smith, J.E. Arnett, J.P.V. Anders, J.L. Keller, T.J. Housh, R.J. Schmidt, and G.O. Johnson. No effect of coactivation on fatigue-induced decreases in isokinetic and isometric torque in healthy young male adults. *Human Movement Science* 86, 2022 DOI: [10.1016/j.humov.2022.103002](#).

Arnett, J.E., R.W. Smith, T.J. Neltner, J.P.V. Anders, T.J. Housh, R.J. Schmidt, and G.O. Johnson. The RPE clamp model and fatigability following a sustained isometric task to failure. *Journal of Exercise Physiology Online* 25:13-26, 2022. [DOI: 10.1519/JSC.00000000000003394](#)

Keller, J.L., T.J. Housh, E.C. Hill, C.M. Smith, R.J. Schmidt, and G.O. Johnson. Are there sex-specific neuromuscular or force responses to fatiguing isometric muscle actions anchored to a high perceptual intensity? *Journal of Strength and Conditioning Research* 36:156-161, 2022. [DOI: 10.1519/JSC.00000000000003394](#)

Garrett, J., J.L. Keller, J.P. Anders, K. Hergenrader, T.J. Neltner, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Echo intensity is weakly associated with muscular strength and endurance in young, healthy adults. *Research in Sports Medicine* 30:371-382, 2022. [DOI: 10.1080/15438627.2021.1888109](#)

Neltner, T.J., J.P.V. Anders, J.L. Keller, R.W. Smith, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Velocity-specific coactivation and neuromuscular responses to fatiguing, reciprocal, isokinetic, forearm flexion and extension muscle actions. *Journal of Strength and Conditioning Research* 36:649-660, 2022. [DOI: 10.1519/JSC.00000000000004190](#)

Proppe, C.E., P.M. Rivera, E.C. Hill, T.J. Housh, J.L. Keller, C.M. Smith, J.P.V. Anders, R.J. Schmidt, G.O. Johnson, and J.T. Cramer. The effects of blood flow restriction resistance training on indices of delayed onset muscle soreness and peak power. *Isokinetics and Exercise Science* 30:167-175, 2022. [DOI: 10.3233/IES-210158](#)

Neltner, T.J., J.P.V. Anders, R.W. Smith, J.E. Arnett, J.L. Keller, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Coactivation Does Not Contribute to Fatigue-Induced Decreases in Isokinetic Forearm Flexion and Extension Torque. *Journal of Science in Sports and Exercise* 2022, [DOI: 10.1007/s42978-022-00194-w](#).

Keller, J.L., J.P.V. Anders, T.J. Neltner, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Sex differences in muscle excitation and oxygenation, but not in force fluctuations or active hyperemia resulting from a fatiguing, bilateral isometric task. *IOP Science: Physiological Measurement* 42, 2021 115004: [DOI: 10.1088/1361-6579/ac3e86](#).

Anders, J.P.V., T.J. Neltner, R.W. Smith, J.E. Arnett, T.J. Housh, F.J. Daugherty, M.S. Tempesta, A.K. Dash, D.J. Munt, R.J. Schmidt, and G.O. Johnson. Supplementation with a blend of trisodium citrate, creatine monohydrate, leucine, and blueberry extract improves muscular strength, endurance, and power. *Journal of Exercise Physiology Online* 24:24-46, 2021.

Smith, R.W., J.P.V. Anders, T.J. Neltner, J.E. Arnett, J.L. Keller, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Perceptual fatigability and neuromuscular responses during a sustained isometric forearm flexion muscle action anchored to a constant level of perceived exertion. *Neurosports* 2, 2021: <https://nsuworks.nova.edu/Neurosports/vol1/iss2/2>.

Smith, C.M., T.J. Housh, J.P.V. Anders, J.L. Keller, E.C. Hill, G.O. Johnson, and R.J. Schmidt. Effects of 4-wks of elastic variable resistance training on the electrochemical and mechanical components of voluntary electromechanical delay durations. *European Journal of Applied Physiology* 121:3313-3321, 2021. [DOI: 10.1007/s00421-021-04791-5](#)

Noboa, K., J.L. Keller, K. Hergenrader, T.J. Housh, J.P.V. Anders, T.J. Neltner, R.J. Schmidt, and G.O. Johnson. Men exhibit greater pain pressure thresholds and times to task failure, but not performance fatigability following self-paced exercise. *Perceptual and Motor Skills* 128:2326-2345, 2021. [DOI: 10.1177/00315125211035028](https://doi.org/10.1177/00315125211035028).

Anders, J.P.V., T.J. Neltner, R.W. Smith, J.L. Keller, T.J. Housh, F.J. Daugherty, M.S. Tempesta, A.K. Dash, D.J. Munt, R.J. Schmidt, and G.O. Johnson. The effects of phosphocreatine disodium salts plus blueberry extract supplementation on muscular strength, power, and endurance. *Journal of the International Society of Sports Nutrition* 18:60, 2021. [DOI: 10.1186/s12970-021-00456-y](https://doi.org/10.1186/s12970-021-00456-y).

Hill, E.C., T.J. Housh, C. M. Smith, J.L. Keller, J.P.V. Anders, R.J. Schmidt, and G.O. Johnson. Acute changes in muscle thickness, edema, and blood flow are not different between low-load blood flow restriction and non-blood flow restriction. *Clinical Physiology and Functional Imaging* 41:452-460, 2021. [DOI: 10.1111/cpf.12720](https://doi.org/10.1111/cpf.12720).

Hill, E.C., T.J. Housh, C.M. Smith, J.L. Keller, R.J. Schmidt, and G.O. Johnson. High versus low intensity fatiguing eccentric exercise on muscle thickness, strength, and blood flow. *Journal of Strength and Conditioning Research* 35:33-40, 2021. [DOI: 10.1519/JSC.0000000000002632](https://doi.org/10.1519/JSC.0000000000002632)

Smith, R.W., T.J. Neltner, J.P.V. Anders, J.L. Keller, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Fatigability, coactivation, and neuromuscular responses of the biceps brachii and tricep brachii following sustained, maximal, isometric forearm flexion to task failure. *Journal of Exercise Physiology Online* 24:55-74, 2021.

Gillen, Z.M., T.J. Housh, R.J. Schmidt, T.J. Herda, R.J. DeAyala, M.E. Shoemaker, and J.T. Cramer. Comparisons of muscular strength, size, and voluntary activation in pre- and post-pubescent males and females. *European Journal of Applied Physiology* 121:2487-2497, 2021. [DOI: 10.1007/s00421-021-04717-1](https://doi.org/10.1007/s00421-021-04717-1)

Jenkins, N.D.M., A.A. Miramonti, E.C. Hill, C.M. Smith, K.C. Snyman, T.J. Housh, and J.T. Cramer. Mechanomyographic amplitude is sensitive to load-dependent neuromuscular adaptations in response to resistance training. *Journal of Strength and Conditioning Research* 35:3265-3269, 2021. [DOI: 10.1519/JSC.0000000000003276](https://doi.org/10.1519/JSC.0000000000003276)

Anders, J.P.V., T.J. Neltner, J.L. Keller, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Are mode-specific differences in performance fatigability attributable to muscle oxygenation? *European Journal of Applied Physiology* 121:2243-2252, 2021. [DOI: 10.1007/s00421-021-04694-5](https://doi.org/10.1007/s00421-021-04694-5)

Hill, E.C., T.J. Housh, J.L. Keller, C.M. Smith, J.P.V. Anders, R.J. Schmidt, G.O. Johnson, and J.T. Cramer. Patterns of responses and time-course of changes in muscle size and strength during low-load blood flow restriction resistance training in women. *European Journal of Applied Physiology* 121:1473-1485, 2021. [DOI: 10.1007/s00421-021-04627-2](https://doi.org/10.1007/s00421-021-04627-2)

Keller, J.L., T.J. Housh, J.P.V. Anders, T.J. Neltner, R.J. Schmidt, and G.O. Johnson. Similar performance fatigability and neuromuscular responses following sustained bilateral tasks above and below critical force. *European Journal of Applied Physiology* 121:1111-1124, 2021. [DOI: 10.1007/s00421-020-04588-y](https://doi.org/10.1007/s00421-020-04588-y)

Keller, J.L., E.C. Hill, T.J. Housh, C.M. Smith, J.P.V. Anders, R.J. Schmidt, and G.O. Johnson. The acute and early phase effects of blood flow restriction training on ratings of perceived exertion, performance fatigability, and muscular strength in women. *Isokinetics and Exercise Science* 29:39-48, 2021. [DOI: 10.1007/s42978-020-00076-z](#).

Neltner, T.J., J.P.V. Anders, J.L. Keller, R.W. Smith, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Ipsilateral and contralateral torque responses to bilateral and unilateral maximal, fatiguing, isokinetic leg extensions. *International Journal of Kinesiology and Sport Science* 8:25-33, 2020. [DOI: 10.1007/s42978-020-00076-z](#).

Anders, J.P.V., J.L. Keller, T.J. Neltner, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Task-specific performance fatigability and the bilateral deficit during isokinetic leg extensions. *Journal of Musculoskeletal and Neuronal Interactions* 21:4-12, 2020. [PMID: 32800014](#)

Keller, J.L., T.J. Housh, J.P.V. Anders, C.M. Smith E.C. Hill, R.J. Schmidt, and G.O. Johnson. Day to day consistency and inter-subject variability of neuromuscular responses and performance fatigability as the result of maximal bilateral, dynamic leg extensions. *Journal of Science in Sport and Exercise* 2020: [DOI 10.1007/s42978-020-00076-z](#).

Keller, J.L., T.J. Housh, J.P.V. Anders, T.J. Neltner, R.J. Schmidt, and G.O. Johnson. Anchor scheme, intensity, and time to task failure do not influence performance fatigability or changes in neuromuscular responses following bilateral leg extensions. *Journal of Exercise Physiology Online* 23:119-134, 2020. [DOI: 10.1007/s42978-020-00076-z](#).

Anders, J.P.V., J.L. Keller, C.M. Smith, E.C. Hill, T.J. Neltner, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Performance fatigability and the bilateral deficit during maximal, isokinetic leg extensions in men and women. *Isokinetics and Exercise Science* 29:59-66, 2020. [DOI: 10.3233/IES-202178](#)

Anders, J.P.V., J.L. Keller, C.M. Smith, E.C. Hill, T.J. Neltner, T.J. Housh, R.J. Schmidt, and G.O. Johnson. Performance fatigability and neuromuscular responses for bilateral and unilateral leg extensions in men. *Journal of Musculoskeletal and Neuronal Interactions* 20:325-331, 2020. [PMID: 32800014](#)

Neltner, T.J., T.J. Housh, C.M. Smith, J.P.V. Anders, J.L. Keller, E.C. Hill, R.J. Schmidt, and G.O. Johnson. Similar fatigue-induced changes in neuromuscular patterns of responses for contralateral legs during maximal bilateral leg extensions. *Journal of Exercise Physiology Online* 23:1-17, 2020. [DOI: 10.1007/s42978-020-00076-z](#).

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Bowers, R. W., W. G. Thorland, T. J. Housh, G. O. Johnson, J. Kelly, T. Lohman, R. Oppliger, K. Tchong, and C. Tipton. Cross-validation equations to predict minimal weight for high school wrestlers. *Medicine and Science in Sports and Exercise* 21:S72, 1989. (Presented at the American College of *Sports Medicine* Annual Convention, 1989, Baltimore).

Housh, D. J., T. J. Housh, and S. M. Bauge. The accuracy of the critical power test for predicting time to exhaustion during cycle ergometry. *Medicine and Science in Sports and Exercise* 21:S9, 1989. (Presented at the American College of *Sports Medicine* Annual Convention, 1989, Baltimore).

Hughes, R. A., T. J. Housh, R. J. Hughes, and G. O. Johnson. The effect of exercise duration on lipoprotein metabolism in women. Abstracts of Research Presentations at the National AAHPERD Convention, Boston, AAHPERD Publications, 1989. (Presented at the AAHPERD Annual Convention, 1989, Boston).

Johnson, G. O., R. J. Hughes, R. A. Hughes, R. J. Schnitzler, D. J. Housh, and T. J. Housh. Effect of training intensity on V_{O2}max and the onset of blood lactate accumulation. Abstracts of Research Presentations at the National AAHPERD Convention, Boston, AAHPERD Publications, 1989. (Presented at the AAHPERD Annual Convention, 1989, Boston).

Housh, T. J., H. A. deVries, G. O. Johnson, G. D. Tharp, S. A. Evans, R. J. Hughes, and D. J. Housh. The relationship between ventilatory threshold and the physical working capacity at the fatigue threshold. Abstracts of Research Presentations at the National AAHPERD Convention, Boston, AAHPERD Publications, 1989. (Presented at the AAHPERD Annual Convention, 1989, Boston).

Housh, T. J., R. J. Hughes, G. O. Johnson, D. J. Housh, L. Wagner, J. Weir, and S. Evans. An age-effect in the isokinetic strength increases of high school wrestlers. (Presented at the International Isokinetic Congress, 1989, Lake Tahoe).

Cisar, C. J., T. J. Housh, G. O. Johnson, and W. G. Thorland. Body composition and build as predictors of running performance during an endurance training program. (Presented at the Southwest Chapter of the American College of *Sports Medicine* Convention, 1988, Las Vegas).

McDowell, S. L., K. B. Kenney, R. A. Hughes, T. J. Housh, and G. O. Johnson. The relationship between ventilatory threshold and critical velocity. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Bauge, S. M., J. M. Schlike, R. J. Hughes, R. A. Hughes, D. J. Housh, T. J. Housh, and G. O. Johnson. Changes in the body composition, muscular strength, and anaerobic characteristics of high school wrestlers across a season. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Hughes, R. J., R. A. Hughes, S. L. McDowell, K. B. Kenney, T. J. Housh, and G. O. Johnson. Anaerobic power and capacity of high school wrestlers across age. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Hughes, R. A., T. J. Housh, and G. O. Johnson. The validity of anthropometric estimations of body composition in high school wrestlers across a season. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Housh, T. J., G. O. Johnson, R. A. Hughes, D. J. Housh, R. J. Hughes, A. Fry, and C. J. Cisar. Isokinetic strength of high school wrestlers across age. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Johnson, G. O., T. J. Housh, D. R. Powell, and C. J. Ansorge. A physiological comparison of female body builders and power lifters. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Nebelsick-Gullett, L., T. J. Housh, and G. O. Johnson. The relationship between anaerobic capacity from the Wingate test and anaerobic work capacity from the critical test. Abstracts of Research Presentations at the National AAHPERD Convention, Kansas City, AAHPERD Publications, 1988. (Presented at the AAHPERD Annual Convention, 1988, Kansas City).

Thorland, W. G., G. O. Johnson, T. J. Housh, G. Tharp, and C. J. Cisar. Generality of strength and power in young male runners. *Medicine and Science in Sports and Exercise* 20:S67, 1988. (Presented at the American College of *Sports Medicine* Annual Convention, 1988, Dallas).

Johnson, G. O., T. J. Housh, K. B. Kenney, R. A. Hughes, C. J. Cisar, and W. G. Thorland. Estimation of body density in high school wrestlers. *Medicine and Science in Sports and Exercise* 20:S41, 1988. (Presented at the American College of *Sports Medicine* Annual Convention, 1988, Dallas).

Housh, T. J., G. O. Johnson, R. A. Hughes, C. J. Cisar, and W. G. Thorland. The effect of age and body weight on estimations of body composition in high school wrestlers. *Medicine and Science in Sports and Exercise* 20:S41, 1988. (Presented at the American College of *Sports Medicine* Annual Convention, 1988, Dallas).

Johnson, G. O., T. J. Housh, W. G. Thorland, C. J. Cisar, R. A. Hughes, K. B. Kenney, and S. L. McDowell. Validation of anthropometric equations for the prediction of minimal wrestling weight. *Medicine and Science in Sports and Exercise* 19:S47, 1987. (Presented at the American College of *Sports Medicine* Annual Convention, 1987, Las Vegas).

Hughes, R. A., T. J. Housh, W. G. Thorland, and G. O. Johnson. Intertester and validity of anthropometric estimates of body composition. *Medicine and Science in Sports and Exercise* 19:S23, 1987. (Presented at the American College of *Sports Medicine* Annual Convention, 1987, Las Vegas).

Johnson, G. O., T. J. Housh, L. Marty, G. Eischen, and C. Eischen. Bilateral and ipsilateral isokinetic leg flexion and extension strength ratios of university football players. Abstracts of Research Presentations at the National AAHPERD Convention, Las Vegas, AAHPERD Publications, 1987. (Presented at the AAHPERD Annual Convention, 1987, Las Vegas).

Fry, A. C., T. J. Housh, and R. A. Hughes. Stature and flexibility variables as discriminators of proper foot contact during the parallel squat weight training exercise. (Presented at the AAHPERD Central District Convention, 1987, Kansas City).

Cisar, C. J., W. G. Thorland, G. O. Johnson, T. J. Housh, and R. A. Hughes. Validity of anthropometric equations for determination of changes in body composition in adults during

training. *Medicine and Science in Sports and Exercise* 18:79, 1986. (Presented at the American College of *Sports Medicine* Annual Convention, 1986, Indianapolis).

Thorland, W. G., G. O. Johnson, C. J. Cisar, and T. J. Housh. Estimation of minimal wrestling weight using measures of body build and composition. *Medicine and Science in Sports and Exercise* 18:441, 1986. (Presented at the American College of *Sports Medicine* Annual Convention, 1986, Indianapolis).

Housh, T. J., W. G. Thorland, G. O. Johnson, R. A. Hughes, and C. J. Cisar. Partial correlations between metabolic factors and middle-distance running performance controlling for aerobic capacity. (Presented at the AAHPERD Northwest District Convention, 1986, Vancouver).

Housh, T. J., W. G. Thorland, G. O. Johnson, C. J. Cisar, R. A. Hughes, and P. Lundvall. Error in skinfold assessment of body density. *Medicine and Science in Sports and Exercise* 18:457, 1986. (Presented at the American College of *Sports Medicine* Annual Convention, 1986, Indianapolis).

Housh, T. J., W. G. Thorland, G. O. Johnson, R. A. Hughes, C. J. Cisar, and C. J. Ansorge. The covariate influence of aerobic capacity on structural and compositional factors related to middle distance running performance. Abstracts of Research Presentations at the National AAHPERD Convention, Cincinnati, AAHPERD Publications, 1986. (Presented at the AAHPERD Annual Convention, 1986, Cincinnati).

Thorland, W. G., G. O. Johnson, G. D. Tharp, and T. J. Housh. Comparative characteristics of elite junior and senior level athletes. Presented at the Big 10 CIC Symposium on the Effects of Competition on Children and Youth, 1985, Michigan State University, East Lansing. (Invited Presentation).

Housh, T. J. Body composition and weight control, exercise programming, program administration. Presented at the American College of *Sports Medicine* Fitness Instructors Workshop, 1985, Portland Adventist Hospital, Portland. (Invited Presentation).

Housh, T. J. Developmental strength programs for youth. Presented at the Northwest American Corrective Therapy Association Workshop, 1985, Portland State University, Portland. (Invited Presentation).

Johnson, G. O., W. G. Thorland, C. J. Cisar, T. J. Housh, R. A. Hughes, and G. D. Tharp. Analysis of pre-season body composition of high school wrestlers according to age and selected weight classes. (Presented at the American College of *Sports Medicine* Annual Convention, Colloquia entitled: A Progress Report on the Data Bank Study for Determining A Minimal Weight, 1985, Nashville).

Hughes, R. A., W. G. Thorland, G. O. Johnson, and T. J. Housh. The effect of exercise intensity on acute serum lipoprotein responses. *Medicine and Science in Sports and Exercise* 17:226, 1985. (Presented at the American College of *Sports Medicine* Annual Convention, 1985, Nashville).

Housh, T. J., W. G. Thorland, G. O. Johnson, and R. A. Hughes. The contribution of selected physiological variables to middle distance running performance. Abstracts of Research Presentations at the National AAHPERD Convention, Atlanta, AAHPERD Publications, 1985. (Presented at the AAHPERD Annual Convention, 1985, Atlanta).

Schmidt, R. J., T. J. Housh, and R. A. Hughes. Metabolic responses to kendo. Presented at the Seventeenth Annual Meeting of the "Nippon Budo Gakka" (Japanese Academy of Martial Arts), 1984, Tokyo Noko University, Tokyo, Japan).

Thorland, W. G., G. O. Johnson, C. J. Cisar, T. J. Housh, and G. D. Tharp. Strength and anaerobic influences of running ability in young female athletes. *Medicine and Science in Sports and Exercise* 16:158, 1984. (Presented at the American College of *Sports Medicine* Annual Convention, 1984, San Diego).

Johnson, G. O., W. G. Thorland, T. J. Housh, C. J. Cisar, and G. D. Tharp. Analysis of pre-season body composition of high school wrestlers as a function of age and body weight. *Medicine and Science in Sports and Exercise* 16:157, 1984. (Presented at the American College of *Sports Medicine* Annual Convention, 1984, San Diego).

Housh, T. J., W. G. Thorland, and G. Tharp. Isokinetic leg strength of elite adolescent female track and field athletes by event. Abstracts of Research Presentations at the National AAHPERD Convention, Minneapolis, AAHPERD Publications No. 088314-237-6, 1983. (Presented at the AAHPERD Annual Convention, Minneapolis).

Cisar, C. J., W. G. Thorland, G. O. Johnson, and T. J. Housh. Aerobic and anaerobic thresholds and max O₂ consumption rates as predictors of distance running performance. *Medicine and Science in Sports and Exercise* 15:107, 1983. (Presented at the American College of *Sports Medicine* Annual Convention, 1983, Montreal).

Housh, T. J., W. G. Thorland, G. O. Johnson, G. Tharp, and M. J. Refsell. Multiple discriminant analysis of sports participation with respect to body composition and body build variables. *Medicine and Science in Sport and Exercise* 15:179, 1983. (Presented at the American College of *Sports Medicine* Annual Convention, 1983, Montreal).

Thorland, W. G., G. O. Johnson, T. J. Housh, C. J. Cisar, and G. Tharp. Anthropometric estimation of body density in highly trained adolescent male athletes. *Medicine and Science in Sports and Exercise* 15:180, 1983. (Presented at the American College of *Sports Medicine* Annual Convention, 1983, Montreal).

Thorland, W. G., G. O. Johnson, T. J. Housh, and G. Tharp. Estimation of body density from skinfold thickness in highly trained adolescent female athletes. *Medicine and Science in Sports and Exercise* 14:159, 1982. (Presented at the American College of *Sports Medicine* Annual Convention, 1982, Miami).

Johnson, G. O., W. G. Thorland, T. J. Housh, G. Tharp, M. J. Refsell, and K. Knortz. Effect of a competitive season on the body composition of female university athletic teams. *Medicine and Science in Sports and Exercise* 14:107, 1982. (Presented at the American College of *Sports Medicine* Annual Convention, 1982, Miami).

MASTER'S STUDENT THESIS COMMITTEES

1987 Lori Nebelsick-Gullett, The Relationship Between Anaerobic Capacity from the Wingate Test and Anaerobic Work Capacity from the Critical Power Test. (Chair)

- 1987 Sharon McDowell, The Effect of Exercise Duration on Salivary Immunoglobulin A. (Chair)
- 1987 Dawn Powell, A Physiological Comparison of Female Body Builders and Power Lifters. (Member)
- 1988 Kathryn Kenney, The Contribution of Selected Physiological Variables to Sprint Swimming Performance. (Chair)
- 1988 Alan Ryan, Blood Lactate Concentrations After 10, 15 and 30 Seconds of Supramaximal Exercise in Weight-Trained and Sedentary Men. (Member)
- 1988 Dona Housh, Actual Versus Predicted Times to Exhaustion Using the Critical Power Test. (Chair)
- 1988 Ken Cheloha, The Effect of Exercise Intensity on Salivary Immunoglobulin A and Cortisol. (Member)
- 1989 Tom Sachtleblen, The Effect of Glycogen Depletion and Supercompensation on Critical Power and Anaerobic Work Capacity. (Member)
- 1990 Rommie Hughes, The Effect of Training on Testosterone, Luteinizing Hormone and Estradiol Responses to a Maximal and Submaximal Exercise Bout. (Chair)
- 1990 Joe Weir, The Effect of Isotonic Weight Training on the Force Velocity Curve. (Chair)
- 1990 Loree Wagner, The Effect of Grip Spacing on Bench Press Performance. (Chair)
- 1990 Robert Schwab, The Acute Effects of Two Different Bouts of Weightlifting Exercise on Serum Testosterone Concentration. (Chair)
- 1991 Merrell Pepper, The Accuracy of the Critical Velocity Test for Predicting Time to Exhaustion During Treadmill Running. (Chair)
- 1992 Bruce Warner, The Accuracy of the Critical Power Test for Predicting Time to Exhaustion During Arm Cranking Ergometry. (Chair)
- 1992 Jeff Soucie, The Bilateral Effects of Unilateral Electrical Stimulation on the Force-Velocity Curve. (Chair)
- 1992 Dave Pavlat, Validation of the Electromyographic Fatigue Threshold Test. (Chair)
- 1992 Jeff Stout, The Validity of NIR for Estimating Body Composition in Males and Females. (Chair)
- 1992 Keanmun Ng, Effects of a Sprint Training Device on Sprint Biomechanics, Performance and Strength Measures. (Member)
- 1995 Tammy Evetovich, The Effect of Workout Duration on the Physical Working Capacity at the Fatigue Threshold (PWCFT) Test. (Chair)
- 1995 Mike Wanetka, The Development of a Valid Questionnaire to Assess Exercise Dependence. (Member)

- 1996 Kyle Ebersole, The MMG and EMG Responses of the Superficial Quadriceps Muscles During Isometric Contractions. (Chair)
- 1998 Anthony Bull, The Effect of Mathematical Modeling on the Estimation of Critical Power. (Chair)
- 1998 Sharon Perry, Validity of the Physical Working Capacity at the Heart Rate Threshold Test. (Chair)
- 2001 Joel Cramer, Gender Comparisons Among Peak Torque, Mean Power Output, Mechanomyographic and Electromyographic Responses During Maximal, Eccentric Isokinetic Muscle Actions. (Chair)
- 2004 Travis Beck, Mechanomyographic and electromyographic amplitude and frequency responses during fatiguing isokinetic muscle actions of the biceps brachii. (Chair)
- 2011 Haley Bergstrom, A new single workout test to estimate critical power and anaerobic work capacity. (Chair)
- 2013 Robert Lewis, The effects of intermittent isometric fatigue on concentric, eccentric, and isometric torque. (Chair)
- 2013 Nathaniel Jenkins, Test-retest reliability for voluntary and evoked measures of peak torque, electromechanical delay, and rate of torque development in older men. (Member)
- 2016 Cory Smith, Time course of changes in neuromuscular parameters during fatiguing high-load and low-load concentric dynamic constant external resistance leg extension muscle actions. (Chair)
- 2016 Ethan Hill, Electromyographic and mechanomyographic time and frequency response during fatiguing, submaximal, isokinetic muscle actions of the biceps brachii. (Chair)

DOCTORAL STUDENT DISSERTATION COMMITTEES

- 1987 Roger Hughes, The Effect of Exercise Duration on Serum Lipoprotein Metabolism in Females. (Chair)
- 1987 June Nutter, The Effect of Exercise and Oral Contraceptives on Total Serum Calcium, Estradiol and Luteinizing Hormone in Moderately Trained Women. (Member)
- 1991 Sharon McDowell, The Effect of Exercise Training on Natural Killer Cell Activity. (Chair)
- 1992 Karen Knortz, The Effect of Repetition Number on Isokinetic Strength and Endurance. (Chair)
- 1993 Joyce Schlike, The Effect of Isokinetic Training in Osteoarthritis Patients. (Member)
- 1993 Joe Weir, The Effect of Unilateral Isometric Leg Extension Training on the Torque and Integrated Electromyogram of the Trained and Contralateral Limb. (Chair)
- 1993 Joan Eckerson, The Validity of Skinfold, Bioelectrical Impedance and Near-infrared Interactance Equations for Monitoring Changes in Fat-free Weight in Females. (Chair)

- 1993 Loree Wagner, The Effect of Endurance Training on the Physical Working Capacity at the Heart Rate Threshold. (Chair)
- 1994 Bennie Moore, The Effects of Latex Gloves on Hand Sensibility and Manual Dexterity. (Member)
- 1995 Jeff Stout, The Relationships Among Electromyography, Acoustic Myography and Oxygen Consumption During Incremental Cycle Ergometry. (Chair)
- 1998 Tammy Evetovich, The Effects of Concentric Isokinetic Strength Training of the Quadriceps Femoris on Electromyography, Mechanomyography, and Muscle Strength. (Chair)
- 2000 Kyle Ebersole, The Effects of Isometric Strength Training of the Biceps Brachii on Electromyography, Mechanomyography, and Muscle Strength. (Chair)
- 2001 Doug Smith, The Effects of Isometric Strength Training of the Quadriceps Femoris on Electromyography, Mechanomyography, and Peak Torque. (Chair)
- 2001 Sharon Perry, Mechanomyographic and Electromyographic Responses of the Superficial Quadriceps Femoris Muscles During Fifty Maximal Isokinetic Muscle Actions at Different Velocities. (Chair)
- 2001 Anthony Bull, Oxygen Kinetic During Continuous Running at Critical Velocity. (Chair)
- 2005 Joel Cramer, The Acute Effects of Static Stretching on Peak Torque, Mean Power Output, Mechanomyography, and Electromyography during Maximal, Eccentric, Isokinetic Muscle Actions. (Chair)
- 2005 Jared Coburn, Responses of Mechanomyography, Electromyography, and Peak Torque to Three Days of Velocity-Specific Isokinetic Training. (Chair)
- 2007 Moh Malek, Examination of the Relationship Between the Slow Component of Oxygen Uptake Kinetics and Plasma Ammonia Concentrations During Cycle Ergometer Exercise. (Chair)
- 2007 Travis Beck, The Influence of Electrode Placement Over the Innervation Zone on Electromyographic Amplitude and Mean Power Frequency Versus Isokinetic and Isometric Torque Relationships. (Chair)
- 2009 Michelle Mielke, An Examination of the Physiological Responses at the Critical Heart Rate. (Chair)
- 2011 Jorge Zuniga, Patterns of Responses for Neuromuscular and Metabolic Parameters for Ramp Versus Step Incremental Cycle Ergometer Tests. (Chair)
- 2011 Clayton Camic, An Assessment of the Motor Control Strategies and Effect of Fatigue Specific to Isometric, Concentric, and Eccentric Muscle Actions. (Chair)
- 2014 Haley Bergstrom, Physiological Responses at the Critical Heart Rate During Treadmill Running. (Chair)

- 2016 Kristen Cochrane, Physiological Responses at the Rating of Perceived Exertion Tt and Above the Gas Exchange Threshold During Treadmill Running. (Chair)
- 2016 Nathaniel Jenkins, Neuromuscular Adaptions to Three and Six Weeks of High- versus Low-Load Leg Extension Resistance Training. (Member)
- 2019 Ethan Hill, The Effects of 4 weeks of Blood Flow Restriction and Low-Load Resistance Training on Muscle Strength, Power, Hypertrophy, and Neuromuscular Adaptation. (Chair)
- 2019 Cory Smith, The Effects of Variable Resistance Training and Dynamic Constant External Resistance Training on Force and Neuromuscular Adaptations as a Result of Four Weeks of Leg Press Training. (Chair)
- 2020 Josh Keller, The Sex-Specific Contributions of Neuromuscular and Muscle Blood Flow Responses to Performance Fatigability Following Fatiguing Bilateral Muscle Actions Above and Below Critical Force. (Chair)
- 2022 John Paul Anders, Modality-Specific Differences in Exercise-Induced Fatigability and Neuromuscular Function Between Unilateral and Bilateral Isokinetic Muscle Actions. (Chair)

PROFESSIONAL AFFILIATIONS

- American College of *Sports Medicine* (Fellow)
- American College of *Sports Medicine*, Northland Chapter
- American Alliance for Health, Physical Education, Recreation and Dance (Fellow Research Consortium)
- Nebraska Association for Health, Physical Education, Recreation and Dance
- National Strength and Conditioning Association (Fellow)
- North American Society for Pediatric Exercise Medicine
- International Society of Electrophysiology and Kinesiology
- American Society of Exercise Physiologists

INTERNAL FUNDING

- 2017-2020 University of Nebraska, System Science Collaborative Initiative (Co-Principal Investigator: Principal Investigator, Terry Stentz, PhD), 2017-2020, \$300,000
- 1986, 1987, UNL Research Council, approximately \$15,000
1988, 1990,
& 1997
- 1988 UNL Research Initiation Grant, \$6,000
- 1986-2001 Health and Human Performance Laboratory Equipment Funds, approximately \$100,000

EXTERNAL FUNDING

- 2021-2023 General Nutrition Corporation (Principal Investigator), \$174,894

2020-2023 Natreon Inc. (Principal Investigator), \$43,700

2020-2023 Natreon Inc. (Principal Investigator), \$79,502

2019-2022 Natreon Inc. (Principal Investigator) \$46,682

2019-2020 National Strength and Conditioning Association (Faculty Advisor: Principal Investigator, Josh Keller), \$9,900

2019-2020 Natreon Inc. (Principal Investigator), \$37,147

2017-2019 Natreon Inc. (Principal Investigator), \$77,127

2017-2018 NASA Nebraska Space Grant (Faculty Advisor: Principal Investigator, Ethan Hill), \$4000

2017-2018 General Nutrition Corporation (Principal Investigator), \$97,800

2017-2018 National Strength and Conditioning Association (Faculty Advisor: Principal Investigator, Ethan Hill), \$9,635

2015-2016 Stepan Lipid Nutrition (Co-Principal Investigator: Principal Investigator, Joel Cramer PhD), \$150,447

2013-2014 National Strength and Conditioning Association (Faculty Advisor: Principal Investigator, Haley Bergstrom), \$10,000

2013-2014 Stepan Lipid Nutrition (Co-Co-Principal Investigator: Principal Investigator, Joel Cramer PhD), \$339,566

2013 General Nutrition Corporation (Principal Investigator), \$99,600

2012-2013 Rock Creek Pharmaceuticals (Co-Principal Investigator: Principal Investigator, Joel Cramer PhD), \$377,456

2012 General Nutrition Corporation (Principal Investigator), \$99,600

2010-2011 General Nutrition Corporation (Principal Investigator), \$99,840

2009 General Nutrition Corporation (Principal Investigator), \$60,000

2009 General Nutrition Corporation (Principal Investigator), \$60,000

2008-2009 General Nutrition Corporation (Principal Investigator), \$90,000

2008 General Nutrition Corporation (Principal Investigator), \$45,000

2006-2008 General Nutrition Corporation (Principal Investigator), \$128,400

2006-2007 General Nutrition Corporation (Principal Investigator), \$86,760

2006 General Nutrition Corporation (Principal Investigator), \$98,160

2005-2006 General Nutrition Corporation (Principal Investigator), \$98,160

2005 FedEx Institute of Technology Research Innovation Fund (Co-investigator: Principal Investigator, Andy Fry PhD, University of Memphis), \$42,836

2005 General Nutrition Corporation (Principal Investigator), \$60,000

2004-2005 General Nutrition Corporation (Principal Investigator), \$100,100

2004-2005 General Nutrition Corporation (Principal Investigator), \$41,250

2003-2004 General Nutrition Corporation (Principal Investigator), \$57,750

2003-2004 Met-Rx (Principal Investigator), \$13,200

2003-2004 Numico Research (Co-principal Investigator), \$77,000

2001-2003 Nutricia U.S.A. (Principal Investigator), \$48,250

2004 American College of *Sports Medicine* (Faculty advisor), \$2,500

2008 National Strength and Conditioning Association (Faculty advisor), \$3,988

2004 National Strength and Conditioning Association (Faculty advisor), \$2,496

2002 National Strength and Conditioning Association (Faculty advisor), \$2,284

2002 National Strength and Conditioning Association (Faculty advisor), \$1,600

2002 National Strength and Conditioning Association (Faculty advisor), \$2,446

2000 National Strength and Conditioning Association (Faculty advisor), \$2,338

1999 National Strength and Conditioning Association (Faculty advisor), \$1,500

1988 Central District Alliance of Health, Physical Education, Recreation and Dance (Principal Investigator), \$950

1987 Nebraska Alliance of Health, Physical Education, Recreation and Dance, Principal Investigator), \$500

GRANT PROPOSALS (EXTERNAL; NOT FUNDED)

2003 Muscular Dystrophy Association (Co-investigator) \$108,209

2001 Bioenergy, Inc. (Principal Investigator), \$25,300

2000 Experimental and Applied Sciences (Co-investigator) \$83,668

2000 National Institute of Health, National Institute of General Medical Sciences (Co-investigator), \$187,155

1999 Fortress Systems International Nutrition (Co-investigator), \$55,760

1996 National Institute of Health, National Institute on Geriatrics and Rehabilitation Medicine (Co-investigator 1R01HD34365-01), \$167,299

1993 National Institute of Health, National Institute on Aging and National Institute of Allergy and Infectious Diseases (Principal investigator 1R01AG12031-01), \$607,434

1993 Nebraska State Department of Health (Co-investigator), \$40,000

- 1993 Foundation for Physical Therapy (Co-investigator), \$29,969
- 1991 American Cancer Society (Co-investigator 91-06), \$14,250
- 1991 National Institutes of Health, National Institute of Allergy and Infectious Diseases (Principal Investigator 1R01AI32567-01), \$568,561
- 1989 American Heart Association, Nebraska Affiliate, \$18,000

SERVICE TO THE UNIVERSITY

- 2003-2004 NHS Graduate Committee (UNL)
- 2005-2007 NHS Chair Advisory Committee (UNL)
- 2005-2007 NHS Promotion and Tenure Committee (UNL)
- 2005-2006 College of Human Resources and Family Sciences Promotion and Tenure Committee (UNL)
- 2001-2003 Life Science Curriculum Coordinating Council (UNL)
- 2000-2003 Academic Rights and Responsibilities Panel (UNL)
- 1999-2003 Exercise Science Research Committee Chair (UNL)
- 1999-2003 Exercise Science Undergraduate Curriculum Committee (UNL)
- 1999-2003 Exercise Science Graduate Curriculum Committee (UNL)
- 1997 HHP Grade Appeals Committee (UNL)
- 1996-1998 Teachers College Promotion and Tenure Committee (UNL)
- 1994-1995 Teachers College Internal Advisory Committee for Fund Development and Public Relations (UNL)
- 1994-1997 HHP Department Committee (UNL)
- 1994-1995 HHP Grade Appeals Committee (UNL)
- 1993-1994 Institutional Review Board for Human Subjects (UNL)
- 1992-1997 HHP Graduate Chair (UNL)
- 1991-1992 HPER School Committee (UNL)
- 1991 HPER Distinguished Teaching Award Committee (UNL)
- 1990-1997 Teachers College Graduate Coordinating Council (UNL)
- 1990-1992 Teachers College Graduate Coordinating Council Faculty Development Subcommittee (UNL)
- 1989-1990 Faculty Senate (UNL)
- 1989-1990 Undergraduate Exercise Science Club Faculty Sponsor (UNL)

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| 1988 | Kinesiologist Search Committee (UNL) |
| 1988 | Chairperson Search Committee (UNL) |
| 1986-1992 | Graduate Committee (UNL) |
| 1985-1986 | Promotion and Tenure Committee (Chairman) (PSU) |
| 1985-1986 | Graduate Committee (PSU) |
| 1985-1986 | Graduate Council (PSU) |
| 1984-1986 | Biomedical Grant Allocation Committee (PSU) |
| 1984-1985 | Social and Special Events Committee (PSU) |

SERVICE TO THE PROFESSION

- Senior Associate Editor, *Journal of Strength and Conditioning Research*
- Reviewer, *Strength and Conditioning Journal*
- Reviewer, *Journal of Applied Physiology*
- Reviewer, *International Journal of Sports Medicine*
- Reviewer, *Journal of Sports Sciences*
- Reviewer, *Medicine and Science in Sports and Exercise*
- Reviewer, *Pediatric Exercise Science*
- Reviewer, *Research Quarterly for Exercise and Sport*
- Reviewer, *Sports Medicine*
- Reviewer, *European Journal of Applied Physiology* and Occupational Physiology
- Reviewer, *American Journal of Human Biology*
- Reviewer, *Journal of Orthopedic and Sports Physical Therapy*
- Reviewer, *Clinical Journal of Sports Medicine*
- Reviewer, *British Journal of Sports Medicine*
- Reviewer, *Journal of Exercise Physiology*
- Reviewer, *Canadian Journal of Applied Physiology*
- Reviewer, *Educational Psychology Review*
- Book Reviewer, Human Kinetics Publishers
- Lincoln YMCA Medical Advisory Board
- State Board of Directors for the National Strength and Conditioning Association
- National Strength and Conditioning Association Awards Committee
- National Strength and Conditioning Association Research Committee (Chair 2004-2007)
- National Strength and Conditioning Association Abstract Reviewer
- *Journal of Strength and Conditioning Research* Publication Sub-committee
- AAHPERD Abstract Reviewer
- NSCA Certification Commission Judicial Committee
- NSCA Research Grant Review Panel

