

CURRICULUM VITAE

NAME: Kirk L. English, PhD

DATE: 06 Aug 2019

CURRENT POSITION Assistant Professor
University of Houston-Clear Lake
College of Human Sciences and Humanities
Department of Clinical Health and Applied Sciences
2700 Bay Area Blvd
Houston, TX 77058
Office: 281.283.3313
english@uhcl.edu

BIOGRAPHICAL Place of Birth: Houston, TX
Citizenship: United States of America
Languages: English, Russian

EDUCATION

Graduate

2007-2013 Doctor of Philosophy
University of Texas Medical Branch
Galveston, Texas
Field of Study: Rehabilitation Sciences
Specialization: Nutrition & Metabolism

2000-2004 Master of Arts
University of Houston-Clear Lake
Houston, Texas
Field of Study: Fitness and Human Performance
Specialization: Exercise Physiology

Undergraduate

1998-2000 Bachelor of Science
University of Houston-Clear Lake
Houston, Texas
Field of Study: Fitness and Human Performance
Specialization: Exercise Physiology

PROFESSIONAL AND TEACHING EXPERIENCE

Academic

2018-present Experimental Research Director
Exercise and Nutritional Health Institute
University of Houston-Clear Lake
Houston, TX

2017-present Assistant Professor

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University of Houston-Clear Lake
College of Human Sciences and Humanities
Department of Clinical Health and Applied Sciences
Houston, TX

2015-2017 Adjunct Professor
University of Houston-Clear Lake
College of Human Sciences and Humanities
Department of Clinical Health and Applied Sciences
Houston, Texas

2014-2017 Research Scientist
University of Texas Medical Branch
School of Health Professions
Department of Nutrition and Metabolism
Galveston, TX

2007-2012 Graduate Assistant
University of Texas Medical Branch
Graduate School of Biomedical Sciences
Preventive Medicine and Community Health
Division of Rehabilitation Sciences
Department of Nutrition and Metabolism
Galveston, TX

2005-2007 Adjunct Instructor
University of Houston-Clear Lake
School of Human Sciences and Humanities
Fitness and Human Performance Program
Houston, Texas

Government/Private industry

2013-2017 Senior Scientist
JES Tech
NASA-Johnson Space Center
Biomedical Research & Environmental Sciences
Exercise Physiology & Countermeasures Laboratory

2004-2013 Exercise Physiologist
JES Tech
NASA-Johnson Space Center
Biomedical Research & Environmental Sciences
Exercise Physiology & Countermeasures Laboratory

2003-2004 Exercise Physiologist
Bayshore Medical Center
Orthopaedic and Sports Medicine Clinic
Pasadena, Texas

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2001-2003	Cardiopulmonary stress test technician Basic Solutions International Seabrook, Texas
2000-2001	Exercise Physiologist Progressive Physical Therapy Webster, Texas

RESEARCH ACTIVITIES

A. Areas of Research

Research focuses on age- and unloading-induced alterations in muscle mass, muscle performance, and muscle metabolism in middle-aged and elderly adults, and the influence of nutrition and exercise to prevent or attenuate these maladaptations. This work is relevant to both clinical (aging adults) and applied (astronauts in spaceflight) populations. Techniques, methodologies, and outcomes include bed rest, stable isotope tracers, western blotting, blood/urine assays, resistance exercise training, nutritional supplementation, muscle protein synthesis, isokinetic and isoinertial strength testing, body composition (DXA, etc.), EKG, EMG, and VO₂max testing.

Previous employment at NASA-JSC involved exercise countermeasures research. This included the development and validation of novel exercise hardware and exercise protocols designed to maintain bone, muscle mass, and muscle strength during the mechanical unloading of long-duration spaceflight.

Doctoral research included investigator position on UTMB's Institute for Translational Science's (ITS) Multidisciplinary Translational Team (MTT), "Aging Muscle and Sarcopenia."

B. Grants Received

University of Houston-Clear Lake (UHCL) Faculty Research Support Fund (FRSF):
"Development and validation of a rowing ergometry virtual reality software interface to improve exercise performance and enjoyment"
10/15/2018 – 10/14/2019
Role: Principal Investigator
Grant amount: \$2,189

North Dakota (ND) National Aeronautics and Space Administration (NASA) Established Program to Stimulate Competitive Research (EPSCoR):
"Low intensity exercise and blended protein supplementation as a strategy for rapid muscle growth and strength gain in astronaut-aged participants"
8/16/2018 – 5/5/2019
Role: Collaborator
Grant amount: \$13,575

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NASA Human Exploration Research Opportunities (HERO): NNJ15ZSA001N-AG
"Gravitational dose and multi-system physiologic response"
06/01/2016 – 05/31/2017
Role: Co-Investigator
Grant amount: \$398,233.48

NASA Human Exploration Research Opportunities (HERO): NNJ15ZSA001N
"NextGen Crew Countermeasure Software for Exploration Mission Support"
06/01/2016 – 05/31/2017
Role: Co-Investigator
Grant amount: \$400,000

NASA Johnson Space Center Human Research Program (HRP) Directed Task
"Identification of Fitness Standards for Exploration Mission Tasks"
Role: Co-Investigator
Grant amount: \$815,424

NIH (R01 NR012973-01)
"Preserving muscle mass and function in bedridden older adults"
10/2011-10/2016
Role: Graduate student
Grant amount: \$2,700,000

NSBRI (NNJ08ZSA002N)
"An integrated low-volume nutritional countermeasure to maintain muscle mass and function during space exploration"
06/2009-06/2013
Role: Graduate student
Grant amount: \$1,620,000

UTMB Sealy Center on Aging
Claude D. Pepper Older Americans Center
Pilot Program Grant
"Electrical Stimulation and Nutritional Support in Hospitalized Elders"
08/01/08 – 08/01/10
Role: Graduate student
Grant Amount: \$62,000

Project Title: Musculoskeletal adaptations to different levels of eccentric resistance during 8 weeks of training.
PI Name: R. Donald Hagan
Period of Performance: September 2004-August 2005
Funding Agency: Countermeasures Evaluation and Validation Project (NASA)
Goals of Research: To determine the effects of different levels of eccentric resistance training on the musculoskeletal system. This is of particular operational significance given hardware limitations onboard the International Space Station.
Role: Key Personnel

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C. Grants (pending)

Department of Defense Basic: Research Program for Historically Black Colleges and Universities and Minority-Serving Institutions, W911NF-19-S-0009, FY 2020. “A virtual reality-based exercise countermeasure to reduce stress and inflammation and improve human performance during sleep deprivation”

Role: Co-Investigator

Amount requested: \$660,000

D. Grants (not funded)

NASA TRISH Biomedical Research Advances for Space Health: BRASH1901. “Virtual reality and exercise-based countermeasures for combating stress, cognitive, and performance aspects of sleep deprivation”

Role: Co-Investigator

Amount requested: \$800,000

NASA Human Exploration Research Opportunities (HERO): 80JSC017N0001-OMNIBUS
“Development and Validation of a Rowing Ergometry Virtual Reality Software Interface to Improve Exercise Performance and Enjoyment”

Role: Co-Investigator

Amount requested: \$100,000

NASA Human Exploration Research Opportunities (HERO): NNJ14ZSA001N—Omnibus
“Effects of force dampening on physiologic adaptations to flywheel training”

Role: Co-Investigator

Amount requested: \$100,000

NASA Human Exploration Research Opportunities (HERO): NNJ14ZSA001N—Omnibus
“Does a Cephalad Fluid Shift Contribute to Alterations in Calf Performance?”

Role: Co-Investigator

Amount requested: \$100,000

National Space Biomedical Research Institute (NSBRI-NNJ13ZSA002N)

“Optimal distribution of nutrition to potentiate exercise training during hypocaloric bed rest”

Role: Co-Investigator

Amount requested: \$1,200,00

DOCTORAL DISSERTATION

English KL. Effects of leucine on skeletal muscle during 14 d bed rest in middle-aged adults. University of Texas Medical Branch, August 2013[©].

PEER-REVIEWED PUBLICATIONS

A. Articles in Peer-Reviewed Journals

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1. **English KL**, Mulavara AP, Bloomberg JJ, Ploutz-Snyder LL. Exercise countermeasures to neuromuscular deconditioning in spaceflight. *Compr Physiol*, 2019. (accepted)
2. Ryder JW, Fullmer P, Buxton RE, Crowell JB, Goetchius E, Bekdash O, De Witt JK, Hwang EY, Feiveson A, **English KL**, Ploutz-Snyder LL. A novel approach for establishing fitness standards for occupational task performance. *Eur J Appl Physiol* 119(7): 1633-48, 2019. doi: [10.1007/s00421-019-04152-3](https://doi.org/10.1007/s00421-019-04152-3)
3. Ploutz-Snyder LL, Downs M, Goetchius E, Crowell B, **English KL**, Ploutz-Snyder R, Ryder J, Dillon EL, Sheffield-Moore M, Scott JM. Exercise training mitigates multi-system deconditioning during bed rest. *Med Sci Sports Exerc* 50(9): 1920-28, 2018. doi: [10.1249/MSS.0000000000001618](https://doi.org/10.1249/MSS.0000000000001618)
4. De Witt JK, **English KL**, Crowell JB, Kalogera KL, Guilliams ME, Nieschwitz BE, Hanson AM, Ploutz-Snyder LL. Isometric mid-thigh pull reliability and relationship to deadlift 1RM. *J Strength Cond Res* 32(2): 528-33, 2018. doi: [10.1519/JSC.0000000000001605](https://doi.org/10.1519/JSC.0000000000001605)
5. Arentson-Lantz E, **English KL**, Paddon-Jones D, Fry CS. 14 days of bed rest induces a decline in satellite cell content and robust atrophy of skeletal muscle fibers in middle-aged adults. *J Appl Physiol* 120(8): 965-75, 2016. doi: [10.1152/jappphysiol.00799.2015](https://doi.org/10.1152/jappphysiol.00799.2015)
6. **English KL**, Mettler JA, Ellison JB, Mamerow MM, Arentson-Lantz E, Pattarini JM, Ploutz-Snyder R, Sheffield-Moore M, Paddon-Jones D. Leucine partially protects muscle mass and function during bed rest in middle-aged adults. *Am J Clin Nutr* 103(2): 465-73, 2016. doi: [10.3945/ajcn.115.112359](https://doi.org/10.3945/ajcn.115.112359)
7. **English KL**, Lee SMC, Loehr JA, Ploutz-Snyder RJ, Ploutz-Snyder LL. Isokinetic strength changes following long-duration spaceflight on the International Space Station. *Aerosp Med Hum Perform* 86(12, Suppl): A68-77, 2015.
8. Hackney KJ, Scott J, Hanson A, **English KL**, Downs M, Ploutz-Snyder L. The Astronaut-Athlete: optimizing human performance in space. *J Strength Cond Res* 29(12): 3531-45, 2015. doi: [10.1519/JSC.0000000000001191](https://doi.org/10.1519/JSC.0000000000001191)
9. **English KL**, Loehr JA, Lee SMC, Smith SM. Early-phase musculoskeletal adaptations to different levels of eccentric resistance after 8 weeks of lower body training. *Eur J Appl Physiol* 114(11): 2263-80, 2014. doi: [10.1007/s00421-014-2951-5](https://doi.org/10.1007/s00421-014-2951-5)
10. Hackney KJ and **English KL**. Protein and essential amino acids to protect musculoskeletal health during spaceflight: evidence of a paradox? *Life* 4(3): 295-317, 2014. doi: [10.3390/life4030295](https://doi.org/10.3390/life4030295)
11. Mamerow MM, Mettler JA, **English KL**, Casperson SL, Arentson-Lantz E, Sheffield-Moore M, Layman DK, Paddon-Jones D. Dietary protein distribution positively influences 24 hour muscle protein synthesis in healthy adults. *J Nutr* 144(6): 876-80, 2014.
12. **English KL**, Hackney KJ, De Witt JK, Ploutz-Snyder RJ, Goetchius EL, Ploutz-Snyder LL. A ground-based comparison of the Muscle Atrophy Research and Exercise System (MARES) and a commercially available isokinetic dynamometer. *Acta Astronautica* 92(1):3-9, 2013.

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13. **English KL**, Amonette WE, Graham M, Spiering BA. What is “evidence-based” strength and conditioning? *Strength and Cond J* 34(3): 19-24, 2012.
14. Loehr JA, Lee SMC, **English KL**, Sibonga J, Smith SM, Spiering BA, Hagan RD. Musculoskeletal adaptations to training with the Advanced Resistive Exercise Device. *Med Sci Sports Exerc* 43(1): 146-156, 2011.
15. Amonette WE, **English KL**, Ottenbacher KJ. *Nullius in Verba*: a call for the incorporation of evidence-based practice into the discipline of exercise science. *Sports Med* 40(6): 1-9, 2010.
16. **English KL**, Paddon-Jones D. Protecting muscle mass and function in older adults during bed rest. *Curr Opin Clin Nutr Metab Care* 13(1): 34-39, 2010.

B. Manuscripts in Preparation and Review

1. **English KL**, Goetchius E, Buxton R, Ryder JW, Ploutz-Snyder R, Guilliams M, Scott JM, Downs M, Ploutz-Snyder LL. High intensity training during spaceflight: results from the NASA Sprint study. *Med Sci Sports Exerc.* (in review)
2. De Witt JK, Fincke R, Logan RL, Guilliams ME, **English KL**, Ploutz-Snyder LL. Comparison of hip kinematics and torques during the deadlift, single-leg squat, and bilateral squat exercises. *Sports Biomechanics* (in review).
3. **English KL**, Paddon-Jones D. Glucose tolerance and insulin sensitivity during 14 d bed rest in middle-aged adults (in preparation).

C. Government Publications

1. Ploutz-Snyder L, Ryder JW, **English KL**, Haddad F, Baldwin K. Evidence Report: risk of impaired performance due to reduced muscle mass, strength, and endurance. NASA-JSC Human Research Program, Human Health Countermeasures Element. HRP-47072, 2015.
2. **English KL**, Hackney KJ, Redd E, De Witt JK, Ploutz-Snyder R, Ploutz-Snyder LL. A ground-based comparison of the Muscle Atrophy Research and Exercise System (MARES) and a standard isokinetic dynamometer. NASA Technical Paper-216144, 2011.
3. **English KL**, Loehr JA, Lee SMC, Laughlin MA, Hagan RD. Reliability of strength testing using the Advanced Resistive Exercise Device and free weights. NASA Technical Paper-214782, 2008.

D. Books and Book Chapters

1. Amonette WE, **English KL**, Kraemer WJ. *Evidence-based Practice in Exercise Science: the Six-Step Approach*. Champaign, IL: Human Kinetics, 2016.
2. Amonette WE, **English KL**, Spiering BA, and Kraemer WJ. Evidence-based practice in strength and conditioning. In: *Conditioning for Strength and Human Performance* 2nd ed. TJ Chandler, LE Brown, eds. Baltimore, MD: Lippincott, Williams, and Wilkins, 2012.

E. Intellectual Properties

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1. Amonette WE, **English KL**, Buford W, Amonette BW. An apparatus to facilitate upright posture. US Patent No.: US 8,597,162 B2. Patent issued December 3, 2013.

F. Conference Proceedings

1. Goetchius L, **English K**, Scott J, Buxton R, Downs M, Ryder J, Ploutz-Snyder R, Ploutz-Snyder L. High intensity training during spaceflight: results from the Sprint study. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2019.
2. Ryder J, Fullmer P, Buxton R, Crowell B, Goetchius E, Bekdash O, De Witt J, Hwang E, Feiveson A, **English K**, Ploutz-Snyder L. Identification of muscle fitness standards for exploration mission tasks. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2019.
3. Fullmer P, De Witt J, Hwang E, Ryder J, **English K**. Relationships between various isometric force measures. National Strength and Conditioning Association National Conference, Indianapolis, IN, July 11-14, 2018.
4. Goetchius E, **English KL**, Crowell J, Buxton R, Downs M, Dillon EL, Sheffield-Moore M, Urban RJ, Ploutz-Snyder L. Timecourse of change in aerobic capacity during prolonged spaceflight and bed rest with an integrated resistance and aerobic exercise prescription. National Strength and Conditioning Association National Conference, Indianapolis, IN, July 11-14, 2018.
5. Hwang E, **English K**, Ryder J, Kelly C, Walker T. Heart rate responses to unaided Orion side and top hatch egress in the Gulf of Mexico. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2018.
6. Goetchius E, **English K**, Downs M, Crowell J, Young M, Ploutz-Snyder L. Time course of changes in VO₂pk during 70-day bed rest. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2018.
7. Cross E, Perera J, Hanson A, **English K**, Vu L, Amonette W. NextGen One Portal usability evaluation. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2018.
8. Ryder JW, Fullmer P, Crowell B, Buxton R, Goetchius E, Hwang E, De Witt J, **English KL**, Ploutz-Snyder L. Identification of muscle fitness standards for exploration mission tasks. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2018.
9. Ploutz-Snyder L, De Witt J, Scott J, **English K**, Buxton R, Goetchius E, Ryder J, Ploutz-Snyder R, Downs M. Optimization of in-flight exercise countermeasures—SPRINT. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2018.
10. **English K**, Buxton R, Crowell B, DeWitt J, Goetchius E, Hwang E, Ploutz-Snyder L, Ryder J. Identification of muscle fitness standards for exploration mission tasks. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2017.
11. Downs M, Scott J, DeWitt J, **English K**, Buxton R, Goetchius E, Crowell B, Ploutz-Snyder R, Ploutz-Snyder L. Individual variability in aerobic fitness and muscle strength adaptations to 70 days of bed rest and exercise training. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2017.

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12. Hwang E, **English K**, Crowell B, Ryder J. Design and construction of an indoor Mars analog track for the Fitness for Mission Tasks study. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2017.
13. Ploutz-Snyder L, Scott J, **English K**, Buxton R, Goetchius E, Ryder J, Ploutz-Snyder R, Downs M. SPRINT exercise in bed rest and spaceflight. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2017.
14. Perera J, Hanson A, **English K**, Frank A, Hardy M, Sandor A, Vu L, Benson E, Kim H, Williams T, Amonette W. NextGen crew countermeasure software for exploration mission support. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2017.
15. Hanson A, Kalogera K, Sandor A, Hardy M, Frank A, Amonette W, **English K**, Williams T, Perera J. Evaluation of the NextGen exercise software interface in the NEEMO analog. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2017.
16. Arentson-Lantz E, Lamon S, Fry C, **English KL**, A, Paddon-Jones D. Expression of skeletal muscle miRNA are unaltered during 14 days of bed rest but decrease following 7 days of reloading in middle-aged adults. Experimental Biology National Conference. Chicago, IL, April 2017.
17. **English KL**, Muluvara A, Bloomberg J, Ploutz-Snyder LL. Calf strength loss during mechanical unloading: does it matter? 63rd Annual Meeting of the American College of Sports Medicine, Boston, MA, May 31-June 4, 2016.
18. **English KL**, Hwang EY, Ryder JW, Kelly C, Walker T, Ploutz-Snyder LL. Heart rate responses to unaided Orion side hatch egress in the Neutral Buoyancy Laboratory. NASA Human Research Program Investigators' Workshop, Galveston, TX. February 2016.
19. **English KL**, Muluvara A, Bloomberg J, Ploutz-Snyder LL. Calf strength loss during mechanical unloading: does it matter? NASA Human Research Program Investigators' Workshop, Galveston, TX. February 2016.
20. **English KL**, Buxton RE, Hoellen D, Nieschwitz B, Ryder JW, Ploutz-Snyder RJ, Ploutz-Snyder LL. Correlations between clinical and functional muscle outcomes: implications for spaceflight. 62nd Annual Meeting of the American College of Sports Medicine, San Diego, CA, May 26-30, 2015.
21. Buxton RE, Ryder JW, **English KL**, Guined JR, Ploutz-Snyder RJ, Ploutz-Snyder LL. Effects of reduced strength on self-selected pacing for long-duration activities. 62nd Annual Meeting of the American College of Sports Medicine, San Diego, CA, May 26-30, 2015.
22. Ryder JW, Buxton RE, **English KL**, Guined JR, Ploutz-Snyder LL. Use of a novel weighted suit to assess ambulatory performance under reduced strength to body weight conditions. 62nd Annual Meeting of the American College of Sports Medicine, San Diego, CA, May 26-30, 2015.
23. Downs M, Goetchius E, Buxton RE, Guined JR, **English KL**, Scott J, Ploutz-Snyder LL. Energy requirements during 70 days of bed rest with high intensity aerobic and resistance exercise. 62nd Annual Meeting of the American College of Sports Medicine, San Diego, CA, May 26-30, 2015.

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24. Arentson-Lantz E, Fry C, **English KL**, Paddon-Jones D. Satellite cell content decreases and muscle physiology is altered during 2 weeks of physical inactivity in middle aged adults. Experimental Biology National Conference. San Diego, CA, Mar 28-April 1, 2015.
25. Ploutz-Snyder LL, Ryder JW, **English KL**, Buxton RE, Bloomberg J, Ploutz-Snyder RJ. Strategies for identification of strength thresholds for exploration tasks. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2015.
26. **English KL**, Buxton RE, Crowell JB, Goetchius E, Guined JR, Hoellen D, Nieschwitz B, Ryder JW, Seponski CA, Ploutz-Snyder RJ, Ploutz-Snyder LL. Correlations between clinical and functional muscle outcomes: implications for spaceflight. NASA Human Research Program Investigators' Workshop, Galveston, TX. January 2015.
27. **English KL**, Arentson-Lantz E, Urban RJ, Sheffield-Moore M, Paddon-Jones D. Healthy middle-aged adults display an aging muscle phenotype after 14 days of bed rest. Sealy Center, Forum on Aging. Galveston, TX. December 2014.
28. **English KL**, Newby NJ, Hackney KJ, De Witt JK, Beck CE, Rovekamp RN, Rea RL, Ploutz-Snyder LL. Comparison of Knee and Ankle Dynamometry between NASA's X1 Exoskeleton and Biodex System 4. 61st Annual Meeting of the American College of Sports Medicine, Orlando FL, May 27-31, 2014. (*Med Sci Sports Exerc*, 46:5 (Suppl), 2014).
29. Beck CE, Rovekamp RN, Rea RL, **English KL**, Newby NJ, Hackney KJ, De Witt JK, Ploutz-Snyder LL. Comparison of Knee and Ankle Dynamometry between NASA's X1 Exoskeleton and Biodex System 4. NASA Human Research Program Investigators' Workshop, Galveston, TX. February 2014.
30. J Ellison, J McGaugh, E Arentson-Lantz, **KL English**, D Paddon-Jones. Effects of leucine supplementation on functional outcome measures during bed rest in middle-aged adults: preliminary results. NASA Human Research Program Investigators' Workshop, Galveston, TX. February 2013.
31. **KL English**, JA Mettler, CP Danesi, J Ellison, BM Doucet, E Arentson-Lantz, AM Inniss, CH Mathers, JM Pattarini, D Paddon-Jones. Leucine attenuates losses in muscle mass and strength and preserves muscle quality during 14 d bed rest in middle-aged adults. NASA Human Research Program Investigators' Workshop, Galveston, TX. February 2013.
32. E Arentson-Lantz, **KL English**, J Mettler, CP Danesi, J Ellison, BM Doucet, AM Inniss, CH Mathers, JM Pattarini, D Paddon-Jones. Effects of leucine supplementation during 14 d bed rest and 7 d rehabilitation on glucose tolerance and insulin sensitivity during OGTT. NASA Human Research Program Investigators' Workshop, Galveston, TX. February 2013.
33. **KL English**, CP Danesi, BM Doucet, J Mettler, JM Pattarini, E Arentson-Lantz, D Lewis, AM Inniss, RJ Urban, M Sheffield-Moore, D Paddon-Jones. Nutrition maintains muscle quality in middle-aged adults during bed rest inactivity. Sealy Center, Forum on Aging. Galveston, TX. November 2012.
34. **English KL**, Mettler J, Mamerow MM, Mathers CH, Pattarini JM, Paddon-Jones D. Leucine preserves muscle and strength and enhances recovery following bed rest. Experimental Biology National Conference. San Diego, CA, April 2012.

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35. Mamerow MM, Mettler JA, **English KL**, Layman DK, Volpi E, Paddon-Jones D. Muscle protein synthesis is suboptimal following a typical carbohydrate-rich breakfast. Experimental Biology National Conference. San Diego, CA, April 2012.
36. Mamerow MM, Mettler JA, **English KL**, Layman DK, Volpi E, Paddon-Jones D. Protein distribution effect on indices of satiety. Experimental Biology National Conference. San Diego, CA, April 2012.
37. Mettler JA, **English KL**, Doucet BM, Mamerow MM, Paddon-Jones D. Skeletal muscle fatigue and neuromuscular activation during bed rest. Experimental Biology National Conference. San Diego, CA, April 2012.
38. **English KL**, Mettler J, Mamerow MM, Danesi CP, Inniss AM, Mathers CH, Pattarini JM, Paddon-Jones D. Preserving muscle mass and strength with nutrition during unloading. NASA Human Research Program Investigators' Workshop, Houston, TX. February 2012.
39. **English KL**, Mettler J, Mamerow MM, Danesi CP, Pattarini JM, Ellison JB, McGaugh JM, Paddon-Jones D. Unable to exercise? Preserve muscle with nutrition. Sealy Center, Forum on Aging. Galveston, TX. November 2011.
40. Mettler JA, **English KL**, Doucet BM, Mamerow MM, Mathers C, Pattarini JM, Ellison J, McGaugh J, Volpi E, Paddon-Jones D. Muscular endurance and neuromuscular function following 14 days of bed rest in middle-aged adults. Sealy Center, Forum on Aging. Galveston, TX. November 2011.
41. **English KL**, Mamerow MM, Mettler J, Danesi CP, Tang P, Mathers CH, Pattarini JM, Paddon-Jones D. Leucine attenuates the loss of lean tissue mass and muscle strength during 14 d of bed rest disuse: preliminary results. The National Center for Human Performance 2011 Annual Meeting, Houston, TX. November 2011.
42. **KL English**, RJ Ploutz-Snyder, JB Crowell, RL Cromwell, LL Ploutz-Snyder. Gender Differences in Isokinetic Strength after 60 and 90 d Bed Rest. 58th Annual Meeting of the American College of Sports Medicine, Denver, CO, May 31-June 4, 2011. (*Med Sci Sports Exerc*, 43:5, Suppl 569, 2011).
43. Hackney KJ, **English KL**, Redd E, De Witt JK, Ploutz-Snyder R, Ploutz-Snyder LL. A Ground-based Comparison of the Muscle Atrophy Research and Exercise System (MARES) and a Standard Isokinetic Dynamometer. IAA Humans in Space Symposium. Houston, TX. April 2011.
44. **English KL**, Mettler J, Mamerow MM, Sheffield-Moore M, Paddon-Jones D. Leucine attenuates muscle loss and facilitates recovery following bed rest in middle-aged adults. Experimental Biology National Conference. Washington D.C. April 2011.
45. **English KL**, Mettler J, Mamerow MM, Mathers CH, Sheffield-Moore M, Paddon-Jones D. Leucine Attenuates Bed Rest-Induced Muscle Loss and Enhances Recovery in Middle-Aged Adults: Preliminary Results. IAA Humans in Space Symposium. Houston, TX. April 2011.
46. **English KL**, Mettler J, Mamerow MM, Danesi C, Mathers CH, Paddon-Jones D. Leucine attenuates muscle loss and facilitates recovery following 14 days of bed rest in middle-aged adults: preliminary results. Sealy Center, Forum on Aging. Galveston, TX. November 2010.

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47. **English KL**, Mamerow MM, Sheffield-Moore M, Paddon-Jones D. A low-volume nutritional countermeasure to maintain muscle mass and function during space exploration. NASA Human Research Program Investigators' Workshop. Houston, TX. February 2010.
48. **English KL**, Mamerow MM, Paddon-Jones D. Leucine as a countermeasure to maintain muscle mass and function during 14 days of bed rest in middle-aged adults. Sealy Center, Forum on Aging. Galveston, TX. November 2009.
49. Nash RE, Loehr JA, Lee SMC, **English KL**, Evans H, Smith SA, Hagan RD. Changes in muscle volume and strength following 16 weeks of training using the Advanced Resistive Exercise Device (ARED) and free weights. 56th Annual Meeting of the American College of Sports Medicine, Seattle WA, May 27-30, 2009. (*Med Sci Sports Exerc*, 41:5 (Suppl), S407, 2009).
50. **English KL**, Paddon-Jones D. Muscle protein synthesis is not influenced by gender in non-obese older adults. Sealy Center, Forum on Aging. Galveston, TX. November 2008.
51. **English KL**, Loehr JA, Lee SMC, Laughlin MS, Hagan RD. Different levels of eccentric resistance during eight weeks of training affect muscle strength and lean tissue mass. National Strength and Conditioning Association Annual Meeting, Las Vegas, NV, July 9-12, 2008.
52. Garcia YL, Solis J, Denton T, **English KL**, Cazes D, Petersen N, Dupler TL, Amonette WE. Loading order does not alter power output during the squat exercise. National Strength and Conditioning Association Annual Meeting, Las Vegas, NV, July 9-12, 2008.
53. Loehr JA, Lee SMC, **English KL**, Leach M, Bentley J, Nash R, Hagan RD. 16 weeks of training with the International Space Station advanced Resistive Exercise Device (aRED) is not different than training with free weights. National Strength and Conditioning Association Annual Meeting, Las Vegas, NV, July 9-12, 2008.
54. Bentley JR, Loehr JA, De Witt JK, Lee SMC, **English KL**, Nash RE, Leach MA, Hagan RD. Correlation of ground reaction force variables with peak vertical jump height. National Strength and Conditioning Association Annual Meeting, Las Vegas, NV, July 9-12, 2008.
55. Lee SMC, Loehr JA, **English KL**, Sibonga J, Maddocks MJ, Smith SA, Hagan RD. Bone mineral density adaptations of the hip and spine to training with the Advanced Resistive Exercise Device and with free weights in ambulatory subjects. 55th Annual Meeting of the American College of Sports Medicine, Indianapolis, IN, May 28-31, 2008. (*Med Sci Sports Exerc*, 40:5 (Suppl): S303, 2008).
56. Doucet B, **English KL**, Utsey C, Protas E, Ostir G, Paddon-Jones D. Neuromuscular electrical stimulation and nutritional support during acute hospitalization and inactivity in elders. Sealy Center, Forum on Aging. Galveston, TX. September 2007.
57. **English KL**, Loehr JA, Lee SMC, Maddocks MJ, Laughlin MS, Hagan RD. Musculoskeletal adaptations to different levels of eccentric resistance during 8 weeks of training. American College of Sports Medicine 54th Annual Meeting, New Orleans, LA, May 30-June 2, 2007. (*Med Sci Sports Exerc*, 39:5 (Suppl), S325, 2007).

CURRICULUM VITAE

58. Henderson R, Amonette WE, **English KL**, Twine CA, Dupler TL. Changes in balance strategies following brief anaerobic work. *Journal of Strength and Conditioning Research*. 2004, 17(4).
59. **English KL**, Amonette WE, Johnston LJ, Babbington D, Dupler TL, Wise D. Closed and open kinetic chain strength training does not reduce landing forces in female athletes. American College of Sports Medicine 50th Annual Meeting. San Francisco, CA. May 2003. (*Med Sci Sports Exerc*, 35:5 (Suppl), 2003).

REFEREED PAPERS PRESENTED (Podium Presentations)

1. **English KL**. Correlations between clinical and functional muscle outcomes: implications for spaceflight. 62nd Annual Meeting of the American College of Sports Medicine, San Diego, CA, May 26-30, 2015 (15 min).
2. **English KL**. Leucine attenuates losses in muscle mass and strength and preserves muscle quality during 14 d bed rest in middle-aged adults. NASA Human Research Program Investigators' Workshop, Houston, TX. February 2013 (15 min).

INVITED LECTURES AND SYMPOSIA

A. National

1. **English KL** and Amonette WE. Evidence-based practice in strength and conditioning. National Strength and Conditioning Association (NSCA) Annual Conference, Orlando, FL; July 17, 2010 (2 h).

B. Local

1. **English KL** and Amonette WE. Evidence-based Practice in Exercise Science. Lecture for PHS 6391 Evidence-based Rehabilitation, University of Texas Medical Branch, Galveston, TX, March 2017.
2. **English KL** and Amonette WE. Evidence-based Practice in Exercise Science. Lecture for PHS 6391 Evidence-based Rehabilitation, University of Texas Medical Branch, Galveston, TX, March 2015.
3. **English KL**. Exercise in Spaceflight for the Protection of Muscle and Performance. Aerospace Medicine Clerkship, NASA-Johnson Space Center, Houston, TX, (bi-annually, 2014-2017).
4. **English KL**. Exercise in Spaceflight for the Protection of Muscle and Performance. Preventive Medicine and Community Health Seminar Series, University of Texas Medical Branch, Galveston, TX, January 2014.
5. **English KL** and Amonette WE. Evidence-based Practice in Exercise Science. Lecture for PHS 6391 Evidence-based Rehabilitation, University of Texas Medical Branch, Galveston, TX, March 2013.
6. **English KL** and Amonette WE. Innovations in Technology for the Physical Education Teacher. Lecture given for the Deer Park Independent School District, Fairmont Middle School, Deer Park, TX, January 2007.

CURRICULUM VITAE

7. **English KL.** Body Mechanics, Back Safety, and Ergonomics. Series of presentations to Bayshore Medical Center staff. Bayshore Medical Center, Pasadena, TX, 2003-2004.
8. **English KL.** Post-bariatric Surgery Exercise Rehabilitation. Presented to Bariatric Surgery Support Group. Bayshore Medical Center, Pasadena, TX, October 2003 and February 2004.

PROFESSIONAL SERVICE

Journal Peer-review

Medicine and Science in Sports and Exercise
Journal of Athletic Training
Muscle and Nerve
Journal of Strength and Conditioning Research

TEACHING EXPERIENCE

Graduate

EXHS 5132: Applied Exercise Physiology: Cardiorespiratory
EXHS 5335: Exercise in Chronic Disease: Cardiopulmonary and Metabolic
EXHS 6033: Laboratory Techniques and Research Design

Undergraduate

HLTH 2110: Team Games and Sports
HLTH 2113: Individual Games and Sports
HLTH 2115: Innovative Games and Sports
HLTH 2301: Introduction to Exercise Science
HLTH 3309: Evidence-based Practice
HLTH 3739: Exercise Physiology Laboratory Practicum
HLTH 4034: Principles of Physical Fitness
HLTH 4309: Research Practicum
HLTH 4370: Undergraduate Laboratory Practicum

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

2003-present American College of Sports Medicine
2008-present National Strength and Conditioning Association
2009-present American Physiological Society

HONORS AND AWARDS

2018 NASA Group Achievement Award for ICEE-HOT capsule egress testing in Gulf of Mexico
2017 NASA Recognition of Excellence in support of 2017 Astronaut Selection Cycle
2012-2013 NASA/Texas Space Grant Consortium Graduate Fellowship
2012-2013 Robert Bennett Tuition Scholarship Award
2012 National Space Biomedical Research Institute's Predoctoral Gravitational Physiology

CURRICULUM VITAE

- Award (APS—Environmental & Exercise Physiology)
- 2012 Outstanding research poster at the National Space Biomedical Research Institute's NASA-Human Research Program Investigators' Workshop
- 2011-2012 NASA/Texas Space Grant Consortium Graduate Fellowship
- 2011-2012 Charles F. Otis Endowed Award for Clinical Research
- 2010-2011 NASA/Texas Space Grant Consortium Graduate Fellowship
- 2010-2011 Don W. Micks Scholarship in Preventive Medicine and Community Health
- 2010-2011 Emily E. Dupree Endowed Award for Excellence in Rehabilitation Science
- 2007-2012 Predoctoral Fellowship in Interdisciplinary Rehabilitation Research Training Program, supported by the National Center for Medical Rehabilitation Research, NIH
- 2006 Bravo Award—Wyle Life Sciences, Bioastronautics Contract
- 1997 Phi Theta Kappa National Honor Society