

Hui Ying Luk, Ph. D, CSCS

CURRICULUM VITAE

EDUCATION BACKGROUND

M.S. in Data Science, May 2024
Texas Tech University, Lubbock, TX

Ph.D. in Biology (Major: Exercise Physiology), 2018
University of North Texas, Denton, TX
Dissertation Title: Effect of the transient resistance exercise-induced testosterone increase on satellite cell activation.
Advisor: Dr. Jakob L. Vingren

M.S. in Kinesiology, 2013
University of Connecticut, Storrs, CT
Thesis Title: Acute resistance exercise stimulates sex-specific dimeric immunoreactive growth hormone response.
Advisor: Dr. William J. Kraemer

M.S. in Strength and Conditioning, 2011
Springfield College, Springfield, MA
Thesis Title: The Comparison of muscle force imbalance in powerlifters and jumpers.
Advisors: Drs. Margaret Jones and Brian Thompson

B.A. (Honor) in Physical Education and Recreation Management, 2008
Hong Kong Baptist University, Kowloon, Hong Kong
Honor Project Title: Exercise motivation and parental influence in Hong Kong rugby players.
Advisor: Dr. Bik Chu Chow

CURRENT ACADEMIC POSITION

Assistant Professor in Exercise Physiology (September 2018 – Present)
The Department of Kinesiology and Sport Management, Texas Tech University, Lubbock, TX.
Director of the Applied Exercise Physiology Laboratory

Primary Responsibilities:

- Director of the Applied Exercise Physiology Laboratory
 - Oversee the day-to-day operations, project management, and strategic planning of the laboratory. Foster a research environment that supports innovative studies in skeletal muscle physiology, hydration, and metabolic health.
- Grant Submissions to Federal Agencies and Foundations
 - Lead the development and submission of grant proposals to major funding bodies, including the National Institutes of Health (NIH) and private foundations to support research initiatives and expand laboratory capabilities.
- Manuscript Preparation and Submission

- Author and co-author peer-reviewed journal articles, presenting novel findings in physiology, skeletal muscle health, and metabolic function. Ensure timely submission and revision of manuscripts to high-impact journals.
- Establish and Maintain External and Internal Collaborations
 - Develop and sustain collaborative research partnerships to enhance research capacity and interdisciplinary projects.
- Mentorship of Undergraduate and Graduate Students
 - Supervise and mentor students in research projects, independent studies, and laboratory activities. Guide students through hypothesis development, experimental design, data analysis, and the presentation of findings at local and national conferences.
- Teaching Undergraduate and Graduate Courses
 - Deliver structured and engaging instruction in courses related to exercise physiology, skeletal muscle biology, and applied exercise science. Design curriculum that integrates current research, hands-on laboratory experience, and critical thinking exercises.

MEMBERSHIP IN PROFESSIONAL ORGANIZATION

American College of Sports Medicine

American Physiology Society

National Strength and Conditioning Association

RESEARCH AFFILIATIONS

Center of Excellence for Translational Neurosciences and Therapeutics (TTU HSC)

Center of Excellence for Integrative Health (TTU HSC)

TEACHING

SCHOLARSHIP OF TEACHING AND LEARNING

Courses Taught

Undergraduate

KIN 3305, Exercise Physiology

KIN 3305, Exercise Physiology (Online), eLearning Certified

KIN 3306, Applied Exercise Physiology

KIN 4000, Independent Studies

KIN 4305, Advanced Strength and Conditioning

KIN 4305, Advanced Strength and Conditioning (Hybrid)

KIN 5031, Independent Study

Graduate

KIN 7000, Research

KIN 7104, Seminar in Exercise Physiology

KIN 7303, Advanced Exercise Physiology II

RESEARCH MENTORING

Postdoctoral Mentorship

1. Benjamin Barr (2025 - Present)

Mentoring in grant writing and manuscript preparation with a focus on skeletal muscle physiology and metabolic health.

Doctoral Mentorship

1. Casey Appell (2021 – Present)
Doctoral student focused on the role of hydration and skeletal muscle recovery. Supervising experimental design, data analysis, and dissertation writing.
2. Nigel Jiwan (2020 – 2024)
Successfully mentored through doctoral research on the *Effect of Capsaicin and Heavy Resistance Exercise on Muscle Anabolic Signaling in Healthy Resistance-Trained Men*. Guided him from project conception to dissertation defense.

Master's Mentorship

1. Casey Appell (2019 – 2021)
Supervised master's thesis research in exercise physiology, leading to seamless transition into doctoral studies.

Doctoral Dissertation Committees

Chair

1. Casey Appell — *The Effect of Dehydration on Skeletal Muscle Recovery in Men and Women*
Current
Leading research on hydration status and muscle recovery, providing guidance in experimental protocols and manuscript development.
2. Nigel Jiwan — *Effect of Capsaicin and Heavy Resistance Exercise on Muscle Anabolic Signaling in Healthy Resistance-Trained Men*
Defended in 2024
Directed the project from hypothesis development to dissertation defense, contributing to peer-reviewed publications.

Committee Member

1. Arun Maharaj — *Effects of L-Citrulline Supplementation and Low-Intensity Resistance Exercise Training on Vascular Function, Body Composition, and Muscle Strength in Hypertensive Postmenopausal Women*
Completed in 2022
2. Mauricio A. Martinez — *Effects of Four Weeks of L-Citrulline and L-Arginine Supplementation on Postprandial Macro- and Microvascular Endothelial Function and the Effects of Supplementation on Macro- and Microvascular Endothelial Function during Superimposed Sympathetic Activity in Post-Menopausal Prediabetic Women*
Current

Doctoral Qualifying Exam Committees

Chair

1. Casey Appell
Led examination of doctoral competency in exercise physiology, metabolic health, and skeletal muscle adaptation.
2. Nigel Jiwan
Directed comprehensive assessment of theoretical knowledge and experimental design in muscle physiology.

Committee Member

1. Arun Maharaj
2. Mauricio A. Martinez

Master Thesis Committees

Chair

1. Casey Appell — *The Effect of Ginger Root (Zingiber officinale) Supplementation on Skeletal Muscle in Type 2 Diabetes Mellitus Rodent Model*
Completed in 2021
 Directed research on the metabolic and physiological effects of ginger supplementation in a diabetic model.

Committee Member

1. Alan Ky — *Thirst Sensation Does Not Affect Reaction Time But Decreases Mood in Men*
Completed in 2023
2. Matthew Nino — *Response to Endurance Training Using Critical Speed: Influence of Genetic Background and Exercise Intensity*
Completed in 2022

Independent Undergraduate Research (Presentations and Publications)

1. Travis Raif — *Muscle Damage Increases Autophagy Activation in Untrained Young Men*
January 2020 – May 2020
 Presentation: Annual Meeting of the American College of Sports Medicine (ACSM), 2020

Undergraduate Research Volunteers with Conference Presentations

1. Corey Lawrence
 Title: *Characterization of Physical and Cognitive Performance and Hydration in Older Adults*
Fall 2023 – Present
 Presentations: ACSM Annual Meeting, 2024; ACSM Texas Chapter Meeting, 2024
2. Jayln Dunlap
 Title: *The Effect of Capsaicin on Peak Force and Rate of Force Development in Resistance-Trained Men - A Pilot Study*
Spring 2023 – Present
 Presentation: ACSM Texas Chapter Meeting, 2024
3. Mia Uregas
 Title: *Dehydration and Heavy Resistance Exercise Effect on Intracellular and Intramuscular Fluid Shifts*
Spring 2023 – Spring 2024
 Presentation: ACSM Texas Chapter Meeting, 2024
4. Ryan Ellis
 Title: *The Effect of Hydration Status on Sleep Before and After Exercise: A Pilot Study*
Spring 2022 – Spring 2024
 Presentations: ACSM Annual Meeting, 2023; ACSM Texas Chapter Meeting, 2023
5. Carson Lewis
 Title: *The Effect of Dehydration and High-Volume Resistance Exercise on Intracellular and Local Muscular Fluid Shifts - A Pilot Study*
Spring 2022 – Spring 2023
 Presentation: ACSM Texas Chapter Meeting, 2023

6. Raoul Sterling

Title: *The Effect of Geranylgeraniol and Ginger on Satellite Cells Myogenic State in Type 2 Diabetic Rats*

Spring 2022 – Summer 2022

Publication: Current Issues in Molecular Biology, 2024

Undergraduate Research Volunteers (Support data collection, data analyses, and sample analyses)

1. Amar, Vaela

Project: Dehydration and Rehydration Impact on Physiology

Summer 2025 – Present

Roles: Data collection and data entry

2. Chelsea, Bere

Project: Dehydration and Rehydration Impact on Physiology

Summer 2025 – Present

Roles: Data collection and data entry

3. Karina Olvera

Projects: The Effect of Capsaicin on Anabolism, The Effect of Dehydration on Skeletal Muscle Recovery, Dehydration and Rehydration Impact on Physiology

Fall 2023 – Present

Roles: Data collection, PBMC isolation, sample processing, and optimizing H&E staining

4. Eyal Refaeli

Projects: The Effect of Dehydration on Skeletal Muscle Recovery, Dehydration and Rehydration Impact on Physiology

Fall 2024 – Present

Roles: Data collection and data entry

5. Hailee Fite

Project: The Effect of Dehydration on Skeletal Muscle Recovery

Fall 2024 – Present

Roles: Data collection

6. Sarah Walper

Project: The Effect of Dehydration on Skeletal Muscle Recovery

Fall 2024 – Present

Roles: Data collection, PBMC isolation, sample storage, and optimizing H&E staining

7. Corey Lawrence

Projects: The Effect of Capsaicin on Anabolism and The Effect of Dehydration on Skeletal Muscle Recovery

Fall 2023 – Present

Roles: Data collection and data entry

8. Jalyn Dunlap

Projects: The Effect of Capsaicin on Anabolism and The Effect of Dehydration on Skeletal Muscle Recovery

Fall 2022 – Present

Roles: Data collection and sample preparation

9. Alexis Mayberry
 Projects: The Effect of Capsaicin on Anabolism and The Effect of Dehydration on Skeletal Muscle Recovery
Fall 2023 – Spring 2025
 Roles: Data entry

10. Savannah Adjetey
 Projects: The Effect of Capsaicin on Anabolism and The Effect of Dehydration on Skeletal Muscle Recovery
Fall 2023 – Spring 2025
 Roles: Sample materials preparation

11. Andrew Schindel
 Projects: The Effect of Capsaicin on Anabolism
Spring 2023 – Spring 2024
 Roles: Cryo-sectioning and staining and data collection

12. Isabell Trevino
 Projects: The Effect of Dehydration on Sleep and Anabolism
Spring 2022 – Spring 2023
 Roles: Data collection, sample processing, PBMC isolation, western blotting

PRIOR ACADEMIC POSITION(S)

Graduate/Research Assistant (August 2013 – August 2018)
 Applied Physiology Laboratory, University of North Texas, Denton, TX.

Graduate Assistant (August 2011 – May 2013)
 Human Performance Laboratory, University of Connecticut, Storrs, CT.

Graduate Assistant (September 2008 - January 2010)
 Campus Recreation (Rugby Coach), Springfield College, Springfield, MA.

MEMBERSHIP IN PROFESSIONAL ORGANIZATION

American College of Sports Medicine (2013 – Present)
 American Physiology Society (2017 – Present)
 National Strength and Conditioning Association (2010 – Present)

PUBLICATIONS

Articles (refereed)

1. Luk, HY., Jiwan, N., Appell, C., Vellers, H., Levitt, DL., & Sekiguchi, Y. (2025) Passive Dehydration Increases Oxidative Stress and mTOR Signaling Pathway Activation in Young Men Following Resistance Exercise. *Journal of Physiology*. 603(12): 3551-3570. doi: 10.1113/JP288434.
2. Sekiguchi, Y., Jiwan, NC., Appell, CR., Moya, RM., Ky, AT., Keefe, MD., Dunn, RA., & Luk, HY. (2025). Impact of Hydration Status on Sleep and Recovery After Heavy Resistance Exercise. *Journal of Strength and Conditioning Research*. DOI: [10.1519/JSC.00000000000005225](https://doi.org/10.1519/JSC.00000000000005225)
3. Levitt, D., Khatabil, AL., Hall, RE., DiLeo, MR., Milles, CJ., Williams, AK., Appell, CR., Budnar, RG., & Luk, HY. (2025) Using Computer Vision Libraries to Streamline Nuclei Quantification. *Journal of Visualized Experiments*. 200. DOI:10.3791/67945.

4. Luk, H.Y., Levitt, D., Appell, C., & Jiwan, N. (2025) Resistance Exercise-induced Circulating Factors Influence the Damaged Skeletal Muscle Proteome in a Sex-dependent Manner. *Physiological Report*. 13 (7). doi: 10.14814/phy2.70291.
5. Appell, C., Jiwan, N., Sekigushi, Y., & Luk, HY. (2025) Passive Dehydration Reduces Muscle Thickness After Resistance Exercise. *Journal of Sports Sciences*. (43): 336-347. <https://doi.org/10.1080/02640414.2025.2456402>
6. Keefe, MS., Luk, HY., Rolloque, JS., Jiwan NC., & Sekiguchi, Y. (2025) Hydration Assessment in Males and Females using the WUT (Weight, Urine Color, and Thirst) Venn Diagram compared to Blood and Urinary Indices. *Nutrients*. 17(4):689. DOI: [10.3390/nu17040689](https://doi.org/10.3390/nu17040689)
7. Appell, C.R., Jiwan, N.C., Shen, C.L., & Luk, HY. (2024) Curcumin Mitigates Muscle Atrophy Potentially by Attenuating Calcium Signaling and Inflammation in a Spinal Nerve Ligation Model. *Current Issues in Molecular Biology*. 46(11), 12497-12511. <https://doi.org/10.3390/cimb46110742>
8. Jiwan, N.C., Appell, C.R., Sterling, R., Shen, C.L., & Luk, HY. (2024) The Effect of Geranylgeraniol and Ginger on Satellite Cells Myogenic State in Type 2 Diabetic Rats. *Current Issues in Molecular Biology*. 46(11), 12299-12310. <https://doi.org/10.3390/cimb46110730>
9. Elliott KB, Keefe MS, Rolloque JJS, Jiwan NC, Dunn RA, Luk HY, & Sekiguchi Y. (2024) Relationships between Morning Thirst and Later Hydration Status and Total Water Intake. *Nutrients*. 16, 3212: 1-10.
10. Dunn, RA., Luk, HY., Appell, C., Jiwan, NC., Keefe, MS., Rolloque, JS., & Sekiguchi, Y. (2024) Eccentric muscle-damaging exercise in the heat lowers cellular stress prior to and immediately following future exertional heat exposure. *Cell Stress and Chaperones*, 29 (3). <https://doi.org/10.1016/j.cstres.2024.05.001>
11. Dobson NL., Levitt, DE., Luk, HY., & Vellers, HL. Adverse Skeletal Muscle Adaptations in Individuals Born Preterm – A Comprehensive Review (2024). *Current Issues in Molecular Biology*, 46(5). <https://doi.org/10.3390/cimb46050276>
12. Appell, CR., Jiwan, NC., Wang, R., Shen, CL., & Luk, HY. (2024). Ginger Root Supplementation Attenuated Mitochondrial Fusion and Improved Skeletal Muscle Size in Type 2 Diabetic Rats. *In vivo*, 38(1). <https://doi.org/10.21873/invivo.13412>
13. Keefe, MS., Luk, HY., Rolloque, JS., Jiwan, NC., McCollum, TB., & Sekiguchi, Y. (2024). The WUT (Weight, Urine Color, and Thirst) Venn Diagram is an Accurate Tool Compared to Urinary and Blood Markers for Hydration Assessment at Morning and Afternoon Timepoints in Euhydrated and Free-Living Individuals. *The British journal of nutrition*, 131(7). <https://doi.org/10.1017/S000711452300274X>
14. Zinn, J., Sekiguchi, Y., Vingren, J., Luk, HY., Wright, SS., Munoz, CX., McKenzie, AL., Ganio, MS., McDermott, BP., Armstrong, LE., Williamson, K., & Bivona, JJ. (2023) LPS-induced TLR4 Activation during a 164-km and 100-km Cycling Event in a Hot and Humid Environment. Cytokine. *Asian Exercise and Sport Science Journal*, 7(1).
15. Jiwan, NC., Appell, R., Keefe, MS., Dunn, RA., Luk, HY., & Sekiguchi, Y. (2023). Storing urine samples with moisture preserves urine hydration marker stability up to 21 days. *International urology and*

nephrology, 10.1007/s11255-023-03581-6. Advance online publication. <https://doi.org/10.1007/s11255-023-03581-6>

16. Levitt, DE., **Luk, HY.**, & Vingren, JL. (2023). Alcohol, resistance exercise, and mTOR pathway signaling: An evidence-based narrative review. *Biomolecules*, 13(1). <https://doi.org/10.3390/biom13010002>
17. Jiwan, NC., Appell, C., Wang, Rui., Shen, CL., & **Luk, HY.** (2022). Geranylgeraniol Supplementation Mitigates Soleus Muscle Atrophy via Changes in Mitochondrial Quality in Diabetic Rats, *In Vivo*. DOI: 10.21873/invivo.12998. Epub 2022 Oct 29
18. **Luk, HY.**, Jiwan, NC., Appell, CR., Levitt, DE., & Vingren, JL. (2022). Sex Specific Mitochondrial Dynamics and Mitophagy Response to Muscle Damage, *Physiological Reports*. DOI: 10.14814/phy2.15230.
19. Al Masud, A. **Luk, HY.**, Shen, CL., & Chyu, MC. (2022). Impact of Local Vibration Training on Neuromuscular Activity, Muscle Cell, and Muscle Strength: a Review. *Critical Reviews in Biomedical Engineering*, DOI: 10.1615/CritRevBiomedEng.2022041625
20. Shen, CL., Watkins, BA., Kahathuduwa, C., Chyu, MC., Zabet-Moghaddam, M., Elmassry, MM., **Luk, HY.**, Brismee, JM., Knox, A., Lee, J., Zumwalt, M., Wang, R., Wager, TD., & Neugebauer, V. (2022). Tai Chi Improves Brain Functional Connectivity and Plasma Lysophosphatidylcholines in Postmenopausal Women with Knee Osteoarthritis: An Exploratory Pilot. *Frontiers in Medicine*, doi: 10.3389/fmed.2021.775344
21. **Luk, HY.**, Appell, C., Levitt, DE., Jiwan, NC., & Vingren, JL. (2021). Differential Autophagy Response in Men and Women After Muscle Damage. *Frontiers in Physiology*, <https://doi.org/10.3389/fphys.2021.752347>
22. Vingren, JL., Boyett, JC., Lee, EC., Levitt, DE., **Luk, HY.**, McDermott, BP., Munoz, CX., Ganio, MS., Armstrong, LE., & Hill, DW. (2022). Effect of Ibuprofen on Circulating Cytokine and Leukocyte Subset Responses to 164-km Road Cycling Event in a Hot Environment. *Research Quarterly for Exercise and Sport*, <https://doi.org/10.1080/02701367.2021.1981539>
23. **Luk, HY.**, Levitt, DE., Appel, C., & Vingren, JL. (2021). Sex dimorphism in muscle damage-induced inflammation. *Medicine & Science in Sports & Exercise*. 53 (8), 1595-1605, doi: 10.1249/MSS.0000000000002628
24. **Luk, HY.**, Jones, MT., & Vingren, JL. (2021). Effect of rest period configurations on systemic inflammatory response in resistance-trained women, *Journal of Sports Sciences*, <https://doi.org/10.1080/02640414.2021.1882725>
25. **Luk, HY.**, Appel, C., Chyu, MC., Chen, CH., Wang, CY., Yang, RS., & Shen, CL. (2020). Impacts of Green Tea on Joint and Skeletal Muscle Health: Prospects of Translational Nutrition, *Antioxidants*, 9(11), 1050, <https://doi.org/10.3390/antiox9111050>.
26. **Luk, HY.**, Levitt, DE., Boyett, JC., Rojas, S., Flader, SM., McFarlin, BK., & Vingren, JL. (2019). Resistance exercise-induced hormonal response promotes satellite cell proliferation in untrained men but not in women, *American Journal of Physiology: Endocrinology and Metabolism*, 317: E421-E432.

27. Levitt, DE., **Luk, HY.**, Duplanty A., Mcfarlin, BK., Hill, DW., & Vingren, JL. (2017). Effect of alcohol after muscle damaging resistance exercise on muscular performance recovery and inflammatory capacity in women. *European Journal of Applied Physiology*, 117 (6): 1195-1206.

28. Kunces, LJ., Keenan, J., Munoz, CX., **Luk, H.Y.**, Vingren, JL., & Carlson-Phillips, A. (2016). A multi-vitamin with relora® improves sleep latency and quality before an endurance cycling event. *Current Topics in Nutraceutical Research*, 14(4): 259-264.

29. **Luk, HY.**, Levitt, DE., Lee, EC., Ganio, MS., McDermott, BP., Kupchak, BR., McFarlin, BK., Hill, DW., Armstrong, LE., & Vingren, JL. (2016). Pro- and anti-inflammatory cytokine responses to a 164-km Road Cycle ride in a hot environment. *European Journal of Applied Physiology*, 116(10): 2007-2015.

30. **Luk, HY.**, McFarlin, BK., & Vingren, JL. (2016). Using Image-Based Flow Cytometry to monitor satellite cells proliferation and differentiation in vitro. *Methods*, 112(1): 175-181.

31. Kraemer, WJ., Hooper, DR., Kupchak, BR., Saenz, C., Brown, LE., Vingren, JL., **Luk, HY.**, Dupont, WH., Szivak, TK., Flanagan, SD., Caldwell, LK., Eklund, D., Lee, EC., Häkkinen, K., Volek, JS., Fleck, SJ., & Maresh, CM. (2016). The effects of roundtrip Trans-American jet travel on physiological stress, neuromuscular performance and recovery. *Journal of Applied Physiology*, 121(2): 438-48.

32. Donahue, RB., Vingren, JL., Duplanty, AA., Levitt, DE., **Luk, HY.**, & Kraemer, WJ. (2016). Acute effect of whole-body vibration warm-up on footspeed quickness. *Journal of Strength & Conditioning Research*, 30(8), 2286-91.

33. Duplanty, AA., Hill, DW., McFarlin, BK., **Luk, HY.**, Budnar, RG., Levitt, DE., Huggett, DB., & Vingren, JL. (2017) Effect of acute alcohol ingestion on resistance exercise induced mTORC1 signaling in human muscle. *Journal of Strength & Conditioning Research*, 31 (1): 54-61.

34. **Luk, HY.**, McKenzie, AL., Duplanty, AA., Budnar, RG., Levitt, D., Fernandez, A., Lee, EC., Armstrong, LE., & Vingren, JL. (2016). Leukocyte subset changes in response to a 164km bicycle ride in a hot environment. *International Journal of Exercise Science*, 9(1): 34-46.

35. Levitt, DE., Duplanty, AA., Budnar, RG., **Luk, HY.**, Fernandez, A., Layman, TJ., Fancher, DL., Hill, DW., McFarlin, BK., & Vingren, JL. (2016) The effect of post-resistance exercise alcohol ingestion on lipopolysaccharide-stimulated cytokines. *European Journal of Applied Physiology*, 116(2): 311-318.

36. Vingren, JL., Budnar, RG., McKenzie, AL., Duplanty, AA., **Luk, HY.**, Levitt, DE., & Armstrong, LE. (2016). The acute testosterone, growth hormone, cortisol, and interleukin-6 response to 164-km road cycling in a hot environment. *Journal of Sport Sciences*, 34(8): 694-9.

37. **Luk, HY.**, Kraemer, WJ., Szivak, TK., Flanagan, SD., Kupchak, BR., Hooper, DR., Kupchak, BR., Comstock, BA., Dunn-Lewis, C., Vingren, JL., Dupont, WH., & Hymer, WC. (2015) Acute resistance exercise stimulates sex-specific dimeric immunoreactive growth hormone response. *Growth Hormone & IGF Research*, 25(3): 136-40.

38. Kupchak, BR., McKenzie, AL., **Luk, HY.**, Saenz C., Kunces, LJ., Ellis, LA., Vingren, JL., Lee, EC., Ballard, KD., Johnson, EC., Kavouras, SA., Ganio, MS., Wingo, JE., Williamson, KH., & Armstrong, LE. (2015). Effect of cycling 164-km in the heat on procoagulant and fibrinolytic parameters. *European Journal of Applied Physiology*, 115(6): 1295-303.

39. Kraemer, WJ., Hooper, DR., Szivak, TK., Kupchak, BR., Dunn-Lewis, C., Comstock, BA., Flanagan, SD., Looney, DP., Sterczala, AJ., DuPont, WH., Pryor, JL., **Luk, HY.**, Maladoungdock, J., McDermott, D., Volek, JS., & Maresh, CM. (2015). The addition of beta-hydroxy-beta-methylbutyrate and isomaltulose to whey protein supplementation augments the recovery process. *Journal of the American College of Nutrition*, 11: 1-9.

40. **Luk, HY.**, Winter, C., O'Neill, E., & Thompson, BA. (2014). The Comparison of muscle force imbalance in powerlifters and jumpers. *Journal of Strength & Conditioning Research*, 28(1), 23-27.

41. Flanagan, SD., Comstock, BA., Dupont, WH., Sterczala, AJ., Looney, DP., Dombrowski, DH., McDermott, DM., Bryce, A., Maladoungdock, J., Dunn-Lewis, C., **Luk, HY.**, Szivak, TK., Hooper, DR., & Kraemer, WJ. (2014). Concurrent validity of the Armour39™ Heart Rate Monitor Strap. *Journal of Strength & Conditioning Research*, 28(3), 870-873.

42. Kraemer, WJ., Fragala, MS., van Henegouwen, WR., Gordon, SE., Bush, JA., Volek, JS., Triplett, NT., Dunn-Lewis, C., Comstock, BA., Szivak, TK., Flanagan, SD., Hooper, DR., **Luk, HY.**, & Mastro, AM. (2013). Responses of proenkephalin Peptide F to aerobic exercise stress in the plasma and white blood cell biocompartments. *Peptides*, 42, 118-24.

43. Dunn-Lewis, C., **Luk, HY.**, Comstock, BA., Szivak, TK., Hooper, DR., Kupchak, BR., Watts, AM., Putney, BJ., Hydren, JR., Volek, JS., Denegar, CR., & Kraemer, WJ. (2012). The Effects of a Customized Over-the-counter mouth guard on neuromuscular force and power production in trained men and women. *Journal of Strength & Conditioning Research*, 26(4), 1085-93.

44. Wolf, MR., Fragala, MS., Volek, JS., Denegar, CR., Anderson, JM., Comstock, BA., Dunn-Lewis, C., Hooper, DR., Szivak, TK., **Luk, HY.**, Maresh, CM., Häkkinen, K., & Kraemer, WJ. (2012). Sex differences in creatine kinase after acute heavy resistance exercise on circulating granulocyte estradiol receptors. *European Journal of Applied Physiology*, 112(9), 3335-40.

45. Dunn-Lewis, C., Kraemer, WJ., Kupchak, BR., Kelly, NA., Creighton, BA., **Luk, HY.**, Ballard, KD., Comstock, BA., Szivak, TK., Hooper, DR., Denegar, CR., & Volek, JS. (2011). A multi-nutrient supplement reduced markers of inflammation and improved physical performance in active individuals of middle to older age: a randomized, double-blind, placebo-controlled study. *Nutrition Journal*, 10, 90.

46. Comstock, BA., Solomon-Hill, G., Flanagan, SD., Earp, JE., **Luk, HY.**, Dobbins, KA., Dunn-Lewis, C., Fragala, MS., Ho, JY., Hatfield, DL., Vingren, JL., Denegar, CR., Volek, JS., Kupchak, BR., Maresh, CM., & Kraemer, WJ. (2011). Validity of the Myotest® in measuring force and power production in the squat and bench press. *Journal of Strength & Conditioning Research*, 25(8), 2293-7.

In Progress

1. **Luk, H. Y.**, Appell, C., Jiwan, N. C., Vellers, H., Sekiguchi, Y., Levitt, D. E. Fluid Restriction Enhances Mitochondrial Stress in Peripheral Blood Mononuclear Cells Following High-Volume Resistance Exercise in Healthy Young Males. (**Under review**)
2. **Luk, H. Y.**, Appell, C., Zhang, F., Blinch, J., Nair, K. Sreekumaran, Shen, C.-L., Levitt, D. E. Effects of Local Heat on Metabolic Health, Frailty Risk, and Exercise Adaptations in Pre-Diabetic Older Adults: Protocol for the Heat and Exercise in Aging as Therapy (HEAT) Clinical Trial. (**Under review**)

3. Ky, AT., Lee, E. Rolloque, J., **Luk, HY.**, Blinch, J., & Sekiguchi, Y. (2025) Thirst Increases Perceived Difficulty Concentrating and Thermal Strain: Comparing Oral and Intravenous Rehydration, A Randomized Trial. (**Under review**)
4. Sekiguchi, Y., Rolloque, JS., Keefe, MS., Jiwan, NC., Elliott, KB., Dunn, RA., Adams, WM., & **Luk, HY.** (2025) The Afternoon Urine Spot Sample is as Accurate as the Morning Spot Sample to Assess Hydration Status (**Under review**)

BOOK CHAPTERS

1. Kraemer, WJ, Beeler, MK, Post, EM, **Luk, HY.**, Lombard, JR, Dunn-Lewis, C., & Volek, JS. Chapter 49- Physiological Basis for Creatine Supplementation in Skeletal Muscle and the Central Nervous System, IN: Nutrition and Enhanced Sports Performance: Muscle Building, Endurance, and Strength (2nd Ed), Bagchi, D., Nair, S., Sen CK, Eds pgs 818, 2018.
2. Kraemer, WJ. Dunn-Lewis C., & **Luk, HY.** Ch 25 Role of Exercise in Diet and Weight Loss. *Obesity: epidemiology, pathophysiology, and prevention*, 2nd ed. Boca Raton: CRC Press, 2012. pp. 381-408.
3. Kraemer, WJ. **Luk, HY.** Lombard, JR. Dunn-Lewis C., & Volek, JS. Ch.39 Physiological Basis for Creatine Supplementation in Skeletal Muscle. *Nutrition and Enhanced Sports Performance: Recommendations for Muscle Building*, Bagchi, D., Nair, S., Sen CK, Eds, 2013.

PROFESSIONAL PRESENTATIONS

1. **Luk, HY.**, Duplanty, AA., Levitt, DE, Budnar, RG, McFarlin, BK, Hill, DW, & Vingren, JL. Increased Satellite Cell Proliferation when Cultured with Post-Exercise Serum: Role of Testosterone? *20th Annual Congress of the European College of Sport Science 2015*, Malmo, Sweden.
2. **Luk, HY.** The Influence of Resistance Exercise-Induced Testosterone on Satellite Cell Proliferation. *Texas Chapter of the American College of Sports Medicine Annual Meeting 2015*, Austin, TX.
3. **Luk, HY.** A Comparison of Muscle Strength Imbalance in Bilateral and Unilateral Predominant Contraction Sports. *New England Chapter of the American College of Sports Medicine Fall Meeting 2011*, Providence, RI.
4. **Luk, HY.** Participation Motivation based on experience and gender in Hong Kong Rugby. *Eastern District Association-AAHPERD Annual Convention 2011*, Long Branch, NJ.

ABSTRACTS

Presentations

1. Appell, C., Jiwan, NC., Lewis, C., Trevino, IR., Ellis, RO., Dunlap, J., Schindel, A., Oliveira, K., Uriegas, M., **Luk, HY.** Dehydration Increased Mitochondrial Fission and Autophagy Response to Resistance Exercise in Peripheral Blood Mononuclear Cells. *National Strength and Conditioning Association National Conference (2025)*.
2. Appell, C., Jiwan, NC., Lewis, C., Trevino, R., Ellis, RO., Dunlap, J., Schindel, A., Oliveira, K., Uriegas, M., **Luk, HY.** Dehydration Increased Cortisol and Decreased Muscle Size Without Altering the Autophagy Response to Resistance Exercise. *Physiology*, 40 (S1).
<https://doi.org/10.1152/physiol.2025.40.S1.0756> (2025).

3. Jiwan, NC., Appell, CR., Schindel, A., Uriegas, M., Berrios, J., Dunlap, J., **Luk, HY.** Effect of Capsaicin and Heavy Resistance Exercise On Ratings of Perceived Exertion and Muscle Swelling (2025). *Medicine & Science in Sports & Exercise* 57(10S), 639. DOI: 10.1249/01.mss.0001160312.70266.13
4. Dunn RA, **Luk HY**, Appell CR, Jiwan NC, Keefe MS, Rolloque JJS, & Sekiguchi Y. Eccentric muscle-damaging exercise in the heat lowers cellular stress prior to and immediately following future exertional-heat exposure (2024). *European Journal of Sports Science*.
5. Appell, CR., Jiwan, NC, & **Luk, HY.** (2024). Investigation on Transient Receptor Potential Vanilloid 1 (TRPV1) Activation in Skeletal Muscle: Pilot Studies. *Physiology*, 39(S1), 2051. <https://doi.org/10.1152/physiol.2024.39.S1.2051>
6. Appell, C. R., Jiwan, NC., Sekiguchi, Y., Levitt, DE., & **Luk, HY.** (2024) Dehydration and Resistance Exercise Increased Muscle and Immune Cell Oxidative Stress in Trained Men. *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 47. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/47>
7. Jiwan, NC., Levitt, DE, Appell, R., & **Luk, HY.** (2024). Resistance-Exercise-Induced Circulating Factors on Damaged Skeletal Muscle Tissue Proteome in Young Untrained Men. *Physiology*, 39(S1), 1251. <https://doi.org/10.1152/physiol.2024.39.S1.1251>
8. **Luk, HY.**, Jiwan, NC, Appell, C., Ellis, R., Trevino, I., Schindel, A., Sterling, R., Lewis, C., Ky, A., Moya, R., Dunlap, J., Washington, C., Levitt, DE., & Sekiguchi, Y. (2024). Mild Osmotic Stress Alters mTOR Pathway Signaling. *Physiology*, 39(S1), 1331. <https://doi.org/10.1152/physiol.2024.39.S1.1331>
9. Watkins, BA., Newman, JW., Faria Snodgrass, IR., Chyu, MC., Lee, J., **Luk, HY.**, Appell, C., Neugebauer, V., & Shen, CL. (2024). Tai Chi Exercise of Short Duration Alters Circulating Oxylipins in Post-Menopausal Women with Knee Osteoarthritis. *Annual Meeting of the American Society of Nutrition*.
10. Sekiguchi, Y., Jiwan, NC, Appell, CR, Moya, R., Ky, A., Sekiguchi, JS, Keefe, M. & **Luk, HY.** (2024). Dehydration Decreases Slow Wave Sleep After Heavy Resistance Exercise. *Physiology*, 39(S1), 1321. <https://doi.org/10.1152/physiol.2024.39.S1.1321>
11. Dunn, RA., Jiwan, NC., Appell, CR., Schindel, A., Ellis, R., Dunlap, J., Washington, C., Trevino, IR., Lewis, C., Moya, RE., Rolloque, JS., Keefe, MS., **Luk, HY.**, & Sekiguchi, Y. (2024) "The Effects of Hydration Status on Heart Rate Variability Following Supramaximal Intensity Exercise," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 33. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/33>
12. Keefe, M., Dunn, RA., Appell, CR., Jiwan, NC., Rolloque, JS., **Luk, HY.**, & Sekiguchi, Y. (2024) "Sleep Duration is Increased Following Muscle Damaging Exercise in Hot Environmental Conditions," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 6. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/6>
13. Moya, RE., **Luk, HY.**, Appell, CR., Ky, A., Elliott, KB., Dunlap, C., Jiwan, NC, & Sekiguchi, Y. (2024) "Habitual Fluid Intake Does Not Affect Sleep Parameters in Young Women," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 10. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/10>

14. Lawrence, C., Appell, CR., Jiwan, NC., Blinch, J., Ky, AT., Moya, RM., Keeney, CA., Sekiguchi, Y., & **Luk, HY.** (2024) "Characterization of Physical and Cognitive Performance and Hydration in Older Adults" *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 56. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/56>
15. Hollis, EA., Dunn, R., Appell, CR., Keefe, MA., Jiwan, NC., **Luk, HY.**, & Sekiguchi, Y. (2024) "The Effect of Eccentric Muscle-Damaging Exercise in the Heat on Perceptual Stress Measures During Future Exertional-Heat Exposure," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 70. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/70>
16. Mesquita, KA., Rolloque, JS., Keefe, MA., Dunn, R., Appell, CR., Jiwan, NC., **Luk, HY.**, & Sekiguchi, Y. (2024) "Morning vs Afternoon Differences in Hydration Status Assessments," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 72. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/72>
17. Uriegas, MA., Jiwan, NC., Appell, CR., Schindel, A., Ellis, RO., Dunlap, J., Washington, C., Trevino, I R., Lewis, CW., Rolloque, JS., Moya, R., Keefe, MA., Dunn, RA., Sekiguchi, Y., & **Luk, HY.** (2024) "Dehydration and Heavy Resistance Exercise Effect on Intracellular and Intramuscular Fluid Shifts" *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 118. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/118>
18. Dunlap, J., Jiwan, NC., Appell, CR., Schindel, A., Berrios, J., Adjetey, S., Uriegas, M., & **Luk, HY.** (2024) "The Effect of Capsaicin on Peak Force and Rate of Force Development in Resistance-Trained Men - A Pilot Study," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 16, Article 120. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss16/120>
19. Jiwan, NC., Appell, CR., Sterling, R., Shen, CL., & **Luk, HY.** The Effect of Geranylgeraniol On Satellite Cells Myogenic State In Type 2 Diabetic Rats: 663. *Medicine & Science in Sports & Exercise*: September 2023 - Volume 55 - Issue 9S - p 225-226. doi: 10.1249/01.mss.0000981804.13727.46
20. Appell, CR., Jiwan, NC., Shen, CL., & **Luk, HY.** Curcumin Mitigates Neuropathic-induce Muscle Atrophy By Suppressing CaMK2/NF- κ B Pathway: 2236. *Medicine & Science in Sports & Exercise*: September 2023 - Volume 55 - Issue 9S - p 737. doi: 10.1249/01.mss.0000986760.49418.c7
21. Ellis, RT., Jiwan, NC., Trevino, IR., Appell, CR., Lewis, C., Sterling, R., Ky, AT., Rolloque, JS., Keefe, MS., Dunn, RA., Sekiguchi, Y., & **Luk, HY.** The Effect Of Hydration Status On Sleep Before And After Resistance Exercise: A Pilot Study: 798. *Medicine & Science in Sports & Exercise*: September 2023 - Volume 55 - Issue 9S - p 277. doi: 10.1249/01.mss.0000982316.95448.64
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24. Pomroy, MM., Keefe, MS., Jiwan, NC., Rolloque, JS., Appell, CR., Benjamin, CL., **Luk, HY.**, & Sekiguchi, Y. (2023) Morning versus Afternoon Body Mass in Free-Living or Controlled Euhydration.

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26. Lewis, C., Jiwan, NC., Appell, CR., Trevino, IR., Ellis, RT., Sterling, R., Rolloque, JS., Ky, AT., Keefe, MS., Dunn, RA., Sekiguchi, Y., & **Luk, HY.** (2023) The Effect of Dehydration and High-Volume Resistance Exercise on Intracellular and Local Muscular Fluid Shifts - A Pilot Study, International Journal of Exercise Science: Conference Proceedings: Vol. 2: Iss. 15, Article 52.
<https://digitalcommons.wku.edu/ijesab/vol2/iss15/52>

27. Elliott, KB., Ky, AT., Appell, CR., Dunn, RA., Jiwan, NC, Dunlap, C, Tallam, GC., **Luk, HY.**, & Sekiguchi, Y. (2023) Impact of Habitual Water Intake on Muscle Quality and Total Body Water-A Pilot Study, International Journal of Exercise Science: Conference Proceedings: Vol. 2: Iss. 15, Article 37.
<https://digitalcommons.wku.edu/ijesab/vol2/iss15/37>

9. Shen, CL., Appell, CR., Jiwan, NC., Wang, R., & **Luk, HY.** Ginger Root Extract Supplementation Attenuated Mitochondrial Fusion and Improved Skeletal Muscle Size in Type 2 Diabetic Rats. *International Conference of Frailty & Sarcopenia Research* 2022.

10. Jiwan, NC., Appell, CR., Wang, R., Shen, CL., & **Luk, HY.** Geranylgeraniol Supplementation Mitigates Muscle Atrophy with Mitochondrial Quality Improvement In Diabetic Rats. *Annual meeting of the American College of Sports Medicine* 2022.

11. Appell, C. Jiwan, NC., Wang, R., Shen, CL., & **Luk, HY.** Ginger Root Extract Increases Mitochondrial Fission and Mitophagy in Diabetes Mellitus Rats. *Annual meeting of the American College of Sports Medicine* 2021.

12. Jiwan, NC., Appell, C., Wang, R., Shen, CL., & **Luk, HY.** Geranylgeraniol Increases Autophagy And Mitophagy Gene Expression In Soleus Of Rats With Diabetes. *Annual meeting of the American College of Sports Medicine* 2021.

13. Shen, CL., Kahathuduwa, C., Chyu MC., Brismee, JM, Know, A., Wang, R., **Luk, HY.**, Appell, C., O'Boyle, M., Zumwalt, M., Lee, J., Watkins, BA., & Neugebauer, V. Neurobiological Mechanisms of Pain Modulation from Tai-Chi: a single-arm pre/post pilot study. *Integrative Medicine & Health Symposium* 2021.

14. Jiwan, NC., Appel, C., Miller, K., Vellers, H., & **Luk, HY.** Acute Resistance Exercise-Induced Hormonal Response Increases Mitochondrial Fusion and Mitophagy Markers Only in Untrained Young Men. *Annual Conference of The American Physiological Society of Integrative Exercise Physiology* 2020.

15. Miller, KE., Vechin, FC., Jiwan NC., Appell, C., & **Luk, HY.** Proteomic Investigation of Resistance Exercise-Induced Hormonal Changes on Muscle Damage in Untrained Women: A Pilot Study. *Annual Conference of The American Physiological Society's Integrative Physiology of Exercise* 2020.

16. Wang, R., Ji, G., Dufour, JM., Kaur, G., Miranda, JM., Washburn, RL., Hibler, T., **Luk, HY.**, Neugebauer, V., & Shen, CL. Ginger Mitigates Pain Behaviors and Improves Colon Health in Obese Rats with Diabetic Neuropathy. *The Obesity Society Annual Meeting 2020.*

17. **Luk, HY.**, Appel, C., Fokar, M., & Vingren, JL. Sex Dimorphism in Muscle Damage-Induced Inflammation. *Annual meeting of the American College of Sports Medicine 2020.*

18. Appel, C., Fokar, M., Vingren, JL, & **Luk, HY.** Resistance Exercise-Induced Hormone Change Promotes Autophagy Response in Untrained Women. *Annual meeting of the American College of Sports Medicine 2020.*

19. Raif, T., Appel, C., Fokar, M., Vingren, JL, & **Luk, HY.** Muscle Damage Increases Autophagy Activation in Untrained Young Men. *Annual meeting of the American College of Sports Medicine 2020.*

20. **Luk, HY.**, Levitt, DE., Boyett, J., Rojas, S., Flader, SM., McFarlin, BK. FACSM, & Vingren, JL. FACSM. Resistance Exercise-Induced Hormonal Response Promotes Satellite Cell Proliferation in Untrained Men. *Annual meeting of the American College of Sports Medicine 2019, Orlando, FL.*

21. Vingren, JL. FACSM, Levitt, DE., Boyett, J., **Luk, HY.**, Moses, S., McFarlin, BK. FACSM, & Hill, DW. FACSM. Acute Alcohol Ingestion After Resistance Exercise Does Not Alter Phosphorylation of Upstream Proteins In The mTOR Signaling Pathway. *Annual meeting of the American College of Sports Medicine 2019, Orlando, FL.*

22. **Luk, HY.**, Levitt, DE., Boyett, JC., Rojas S., Flader, SM., McFarlin BK., & Vingren JL. Effect of the transient resistance exercise-induced hormonal response on satellite cell activity: A Pilot Study. *Advances in Skeletal Muscle Biology in Health and Disease 2017, Gainesville, FL*

23. Levitt, DE., **Luk, HY.**, Duplanty, AA., Hill, DW., McFarlin, BK., & Vingren, JL. Post-eccentric exercise alcohol ingestion and LPS-stimulated cytokines in resistance-trained women. *Advances in Skeletal Muscle Biology in Health and Disease 2017, Gainesville, Florida.*

24. Hosokawa, Y., Zinn, JR., Wright, S., Leduc, M., Howard, E., Casa, DJ., Stearns, RL., Huggins, RA., Adams, WM., Jardine, J., Davis, RJ., Armstrong, LE., Vingren, J., **Luk, HY.**, Levitt, D., Ganio, MS., McDermott, BP., Williamson, K., McKenzie, AL., Munoz, CX., Kunce, LJ., & Lee, EC. LPS-induced TLR4 activation during prolonged running and cycling events in hot and humid environments. *Experimental Biology 2017, Chicago, IL.*

25. Levitt, DE., **Luk, HY.**, Rojas, S., Duplanty, AA., Hill, DW., McFarlin, BK., & Vingren, JL. Acute post-resistance exercise alcohol consumption does not alter muscular performance recovery in women. *The National Strength and Conditioning Association's National Conference 2016, Las Vegas, NV.*

26. **Luk, HY.**, Levitt, D., McFarlin, BK., & Vingren, JL. Using Image-Based Flow Cytometry to monitor and track satellite cells *in vitro*. *Congress of the International Society for Advancement of Cytometry: Cyto, 2016, Seattle, WA.*

27. Levitt, DE., Duplanty, AA., **Luk, HY.**, Budnar, Jr., RG., Fernandez, A., Hill, DW., McFarlin, BK., & Vingren, JL. (July 2016). Effect of acute alcohol ingestion on resistance exercise induced mTOR signaling in men. *The National Strength and Conditioning Association's National Conference 2016, New Orleans, LA.*

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29. **Luk, HY.**, Duplanty, AA., Budnar, RG., Levitt, DE., Fernandez, A., McFarlin, BK., Hill, DW., & Vingren, JL. Glucocorticoid receptor content after heavy squat exercise is not affected by acute ethanol consumption. *The National Strength and Conditioning Association's National Conference 2016*, New Orleans, LA.

30. Cartas, KP., Levitt, DE., **Luk, HY.**, McFarlin, BK., Armstrong, LE., Hill, DW., Kupchak, BR., McKenzie, AL., Williamson, KH., Kunces, LJ., Munoz, CX., Lee, EC., & Vingren JL. Ibuprofen does not affect changes in leukocyte subsets in response to ultra-endurance cycling in the heat. *The National Strength and Conditioning Association's National Conference 2016*, New Orleans, LA.

31. South, ME, Levitt, DE., **Luk, HY.**, Kupchak, BR., Ganio, M., McDermott, B., Kunces, LJ., Munoz, CX., Lee, EC., Armstrong, LE., McFarlin, BK., Hill, DW., & Vingren JL. The effect of ibuprofen on pro-inflammatory cytokines in response to ultra-endurance cycling in the heat. *The National Strength and Conditioning Association's National Conference 2016*, New Orleans, LA.

32. Rojas, S., Levitt, DE., **Luk, HY.**, McKenzie, AL., Ganio, M., McDermott, B., Williamson, KH., Munoz, CX., Lee, EC., Armstrong, LE., McFarlin, BK., Hill, DW., & Vingren JL. Effect of ibuprofen on anti-inflammatory cytokine responses to ultra-endurance cycling in a high temperature environment. *The National Strength and Conditioning Association's National Conference 2016*, New Orleans, LA.

33. Kunces, LJ., Keenan, J., Munoz, CX., Lee, EC., **Luk, HY.**, Vingren, J., & Carlson-Phillips, A. Effects of a multi-vitamin with Relora® on sleep before an endurance cycling event. *Annual meeting of the American College of Sports Medicine 2016*, Boston, MA.

34. Hooper, DR., Secola, PJ., Dulkis, LL., Dupont, W., Saenz, C., Kupchak, BR., Szivak, TK., Comstock, BA., Flanagan, SD., Kalkowski, RJ., Volek, JS., Looney, D., Pryor, JL., **Luk, HY.**, Beauette, T., Thurston, T., Galpin, AJ., Maresh, CM., Brown, LE., & Kraemer, WJ. Trans-American travel within NCAA regulations induces jet lag which attenuates sleep quality and athletic performance. *Annual meeting of the American College of Sports Medicine 2015*, San Diego, CA.

35. McKenzie, AL., Vingren, JL., Kunces, L., Saenz, C., McDermott, BP., Ganio, MS., **Luk, HY.**, Duplanty, A., Budnar, R., Kupchak, BR., Lee, EC., & Armstrong, LE. Endogenous antioxidant enzyme response to a 164km cycling event in the heat. *Annual meeting of the American College of Sports Medicine 2015*, San Diego, CA.

36. Levitt, DE, Duplanty, AA, Budnar, RG, **Luk, HY.**, Fernandez, A, Layman, TJ, Fancher, DL, McFarlin, BK, Hill, DW, & Vingren, JL. The effect of alcohol consumption after heavy resistance exercise on lipopolysaccharide-stimulated IL-1 β , TNF- α , and IL-10. *The National Strength and Conditioning Association's National Conference 2015*, Orlando, FL.

37. Vingren JL, Budnar RG, Duplanty AA, Levitt DE, **Luk HY.**, Fernandez A, & Hill, DW. Effect of ethanol ingestion on the acute hormonal response to heavy resistance exercise in women. *The National Strength and Conditioning Association's National Conference 2015*, Orlando, FL.

38. **Luk, HY.**, Levitt, DE., Duplanty, AA., Budnar, RG., Fernandez, A., Layman, TJ., McKenzie, AL., Lee, EC., Armstrong, LE., Hill, DW., McFarlin, BK., & Vingren, JL. The T_H2 cytokines response to ultra-

endurance cycling in hot environment. The National Strength and Conditioning Association's National Conference 2014, Las Vegas, NV.

39. Duplanty, AA., Budnar, RG., **Luk, HY.**, Fernandez, A., Levitt, DE., Venable, AS., Hill, DW., DiMarco, NM., McFarlin, BK., & Vingren, JL. Engaging in resistance training is associated with greater femoral and spinal bone mineral density in male long distance runners. The National Strength and Conditioning Association's National Conference 2014, Las Vegas, NV.
40. Levitt, DE., **Luk, HY.**, Duplanty, AA., Budnar, RG., Fernandez, A., Layman, TJ., Mckenzie, A., Lee, EC., Armstrong, LE., McFarlin, B., & Vingren, JL. The pro-inflammatory cytokine response to ultra-endurance cycling in an extreme environment. The National Strength and Conditioning Association's National Conference 2014, Las Vegas, NV.
41. Layman, TJ, Duplanty, AA, Budnar, RG, **Luk, HY**, Cregar, CM, Idemudia, NO, Fernandez, A, Levitt, DE, Hill, DW, & Vingren, JL. Binge drinking following heavy eccentric resistance exercise: Effect on muscle power recovery in women. The National Strength and Conditioning Association's National Conference 2014, Las Vegas, NV.
42. Fernandez, A, Duplanty, AA, Budnar, RG, **Luk, HY**, Levitt, DE, Layman, TJ, Hill, DW, & Vingren, JL. Exercise intervention on performance measures related to cardiovascular and neuromuscular health in HIV+ women recovering from substance abuse. The National Strength and Conditioning Association's National Conference 2014, Las Vegas, NV.
43. **Luk, HY.**, Flanagan, SD., Kupchak, BR., Comstock, BA., Szivak, TK., Hooper, DR., Looney, DP., White, MT., DuPont, WH., Sterczala, AJ., Maladouangdock, J., Vingren, JL., Maresh, CM., & Kraemer, WJ. Growth hormone dimer release in untrained men and women after acute resistance exercise. Annual meeting of the American College of Sports Medicine 2014, Orlando, FL.
44. Vingren, JL., Duplanty, AA., Budnar, RG., **Luk, HY.**, Fernandez, A., Miller, J., & Hill, DW. Effect of combined aerobic and resistance training on HPA axis reactivity in HIV+ women undergoing treatment for substance abuse. Annual meeting of the American College of Sports Medicine 2014, Orlando, FL.
45. Budnar, RG., **Luk, HY.**, Duplanty, AA., Fernandez, A., Armstrong, LE., McKenzie AL., Johnson, E. C., Kupchak, BR., Lee, EC., Williamson, K., & Vingren, JL. Effects of Long Distance Cycling in a Hot Ambient Temperature on White Blood Cell Count. Annual meeting of the American College of Sports Medicine 2014, Orlando, FL.
46. McKenzie AL., Vingren, JL., Kunces, LJ., Saenz, C., McDermott, BP., Ganio, MS., **Luk, HY.**, Duplanty, AA, Budnar, RG., Kupchak, BR., Lee, EC., & Armstrong, LE. Endogenous antioxidant enzyme response to a 164km cycling event in the heat. Annual meeting of the American College of Sports Medicine 2014, Orlando, FL.
47. Vingren, JL., Adinoff, B., Duplanty, AA., Budnar, RG., **Luk, HY.**, Xiao, H., & Hill, DW. Muscle glucocorticoid receptors and long-term alcohol abuse: Preliminary findings. 13th Biennial Advances in Skeletal Muscle Biology in Health and Disease Conference 2014, Gainesville, FL.
48. Flanagan, SD., **Luk, HY.**, Kupchak, BR., Comstock, BA., Szivak, TK., Hooper, DR., Looney, DP., White, MT., DuPont, WH., Sterczala, AJ., Maladouangdock, J., & Kraemer, WJ. Untrained men and women demonstrate different growth hormone dimer concentration responses to acute resistance exercise. New England Chapter of the American College of Sports Medicine Fall Meeting 2013, Providence, RI.

49. Hooper DR., Szivak TK., Comstock BA., Dunn-Lewis C., Apicella JM., Looney DP., Flanagan SD., Creighton BC., **Luk HY.**, & Kraemer WJ. Effects of Fatigue from Resistance Training on Barbell Back Squat Biomechanics. *National Strength and Conditioning Association, National Conference 2013*, Las Vegas, NV.

50. Comstock BA., Dunn-Lewis C., Hooper DR., Szivak TK., Flanagan SD., Looney DP., Maladouangdock J., DuPont WH., McDermott DM., **Luk HY.**, Staron RS., & Kraemer WJ. Effects of Resistance Exercise on a Novel Growth Hormone Assay Signal in Men. *The National Strength and Conditioning Association, National Conference 2013*, Las Vegas, NV.

51. Kraemer WJ., Flanagan SD., Dunn-Lewis C., Comstock BA., Hooper DR., Szivak TK., Sterczala AJ., Bryce AR., & **Luk HY.** Effect of Ladder Climbing on Regional Anterior Pituitary Immunoreactive Growth Hormone Release in Male Rats. *National Strength and Conditioning Association, National Conference 2013*, Las Vegas, NV.

52. Flanagan SD., Dunn-Lewis C., Comstock BA., Hooper DR., Szivak TK., Looney DP., DuPont WH., Webster ET., Bryce AR., **Luk HY.**, Dombrowski DH., Giacchino CE., McDermott DM., Staron RS., & Kraemer WJ. Effects of Acute Resistance Exercise and Short-Term Training on Bioactive Prolactin Responses in Men. *National Strength and Conditioning Association, National Conference 2013*, Las Vegas, NV.

53. Hooper, DR., Comstock, C., Dunn-Lewis C, Luk, HY., Szivak, T., Hydren, JR., Heavens, K., Pandit, AL., Looney, D., Dombrowski, D., Smith, R., Denegar, CR., & Kraemer, WJ. Effects of a lower body compression garment on markers of recovery after a heavy resistance workout in women. *National Strength and Conditioning Association's National Conference 2012*, Providence, RI.

54. Comstock, C., Hooper, DR., Dunn-Lewis C, Luk, HY., Szivak, T., Hydren, JR., Heavens, K., Pandit, AL., Looney, D., Dombrowski, D., Smith, R., Denegar, CR., & Kraemer, WJ. Effects of a lower body compression garment on markers of recovery after a heavy resistance workout in men. *National Strength and Conditioning Association's National Conference 2012*, Providence, RI.

55. **Luk, HY.**, Thompson, BA., Winter, C., & O'Neill, E. Springfield College, Springfield, MA. Comparison of Muscle Strength Imbalance in Bilateral and Unilateral Predominant Contraction Sports. *New England Chapter of the American College and Sports Medicine Fall Meeting 2011*, Providence, RI.

56. Creighton, BC., Kupchak, B., Aristizabal, J., **Luk, HY.**, Hooper, DR., Looney, DP., Volek, J., Maresh, CM., & Kraemer, WJ. The influence of resistance training on primary hemostatic responses. *New England Chapter of the American College and Sports Medicine Fall Meeting 2011*, Providence, RI.

57. Comstock, C., Kelly, NA., Creighton, BC., Szivak, TK., Pandit, AL., **Luk, HY.**, Dombrowski, D., Volek, J., Maresh, CM., & Kraemer, WJ. The effect of total volume performed during acute heavy resistance exercise on circulating lymphocytes in untrained men. *New England Chapter of the American College of and Sports Medicine Fall Meeting 2011*, Providence, RI.

58. **Luk, HY.**, Participation Motivation based on experience and gender in Hong Kong Rugby. NASPE Undergraduate Research Session /Association of the American Alliance for Health, Physical, Education, Recreation and Dance National Convention 2011, San Diego, CA.

FUNDING

External Application (Awarded)

1. **Agency:** National Institute of Health/National Institute of Aging
Title: Glycemic control and frailty risk in older people at risk for type 2 diabetes: Impact of local heat therapy - R01AG084597
Luk HY (multi-PI), Levitt DE (multi-PI), Zhang, FY (Co-I)
Amount Obtained: \$3,505,732
Duration: Aug 2024- July 2029
2. **Agency:** National Strength and Conditioning Association, Young Investigator Award
Title: The Effect of Dehydration on Sleep and Anabolism
Luk HY (PI)
Amount Obtained: \$24,000
Duration: 2022-2025
3. **Agency:** American River Nutrition
Title: Effect of annatto-derived geranylgeraniol (GG) on statin-associated myopathy.
Shen CL (PI, 10%), Ansari M. (Co-I), Dunn D. (Co-I), **Luk HY (Co-I)**, Lee J. (Co-I)
Amount Obtained: \$266,294
Duration: 2022-2025
4. **Agency:** South Plains Foundation
Title: Tocotrienols Supplementation for Postmenopausal Women with Sarcopenia: A Pilot Study.
Shen CL (PI, 15%). Culberson, J (co-I), Palmer T (co-I), Yang, SP (co-I), **Luk HY (Co-I)**, Robyn Richmond (Co-I), Watkins BA (co-I).
Amount Obtained: \$15,000
Duration: 9/1/2018-8/31/2019
5. **Agency:** National Strength and Conditioning Association Foundations
Title: Effect of the transient resistance exercise-induced testosterone increase on satellite cell activation.
Luk HY (Student-PI)
Amount Obtained: \$15,000
Duration: 9/1/2015-8/31/2017
6. **Agency:** American College of Sports Medicine Texas Chapter
Title: The influence of resistance exercise-induced testosterone on satellite cell proliferation
Luk HY (Student-PI)
Amount Obtained: \$1,000
Duration: 2/27/2015-8/31/2015
7. **Agency:** National Strength and Conditioning Association Foundations
Title: Travelling and Exercise Performance
Luk HY (Student-PI)
Amount Obtained: \$5,000
Duration: 9/1/2015-8/31/2017

Funding (Research Mentor)

1. **Agency:** Texas American College of Sports Medicine, Doctoral Research Grant, 2025

Title: The Effect of Dehydration on the Systemic and Intramuscular Response to Muscle Damage and its Impact on Recovery.

Appell, C. (Student)

Amount Obtained: \$1,750

2. **Agency:** Texas American College of Sports Medicine, Doctoral Research Grant, 2023

Title: The Effect of 3-Day Heat Exposure on Muscle and Performance Recovery

Jiwan, N.C. (Student)

Amount Obtained: \$1,750

3. **Agency:** Texas American College of Sports Medicine, Master Research Grant, 2020

Title: The Effect of Resistance Exercise-Induced Hormone Change on Autophagy Response in Untrained Men and Women

Appell, C. (Student)

Amount Obtained: \$1,000

Internal Applications (Awarded)

1. **Agency:** Texas Tech University

Title: Dehydration, Rehydration, and Impact on Physiology

Luk HY (PI)

2. **Agency:** American River Nutrition, Inc., Hadley, MA.

Title: Tocotrienols supplementation for postmenopausal women with low muscle strength

Luk HY (Co-I)

3. **Agency:** Center of Excellence for Translational Neurosciences and Therapeutics, TTUHSC.

Title: Tai Chi for pain management: a pilot mechanistic study.

Luk HY (Co-I)

External Application (Denied)

1. **Agency:** National Strength and Conditioning Association Foundations, Young Investigator Grant, 2022

Title: The Effect of Animal-Based Diet on Satellite Cell Myogenesis and Muscle Recovery: Gut-Muscle Axis

Luk, HY. (PI)

2. **Agency:** National Institutes of Health, 2019

Title: Clinical Investigation of Tai Chi and n-3 PUFA on endocannabinoid modulation and brain fMRI connectivity in knee OA pain

Luk, HY. (Co-I)

3. **Agency:** National Strength and Conditioning Association Foundations, Young Investigator Grant, 2019

Title: Effect of Resistance Exercise Intensity on Cannabinoid Receptor 1 and Muscle Anabolism in Untrained Normal Weight and Obese Young Women

Luk, HY. (PI)

4. **Agency:** National Institute of Aging, Research Center Collaborative Network, 2019

Title: Effect of Chronic L-Citrulline Supplementation on Cardiometabolic and Skeletal Muscle Health in Post-Menopausal Women with Prediabetes

Luk, HY. (co-PI)

5. Agency: Highbush Blueberry Council, 2019

Title: Targeting endothelial function with blueberry supplementation to treat or prevent hypertension and skeletal muscle weakness in older women

Luk, HY. (co-PI)

6. Agency: Texas American College of Sports Medicine, Doctoral Research Grant, 2014

Title: Effect of alcohol on low back muscle strength recovery after moderate trunk extension exercise in men and women

Luk, HY. (Student-PI)

7. Agency: National Strength and Conditioning Association, Doctoral Research Grant, 2014

Title: Acute resistance exercise on satellite cells: *In Vivo* and *In Vitro*.

Luk, HY. (Student-PI)

SERVICES

DEPARTMENT SERVICE

1. Departmental Safety Committee 2024 - Present
2. Faculty Search Committee, 2025
3. Scholarships Committee, 2020, 2021, 2022, 2023
4. Qualifying Exam Committee, 2020
5. Faculty Awards Committee, 2022

UNIVERSITY SERVICE

1. Institutional Laboratory Safety Committee, Committee Member, 2025 - Present
2. Grad School General Fellowship Evaluations, 2025
3. TTU Undergraduate Research Conference Reviewer, 2024

EDITORIAL BOARD/ REVIEWER

Editorial Board- Frontiers in Physiology (Exercise Physiology section)

Journals Reviewer

Grant Proposals Reviewer – National Strength and Conditioning Association Foundation

Abstract Reviewer – National Strength and Conditioning Association

Abstract Reviewer – American College of Sports Medicine Texas Chapter

HONORS AND AWARDS

1. Robert B. Toulouse Fellowship, 2013 – 2018
University of North Texas
Description: This is the most prestigious fellowship at University of North Texas and is only awarded to approximately 8 students each year.
2. Manuscript Award, 2018
American College of Sports Medicine Texas Chapter
Description: Up to four students were recognized as manuscript award recipients based on the evaluation by a committee of TACSM faculty members.
3. Minority Scholarship, 2016
National Strength and Conditioning Association
Description: It is a nationwide scholarship to encourage minority to enter the field of Strength and Conditioning.

4. Irma Caton Scholarship, 2016
University of North Texas
Description: It is a scholarship for outstanding graduate student within the Department of Kinesiology, Health Promotion, and Recreation.
5. Marrow's Family Scholarship, 2016
University of North Texas
Description: It is a scholarship for outstanding graduate student within the Department of Kinesiology, Health Promotion, and Recreation.
6. Women's Scholarships, 2015
National Strength and Conditioning Association
Description: It is a nationwide scholarship to encourage women to enter the field of Strength and Conditioning.
7. Delta Psi Kappa Scholarship, 2015
University of North Texas
Description: It is a scholarship for outstanding graduate student within the Department of Kinesiology, Health Promotion, and Recreation.
8. The Irma Caton Scholarship, 2015
University of North Texas
Description: It is a scholarship for outstanding graduate student within the Department of Kinesiology, Health Promotion, and Recreation.
9. Manuscript Award, 2014
American College of Sports Medicine Texas Chapter
Description: Up to four students were recognized as manuscript award recipients based on the evaluation by a committee of TACSM faculty members.
10. Outstanding Master's Student Scholarship, 2013
University of Connecticut
Description: It is a scholarship for outstanding graduate student within the Department of Kinesiology.
11. Undergraduate Student Investigator Award, 2011
American Alliance for Health, Physical Education, Recreation and Dance - Eastern District Association
Description: One of the students was recognized as the award recipient based on the evaluation on the presentation of the undergraduate research by the committee of Eastern District Association members
12. Hong Kong Rugby Football Union Scholarship, 2003-2005
Hong Kong Rugby Football Union
Description: Scholarship was given to potential youth rugby player.
13. Women's Development Player of the Year, 2004-2005
Hong Kong Rugby Football Union
Description: This award was given to the best rugby player.

CERTIFICATIONS

Certified Strength and Conditioning Specialist (CSCS) - National Strength and Conditioning Association
Badminton School Coach Certificate – Hong Kong Badminton Association Ltd.
Rugby Level 1 Coaching Course Certificate of Attendance – International Rugby Board
Physical Fitness Foundation Certification Course – Physical Fitness Association of Hong Kong, China

ADDITIONAL PROFESSIONAL EXPERIENCE

Strength and Conditioning Coach (Internship), 2009-2010

Springfield College, Springfield, MA

Responsibilities: Assisted Strength and Conditioning coach in teaching, and implementing comprehensive strength and conditioning programs, cleaned and maintained the facility and equipment.

Library Technician, 2009-2011

Springfield College Library, Springfield College, MA

Responsibility: Assisted with interlibrary loan process.

Tutor (After-class program), 2008

Education Plus Center, Hong Kong

Responsibilities: Reviewed class materials and monitored students' homework progress.

Program Coordinator (Internship), 2007

Hong Kong Rugby Football Union, Hong Kong

Responsibilities: Managed and responded to project related email, managed and organized University representative team tryout, requested or acquired training equipment or supplies necessary for the rugby practice, organized, coordinated and managed a tournament in GuangZhou, China.

Rugby Coach, 2006-2007

Hong Kong Baptist University, Hong Kong

Responsibilities: Prepared practice plan, provided a safe physical environment, taught the rules of rugby, directed players in competition.

Badminton Coach, 2007

Ying Chi Center, Hong Kong

Responsibilities: Prepared practice plan, provided a safe physical environment, taught the rules of badminton.