SANDRA K. HUNTER, PH.D.

FELLOW OF THE AMERICAN COLLEGE OF SPORTS MEDICINE (FACSM)

OCTOBER, **2023**

| PRIMARY POSITION | PROFESSOR Exercise Science Program Department of Physical Therapy | |
|---|--|-------------|
| | DIRECTOR: ATHLETIC & HUMAN PERFORMANCE RESEARCH CENTER Office of Research and Innovation https://www.marguette.edu/athletic-human-performance-research-center/ | |
| | <i>Marquette University</i> Rm 230N, Cramer Hall PO Box 1881 Milwaukee, W 53201 | |
| AFFILIATE POSITIONS | EDITOR-IN-CHIEF - JOURNAL Exercise and Sport Science Reviews | |
| | ASSOCIATE EDITOR - JOURNAL Medicine and Science in Sports and Exercise | |
| CONTACT | 414.288.6673 <u>Sandra.Hunter@marquette.edu</u> | |
| RESEARCH EXPERTISE | Aging: Athletic Performance, Fatigability, and the Protective Effects of Exercise Tr Sex Differences in Fatigability and Athletic Performance Diabetes: Muscle Function and Fatigability Exercise Training: Neuromuscular Fatigability and Strength Training COVID-19: Persistent Effects of Long COVID on Physical Function | aining |
| IMPACT OF RESEARCH: | H Index: 55 (Google Scholar, October 1, 2023) | |
| | i10-Index: 110 (# publications with 10 or more citations) | |
| I. EDUCATION | | |
| Postdoctoral Research Associate | <i>University of Colorado</i> , Boulder, CO Neural Control of Movement Laboratory, Department of Kinesiology and Applied Physiology Director: Professor Roger M Enoka. | 1999 - 2003 |
| Doctor of Philosophy Exercise & Sport Science | University of Sydney, Australia Dissertation: 'Human Skeletal Muscle Function and Morphology: The Effects of Ageing and Exercise' Advisor: Associate Professor Martin Thompson. | 1998 |
| Graduate Diploma Human Movement Science | University of Wollongong, Australia | 1992 |
| Bachelor of Education Physical Education & Health | University of Sydney, Australia | 1985 |

II. ACADEMIC, SCHOLARLY AND PROFESSIONAL EXPERIENCE

Director

| Athletic and Human Performance Research Center |
|--|
| Marquette University, Milwaukee, WI |
| Office of Research and Innovation |

06.2020 - present

| Professor | <i>Marquette University</i> , Milwaukee, WI Exercise Science Program, Department of Physical Therapy | 08.2014 - present |
|---------------------------------|--|---------------------|
| Planning Director | Athletic and Human Performance Research Center <i>Marquette University</i> , Milwaukee, WI Office of Research and Innovation | 09.2018 - 06.2020 |
| Associate Professor | <i>Marquette University</i> , Milwaukee, WI Exercise Science Program, Department of Physical Therapy | 08.2009 - 07.2014 |
| Assistant Professor | <i>Marquette University</i> , Milwaukee, WI Exercise Science Program, Department of Physical Therapy | 08.2003 - 07.2009 |
| Postdoctoral Research Associate | University of Colorado, Boulder, CO Neural Control of Movement Laboratory Department of Kinesiology and Applied Physiology Research: Mechanisms of neuromuscular fatigue and muscle function: aging and sex differences Director: Professor Roger M Enoka | 04.1999 - 07.2003 |
| Research Assistant | Nepean Hospital , Sydney, Australia Division of Geriatrics & Rehabilitation Research: Strength and aerobic training in dependent old adults | 1998 - 1999 |
| Research Assistant | University of Sydney , Australia School of Physiotherapy and School of Exercise & Sport Science | 1994 - 1999 |
| Teaching Assistant | <i>University of Sydney</i> , Australia School of Exercise & Sport Science Teaching areas: exercise physiology and biomechanics | 1992 - 1996 |
| High School Teacher | Downlands College , Toowoomba, Queensland, Australia Physical Education, Health & Geography Teacher; Women's Sports Coordina | 1985 - 1988 ator |

III. PUBLICATIONS

A. REFEREED JOURNAL PUBLICATIONS

2023 (15 publications to date)

- 149. Hunter SK, Angadi SS, Bhargava A, Harper J, Hirschberg AL, Levine BD, Moreau K, Nokoff N, Stachenfeld N, Bermon S. The biological basis of sex differences in athletic performance: consensus statement for the American College of Sports Medicine. <u>Translational Journal of the American College of Sports Medicine</u>. 8(4),2023. DOI: 10.1249/TJX.00000000000236. and joint published in <u>Medicine and Science in Sports and Exercise</u> Sep 29. doi: 10.1249/MSS.000000000003300. Online ahead of print, 2023.
- 148. Atkinson MA, James JJ, Quinn ME, Senefeld JW, <u>Hunter SK</u>. Sex Differences in Track and Field Elite Youth. DOI: <u>https://sportrxiv.org/index.php/server/preprint/view/324</u>
- 147. Heck, J, Boos Z, Fial AV, Lennon SL, Smith CS, <u>Hunter SK</u>, Farquhar WB, Capin J. Long-term Function and Cardiometabolic Health in Former Athletes: A Scoping Review. British Medical Journal Open Sport & Exercise Medicine. (accepted for publication, Sept 25, 2023)
- 146. James JJ*, Klevenow EA*, Atkinson MA, Vosters EE, Bueckers EP, Quinn ME, Kindy SL, Mason AP, Nelson SK, Rainwater KAH, Taylor PV, Zippel EP, and <u>Hunter SK.</u> Underrepresentation of Women Participants in Exercise Science and Physiology Research is Associated with Authorship. <u>Journal of Applied Physiology</u> (in press, August 27, 2023). <u>https://journals.physiology.org/doi/abs/10.1152/japplphysiol.00377.2023?rfr_dat=cr_pub++0pubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org</u>
- 145. Solleiro Pons M, <u>Hunter SK</u>, Ansdell P. Sex differences in fatigability and recovery following a 5 km running time trial. <u>European</u> <u>Journal of Sport Science</u> Open access July 2023 <u>https://doi.org/10.1080/17461391.2023.2233483</u>

- 144. Sara LK, Gutsch SB, Hoeger-Bement M & <u>Hunter SK</u> Altered plantar flexor strength and pain sensitivity cannot be assumed in chronic midportion Achilles tendinopathy. <u>Exercise, Sport and Movement</u> (accepted for publication, August 9, 2023)
- 143. Zhou Z, Alqahtani SZ Schmit BD, Durand MJ, <u>Hunter SK</u>, Hyngstrom A. Sex-specific impact of stroke on neuromuscular fatigability. Journal of Neurologic Physical Therapy (in revision, August 2023)
- 142. Nesburg RA, Mason AP, Fitzsimmons B, <u>Hunter SK</u> Sex differences in marathon running: physiology and participation <u>Exercise</u>, <u>Sport and Movement</u>, 1(3):e00010, July 2023. | <u>doi: 10.1249/ESM.000000000000010</u>
- 141. Nokoff NJ, Senefeld JW, Krausz C, <u>Hunter SK</u>, Joyner MJ. Hormonal basis of sex differences in athletic performance: Perspectives on transgender athletes. <u>Exercise and Sport Sciences Reviews</u>, 51(3):85-95. 2023. <u>Doi: 10.1249/JES.000000000000317</u>. PMID: 37057897
- 140. Pereira HM and <u>Hunter SK</u>. Cognitive challenge as a noninvasive probe to expose sex-and age-related differences during static contractions. *Frontiers in Physiology May* 16;14:1166218, 2023. doi: 10.3389/fphys.2023.1166218. eCollection 2023.PMID: 37260592
- 139. Senefeld JW, <u>Hunter SK</u>, Coleman D, Joyner MJ. Case Studies in Physiology: Male to Female Transgender Swimmer in College Athletics. *Journal of Applied Physiology* 134: 1032–1037, 2023. <u>https://doi.org/10.1152/japplphysiol.00751.2022</u>
- 138. Boyer KA, Hayes KL, Umberger BR, Adamczyk PG, Bean JF, Brach JS, Clark BC, Clark DJ, Ferrucci L, Finley J, Franz JR, Golightly YM, Hortobágyi T, <u>Hunter SK</u>, Narici M, Nicklas B, Roberts T, Sawicki G, Simonsick E, and Kent JA. Age-related changes in gait biomechanics and their impact on the metabolic cost of walking: Report from a National Institute on Aging workshop. <u>Experimental Gerontology</u>. Mar;173:112102. doi: 10.1016/j.exger.2023.112102. Epub Jan 21, 2023. <u>PMID: 36693530</u>
- 137. Piacentine LB, Barbosa HC, Haglund KA, Opielinski LE, <u>Hunter SK</u>, Papanek PE, Hoeger Bement MK, Johnson, NL. Lived Experiences of American Adults who Survive COVID-19: Implications for Physical Activity and Interpersonal Stress. <u>Families</u>, <u>Systems</u>, and <u>Health</u>. 41 (3), 308–319. <u>https://doi.org/10.1037/fsh0000792</u> <u>https://psycnet.apa.org/fulltext/2024-10422-002.pdf</u>
- 136. Fulton TJ, Sundberg CW, Arney BE, <u>Hunter SK</u>. Sex differences in the speed duration relationship across the lifespan. <u>Medicine</u> <u>Science Sports and Exercise</u> May 1;55(5):911-919, 2023. doi: 10.1249/MSS.000000000003112. Epub 2022 Dec 28. <u>PMID:</u> <u>36728809</u>
- 135. Hunter SK, From the Editor. Exercise and Sport Sciences Reviews, 51(1):1, Jan 2023.

2022 (3 publications)

- 134. Beradi, G, Senefeld J, <u>Hunter SK</u>, Bement M. Localized Pain and Fatigue Three Days Following Submaximal Resistance Exercise in People with and without Fibromyalgia: Exercise Recovery or Symptom Exacerbation <u>Journal of Pain</u> (accepted for publication).
- 133. Wrucke DJ, Hoeger Bement MK, Harkins AL, <u>Hunter SK</u>, Stolzman S, Kaugars AS. Health Sciences Students' Mental Health, Physical Activity, and Career Commitment During the COVID-19 Pandemic. <u>Journal of the American Health College</u>, Oct 19;1-8. <u>https://doi.org/10.1080/07448481.2022.2128679</u>
- 132. Haischer MH, Beilfuss R, Hart MR, Opielinski L, Schmit E, Wrucke D, Zhao H, Uhrich TD, <u>Hunter SK.</u> Who was wearing a mask in 2021? Update on gender-, age-, and location-related differences during the COVID-19 pandemic. MedRxiv 2022. <u>https://www.medrxiv.org/content/10.1101/2022.01.18.22269479v1</u> DOI: https://doi.org/10.1101/2022.01.18.22269479

2021 (9 publications)

- 131. Senefeld JW, <u>Hunter SK</u>, Coleman Lambelet D, Joyner MJ. <u>Transgender swimmer in college athletics</u>. MedRxiv 2021. <u>https://doi.org/10.1101/2021.12.28.21268483</u>
- Delgadillo JD, Sundberg CW, Kwon M, <u>Hunter SK</u>. Fatigability of the knee extensor muscles during high- and low-load resistance exercise in young and older adults <u>Journals of Gerontology</u> Oct 15, Volume 154, 2021, <u>https://doi.org/10.1016/j.exger.2021.111546</u> PMID: 34492255
- 129. Sara LK, Gutsch SB, & <u>Hunter SK</u> The single-leg heel raise does not predict maximal plantar flexion strength in healthy males and females. <u>*PloS One*</u> Aug 20;16(8):e0253276, 2021. <u>DOI: 10.1371/journal.pone.0253276</u>. eCollection 2021. PMID: 34415915
- 128. Varesco G, <u>Hunter SK</u> & Rozand V. Physical activity and aging research: opportunities abound. <u>Applied Physiology, Nutrition, and</u> <u>Metabolism</u> Aug;46(8):1004-1006, 2021 <u>DOI: 10.1139/apnm-2020-1062</u>.
- 127. Berardi G, Senefeld JW, <u>Hunter SK</u>, Hoeger Bement MK. Fitness levels do not explain greater performance fatigability of the upper extremity in fibromyalgia. <u>European Journal of Applied Physiology</u>. Aug;121(8):2363-2364, 2021. <u>DOI: 10.1007/s00421-021-04695-4</u> Epub 2021 Apr 22. PMID: 33885990

- 126. Senefeld JW, Haischer MH, Jones AM, Wiggins CC, Beilfuss R, Joyner MJ & <u>Hunter SK.</u> Technological advances in elite marathon performance. <u>Journal of Applied Physiology</u> Jun 1;130(6):2002-2008, 2021. <u>DOI: 10.1152/japplphysiol.00002.2021</u>. Epub 2021 May 13. PMID: 33982594
- 125. Berardi G, <u>Hunter SK</u>, Frey Law L and Hoeger Bement MK. Tolerance to submaximal eccentric exercise in women with and without fibromyalgia, moving away from anecdotal beliefs. <u>*The Journal of Pain*</u>. May; 22(5):608. <u>https://doi.org/10.1016/j.jpain.2021.03.120</u>
- 124. Berardi G, Senefeld JW, <u>Hunter SK</u> and Hoeger Bement MK. Impact of isometric and concentric resistance exercise on pain and fatigue in fibromyalgia. <u>European Journal of Applied Physiology</u>. May;121(5):1389-1404, 2021. <u>DOI: 10.1007/s00421-021-04600-z</u>. Epub 2021 Feb 22. PMID: 33616753
- 123. Zijdewind I, Hyngstrom AS, <u>Hunter SK</u>. Fatigability in clinical and special populations: an important metric of motor performance <u>Frontiers in Physiology (Exercise Physiology)</u>. Feb 11;11:570861, 2021.<u>DOI: 10.3389/fphys.2020.570861</u>.

2020 (13 publications)

- 122. Negro F, Bathon KE, Nguyen JN, Bannon CG, Orizio C, <u>Hunter SK</u>, Hyngstrom AS. Impaired firing behavior of individually tracked paretic motor units during fatiguing contractions of the dorsiflexors and functional implications post stroke. <u>Front Neurol [Neurorehab]</u> 29 Oct 2020. <u>https://doi.org/10.3389/fneur.2020.540893</u>.
- 121. Haischer MH, Beilfuss R, Hart MR, Opielinski L, Wrucke D, Zirgaitis G, Uhrich TD, <u>Hunter SK.</u> Who is wearing a mask? Gender-, age-, and location-related differences during the COVID-19 pandemic. <u>Plos ONE</u>, Oct 15, 2020. <u>https://doi.org/10.1371/journal.pone.0240785</u>.
- 120. * Ansdell P, Thomas K, Hicks K, <u>Hunter SK</u>, Howatson G, Goodall S. Physiological sex differences affect the integrative response to exercise: acute and chronic implications. <u>Exper Physiol</u>, 105: 2007–2021, 2020 <u>https://doi.org/10.1113/EP088548</u>. * *Inaugural Review Prize Winner*
- 119. Ansdell P, Škarabot J, Atkinson E, Corden S, Tygart A, Hicks KM, Thomas K, <u>Hunter SK</u>, Howatson G, Goodall S. Sex differences in fatigability following exercise normalised to the power-duration relationship. <u>J Physiol [Lond]</u>, 598: 24, 5717–5737, 2020 https://doi.org/10.1113/JP280031.
- 118. Senefeld JW, Singh-Peters LA, Kenno KA, and <u>Hunter SK</u>, and Jakobi JM. Greater fatigue resistance of dorsiflexor muscles in people with prediabetes than Type 2 Diabetes. <u>J Electromyogr Kinesiol</u>, Vol 54, Oct, 2020. <u>https://doi.org/10.1016/j.jelekin.2020.102458</u>.
- 117. Kwon M, Senefeld JW, and <u>Hunter SK</u>. Attenuated activation of knee extensor muscles during fast contractions in older men and women. <u>Eur J Appl Physiol</u>, Vol 120, 2289–2299, 2020. PMID: 32789699. <u>https://doi.org/10.1007/s00421-020-04451-0</u>
- 116. Senefeld JW, Keenan KG, Ryan KS, D'Astice SE, Negro F and <u>Hunter SK</u>. Greater fatigability and motor unit discharge variability in human type 2 diabetes. <u>*Physiol Rep*</u>, Jul;8(13):e14503, 2020. DOI: 10.14814/phy2.14503. PMID: 32633071, PMCID: PMC7379048
- 115. Teigen, L, Sundberg CW, Kelly L, <u>Hunter SK</u>, and Fitts RH. Ca2+ dependency of limb muscle fiber contractile mechanics in young and older adults. <u>Amer J Physiol: Cell Physiol</u>, Jun;318 (6): C1238-C1251, 2020. doi: 10.1152/ajpcell.00575.2019. PMID: 32348175 <u>https://journals.physiology.org/doi/abs/10.1152/ajpcell.00575.2019</u>
- Joyner M, <u>Hunter SK</u>, Lucia A, and Jones A. Last Word on Viewpoint: Physiology and fast marathons. <u>J Appl Physiol</u> 128: 1086– 1087, 2020. https://doi.org/10.1152/japplphysiol.00181.2020.
- Joyner M, <u>Hunter SK</u>, Lucia A, and Jones A. Physiology and Fast Marathons. <u>J Appl Physiol</u> 128: 1065–1068, 2020. doi: 10.1152/japplphysiol.00793.2019. PMID: 31944889 <u>https://journals.physiology.org/doi/pdf/10.1152/japplphysiol.00793.2019</u>
- 112. Senefeld JW, Harmer AR, Magill SB, Harkins A, and <u>Hunter SK</u>. Greater fatigability of the lower limb in people with type 2 diabetes and prediabetes. <u>Med Sci Sport Exer</u> May;52(5):1176-1186, 2020. DOI: 10.1249/MSS.00000000002238. PMID: 31815831. <u>https://pubmed.ncbi.nlm.nih.gov/31815831/?from_term=Greater+fatigability+of+the+lower+limb+in+people+with+type+2+diabetes+an_d&from_pos=2</u>
- 111. Rozand V, Sundberg CW, <u>Hunter SK</u>, Smith AE. Age-related deficits in voluntary activation: a systematic review and meta-analysis. <u>Med Sci Sports Exer.</u> 52 (3), 549-560, 2020. doi:10.1249/MSS.00000000002179. PMID: 31688647.
- 110. Senefeld J, D'Astice S, Harmer AR, and <u>Hunter SK</u>. Increased cardiovascular response to a 6-minute walk test in people with type 2 diabetes. <u>Diabetes Spectrum</u>. Feb;33(1):104-110, 2020. doi: 10.2337/ds19-0002. PMID: 32116462

2019 (10 publications)

- 109. Ansdell P, Brownstein CG, Škarabot J, Hicks KM, Howatson G, Thomas K, <u>Hunter SK</u>, Goodall S. Methodological issues influence determination of critical force during intermittent exercise: authors' reply. <u>J Physiol.</u> Dec;597(24):5987-5989, 2019. doi: 10.1113/JP279085. PMID: 31763698
- 108. Ansdell P, Brownstein CG, Škarabot J, Hicks KM, Howatson G, Thomas K, <u>Hunter SK</u>, and Goodall S. Sex differences in fatigability and recovery relative to the intensity-duration relationship. <u>J Physiol.</u> 597 (23), 5577-5595, 2019. doi: 10.1113/JP278699.] PMID: 31529693.
- 107. Sundberg CW, Prost RW, Fitts RH, <u>Hunter SK</u>. Bioenergetic basis for the increased fatigability with ageing. <u>J Physiol.</u> Oct;597(19):4943-4957, 2019. doi: 10.1113/JP277803. PMID: 31018011
- Senefeld JW, <u>Hunter SK</u>. Are masters athletic performances predictive of human aging in men and women? <u>Mov Sport Sci/Sci Mot</u>. July 12, 2019. <u>https://doi.org/10.1051/sm/2019018</u>.
- Rozand V, Senefeld JW, Sundberg CW, <u>Hunter SK</u>. Differential effects of aging and physical activity on corticospinal excitability of upper and lower limb muscles. <u>J Neurophysiol</u>. Jul 1;122(1):241-250, 2019. <u>https://doi.org/10.1152/jn.00077.2019</u>, PMID:31091158
- 104. Ansdell P, Brownstein CG, Škarabot J, Hicks KM, Simoes D, Thomas K, Howatson G, <u>Hunter SK</u>, Goodall S. Menstrual cycle associated modulations in neuromuscular function and fatigability of the knee extensors in eumenorrheic females. <u>J Appl Physiol</u>, Jun 1;126(6):1701-1712, 2019. <u>https://doi.org/10.1152/japplphysiol.01041.2018</u>, PMID: 30844334
- 103. Murphy S, Durand M, Negro F, Farina D, <u>Hunter SK</u>, Schmit B, Gutterman D, Hyngstrom A. The relationship between blood flow and motor unit firing rates in response to fatiguing exercise post-stroke. <u>Front Physiol</u>. May 10;10:545, 2019. doi: 10.3389/fphys.2019.00545. eCollection 2019. PMID: 31133877. <u>https://www.frontiersin.org/articles/10.3389/fphys.2019.00545/full</u>
- 102. Deering RE, Pashibin T, Cruz M, <u>Hunter SK</u>, Hoeger Bement M. Fatiguing trunk flexor exercise decreases pain sensitivity in postpartum women. <u>Frontiers in Physiology</u>, Mar 26;10:315. doi: 10.3389/fphys.2019.00315. eCollection 2019. PMID: 30971949 <u>https://www.ncbi.nlm.nih.gov/pubmed/30971949</u>
- 101. Senefeld J, Limberg JK, Lukaszewicz KM and <u>Hunter SK.</u> Exercise-induced hyperemia is associated with knee extensor fatigability in adults with Type 2 diabetes. <u>J Appl Physiol</u>. Mar 1;126(3):658-667, 2019. PMID: 30605399.
- 100. Pereira HM, Schindler-Delap B, Keenan KG, Negro F, Farina D, Hyngstrom AS, Nielson KA, and <u>Hunter SK.</u> Oscillations in neural drive and age-related reductions in force steadiness with a cognitive challenge. <u>J Appl Physiol</u>, Apr 1;126(4):1056-1065, 2019. <u>https://doi.org/10.1152/japplphysiol.00821.2018</u>, PMID: 30817244

2018 (10 publications)

- Murphy SA, Negro F, Farina D, Onushko T, Durand M, <u>Hunter SK</u>, Schmit BD and Hyngstrom AS. Stroke increases ischemia-related decreases in motor unit discharge rates <u>J Neurophysiol</u>, 120: 3246 –3256, 2018. doi: 10.1152/jn.00923.2017. PMID: 30379629
- Pereira HM, Schlinder-Delap B, Nielson KA, <u>Hunter SK</u>. Force steadiness during a cognitively challenging motor task is predicted by executive function in older adults. <u>Frontiers in Physiology</u> 9(1316), 2018.
- Sundberg CW, <u>Hunter SK</u>, Trappe SW, Smith CS, Fitts R. Effects of elevated H+ and Pi on the contractile mechanics of skeletal muscle fibres from young and old men: implications for muscle fatigue in humans. <u>J Physiol</u>. Sep;596(17):3993-4015, 2018. PMID: 29806714 PMCID: PMC6117549.
- Deering RE, Senefeld JW, Pashibin T, Neumann DA, Cruz M, <u>Hunter SK</u>. Fatigability of the lumbopelvic stabilizing muscles in women 8 and 26 weeks postpartum. <u>Journal of Women's Health Physical Therapy</u>. Sep-Dec;42(3):128-138. 2018. PMID: 30740039. PMCID: PMC6366649.
- Senefeld J, Magill SB, Harkins A, Harmer AR, <u>Hunter SK.</u> Mechanisms for the increased fatigability of the lower limb in people with Type 2 Diabetes. <u>J Appl Physiol</u>. Aug 1;125(2):553-566, 2018. PMID: 29596017
- Deering RE, Cruz M, Senefeld JW, Pashibin T, Eickmeyer S, <u>Hunter SK.</u> Impaired trunk flexor strength, fatigability, and steadiness in postpartum women. <u>Med Sci Sports Exer</u>. Aug;50(8):1558-1569, 2018. PMID: 29554014.
- Hunter SK. Performance Fatigability: Mechanisms and Task Specificity. <u>Cold Spring Harb Perspect Med (Biology of Exercise)</u>. May 15. pii: a029728. doi: 10.1101/cshperspect.a029728, 2018. PMID: 28507192. (Invited Review).
- 92. Sundberg CW, Kuplic A, Hassanlouei H, <u>Hunter SK.</u> Mechanisms for the age-related increase in fatigability of the knee extensors in old and very old adults. *J Appl Physiol* (1985). Jul 1;125(1):146-158, 2018. doi: 10.1152/japplphysiol.01141.2017 PMID: 29494293

- 91. Keenan, KG, Senefeld JW & <u>Hunter SK.</u> Girls in the Boat: Sex Differences in Rowing Performance and Participation. <u>PLOS ONE.</u> Jan 19;13(1):e0191504. doi: 10.1371/journal.pone.0191504. eCollection 2018. PMID: 29352279.
- Senefeld JW, Pereira HM, Elliott N, Yoon T and <u>Hunter SK.</u> Sex differences in mechanisms of recovery after isometric and dynamic fatiguing tasks. <u>Med Sci Sports Exerc</u>. 50(5):1070-108, 2018. PMID: 29298217, PMCID: PMC5899026

2017 (9 publications)

- Rozand V, Senefeld JW, Hassanlouei H, <u>Hunter SK.</u> Voluntary activation and variability during maximal dynamic contractions with aging. <u>Eur J Appl Physiol</u>. Dec;117(12):2493-2507 2017. PMID: 29058113. <u>https://www.ncbi.nlm.nih.gov/pubmed/29058113</u>
- Andsell P, Thomas K, Howatson G, <u>Hunter SK</u>, Goodall S. Contraction intensity and sex differences in knee-extensor fatigability. <u>J</u> <u>Electromyogr Kinesiol</u>. Dec;37:68-74. 2017. doi: 10.1016/j.jelekin.2017.09.003. PMID: 28963937
- Hassanlouei H, Sundberg W, Smith E, Kuplic A, and <u>Hunter SK</u>. Physical activity modulates corticospinal excitability of the lower limb in young and old adults. <u>J Appl Physiol</u>, Aug 1;123 (2):364-374. DOI: 10.1152/japplphysiol.01078.20162017. PMCID: PMC5614787.
- Casamento-Moran A, <u>Hunter SK</u>, Chen YT, Kwon MH, Fox EJ, Yacoubi B, Christou EA. Sex-differences in spatial accuracy relate to the neural activation of antagonistic muscles in young adults. <u>Experimental Brain Research</u>. Aug;235(8):2425-2436, 2017. PMID: 28500456
- Lee A, Baxter J, Eischer C, Gage M, <u>Hunter SK</u>, Yoon T. Sex differences in neuromuscular function after repeated eccentric contractions of the knee extensor muscles. <u>Eur J Appl Physiol</u>, Jun;117(6):1119-1130. PMID: 28432420.
- Deering RE, Senefeld JW, Pashibin T, Neumann DA, <u>Hunter SK</u>. Muscle function and fatigability of trunk flexors in men and women <u>Biology of Sex Differences</u>. Apr 17; 8:12, 2017. DOI: 10.1186/s13293-017-0133-y. eCollection 2017. PMID: 28428836.
- Kirking M, Berrios Barillas R, Nelson PA, <u>Hunter SK</u>, Hyngstrom AS. Sex differences in neuromuscular fatigue of the knee extensors post stroke <u>Brain Sci</u> Jan 12;7(1). 2017. PMCID: PMC5297297 DOI: 10.3390/brainsci7010008
- Sundberg CW, <u>Hunter SK</u>, Bundle MW. Rates of performance loss and neuromuscular activity in men and women during cycling: evidence for a common metabolic basis of muscle fatigue. <u>J Appl Physiol</u> (1985). Jan 1;122(1):130-141, 2017. doi: 10.1152/japplphysiol.00468.2016. PMID: 27856712
- Senefeld J, Yoon T and <u>Hunter SK</u>. Age differences in dynamic fatigability and variability of arm and leg muscles: associations with physical function. <u>Experimental Gerontology</u> Jan; 87: 74–83, 2017. PMID: 27989926, PMCID: PMC5362345

2016 (8 publications)

- Hunter SK, Pereira HM, Keenan KG. The aging neuromuscular system and motor performance. <u>J Appl Physiol</u> Oct 1;121(4):982-995, 2016. doi: 10.1152/japplphysiol.00475.2016.PMID: 27516536. PMCID: PMC5142309. (Invited Review).
- Hunter SK. The relevance of sex differences in performance fatigability. <u>Med Sci Sports Exerc</u>. Nov;48(11):2247-2256, 2016 PMID: 27015385 (Invited Review).
- Hunter SK, McNeil CJ, Butler JE, Gandevia SC, Taylor JL. Short-interval cortical inhibition and intracortical facilitation during submaximal voluntary contractions changes with fatigue. <u>Experimental Brain Research</u>. Sep;234(9):2541-51, 2016. doi: 10.1007/s00221-016-4658-9. PMID: 27165508. PMCID: PMC5349854
- 77. Senefeld J, Smith C and <u>Hunter SK</u>. Sex differences in participation, performance and the age of ultramarathon runners. <u>International Journal of Sports Physiology and Performance</u> Jul;11(7):635-42, 2016. doi: 10.1123/ijspp.2015-0418. PMID: 26561864
- Senefeld J, <u>Hunter SK</u>. Molecular underpinnings of diabetic polyneuropathy. <u>J Appl Physiol</u> (1985). Jul 1;121(1), 360, 2016. doi: 10.1152/japplphysiol.00380.2016. PMID: 27451278
- Deaner RO, Addona V, Carter RE, Joyner MJ, <u>Hunter SK.</u> Fast men slow more than fast women in a 10 kilometer road race. <u>PeerJ</u>. 2016 Jul 21;4:e2235. doi: 10.7717/peerj.2235. eCollection 2016. PMID: 27547544
- Hunter SK. Sex differences in fatigability of dynamic contractions. <u>Exp Physiol</u>. Feb;101(2):250-5, 2016. doi: 10.1113/EP085370. PMID: 26440505. (Invited Review).
- 73. Senefeld J, Joyner MJ, Stevens AA and <u>Hunter SK.</u> Sex differences in elite swimming with advanced age are less than marathon running. <u>Scandinavian Journal of Medicine and Science in Sports</u>. Jan;26(1):17-28, 2016 PMID: 25648250

2015 (10 publications)

- Durand M, Schaefer K, <u>Hunter SK</u>, Schmit BD and Hyngstrom AS. Impaired Hyperemic Response to Exercise Post Stroke. <u>PLOS</u> <u>One</u>. 2015 Dec 2;10(12). PMCID: PMC4667998
- Stolzman S, Danduran M, <u>Hunter SK</u> and Hoeger Bement M. Pain response after maximal aerobic exercise in adolescents across weight status. <u>Medicine & Science in Sports and Exercise</u>. Nov;47(11):2431-40, 2015. PMCID: PMC4598265
- Yoon T, Doyel R, Widule C and <u>Hunter SK</u>. Sex differences with aging in the fatigability of dynamic contractions. <u>Experimental</u> <u>Gerontology</u>. Oct;70:1-10, 2015. PMID: 26159162
- Pereira HM, Spears VC, Schlinder-Delap B, Yoon T, Harkins A, Nielson KA, Hoeger-Bement M and <u>Hunter SK.</u> Sex differences in arm muscle fatigability with cognitive demand in older adults. <u>*Clinical Orthopaedics and Related Research*</u>. Aug;473(8):2568-77. 2015. PMID: 25712862
- Pereira HM, Spears VC, Schlinder-Delap B, Yoon T, Nielson KA and <u>Hunter SK</u>. Age and sex differences in steadiness of elbow flexor muscles with imposed cognitive demand. <u>European Journal of Exercise Physiology</u>, Jun;115(6):1367-79, 2015. PMID: 25633070
- 67. <u>Hunter SK</u>, Joyner MJ and Jones AW. Last Word on Veiwpoint: The two-hour marathon: what's the equivalent for women? <u>Journal of</u> <u>Applied Physiology</u>. May 15;118(10):1329, 2015.
- 66. <u>Hunter SK</u>, Joyner MJ and Jones AW. The two-hour marathon: what's the equivalent for women? <u>Journal of Applied Physiology</u>. May 15;118(10):1321-3, 2015.
- Kuhnen HR, Rybar MM, Onushko T, Doyel R, <u>Hunter SK</u>, Schmit BD and Hyngstrom AS. The stroke-related effects on maximal dynamic hip flexor fatigability and functional implications. <u>Muscle Nerve</u>. 51(3):446-8, 2015. PMID: 25399720
- 64. Deaner RO, Carter RE, Joyner MJ, <u>Hunter SK.</u> Men are more likely than women to slow in the marathon. <u>Medicine and Science in</u> <u>Sports and Exercise</u>. 47(3):607-16, 2015. PMID: 24983344.
- Lemley K, <u>Hunter SK</u> & Hoeger Bement MK. Conditioned pain modulation predicts exercise-induced hypoalgesia in healthy adults. <u>Medicine and Science in Sports and Exercise</u> 47(1):176-84, 2015. PMID: 24870571

2014 (12 publications)

- Ploutz-Snyder L, Bloomfield S, Bemben D, <u>Hunter SK</u>, Smith SM, Templeton K. Effects of sex and gender on adaptation to space: musculoskeletal health. *Invited review <u>Journal of Women's Health</u> Nov;23(11):963-6, 2014. PMCID: PMC4235589.*
- Yoon T, Vanden Noven ML, Nielson KA, <u>Hunter SK</u>. Brain areas associated with force steadiness and intensity during isometric ankle dorsiflexion in men and women. <u>Experimental Brain Research</u> 232(10): 3133-3145, 2014. PMCID: PMC4172577.
- Vanden Noven M, Pereira HM, Yoon T, Stevens AA, Nielson KA, & <u>Hunter SK</u>. Motor variability during sustained contractions increases with cognitive demand in older adults <u>Frontiers in Aging Neuroscience</u> May, Volume 6, Article 97, 2014. PMCID: PMC4033244.
- Keller-Ross ML, Pereira H, Pruse J, Yoon T, Schlinder-Delap B, Nielson KA, & <u>Hunter SK</u>. Stressor-induced increase in muscle fatigability of young men and women is predicted by strength but not voluntary activation. <u>Journal of Applied Physiology</u> Apr;116(7):767-78, 2014. PMCID: PMC3972745.
- Rybar M, Walker E, Kuhnen HR, Ouellette D, <u>Hunter SK</u> &. Hyngstrom AS. The stroke-related effects of hip flexion fatigue on over ground walking. <u>Gait and Posture</u> Apr;39(4):1103-8, 2014. PMCID: PMC4007512.
- 57. <u>Hunter SK</u>. Sex differences in human fatigability: mechanisms and insight to physiological responses. (*Invited Review*) <u>Acta</u> <u>Physiologica</u>, 210(4), 768–789, 2014. PMCID: PMC4111134.
- Harmer AR, Ruell PA, <u>Hunter SK</u>, McKenna MJ, Thom JM, Chisholm DJ, Flack JR. Effects of type 1 diabetes, sprint training and sex on skeletal muscle sarcoplasmic reticulum Ca²⁺ uptake and Ca²⁺-ATPase activity. <u>Journal of Physiology</u> 592 (Pt 3):523-35, 2014. PMID: 24297852.
- Keller-Ross ML, Schlinder-Delap B, Doyel R, Larsen G & <u>Hunter SK.</u> Muscle fatigability and control in men with posttraumatic stress disorder. <u>Medicine and Science in Sports and Exercise</u> Jul;46(7):1302-13, 2014. PMID: 24389520.
- Hoeger Bement MK, Drewek B, & <u>Hunter SK</u>. Men report greater pain relief following sustained static contractions than women when matched for baseline pain. <u>Journal of Motor Behavior</u> 46(2):107-13, 2014. PMID: 24528132.

- 53. Hoeger Bement MK, Weyer A, Yoon T, <u>Hunter SK</u>. Corticomotor excitability during a noxious stimulus and following exercise in women with fibromyalgia. *Journal of Clinical Neurophysiology* Feb;31(1):94-8, 2014. PMID: 24492452.
- 52. Lemley K, Drewek B, & <u>Hunter SK</u> & Hoeger Bement MK. Pain relief following isometric exercise is not task-dependent in older men and women. <u>Medicine and Science in Sports and Exercise</u> Jan;46(1):185-91. 2014. PMID: 23793233.
- Hyngstrom AS, Kuhnen HR, Kirking KM & <u>Hunter SK.</u> Functional implications of impaired control of submaximal hip flexion following stroke. <u>Muscle and Nerve</u> Feb;49(2):225-32, 2014.

2013 (3 publications)

- Senefeld J, Yoon T, Bement MH and <u>Hunter SK</u>. Fatigue and recovery from dynamic contractions in men and women differ for arm and leg muscles. <u>Muscle and Nerve</u> 48(3):436-9, 2013. PMCID: PMC3951745.
- 49. <u>Hunter SK</u> and Stevens A. Sex differences in marathon running with advanced age: physiology or participation? <u>Medicine and</u> <u>Science in Sports and Exercise</u> Jan;45(1):148-56. 2013.
- Yoon T, Schlinder-Delap B, & <u>Hunter SK.</u> Fatigability and recovery of arm muscles with advanced age for dynamic and isometric contractions. <u>Experimental Gerontology</u> 48(2):259-68, 2013. PMCID: PMC3557758.

2012 (2 publications)

- Yoon T, Schlinder-Delap B, Keller ML, <u>Hunter SK</u>. Supraspinal fatigue impedes recovery from a low-intensity sustained contraction in old adults. <u>Journal of Applied Physiology</u> 112(5): 849-58, 2012. PMCID: PMC3311661.
- Hyngstrom AS, Onushko T, Heitz R, Rutkowski A, <u>Hunter SK</u>, & Schmit BD. Stroke-related neuromuscular fatigue of the hip flexors and functional implications. <u>American Journal of Physical Medicine & Rehabilitation</u> 91(1):33-42, 2012. PMCID: PMC3940208.

2011 (4 publications)

- Keller ML, Pruse J, Yoon T, Schlinder-Delap B & Harkins A, <u>Hunter SK</u>. Supraspinal fatigue is similar in men and women for a lowforce fatiguing contraction. <u>Medicine and Science in Sports and Exercise</u> 43 (10): 1873-1883, 2011.
- 44. Hunter SK. The Two-Hour Marathon: How Important is Age? Journal of Applied Physiology, 110(1):278-93, 2011.
- Hoeger Bement MK, Weyer A, Hartley S, Drewek B, Harkins A, & <u>Hunter SK</u>. Pain perception after isometric exercise in women with fibromyalgia. <u>Archives of Physical Medicine and Rehabilitation</u>, 92(1):89-95, 2011.
- 42. <u>Hunter SK</u>, Stevens A, Magennis K, Skelton KW and Fauth M. Is there a sex differnece in the age of elite marathon runners? <u>Medicine Science Sports and Exercise</u> 43(4):656-64, 2011.

2010 (3 publications)

- Hoeger Bement M, Weyer A, Keller M, Harkins A, and <u>Hunter SK</u>. Anxiety and stress can predict pain perception following a cognitive stressor. <u>Physiology and Behavior</u> 101: 87-92, 2010.
- Griffith EE, Yoon T and <u>Hunter SK</u>. Aging and load compliance influence time to task failure for a submaximal fatiguing contraction with the lower leg. <u>Journal of Applied Physiology</u> 108(6): 1510-9, 2010.
- Hunter SK. Response to task-specific sex differences in muscle fatigue: Is there a common underlying cause? <u>Exercise and Sports</u> <u>Science Reviews</u> January, 37, 2010.

2009 (6 publications)

- Yoon T, Keller ML, Schlinder-Delap B, Harkins A, Lepers R and <u>Hunter SK</u>. Sex differences in response to cognitive stress during a fatiguing contraction. <u>Journal of Applied Physiology</u> 107: 1486 1496, 2009.
- Yoon T, Hawe R, and <u>Hunter SK</u>. Variation in limb support influences the time to task failure for a postural contraction. <u>Journal of</u> <u>Motor Behavior</u> 41(5): 393-5, 2009.
- Hunter SK. Sex differences in mechansims of task-specific muscle fatigue. <u>Exercise and Sports Science Reviews</u> Jul; 37(3):113-22, 2009.
- Hoeger Bement M, Rasiarmos R, DiCapo R, Lewis A, Keller ML, Harkins A, and <u>Hunter SK</u>. Role of the menstrual cycle phase in pain perception before and after isometric contractions. <u>European Journal of Applied Physiology</u> 106(1):105-112, 2009.

- Hoeger Bement MK, Weyer A, Hartley S, Yoon T, and <u>Hunter SK</u>. Exercise attenuates pain-induced corticomotor excitability, <u>Neuroscience Letters</u> 452: 209-213, 2009.
- Hunter SK, Griffith EE, Schlachter KM, and Kufahl TD. Sex differences in time to task failure and blood flow for an intermittent isometric fatiguing contraction. <u>Muscle and Nerve</u> 39(1): 42-53, 2009.

2008 (5 publications)

- Hoeger Bement MK, Rasiarmos RL, DiCapo JM, and <u>Hunter SK</u>. Dose-response of isometric contractions on pain perception in healthy men and women. <u>Medicine Science Sports and Exercise</u>, 40(11): 1880-1889, 2008.
- Hunter SK, Butler JE, Todd G, Gandevia SC and Taylor JL. Slowed recovery of supraspinal fatigue in old adults after fatiguing maximal contractions. *Journal of Applied Physiology*, 105(4):1199-1209, 2008.
- Harmer AR, McKenna MJ, Chisholm DJ, <u>Hunter SK</u>, Ruell PA, Naylor JM, Maxwell LJ, Flack JR. Sprint training increases muscle oxidative metabolism during high-intensity exercise in patients with type 1 diabetes mellitus. <u>Diabetes Care</u>. 31(11), 2097-2102, 2008.
- Yoon T, Schlinder-Delap B, Griffith EE & <u>Hunter SK</u>. Age-related muscle fatigue after a low-force fatiguing contraction is explained by central fatigue. <u>Muscle and Nerve</u>, 37(4): 457-466, 2008.
- Hunter SK, Yoon, T, Farinella JM, Griffith EE, Ng AV. Time to task failure and muscle activation vary with load type for a submaximal fatiguing contraction with the lower leg. <u>Journal of Applied Physiology</u>, 105: 463–472, 2008.

2007 (1 publication)

 Yoon T, Schlinder-DeLap B, Griffith EE & <u>Hunter SK</u>. Mechanisms of fatigue differ after low- and high- force fatiguing contractions in men and women. <u>Muscle and Nerve</u>, 36:512-524, 2007.

2006 (4 publications)

- 26. <u>Hunter SK</u>, Butler JE, Todd G, Gandevia SC and Taylor JL. Supraspinal fatigue does not explain the sex difference in muscle fatigue of maximal contractions. *Journal of Applied Physiology* 101: 1036-1044, 2006.
- 25. <u>Hunter SK</u>, Schletty JM, Schlachter KM, Griffith EE, Polichnowski AJ & Ng AV. Active hyperemia and vascular conductance differ between men and women for an isometric fatiguing contraction. <u>Journal of Applied Physiology</u> 101: 140-150, 2006.
- Mottram CJ, <u>Hunter SK</u>, Rochette L, and Enoka RM. Time to task failure varies with the gain of the feedback signal for women, but not for men. <u>Experimental Brain Research</u> 174(3): 575-587, 2006.
- Harmer AR, Ruell PA, McKenna MJ, Chisholm DJ, <u>Hunter SK</u>, Thom JM, Morris NR, and Flack JR Effects of sprint training on extrarenal potassium regulation with intense exercise in Type 1 diabetes. <u>Journal of Applied Physiology</u> 100: 26-34, 2006.

2005 (4 publications)

- Yoon, TJ, Kim YW, Chung CS, <u>Hunter SK</u>. The effect of aging on the mechanism of muscle fatigue during a sustained submaximal isometric contraction. <u>Korean Journal of Sports Biomechanics</u> 15(3), 51-59, 2005.
- Hunter SK, Rochette L, Critchlow A, and Enoka RM. Time to task failure differs with load type when old adults perform a submaximal fatiguing contraction. <u>Muscle and Nerve</u> 31: 730-740, 2005.
- Tracy BL, Maluf KS, Stephenson JL, <u>Hunter SK</u>, and Enoka RM. Variability of motor unit discharge and force fluctuations across a range of muscle forces in older adults. <u>Muscle and Nerve</u> 32: 533-540, 2005.
- Hunter SK, Critchlow A, and Enoka RM. Muscle endurance is greater for old men compared with strength-matched young men. Journal of Applied Physiology 99: 890-897, 2005.

2004 (4 publications)

- 18. <u>Hunter SK</u>, Duchateau J and Enoka RM. Muscle fatigue and the mechanisms for task failure. <u>Exercise and Sport Science Reviews</u>, 32: 44-49, 2004.
- 17. <u>Hunter SK</u>, Critchlow A, Shin IS and Enoka RM. Men are more fatigable than strength-matched women when performing intermittent fatiguing contractions. *Journal of Applied Physiology*, 96: 2125-2132, 2004.

- Hunter SK, Critchlow A, and Enoka RM. Influence of aging on sex differences in muscle fatigability. <u>Journal of Applied Physiology</u> 97: 1723-1732, 2004.
- 15. <u>Hunter SK</u>, Critchlow A, Shin IS and Enoka RM. Fatigability of the elbow flexor muscles for a sustained submaximal contraction is similar in men and women matched for strength. *Journal of Applied Physiology* 96: 195-202, 2004.

2003 (4 publications) FIRST YEAR AT MARQUETTE UNIV.

- Rochette L, <u>Hunter SK</u>, Place N and Lepers R. Activation varies among the knee extensor muscles during a submaximal fatiguing contraction in the seated-and supine postures. <u>Journal of Applied Physiology</u>, 95: 1515-1522, 2003.
- Enoka RM, Christou EA, <u>Hunter SK</u>, Kornatz KW, Semmler JG, Taylor AM and Tracy BL. Review: Mechanisms that contribute to differences in motor performance between young and old adults. <u>Journal of Electromyography and Kinesiology</u> 13: 1-12, 2003.
- 12. <u>Hunter SK</u> and Enoka RM. Changes in muscle activation can prolong the endurance time of a submaximal isometric contraction in humans. *Journal of Applied Physiology* 94: 108-118, 2003.
- 11. <u>Hunter SK</u>, Lepers R, MacGillis CJ, Enoka RM. Activation among the elbow flexor muscles differs when maintaining arm position during a fatiguing contraction. *Journal of Applied Physiology* 94: 2439-2447, 2003.

2002

- Hunter SK, Ryan DL, Ortega JD and Enoka RM. Task differences with the same load torque alter endurance time of submaximal fatiguing contractions in humans. *Journal of Neurophysiology*, 88: 3087-3096, 2002.
- Laidlaw D, <u>Hunter SK</u>, Enoka RM. Nonuniform activation of the agonist muscle does not covary with index finger acceleration in old adults. <u>Journal of Applied Physiology</u>, 93: 1400-1410, 2002.

2001

- Thom JM, Thompson MW, Ruell PA, Bryant GJ, Fonda JS, Harmer AR, Gwinn T, Janse de Jonge X., <u>Hunter SK</u>. Effect of 10-day cast immobilization on sarcoplasmic reticulum calcium regulation in humans. <u>Acta Physiologica Scandinavica</u>, 171: 141-147, 2001.
- 7. <u>Hunter SK</u>, Thompson MW, Adams RD. Reaction time, strength and physical activity of women aged 20 to 89 years. <u>Journal of Aging</u> <u>and Physical Activity</u>, 9: 32-42, 2001.
- Hunter SK and Enoka RM. Sex differences in the fatigability of arm muscles depends on absolute force during isometric contractions. <u>Journal of Applied Physiology</u>, 91: 2686-2694, 2001.

2000

 Hunter SK, Thompson MW, Adams RD. Relationships among age-associated strength changes and physical activity level, limb dominance and muscle group in women. <u>Journal of Gerontology: Biological Sciences</u>, 55A(6): B264-B273, 2000.

1999

 Hunter SK, Thompson MW, Ruell PA, Harmer AR, Thom JM, Gwinn TH, Adams RD. Human skeletal sarcoplasmic reticulum Ca²⁺ uptake and muscle function with aging and strength training. *Journal of Applied Physiology*, 86(6): 1858-1865, 1999.

1998

- Hunter SK, White MJ, Thompson MW. Review: Techniques to evaluate elderly human muscle function: a physiological basis. <u>Journal</u> of <u>Gerontology: Biological Sciences</u>, 53(3): B204-B216, 1998.
- Hunter SK, Thompson MW. Contractile properties of two human lower limb muscle groups: the quadriceps and triceps surae. <u>Sports</u> <u>Medicine, Training and Rehabilitation</u>, 8(3): 227-237, 1998.

1997

 Booth J, McKenna MJ, Ruell PA, Gwinn TH, Davis GM, Thompson MW, Harmer AR, <u>Hunter SK</u>, Sutton JR. Impaired calcium pump function does not slow relaxation in human skeletal muscle following prolonged exercise. <u>Journal of Applied Physiology</u>, 83(2): 511-521, 1997.

Papers in preparation

Arney BE, Kuplic A, Adam M, Sundberg CW, <u>Hunter SK</u>. Mechanisms of age-related power reduction and fatigability of the upper extremity.

Sundberg CW, Kwon M, Fitts RH, Hunter SK. Adaptations to high-load fast and low-load slow resistance exercise training in old adults

Wrucke D, Hunter SK Sundberg CW. Mechanisms of Age-Related Power Reduction in the Knee Extensor Muscles

Piacentine, L., Wolf, T. L., Lennon, S. L., Smith, C. S., <u>Hunter SK</u>, Farquhar, W. B., Capin, J. J., Long-Term Benefits and Challenges of College Athletics: The Lived Experience of Midlife Former College Athletes. Qualitative Research in Sport, Exercise and Health.

B. BOOK CHAPTERS

Senefeld JW, <u>Hunter SK</u> and Neumann DA. 'Chapter 3: Skeletal Muscle: The Ultimate Stabilizer and Mover of the Skeletal System" in DA Neumann, <u>Kinesiology of the Musculoskeletal System</u> (4th edition); Publisher: Elsevier, 2023.

Hunter SK Senefeld JW and Neumann DA. 'Chapter 3: Skeletal Muscle: The Ultimate Stabilizer and Mover of the Skeletal System" in DA Neumann, <u>Kinesiology of the Musculoskeletal System</u> (3rd edition); Publisher: Elsevier, 2016.

Hunter SK and Brown DA. 'Chapter 3: Skeletal Muscle: The Ultimate Stabilizer and Mover of the Skeletal System" in DA Neumann, <u>Kinesiology of the Musculoskeletal System</u> (2nd edition); Publisher: Elsevier, 2010.

Hunter SK. 'Chapter 19: Aging and the Mechanisms of Task-Dependent Muscle Fatigue' in Advances in Neuromuscular Physiology of Motor Skills and Muscle Fatigue. Pages 391-414, Minoru Shinohara, Ed.; Publisher: Research Signpost, Kerala, India, 2009.

C. NON-REFEREED PUBLICATIONS

Hunter SK, Joyner MJ, Krausz C, Nokoff NJ. Sex Differences in Performance and the Transgender Athlete. <u>Invited Report for the</u> <u>Federation of International Swimming (FINA)</u>. January 27, 2022.

Hunter SK. Tools of Discovery and Survival: A Faculty Perspective. Medium 10.06.2020.

<u>Hunter SK</u>. Gender Differences in the Marathon: Nature or Nurture? <u>Sports Medicine Bulletin</u>. American College of Sports Medicine's Weekly Web publication, 151. 07.05.2011

Hunter SK. "Big Question: Why do we age? A scientist's answer". Marguette Magazine. 08.10.2010

D. CONFERENCE PROCEEDINGS | ABSTRACTS | 2006 - PRESENT

(Conference Proceedings | Abstracts prior to 2006 available on request)

- Rouhani M, Hoeger Bement, M, <u>Hunter SK</u>, Obeidat AZ, Zackowski KM, and Ng AV. Classification of Pain and its Relationship to Depression and Fatigue in Multiple Sclerosis Consortium of Multiple Sclerosis Centers Annual Meeting, Aurora, CO, May 31 – June 3, 2023.
- 183. Anderson EG., Uhrich TD., Opielinski LE., Kroner KM., Lessila SV., Haischer MH., Hoeger Bement, M, Piacentine, LB., Papanek, PE., <u>Hunter SK</u>, Danduran MJ. Persistent Effects of COVID-19 on Oxygen Responses to Low Intensity Exercise. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 182. Hasicher MH., Opielinski LE., Mirkes LM., Uhrich TD., Bollaert RE., Danduran MJ., Hoeger Bement, M, Piacentine, LB., Papanek, PE., <u>Hunter SK</u>. Acceleration and Deceleration Capacity of Heart Rate is Impaired in COVID-19 Survivors. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 Jun 3, 2023
- 181. Kroner KM., Lessila SV., Weibye BI., Opielinski LE., Mirkes LM., Haischer MH., Uhrich TD., Piacentine, LB., Papanek, PE., <u>Hunter</u> <u>SK</u>., Hoeger Bement M., *Persistent Effects of COVID-19 on Pain Intensity and Distribution. American College of Sports Medicine Annual Meeting*, Denver, CO, May 30 – Jun 3, 2023
- 180. Lessila SV., Kroner KM., Opielinski LE., Weibye BI., Uhrich TD., Haischer MH., Bollaert RE., Beilfuss RN., Piacentine, LB., Papanek, PE., <u>Hunter SK</u>., Hoeger Bement M., Physical Activity Levels Before and After Acute Coronavirus Infection and the Relation to Pain. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 Jun 3, 2023
- 178. Opielinski LE., Uhrich TD., Kroner KM., Lessila SV., Anderson EG., Bollaert RE., Danduran MJ., Beilfuss RN., Haischer MH., Mirkes LM., Greving HJ., Hoeger Bement, M, Piacentine, LB., Papanek, PE., <u>Hunter SK</u>. *Physical Activity and Acute COVID-19 Symptoms*

Influence Long COVID. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 - Jun 3, 2023

- 177. Piacentine LB., Uhrich TD., Haischer MH., Opielinski LE., Anderson EG., Kroner KM., Lessila SV., Hoeger Bement, M, Papanek, PE., <u>Hunter SK</u>. Cognitive and Psychological Symptoms After COVID: Relation to Exercise. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 176. Zhou Z., Bean T., Nguyen J., Klevenow E., Uhrich T., Schmit B., <u>Hunter SK</u>., Durand M., Hyngstrom A. Sex-Specific Impact of Stroke on Maximal Oxygen Consumption During a Graded Exercise Test. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 175. Fulton TJ., Sundberg CW., Arney BE., Kern LM., Wrucke DJ., <u>Hunter SK</u>. Deoxyhemoglobin Kinetics and Fatigability of the Knee Extensors in Young and Older Adults. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 Jun 3, 2023.
- 174. Atkinson MA., Linde JJ., <u>Hunter SK</u>. Sex Differences in Performance of Elite Youth Track and Field Athletes. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 Jun 3, 2023
- 173. Mirkes LM., Boos ZP., Heck J., Wolf TL., Farquhar WB., Lennon SL., Smith CS., <u>Hunter SK</u>., Creasy SA., Capin JJ. College Varsity Athletes Have Longer and More Variable Sleep Patterns Than Matched Non-Athlete Peers. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 172. Capin JJ., Wolf TL., Heck J., Smith CS., Lennon SL., <u>Hunter SK</u>., Farquhar WB., Piacentine LB. Long-Term Benefits and Challenges of College Athletics: The Lived Experience of Midlife Former College Athletes. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 171. Klevenow EA., Linde JJ., Atkinson MA., Vosters EE., Kindy SL., Mason AP., Nelson SK., Rainwater KAH., Taylor PV., Uhrich TD., <u>Hunter SK</u>. Underrepresentation of Women Participants in Exercise Science and Physiology Research is Associated with Authorship. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 170. Bueckers EP., Linde JJ., Atkinson MA., Klevenow EA., <u>Hunter SK</u>. Increased Representation of Women on Editorial Boards of Exercise Science and Physiology Research Journals. American College of Sports Medicine Annual Meeting, Denver, CO, May 30 – Jun 3, 2023
- 169. Zepeda CS., Teigen LE., Fitts RH., <u>Hunter SK</u>., Sundberg CW. Effects of Elevated H⁺ and P_i on the Force-pCA Relationship of Skeletal Muscle Fibers from Young and Older Adults. American Physiological Society Summit, Long Beach, CA, April 19-22, 2023.
- 168. Arney BE., Fulton TJ., Vosters EE., Kern LM., Wrucke DJ., Sundberg CW., <u>Hunter SK</u>. Blood Flow and Fatigability of the Knee Extensor Muscles in Individuals with Prediabetes. American Physiological Society Summit, Long Beach, CA, April 19-22, 2023.
- 167. Linde JJ., Klevenow EA., Atkinson MA., Vosters EE., Bueckers EP., Quinn ME., <u>Hunter SK</u>. Underrepresentation of Women Participants in Exercise Science and Physiology Research is Associated with Authorship: A Historical Perspective. American Physiological Society Summit, Long Beach, CA, April 19-22, 2023.
- 166. Kern LM., Zepeda CS., Fulton TK., <u>Hunter SK</u>., Sundberg CW. Interplay Between Contractile Efficiency and Fatigability of the Knee Extensors in Young and Older Adults. American Physical Therapy Association Combined Sections Meeting, San Diego, CA, Feb 23-25, 2023.

- 165. Zhou, Z; Alqahtani, S; Nguyen, J; Raab, SC; Kroll, ZA; Durand, MJ; Schmit BD; <u>Hunter, SK</u>; Hyngstrom, AS. Sex Differences in Neuromuscular Fatigability During Submaximal Isometric Knee Extension Exercise Post-Stroke. International Stroke Conference. 2022
- 164. Arney, B. E., Fulton, T. J., Vosters, E. E., Kern, L. M., Wrucke, D. J., Sundberg, C. W., & <u>Hunter SK</u>. Blood Flow and fatigability of the knee extensor muscles in individuals with prediabetes. CTSI Midwest TL1 Summit Poster Presentation, 2022.
- 163. Arney, B. E., Fulton, T. J., Vosters, E. E., Kern, L. M., Wrucke, D. J., Sundberg, C. W., & <u>Hunter SK</u>. Blood Flow and muscle fatigue of the leg muscles in people with prediabetes. Milwaukee Regional Research Forum Poster Presentation, CTSI, 2022.
- 162. Raab SC, Zhou Z, Alqahtani S, Nguyen J, Kroll ZA, Durand MJ, Schmit BD, <u>Hunter SK</u>, Hyngstrom AS. Variability of Motor Performance Over Multiple Maximal Effort Trials Increases Post-Stroke American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 – Jun 4, 2022.
- 161. Sundberg CW, Fulton TJ, Kern LM, Arney BE, Wrucke DJ, <u>Hunter SK.</u> Blood flow and fatigability of the knee extensor muscles in young and older adults. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 Jun 4, 2022

- 159. Wrucke DJ, Hunter SK, Sundberg CW. Mechanisms of Age-Related Power Reduction in the Knee Extensor Muscles. American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 Jun 4, 2022
- 158. Arney BE, Fulton TJ, Sundberg CW, <u>Hunter SK</u>. Effects of Ischemic Conditioning on Strength, Voluntary Activation, and Contractile Properties in Older Adults. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 – Jun 4, 2022
- 157. Fulton TJ, Arney BE, Sundberg CW, <u>Hunter SK</u>. Ischemic conditioning and fatigability of the knee extensors in young and older adults. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 Jun 4, 2022
- 156. Nesburg RA, Mason A, Fitzsimmons B, <u>Hunter SK</u>. Participation Rates of Female and Male Runners Predict Marathon Performance. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 – Jun 4, 2022.
- 155. Mason A, Fitzsimmons B, Nesburg RA, <u>Hunter SK</u>. Sex Differences in Marathon Performance are Larger in the Past Decade than Expected Physiologically. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 – Jun 4, 2022.
- 154. Fitzsimmons B, Mason A, Nesburg RA <u>Hunter SK</u>. Increased Marathon Participation in the Last Decade is Driven by Women and Older Runners. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 Jun 4, 2022.
- 153. Rainwater KAH, Nesburg RA, Zhao H, Keenan KG, <u>Hunter SK.</u> Sex Differences in the Age and Performance of the World's Top Swimmers. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 Jun 4, 2022.
- 152. Anderson EG., Uhrich TD, Opielinski LE., Bialkowski W, Haischer MH., Beilfuss RN., Nesburg RA., Hoeger Bement, M, Piacentine, L. B., <u>Hunter SK</u>, Papanek, PE. Body Composition in COVID-19 Survivors. American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 Jun 4, 2022.
- 151. Mirkes LM, Haischer MH, Opielinski LE, Uhrich TD., Nesburg RA., Hoeger Bement, M, Papanek, P E, Piacentine LB., <u>Hunter SK.</u> Persistent Effects of COVID-19 on Lower-Limb Strength and Fatigability. American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 – Jun 4, 2022.
- 150. Beilfuss RN, Opielinski, L. E., Haischer, M. H., Uhrich, T. D., Nesburg, R. A., Piacentine, L. B., Papanek, P. E., Hoeger Bement, M., <u>Hunter, S. K.</u> Impact of COVID-19 Infection on Activity Levels, Perceived Fatigue, and Mental Health. American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 – Jun 4, 2022.
- Opielinski LE, Uhrich TD, Beilfuss RN., Mirkes, L M., Zirgaitis, G. H., Bialkowski, W., Bollaert, R. E., Danduran, M. J., Piacentine, L. B., Hoeger Bement, M. K., Papanek, P. E., <u>Hunter, S.K</u>. Physical activity before and after COVID-19. *American College of Sports Medicine Annual Meeting*, San Diego, CA, May 31 Jun 4, 2022.
- 148. Weibye BI, Schmit E, Zirgaitis GH, Opielinski LE, Piacentine, LB., K., Papanek, PE., <u>Hunter, SK.</u>, Hoeger Bement, M. Pain Perception at Rest and with Movement Following Coronavirus Disease. American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 – Jun 4, 2022.
- 147. Piacentine, L. B., Johnson, N. L., Barbosa, H. C., Opielinski L.E., Papanek, P. E., Hoeger Bement, M., <u>Hunter, SK</u>, Haglund, K. A. Exercise After COVID-19 Infection: A Qualitative Study. American College of Sports Medicine Annual Meeting, San Diego, CA, May 31 – Jun 4, 2022.
- 146. Barbosa, H. C., Johnson, N. L., Papanek, P. E., Hoeger Bement, M., Hunter, SK, Haglund, K. A., Piacentine, L. B., Interpersonal relationships and the COVID-19 pandemic. Southeastern Wisconsin Nursing, 2022.
- 145. Piacentine, L. B., Johnson, N. L., Barbosa, H. C., Papanek, P. E., Hoeger Bement, M., <u>Hunter, SK</u>, Haglund, K. A. *The lived* experience of COVID-19. Midwest Nursing Research Society, 2022.
- 144. Sundberg CW, Teigen LE, <u>Hunter SK</u>, Fitts RH. Cumulative effects of H+ and Pi on peak power of skeletal muscle fibers from young and older adults. Experimental Biology, Philadelphia, April 2-5, 2022
- 143. Nesburg RA, Mason A, Fitzsimmons B, <u>Hunter SK.</u> Sex differences in the Chicago Marathon: A Window into The Sampling Bias in Rehabilitation. Physical Therapy Association of Illinois Meeting, Feb 2022

- 142. Zirgaitis GH, Opielinski L, Uhrich TD, Haischer M, Danduran M, Mirkes L, Nesburg R, Beilfuss R, Bement M, Piacentine L, Papanek P, <u>Hunter SK.</u> Long COVID-19 impact on physical function in males vs females. *Marquette University's Honor's Summer Undergraduate Research Presentations*, Milwaukee, WI, Nov 11, 2021.
- 141. Nesburg R, Opielinski L, Uhrich T, Haischer M, Danduran M, Mirkes L, Zirgaitis G, Beilfuss R, Bement M, Piacentine L, Papanek P, <u>Hunter SK.</u> COVID-19 Impact on physical function. *Marquette University's College of Health Science Summer Undergraduate Research Presentations*, Milwaukee, WI, Aug 6, 2021.

- 140. Layden J, Olsen E, LeVan J, Smith L, Nemanich S, <u>Hunter SK</u>, & luzzini-Seigel J. Physical experience of children with CAS: Survey results from 1100 parent respondents. *Annual Convention of the Apraxia Kids Association*, July 2021, Virtual.
- 139. Hunter SK. The Aging Neuromuscular System: Fatigability of Limb Muscles. American College of Sports Medicine Annual Meeting, Jun 1-5, 2021, Virtual.
- 138. <u>Hunter SK</u>. Sex Differences in Performance: Historical Perspectives. *American College of Sports Medicine Annual Meeting*, Jun 1-5, 2021, Virtual.
- 137. Arney BE, Kuplic A, Adam M, Sundberg CW, <u>Hunter SK</u>. Mechanisms of age-related power reduction and fatigability of the upper extremity. American College of Sports Medicine Annual Meeting, Jun 1-5, 2021, Virtual.
- 136. Fulton TJ, Sundberg CW, Arney BE, <u>Hunter SK</u>. Sex differences in the speed duration relationship across the lifespan. *American College of Sports Medicine Annual Meeting*, Jun 1-5, 2021, Virtual.
- 135. luzzini-Seigel, J., Layden, J., Olsen, E., Smith, L., LeVan, J., Nemanich, S. T., <u>Hunter, S.K.</u> "Physical Experience of Children with CAS: Survey results from 1100 parent-respondents," ASHA, Washington DC, March 2021.
- 134. Sara LK, Yang K, Hart MR, Bement MH, <u>Hunter SK</u>. Pressure-pain thresholds at baseline and in response to isometric exercise in Achilles tendinopathy. Translational Science 2021: Annual Meeting of the Association for Clinical and Translational Science, Mar 2021, Virtual.
- Sara LK, Yang K, Hart MR, Bement MH, <u>Hunter SK.</u> Fatigability and pain with Achilles tendinopathy. Combined Sections Meeting of the American Physical Therapy Association, Feb 2021, Virtual.

132. Sara LK, Yang K, Hart MR, <u>Hunter SK.</u> Maximal Isometric and Dynamic Plantar Flexor Strength in Achilles Tendinopathy. *Combined Sections Meeting of the American Physical Therapy Association*, Denver, CO, Feb 14, 2020.

2019

- Hyngstrom A, <u>Hunter SK</u>, Zhou, Z, Eng M. Sex differences in neuromuscular fatigability post-stroke. Forward Thinking Poster Session, Marquette University, Milwaukee, Dec 3, 2019.
- Hunter SK. Fatigability in People with Type 2 Diabetes and Prediabetes. Canadian Society of Exercise Physiologists Annual Meeting, Kelowna, BC, Canada, Nov 8, 2019.
- Delgadillo JD, Sundberg CW, Kwon M, <u>Hunter SK</u>. Knee extensor fatigability during different resistance exercise protocols in young and old adults. Poster presentation at the Society for Neuroscience 49th Annual Meeting, Chicago, IL, October 21, 2019.
- 128. Hart MR*, Sara LK, Geiser M, <u>Hunter SK</u>. Strength and fatigability in Achilles tendinopathy patients. *College of Health Science Summer Undergraduate Research Presentations*, Marquette University, Milwaukee, Aug 2, 2019.
- 127. Yoon T, Vanden Noven ML, Hunter SK. Aging and altered brain activation during isometric contractions with the lower limb. American College of Sports Medicine, Orlando, Fl, May 28 - Jun 1, 2019.
- 126. Sara LK, Hickok SB, <u>Hunter SK</u>. The single-leg heel raise test: a poor clinical surrogate for maximal strength of the plantar flexor muscles. *Combined Sections Meeting of the American Physical Therapy Association*, Washington D.C., Jan 25, 2019.
- Hunter SK. Motor unit activity in leg muscles of people with type 2 diabetes. American College of Sports Medicine, Orlando, FI, May 28 Jun 1, 2019.

- 124. Sara LK, Hickok SB, Yang K, and <u>Hunter SK</u>. Central Mechanisms, Not Sex Differences, Predict Plantar Flexor Fatigue for an Intermittent Maximal Isometric Contraction Task. *Integrative Physiology of Exercise (ACSM and APS)*, San Diego, CA, Sept 6-8, 2018.
- 123. Senefeld J, Keenan KG, Negro F, Ryan KS and <u>Hunter SK</u>. Fatigability and Motor Unit Behavior of Lower Limb Muscles in People with Type 2 Diabetes. *Integrative Physiology of Exercise (ACSM and APS),* San Diego, CA, Sept 6-8, 2018.
- 122. Yang K, Sara LK, Hickok SB, <u>Hunter SK</u>. Mechanisms of Plantar Flexor Fatigue in Response to a Single Leg Heel Raise Task. Marquette University's College of Health Science Summer Undergraduate Research Presentations, Milwaukee, WI, Aug 3, 2018.
- 121. D'Astice SE, Senefeld JW, Ryan KS, Schlinder-Delap B, and <u>Hunter SK</u>. Mechanisms of Muscle Fatigue in Lower Limb Muscles for People with Type 2 Diabetes. Marquette University Summer Research Program, Aug 3, 2018.

- 120. Senefeld J, Keenan KG, Ryan KS and Hunter SK. Fatigability and Motor Unit Behavior of the Dorsiflexor Muscles in People with Type 2 Diabetes. *International Motoneuron Society*, Boulder, CO, June 11-14, 2018.
- 119. Kwon M, Delgadillo JD, Senefeld J, Sundberg CW, and <u>Hunter SK</u>. Activation of Knee Extensor Muscles during Rapid Force Development in Young and Old Men and Women. *International Motoneuron Society,* Boulder, CO, June 11-14, 2018.
- 118. Ryan K, Senefeld J, D'Astice S, Schlinder-Delap B, and <u>Hunter SK</u>. Fatigability of the Dorsiflexor Muscles in People with Type 2 Diabetes and Controls. *American College of Sports Medicine Annual Meeting*, Minneapolis, MN, May 29 - Jun 2, 2018.
- 117. Berardi G, Eble C, Senefeld J, <u>Hunter SK</u> and Hoeger Bement M. Are isometric and dynamic contractions equally effective in providing acute pain relief? *American Pain Society Scientific Summit*, Anaheim, CA, March 4-6, 2018.
- 116. D'Astice S, Senefeld J, Harmer AR, and <u>Hunter SK</u>. Increased Cardiovascular Response to a 6-minute Walk Test in People with Type 2 Diabetes. *Combined Sections Meeting, American Physical Therapy Association,* New Orleans, LA, February, 2018.

- 115. Hanson ME, Hoeger Bement M, <u>Hunter SK</u>, Kaugers A, Stolzman S and Harkins AL. Weight Status and Academic Bias in Female Adolescents. *College of Health Science Summer Undergraduate Research Presentations*, Marquette University, Aug 4, 2017.
- 114. Schulte RH, Hoeger Bement M, <u>Hunter SK</u>, Kaugers A, Stolzman S and Harkins AL. Physical Activity, Physical Fitness, and Academic Achievement in Female High School Students College of Health Science Summer Undergraduate Research Presentations, Marquette University, Aug 4, 2017.
- 113. Hickok SB, Sara LK, <u>Hunter SK</u>. Sex Differences in Strength, Fatigability, and Muscle Architecture of the Plantar Flexors in Healthy Young Adults. *College of Health Science Summer Undergraduate Research Presentations*, Marquette University, Aug 4, 2017.
- 112. Ryan K, Senefeld J, Keenan KG, <u>Hunter SK</u>. Mechanisms of fatigability of the dorsiflexor muscles in people with Type 2 diabetes. College of Health Science Summer Undergraduate Research Presentations, Marquette University, Aug 4, 2017.
- 111. Kwon M, Delgadillo JD, Senefeld JW, Sundberg CW. <u>Hunter SK</u>. Activation of Knee Extensor Muscles During Rapid Force Development in Men and Women. *American College of Sports Medicine*, Denver, CO, May 30 Jun 3, 2017.
- 110. Senefeld J, Lukaszewicz KL, Limberg JK, and <u>Hunter SK</u>. Leg blood flow and fatigability in people with Type 2 Diabetes. *American College of Sports Medicine*, Denver, CO, May 30 – Jun 3, 2017
- Harkins, A., Hoeger Bement, M., <u>Hunter, S.K</u>., Kaugars, A. S., Stolzman, S. "Influence of Weight Status & Physical Fitness on Academic Achievement in All-Female College Prep High School," Combined Sections Meeting, American Physical Therapy Association, San Antonio, TX. (February 2017).

- 108. Hassanlouei H, Sundberg CW, Kuplic A, and <u>Hunter SK.</u> Peripheral and Central Contributions to Muscle Fatigue During Dynamic Exercise with Age. 9th International Congress on Physical Education and Sport Sciences, Tehran, Iran, March 9 -10, 2016.
- 107. Deering R, Senefeld J, Pashibin T, Cruz M, Brazauskas R, Neumann D, and <u>Hunter SK</u>. Strength and Fatigability of the Trunk Flexor Muscles in Postpartum Women is Impaired up to 26 Weeks after Delivery. CTSI Regional Research Forum, Milwaukee, WI, October, 2016.
- 106. Senefeld J, Harmer AR, and <u>Hunter SK</u>. Greater Fatigability among type 2 diabetics without Neuropathy is not Associated with Neuromuscular Propagation or Corticomotor Excitability. *International Society of Electromyography and Kinesiology*, Chicago, IL, July 2016.
- 105. Rozand V, Senefeld J, Hassanlouei H, and <u>Hunter SK.</u> Is there an age difference in voluntary activation during maximal dynamic contractions with elbow flexor muscles? *International Society of Electromyography and Kinesiology*, Chicago, IL, July 2016.
- 104. Smith AE, Hassanlouei H, Sundberg CW, Kuplic A, <u>Hunter SK</u>. Physical activity modifies corticospinal excitability of the lower extremity in young and old adults. *Poster presentation at Oral Nanosymposium at the Society for Neuroscience 46th Annual Meeting*, San Diego, CA. November 12-17, 2016.
- 103. Sundberg CW, Hassanlouei H, Kuplic A, <u>Hunter SK.</u> Mechanism for the age-related increase in power loss during fatiguing dynamic contractions in men and women. *Poster presentation at the Integrative Biology of Exercise VII*, Phoenix, AZ. November 4-6, 2016.
- 102. Deering R & <u>Hunter SK</u> Abdominal Muscle Function, Pain Perception and Functional Mobility in Women After Pregnancy. *Presented at the North American Spine Society Annual Meeting*, Boston, MA October 26-29, 2016.

- 101. Harkins A, Hoeger Bement M, Hunter SK, Kaugars A, Stolzman S. Project WISH: Wellness Initiative for Student Health. Submitted for Presentation at the 2016 American Society for Clinical Laboratory Science Annual Meeting, Philadelphia, PA, August 1-4, 2016.
- 100. Deering R, Senefeld J, Pashibin T, Nisivaco S, Lemens J, Bement M, Neumann D, <u>Hunter SK</u>. Novel Clinical Test of Fatigability of the Lumbopelvic Stabilizing Muscles in Postpartum & Nulliparous Women. *Wisconsin Physical Therapy Association* Spring Meeting, April 14-15, 2016, Middleton, WI.
- Deering R, Senefeld J, Pashibin T, Cruz M, Neumann D, Bement M, <u>Hunter SK</u>. Postpartum Women Demonstrate Decreased Abdominal Muscle Strength and Decline in Self-Reported Physical Activity Between 8 Weeks and 26 Weeks Postpartum. *Wisconsin* Association for Perinatal Care Annual Conference, April 25, 2016, Elkhart Lake, WI.
- Sparks S, Hesprich K, Benjamin N, Stolzman S, Harkins A, Hoeger Bement M, <u>Hunter SK</u>, Kaugars A. Influences of Body Image Factors on Self-Perceived Quality of Life. *Poster Presentation at the 2016 Wisconsin Psychological Association Annual Convention*, Middleton, WI, April 13, 2016.
- 97. Battis N, Pardej S, Benjamin N, Stolzman S, Harkins A, Hoeger Bement M, <u>Hunter SK</u>, Kaugars A. Relationships Among Emotion Regulation, Coping, and Body Image in a Community Sample of Adolescents. *Poster Presentation at the 2016 Wisconsin Psychological Association Annual Convention, Middleton, WI, April 13, 2016.*
- Hassanlouei H, Sundberg CW, Kuplic A and <u>Hunter SK</u>. Is there a sex difference with aging in stimulus-response characteristics of the lower limb? To be presented at the *American College of Sports Medicine National Annual Meeting*, Boston, MA, May 31 – June 4, 2016. *Med Sci Sports Exerc*. 2016 May;48(5 Suppl 1):414. doi: 10.1249/01.mss.0000486246.06948.35.
- Sundberg CW, Hassanlouei H, Kuplic A and <u>Hunter SK</u>. Increased fatigability of older women performing high-velocity contractions is explained by mechanisms within the muscle. *American College of Sports Medicine National Annual Meeting*, Boston, MA, May 31 – June 4, 2016. *Med Sci Sports Exerc*. 2016 May;48(5 Suppl 1):492. doi: 10.1249/01.mss.0000486478.32231.bd.
- Deering R, Senefeld J, Pashibin T, Lemley K, Cruz M, Neumann D, and <u>Hunter SK</u>. Strength and fatigability of the trunk flexor muscles in postpartum women. *American Physical Therapy Association*, Anaheim, CA, Feb 17-20 2016.

- Lee AC, Baxtor J, Eischer C, Gage M, <u>Hunter SK</u>, Yoon T. Muscle fatigability from repeated lengthening contractions in young men and women. Society of Neuroscience Abstracts, #424.13, 2015. Society of Neuroscience Annual Meeting, Chicago, IL, October 16-21, 2015.
- Senefeld J, Pereira HM, Elliott N, Yoon T, and <u>Hunter SK</u>. Mechanisms of knee extensor muscle fatigability in men and women after isometric and dynamic contractions. Society of Neuroscience Abstracts, #424.12, 2015. Society of Neuroscience Annual Meeting, Chicago, IL, October 16-21, 2015.
- Berrios R, Kirking M, Kuhnen H, <u>Hunter SK</u>, Schmit B, Hyngstrom AS. Fatiguing contractions of paretic knee extensors do not exacerbate stretch reflex responses. Society of Neuroscience Abstracts, #67.15, 2015. Society of Neuroscience Annual Meeting, Chicago, IL, October 16-21, 2015.
- Murphy SA, Berrios R, <u>Hunter SK</u>, Negro F, Farina D, Nelson A, Keenan K, Schmit B, Hyngstrom AS. Modulation of motor units during repeated contractions post-stroke. *Society of Neuroscience Abstracts*, #160.15, 2015. *Society of Neuroscience Annual Meeting*, Chicago, IL, October 16-21, 2015.
- Bathon K, Onushuko T, Nguyen J, McGonigle E, Geoffroy, N. Ketchum N, Negro F, Farina D, <u>Hunter SK</u>, Schmit B, Hyngstrom AS. Changes in motor unit firing behavior following maximal efforts post stroke. *Society of Neuroscience Abstracts*, #324.20, 2015 *Society of Neuroscience Annual Meeting*, Chicago, IL, October 16-21, 2015.
- Hassanlouei H, Sundberg CW, Senefeld JW, Kuplic A and <u>Hunter SK</u>. Motor cortical input–output characteristics of the lower extremity in young and old adults. Society of Neuroscience Abstracts, # 242.05, 2015. Society of Neuroscience Annual Meeting, Chicago, IL, October 16-21, 2015.
- Linzmeier C, Senefeld J, Eble C, Harkins A, Pierre I, Schlinder-Delap B, Harmer A, and <u>Hunter SK</u>. Neuromuscular Fatigue among Individuals with Type 2 Diabetes and Pre-Diabetes Compared with Matched Controls. Marquette University Biomedical Sciences Summer Research Program, July 2015.
- Pashibin T, Deering R, Senefeld J, Cruz M, Lemley K, Hoeger-Bement B, Linzmeier C, and <u>Hunter SK</u>. Postpartum Women Demonstrate Decreased Abdominal Muscle Strength and Increased Fatigability Compared to Nulliparous Women. Marquette University Biomedical Sciences Summer Research Program, July, 2015.

- Nino de Guzman M, <u>Hunter SK</u>, and Keenan KG. Sex differences in elite indoor rowing times: the potential role of participation. University of Wisconsin - Milwaukee, Milwaukee, WI. Poster presentation at the summer undergraduate research program. June, 2015.
- 84. Harmer, A., Senefeld, J., Harkins, A., Schlinder-Delap, B., Deering, R., Danduran, M. J., <u>Hunter, S.K.</u> World Congress of Physical Therapy, "Heightened cardiovascular stress during the six-minute walk test among people with type 2 diabetes," *World Confederation for Physical Therapy*, Singapore. May 2015.
- 83. Pereira HM, Esser T, Schlinder-Delap B, Senefeld J, Sundberg C, Deering R, <u>Hunter SK.</u> Cognitive demand decreases Steadiness and dexterity with Aging. *American College of Sports Medicine National Annual Meeting*, San Diego, CA, May 26 30, 2015.
- Deering R, Senefeld J, Pashibin T, Pereira H, Hoeger-Bement M, Eickmeyer S, <u>Hunter SK</u>. Fatigability and steadiness of the trunk flexor muscles in young healthy adults. *American College of Sports Medicine National Annual Meeting*, San Diego, CA, May 26 - 30, 2015.
- Senefeld J, Smith C, <u>Hunter SK</u>. Sex differences in ultra-marathon running: performance and participation. American College of Sports Medicine National Annual Meeting, San Diego, CA, May 26 - 30, 2015.
- Sundberg CW, Nelson CR, Trappe S, <u>Hunter SK</u>, Fitts RH. Depressive effects of fatiguing metabolites, H+ and Pi, on maximal isometric force and peak power in young and old human muscle fibers. *American College of Sports Medicine National Annual Meeting*, San Diego, CA, May 26 - 30, 2015.

- Yoon T, Pereira HM, Nielson KA, Prost R, Nelson P, <u>Hunter SK.</u> Brain activation is greater in older women during a fatiguing contraction with imposed cognitive demand. *Society of Neuroscience Abstracts*, # 170.09, 2014. *Society of Neuroscience Annual Meeting*, Washington DC. 11.16.2014.
- Pereira HM, Schlinder-Delap B, Negro F, Farina D, Hyngstrom AS, Keenan KG, <u>Hunter SK</u>. Steadiness and motor unit activity of the elbow flexor muscles with cognitive demand. *Society of Neuroscience Abstracts*, # 160.19, 2014. *Society of Neuroscience Annual Meeting*, Washington DC. 11.16.2014.
- Senefeld J, Harmer AR, Pereira M, Yoon T, Schlinder-DeLap B, Deering R, Harkins A, Danduran M, Magill S, Kidambi S & <u>Hunter</u> <u>SK</u>. Sex differences In fatigability in individuals with Type 2 Diabetes and pre-diabetes. Presented at the ACSM Integrative Physiology of Exercise Meeting, Miami Beach, FI, 09.17 – 09.20.2014
- 76. Sundberg CW, <u>Hunter SK</u>, Bundle M. Sex differences in muscle fatigability during high-intensity cycling exercise. Presented at the ACSM Integrative Physiology of Exercise Meeting, Miami Beach, FI, 09.17 – 09.20.2014
- Pereira HM, Schlinder-Delap B, Negro F, Farina D, Hyngstrom AS, Keenan KG, <u>Hunter SK</u>. Sex difference in steadiness and motor unit activity of the elbow flexor muscles with cognitive demand. Presented at the *Musculoskeletal Sex Differences Throughout the Lifespan Research Symposium*, Chicago, Illinois, 07.30 – 08.01. 2014.
- 74. Hyngstrom AS, Murphy S, Berrios R, Hunter SK, Negro F, Farina D, Schmit B, Keenan KG. Stroke-related changes in the motor unit firing behavior during fatiguing contractions. Presented at the *International Motorneuron Meeting*, Halifax, Canada, 07.2014.
- 73. Durand M, Murphy S, Kirking M, Gutterman D, <u>Hunter SK</u>, and Hyngstrom AS. Stroke-related changes in the hyperemic response to exercise and the relationship to neuromuscular fatigue. *Medicine and Science in Sports and Exercise* 46(5). *American College of Sports Medicine National Annual Meeting*, Orlando, FL, 05.28-05.31.2014.
- 72. Senefeld J, Harmer AR, Pereira M, Yoon T, Schlinder-DeLap B, Deering R, Buzzard A, Harkins A, Danduran M, Magill S, Kidambi S & <u>Hunter SK</u>. Neuromuscular fatigue in individual with and without type 2 diabetes. *Medicine and Science in Sports and Exercise* 46(5). *American College of Sports Medicine National Annual Meeting*, Orlando, FL, 05.28-05.31.2014.
- Pereira HM, Schlinder-Delap B, Yoon T, Keenan KG, <u>Hunter SK.</u> Cognitive stress and visual gain affects force fluctuations at low forces. *Medicine and Science in Sports and Exercise* 46(5). *American College of Sports Medicine National Annual Meeting*, Orlando, FL, 05.28-05.31.2014.

2013

 Pereira HM, Spears VC, Schlinder-Delap B, Yoon T, Nielson KA and <u>Hunter SK</u>. Sex differences in motor fatigue for old adults in response to increased cognitive demand. Society of Neuroscience Abstracts, #89.28, 2013. Society of Neuroscience Annual Meeting, San Diego, CA. 11.09.2013.

- Senefeld J, Harmer AR, Pereira H, Yoon T, Schlinder-DeLap B, Deering R, Buzzard A, Harkins A, Danduran M and <u>Hunter SK</u>. Neuromuscular fatigue in individual with and without Type 2 Diabetes. *Mid West American College of Sports Medicine Annual Meeting*, Merrillville, IN. 11.08-09.2013.
- Senefeld J, Elliott N, Pereira H, Yoon T, Harmer AR and <u>Hunter SK</u>. Sex differences in fatigue following dynamic contractions of knee extensor muscles, *Medicine and Science in Sports and Exercise* 45(5):S363, 2013. *American College of Sports Medicine National Annual Meeting*, Indianapolis, IN. 05.28.2-13 – 06.01.2013.
- Stevens AA, Senefeld J, Joyner MJ and <u>Hunter SK</u>. Sex differences in the world's fastest swimming with advanced age, *Medicine and Science in Sports and Exercise* 45(5):S478, 2013. *American College of Sports Medicine National Annual Meeting*, Indianapolis, IN. 05.28.2-13 06.01.2013.
- Elliott N, Senefeld J, Pereira H, Yoon T, Harmer AR and <u>Hunter SK</u>. Sex differences and supraspinal fatigue of the knee extensor muscles in young adults, *Medicine and Science in Sports and Exercise* 45(5):S95-96, 2013. *American College of Sports Medicine National Annual Meeting*, Indianapolis, IN. 05.28.2-13 – 06.01.2013.
- 65. Lemley K, Coate M, <u>Hunter SK</u>. Hoeger Bement, M. Relation between conditioned pain modulation and exercise-induced hypoalgesia in young healthy adults. *American Pain Society Annual Meeting*, New Orleans, LA. 05.08-11.2013.
- 64. Rybar M, Kuhnen H, Oullette D, Walker E, Berrios Barillas R, Schmit B, <u>Hunter SK</u>, Hyngstrom AS. Hip flexor fatigue following submaximal concentric contractions and walking function post stroke. *American Physical Therapy Association Combined Sections Meeting*, San Diego, CA. 01.21-24.2013.

- Pereira HM, Spears VC, Schlinder-Delap B, Yoon T and <u>Hunter SK</u>. Age and sex differences in control of force during static contractions with the elbow flexor muscles when cognitive demand is imposed. Society of Neuroscience Abstracts, #789.24, 2012. Society of Neuroscience Annual Meeting, New Orleans, LA. 10.13-16.2012.
- Pereira HM, Spears VC, Schlinder-Delap B, Yoon T and <u>Hunter SK</u>. Sex differences in response to cognitive demand during a fatiguing contraction in old adults. *The Biannual Meeting of the International Society of Electromyography and Kinesiology*, Brisbane, Australia. 07.18-21.2012.
- 61. <u>Hunter SK</u>, Yoon T, Onushko T and Christou EA. Age-related difference in time to failure of a submaximal fatiguing contraction is associated with modulation of muscle activity. *The Biannual Meeting of the International Society of Electromyography and Kinesiology*, Brisbane, Australia. 07.18-21.2012.
- 60. Hyngstrom A, Negro F, Kuhnen H, <u>Hunter SK</u>, Keenan K, Farina D, Schmit B. Motor unit behaviour following fatigue in stroke survivors. *International Motorneuron Meeting*, Sydney, Australia. 07.26.2012.
- Pereira HM, Spears V, Yoon T, Schlinder-Delap B and <u>Hunter SK</u>. Cognitive demand increases muscle fatigability of the elbow flexor muscles in young and old adults, *Medicine and Science in Sports and Exercise* 44(5):S127, 2012. *American College of Sports Medicine National Annual Meeting*, San Francisco, CA. 05.30.2012.
- Senefeld J, Yoon T, Hoeger Bement M, and <u>Hunter SK</u>. Sex differences in fatigue during dynamic contractions differs between arm and leg muscles. *Medicine and Science in Sports and Exercise*, 44(5):S97, 2012. *American College of Sports Medicine National Annual Meeting*, San Francisco, CA. 05.30.2012.
- Yoon T, Senefeld J, Hoeger Bement M, and <u>Hunter SK</u>. Age differences in fatigue during dynamic contractions in arm and leg muscles, *Medicine and Science in Sports and Exercise* 44(5):S97, 2012. *American College of Sports Medicine National Annual Meeting*, San Francisco, CA. 05.30.2012.
- Lemley KJ, Drewek B, Miller L, <u>Hunter SK</u> and Hoeger Bement M. Pain relief in older adults following static contractions is not taskdependent, *Medicine and Science in Sports and Exercise* 44(5):S457, 2012. *American College of Sports Medicine National Annual Meeting*, San Francisco, CA. 05.30.2012.
- Stevens AA and <u>Hunter SK</u>. Sex differences in marathon performance with advanced age: nature or nurture? *Medicine and Science in Sports and Exercise*, 44(5):S597, 2012. *American College of Sports Medicine National Annual Meeting*, San Francisco, CA. 05.30.2012.
- 54. Hyngstrom AS, Negro F, Keenan K, <u>Hunter SK</u>, Farina D, and Schmit B. Motor unit behavior following fatigue in stroke survivors. *Cellular and Network Functions in the Spinal Cord Meeting,* Madison, WI. 2012.

- 53. Hoeger Bement MK, Weyer A, Yoon T, <u>Hunter SK</u>. Corticomotor excitability during a noxious stimulus and after exercise in women with fibromyalgia. *American Pain Society Annual Meeting,* Honolulu, HI. 05.17-19.2012.
- Kirking K, Kuhnen H, Burns E, Christou E, <u>Hunter SK</u>, Schmit B. and Hyngstrom A. Impairments in low level force control of hip flexors are associated with clinical measurements of function post stroke. *American Physical Therapy Association Combined Sections Meeting*, Tampa, Florida. 02.2012.

- Hunter SK, McNeil CJ, Butler JE, Gandevia SC and Taylor JL. Short-interval intracortical inhibition and intracortical facilitation are decreased by fatigue during submaximal isometric contractions Society of Neuroscience Abstracts, #278.03, 2011. Society of Neuroscience Annual Meeting, Washington DC. 11.12-16.2011.
- Yoon T, Doyel R, Pereira HM, Keller ML, Nielson KA, Prost R, Nelson PA, and <u>Hunter SK</u>. Brain activation is increased in older adults during a fatiguing contraction with imposed cognitive demand. Society of Neuroscience Abstracts, #815.11, 2011. Society of Neuroscience Annual Meeting, Washington DC. 11.12-16.2011.
- Vanden Noven ML, Pereira HM, Yoon T, Stevens AA, Nielson KA, and <u>Hunter SK</u> Influence of age and cognitive demand on motor output variability and fatigability during sustained isometric contractions. *Society of Neuroscience Abstracts*, #670.18, 2011. *Society* of *Neuroscience Annual Meeting*, Washington DC. 11.12-16.2011.
- Hyngstrom AS, Kuhnen H, Kirking KM, <u>Hunter SK</u> and, Schmit BD. Impairments in isometric force regulation of the hip flexors post stroke and the relationship with function. Society of Neuroscience Abstracts, #589.12, 2011. Society of Neuroscience Annual Meeting, Washington DC. 11.12-16.2011.
- Yoon T, Keller M, Verber MD, Skelton K, Nielson KA and <u>Hunter SK</u>. Brain activation during isometric fatiguing contractions and increased cognitive demand. Society of Neuroscience Abstracts 36, #83.7, 2010. Society of Neuroscience Annual Meeting, San Diego, CA. 11.13-17.2010.
- Yoon T, Stevens AA, Schlinder-DeLap B, Doyel R and <u>Hunter SK</u>. Fatigability of the elbow flexor muscles during dynamic contractions in old and very old adults. *Medicine and Science in Sports and Exercise* 43(5), S599; 2011. *American College of Sports Medicine National Annual Meeting*, Denver, CO. 06.03.2011.
- Stevens AA and <u>Hunter SK</u>. Is there a sex difference in performance and participation of marathon runners with increased age? Medicine and Science in Sports and Exercise 43(5), S539; 2011. American College of Sports Medicine National Annual Meeting, Denver, CO. 06.03.2011.
- Skelton KW, Stevens AA and <u>Hunter SK</u>. Does the age of elite men and women runners differ for the marathon? *Medicine and Science in Sports and Exercise*_43(5), S539; 2011. *American College of Sports Medicine National Annual Meeting*, Denver, CO. 06.03.2011.

2010

- 43. Hyngstrom AS, Onushko TL, Heitz R, Rutowski AA, <u>Hunter SK</u> and, Schmit BD. The effect of stroke-related changes in hip flexor fatigability on motor output. *Proceedings of the Society of Neural Control of Movement Annual Meeting*, Naples, FL. 04.20-25.2010.
- Yoon T, Fiandt C, Doyel R and <u>Hunter SK</u>. Muscle fatigue of the elbow flexor muscles during dynamic contractions with aging. Medicine and Science in Sports and Exercise 42(5), S409; 2010. American College of Sports Medicine National Annual Meeting, Baltimore, MD. 06.01-05.2010.
- 41. <u>Hunter SK</u>. Sex differences and muscle fatigue. *Medicine and Science in Sports and Exercise* 42(5), 51; 2010. *American College of Sports Medicine National Annual Meeting*, Baltimore, MD. 06.01-05.2010.
- Hyngstrom AS, Onushko TL, Heitz R, Rutowski AA, Scanlan S, <u>Hunter SK</u> and, Schmit BD Greater neuromuscular fatigue in the paretic leg of stroke subjects during dynamic contractions. *Society of Neuroscience Abstracts* 36, #897.17, 2010. *Society of Neuroscience Annual Meeting*, San Diego, CA. 11.13-17.2010.
- Keller ML, Schlinder-DeLap B, Doyel R, Larson G and <u>Hunter SK.</u> Muscle fatigability is greater in hand muscles of combat veterans with post-traumatic stress disorder. Society of Neuroscience Abstracts 36, #378.13, 2010. Society of Neuroscience Annual Meeting, San Diego, CA. 11.13-17.2010.

- Vanden Noven ML, Yoon T, Verber MD, Nielson KA and <u>Hunter SK</u>. Aging alters brain activation during submaximal contractions with the lower leg Society of Neuroscience Abstracts 35, #863.6, 2009. Society of Neuroscience Annual Meeting, Chicago, IL. 10.17-21.2009.
- Yoon T, Vanden Noven ML, Verber MD, Nielson KA and <u>Hunter SK</u>. The influence of gain of visual feedback and sex on brain activation during isometric contractions. *Society of Neuroscience Abstracts* 35,# 863.3, 2009. *Society of Neuroscience Annual Meeting*, Chicago, IL. 10.17-21.2009.
- Hyngstrom AS, Onushko TL, Heitz R, Rutowski AA, <u>Hunter SK</u> and, Schmit BD. Stroke impairs strength and control of motor output during sub-maximal fatiguing contractions. <u>Society of Neuroscience Abstracts</u> 35, #568.6, 2009. Society of Neuroscience Annual Meeting, Chicago, IL. 10.17-21.2009.
- 35. Hoeger Bement MK, Weyer AD, Yoon T, <u>Hunter SK</u>. Corticomotor excitability and pain are not influenced by fatiguing exercise in women with fibromyalgia, *American Physical Therapy Association, Section on Research Retreat*, Monterey, CA. 08.09-13.2009.
- Keller ML, Pruse J, Schlinder-Delap B, Yoon T, <u>Hunter SK</u>. Cognitive stress but not distraction influence the time to task failure for a submaximal fatiguing contraction. *American Physical Therapy Association, Section on Research Retreat*, Monterey, CA. 08.09-13.2009.
- Pruse JM, Keller ML, Yoon T, Schlinder-Delap B & <u>Hunter SK</u>. Supraspinal fatigue after a low– force fatiguing contraction in men and women. *Medicine and Science in Sports and Exercise* 41(5), S260; 2009. *American College of Sports Medicine National Annual Meeting*, Seattle, WA. 05.27-30.2009.
- Hunter SK, Vanden Noven ML, Yoon T, Verber MD, Fauth M, Skelton, KW, Neilson KA. Sex differences in brain activation during submaximal contractions of the lower extremity. *Medicine and Science in Sports and Exercise* 41(5), S520; 2009. *American College of* Sports Medicine National Annual Meeting, Seattle, WA. 05.27-30.2009.
- Yoon T, Keller ML, Schlinder-Delap B & <u>Hunter SK</u>. Age and sex differences in muscle fatigability maintaining the same absolute force. *Medicine and Science in Sports and Exercise* 41(5), S97; 2009. *American College of Sports Medicine National Annual Meeting*, Seattle, WA. 05.27-30.2009.
- Vanden Noven ML, Yoon T, Verber MD, Fauth M, Skelton, KW, Neilson KA & <u>Hunter SK</u>. Gain of visual feedback and brain activation during submaximal contractions of the lower extremity. *Medicine and Science in Sports and Exercise* 41(5), S521; 2009. *American College of Sports Medicine National Annual Meeting*, Seattle, WA. 05.27-30.2009.
- Weyer A, Hartley S, Yoon T, <u>Hunter SK</u>, Hoeger Bement MK. Exercise attenuates pain-induced increases in corticospinal excitability. Accepted for presentation at the *American Physical Therapy Association Combined Sections Meeting*, Las Vegas, NV. 02.09-12.2009.
- 28. Hartley SE, Weyer A, <u>Hunter SK</u>, Hoeger Bement MK. Experimental pain measurement in people with fibromyalgia. Accepted for presentation at the *American Physical Therapy Association Combined Sections Meeting*, Las Vegas, NV. 02.09-12.2009.
- Keller ML, Yoon T, Schlinder-Delap B, Pruse J, <u>Hunter SK</u>. Supraspinal fatigue contributes to neuromuscular fatigue after a low-force fatiguing contraction. Accepted for presentation at the *American Physical Therapy Association Combined Sections Meeting*, Las Vegas, NV. 02.09-12.2009.

- Vanden Noven ML, Yoon T, Verber M, Ng A, Nielson K, and <u>Hunter SK</u>. Brain activation and modulation of force fluctuations during a fatiguing contraction of the lower leg. Society of Neuroscience Abstracts 34, 2008. Society of Neuroscience Annual Meeting, Washington DC. 11.19-22.2008.
- Griffith EE, Yoon T, Farinella J, Ng AV & <u>Hunter SK</u>. Type of feedback and time to task failure in young and old adults. *Medicine and Science in Sports and Exercise* 40(5); S448, 2008. *American College of Sports Medicine National Annual Meeting*, Indianapolis, IN. 05.28-31.2008.
- Keller M, Harkins A, Yoon T, Schlinder-Delap B & <u>Hunter SK</u>. Cognitive and physical stressor increases salivary cortisol before and after a low – force fatiguing contraction. *Medicine and Science in Sports and Exercise* 40(5), S349; 2008. *American College of Sports Medicine National Annual Meeting*, Indianapolis, IN. 05.28-31.2008.

- Ng AV, Vanden Noven ML, Cowdy J, Farinella J, Heyer E & <u>Hunter SK</u>. Increased muscle fatigability may contribute to cancer-related fatigue in a breast cancer survivor undergoing chemotherapy. *Medicine and Science in Sports and Exercise* 40(5), S290; 2008. *American College of Sports Medicine National Annual Meeting*, Indianapolis, IN. 05.28-31.2008.
- Yoon T, Vanden Noven ML, Verber M, Ng A, Nielson K, and <u>Hunter SK.</u> Brain activation during isometric ankle dorsiflexion at different contraction intensities. Society of Neuroscience Abstracts 34, 2008. Society of Neuroscience Annual Meeting, Washington DC. 11.19-22.2008.
- Yoon T, Schlinder-Delap B & <u>Hunter SK</u>. Time to failure and muscle activation of a fatiguing contraction alters with practice and age. Medicine and Science in Sports and Exercise 40(5), S447; 2008. American College of Sports Medicine National Annual Meeting, Indianapolis. IN. 05.28-31.2008.
- Bement MKH, Lewis A, DiCapo J, Rasiarmos R, <u>Hunter SK</u>. Mental stress alters pain perception. American Physical Therapy Association Combined Sections Annual Meeting, Nashville TN. 02.2008.
- 19. Bement MKH, Keller ML, Harkins AL, Hunter SK. Cortisol levels before and after isometric contractions are not influenced by the menstrual cycle. American Pain Society Annual Meeting, Tampa, FL. 08.2008.

- 18. <u>Hunter SK</u>, Yoon T, Pate B, Rodriguez TM, Christou EA. Low-frequency oscillations in force are associated with heart rate. *Society for Neuroscience Abstracts*, 33, 2007. *Society of Neuroscience Annual Meeting*, San Diego, CA. 11.02-04.2007.
- Yoon T, Schlinder-Delap B, Keller M, & <u>Hunter SK</u>. Supraspinal fatigue increased during a low-intensity sustained fatiguing contraction in young and old adults. *Society for Neuroscience Abstracts*, 33, 2007. *Society of Neuroscience Annual Meeting*, San Diego, CA. 11.02-04.2007.
- Hawe R, Bly SC, Yoon T, <u>Hunter SK</u>. Increased limb support decreases muscle fatigue for the dorsiflexor muscles. Annual Meeting of the Biomedical Engineering Society, Los Angeles, CA. 09.26-27.2007.
- 15. Ellingson A, Wong S, <u>Hunter SK</u>, Ng AV. Type of depression influences corticospinal responses: a pilot study. *Annual Meeting of the Biomedical Engineering Society*, Los Angeles, CA. 09.26-27.2007.
- Yoon T, Schlinder-Delap B, Griffith EE & <u>Hunter SK</u>. Fluctuations in motor output are altered with fatigue and age. *Medicine and Science in Sports and Exercise* 39(5); S267, 2007. *American College of Sports Medicine National Annual Meeting*, New Orleans, LA. 05.2007.
- Farinella JM, Corrado G, Griffith E, Jablonski K, Romanowich D, Ng AV & <u>Hunter SK</u>. Task-dependent muscle fatigue in the tibialis anterior. *Medicine and Science in Sports and Exercise* 39(5); S263, 2007. *American College of Sports Medicine National Annual Meeting*, New Orleans, LA. 05.2007.
- Griffith EE, Schlachter KM, Kufahl TD, Ng AV & <u>Hunter SK</u>. The influence of active hyperemia on the sex difference in time to failure of an intermittent fatiguing contraction. *Medicine and Science in Sports and Exercise* 39(5);S471, 2007. *American College of Sports Medicine National Annual Meeting*, New Orleans, LA. 05.2007.

- 11. Hoeger Bement MK, Dicapo JM, Rasiarmos R, Lewis A, <u>Hunter SK</u>. Phase of the menstrual cycle does not affect exercise-induced analgesia, *American Physical Therapy Association, Combined Sections Meeting*, Boston, MA., 02.2007.
- Griffith EE, Yoon T, Schlinder-Delap B & <u>Hunter SK</u>. Fatigue within the central nervous system contributes to failure of low-intensity sustained contractions. *American Physical Therapy Association Combined Sections Meeting*, Boston, MA. 02.2007.
- Yoon T, Schlinder-Delap B & <u>Hunter SK</u>. Performance of a cognitive task impairs time to failure and steadiness for a submaximal fatiguing contraction. Society for Neuroscience Abstracts, 32, 2006. Society of Neuroscience Annual Meeting, Atlanta, GA 10.14-10.18.2006.
- Hunter SK, Yoon T, Lepers R & Schlinder-Delap B. Time to failure for a low-force fatiguing contraction is reduced with exposure to a stressor. Society for Neuroscience Abstracts, 32, 2006. Society of Neuroscience Annual Meeting, Atlanta, GA 10.14-10.18.2006.
- 7. <u>Hunter SK</u>. Neural mechanisms that contribute to muscle fatigue. *Medicine and Science in Sports and Exercise* 38(5); 46, 2006. *American College of Sports Medicine National Annual Meeting*, Denver, CO. 05.31-06.03, 2006.

- Hoeger-Bement MK, Rasiarmos RL, DiCapo JM, Griffith EE & <u>Hunter SK</u>. Sex differences and reductions in pressure-induced pain following submaximal isometric contractions. *Medicine and Science in Sports and Exercise* 38(5); S504, 2006. *American College of* Sports Medicine National Annual Meeting, Denver, CO. 05.31-06.03.2006.
- Yoon T, Schlinder-Delap B, Griffith EE & <u>Hunter SK</u>. Old adults exhibit greater central fatigue for a long duration low-intensity fatiguing contraction than young adults. *Medicine and Science in Sports and Exercise* 38(5); S179, 2006. *American College of Sports Medicine National Annual Meeting*, Denver, CO. 05.31-06.03.2006.
- Schlachter KM, Griffith EE, Ng AV & <u>Hunter SK</u>. Active hyperemia and vascular conductance differ in men and women matched for strength for an isometric fatiguing contraction. *Medicine and Science in Sports and Exercise* 38(5); S178, 2006. *American College of* Sports Medicine National Annual Meeting, Denver, CO. 05.31-06.03.2006.
- Griffith EE, Yoon T, Schlinder-Delap B & <u>Hunter SK</u>. Sex differences in muscle fatigability is task dependent and not explained by a difference in central fatigue. *Medicine and Science in Sports and Exercise* 38(5); S179, 2006. *American College of Sports Medicine National Annual Meeting*, Denver, CO. 05.31-06.03.2006.
- Hoeger-Bernent M, Rasiarmos RL, DiCapo JM, Griffith EE, <u>Hunter SK</u>. Pain decreases after long duration and low intensity isometric contractions in men and women. *Proceedings of the American Pain Society National Meeting*, San Antonio, TX, 05.2006.
- 1. Hoeger-Bement M, DiCapo JM, Rasiarmos RL, Griffith EE, <u>Hunter SK</u>. Maximal voluntary contractions decrease pressure-induced pain in healthy men and women. *Proceedings of the Physical Therapy Combined Sections Meeting*, San Diego, CA, 02.02-06.2006.

IV. RESEARCH GRANTS

A. ACTIVE GRANTS

| EXTRAMURAL AND INTRAMURAL GRANTS PRINCIPAL INVESTIGATOR <u>ACTIVE</u> | | |
|---|--|---|
| 1. | National Institute of Health R01 AG077688 Title: Mechanisms of Fatigability and the Protective Effects of Exercise in People with Diabetes Direct and Indirect Costs: \$3.023,719 Direct Costs: \$1,991,319 Role: Contact PI (Co-PI with Christopher Sundberg) | 09.2022 - 04.2027 |
| 2. | National Institute of Health R01 AG048262 Title: Fatigability of Limb Muscle in Older Adults: Protective Effects of Exercise. Direct and Indirect Costs: \$3,015,872 Direct costs: \$1,984,164 Role: Contact PI (Co-PI with Christopher Sundberg and Robert Fitts) | 09.2020 – 08.2025 |
| EX | TRAMURAL GRANTS CO-INVESTIGATOR <u>ACTIVE</u> | |
| 3. | National Institute of Health NICHD R01 [R01 HD112258] Title: Blood Flow Regulation and Neuromuscular Function Post-Stroke Direct and Indirect Costs: \$3,841,551 Direct + Indirect Costs: \$3,178,706 Role: Co-I (PIs: A Hyngstrom and MJ Durand) | 08.2023 – 07.2028 |
| 4. | National Institutes of Health, NICHD R01 [R01HD099340] Title: Ischemic conditioning and improved motor function post stroke Purpose: Quantify increases in walking speed and leg function after four weeks of ischemic conditioning and tre chronic stroke survivors. Direct and Indirect Costs: \$2,250,072 Role: Co-I (PIs: A Hyngstrom and M Durand) | 07.2019 – 06.2024 admill training in |
| 5. | National Institutes of Health R21 Title: Exercise as Treatment in Children with Communication Impairments Direct Costs: \$275,000 Direct Costs + Indirect: \$403,323 Role: Co-I (PI: J Iuzzini-Seigel) | 09.2022 – 07-2024 |

| 0. | Title: Exercise fatigability in older adults: The impact of dietary nitrate supplementation on vascular function ar Direct Costs: \$140,952. Role: Primary Mentor (PI: T. Fulton) | nd bioenergetics |
|----|---|----------------------|
| 7. | National Institutes of Health F99AG083283-01 to Zhilun (Andy) Zhou Title: Project Title: Sex-Specific Impact of Stroke on Neuromuscular Fatigability in Older Adults Role: Sponsor Direct Costs: \$36,035 | 09.2023 — 09.2024 |
| EX | TRAMURAL & INTRAMURAL GRANTS PRINCIPAL & CO-INVESTIGATOR <u>SUBMITTED</u> | <u>& PENDING</u> |
| В. | COMPLETED GRANTS | |
| EX | TRAMURAL GRANTS PRINCIPAL INVESTIGATOR COMPLETED | |
| 1. | National Institute of Health Administrative Supplement NIH [R01AG048262-07S1] (Admin Supplement) Title: Fatigability of Limb Muscle in Older Adults: Protective Effects of Exercise. Direct costs: \$250,000 Role: Contact PI (Co-PI with Christopher Sundberg and Robert Fitts) | 09.2021-06.2022 |
| 2. | Clinical and Translational Science Institute of Southeast WI Pilot Ensemble Award Title: Persistent Effects of COVID-19 on Physical Function Direct Costs: \$35,000 Role: PI | 07.2021 – 06.2022 |
| 3. | Clinical and Translational Science Institute of Southeast WI Title: <i>Fatigue and Neuromuscular Function in Adults with Achilles Tendinopathy</i> Direct and Indirect Costs: \$50,000 Role: PI (Co-PI with Dr Craig Young, MCW) | 06.2020 - 07.2021 |
| 3. | National Institute of Health R01 [R01 AG048262-01A1] Title: Fatigability of Limb Muscle in Older Adults: Protective Effects of Exercise. Direct: \$2.1 million Direct and Indirect Costs: \$2,820,000 Role: PI (Multiple PI with Robert Fitts) | 09.2015 – 08.2020 |
| 4. | University of South Australia, Australia Visiting Distinguished Thought Leader Scholarship Direct: \$11,000 Role: PI | 03.2018 - 05.2018 |
| 5. | National Institute of Health R21 [R21 AG045766] Title: <i>Motor Function in Older Adults: The Importance of Apolipoprotein-E</i> ε4 Inheritance. Direct Costs: \$275,000 Direct and Indirect Costs: \$420,000 Role: PI | 07.2014 - 05.2017 |
| 6. | Women's Health Research Program at the Medical College of Wisconsin Title: Neuromuscular Function in Women Postpartum Direct Costs: \$50,000 Role: PI (Co-PI with M. Cruz) | 03.2015 - 06.2016 |
| 7. | National Institute of Aging R15 [R15AG039697] Title: <i>Neuromuscular Fatigue: Sex and Age Differences.</i> Direct Costs: \$273,000 Direct and Indirect Costs: \$416,000 Role: PI | 10.2011 - 09.2014 |
| 8. | Clinical and Translational Science Institute of Southeast WI Brain Imaging Pilot Grant Title: <i>Brain Activation and the Stress Response During Motor Performance in Older Adults.</i> Direct costs: \$45,000 | 06.2010 - 06.2012 |

6. American Heart Association Post-Doctoral Award to Timothy. Fulton

23

01.2022 - 12.2023

| | Role: PI | | |
|-----|--|-------------------------------|--------|
| 9. | National Institute of Aging R15 [1R15AG30730] Title: <i>Neuromuscular Fatigue in Old Adults.</i> Direct costs: \$150,000 Direct and Indirect: \$226,500 Role: PI | 09.2008 -1 | 0.2011 |
| 10. | Clinical and Translational Science Institute of Southeast WI Doctoral Research Grant Title: <i>The Influence of Posttraumatic Stress Disorder on Motor Impairment in Veterans.</i> Direct costs: \$27,000 Role: PI | 07.2009 - 0 | 6.2011 |
| 11. | Dr. Judith Stitt Women's Faculty Scholarship : Wisconsin Women's Health Foundation Title: Sex Differences in the Stress Response and Motor Performance. Direct costs: \$50,000 Role: Pl | 12.2008 - 1: | 2.2010 |
| 12. | Medical College of Wisconsin Clinical and Translational Science Institute of Southeast WI Core Facility for Pilot Funding Title: Brain Activation During Fatiguing Contractions in Young and Old Adults. Direct costs: \$16,000 Role: PI | 10.2008 - 0 | 3.2009 |
| 13. | National Institute of Occupational, Safety and Health Pilot Training Grant University of Illinois Chicago Title: The impact of stress on neuromuscular fatiguing contraction in men and women. Direct costs: \$16,000 Role: PI | 07.2007 - 0 | 6.2008 |
| 14. | National Institute of Aging RO3 [AG023183] Title: <i>Task Dependence of Muscle Fatigue of Young and Older Adults</i> . Direct costs: \$82,000 Direct and Indirect Costs: \$126,990 Role: PI | 10.2004 - 0 | 9.2006 |
| 15. | American Physiological Society Research Career Enhancement Award Title: <i>Transcranial magnetic stimulation in the study of muscle fatigue in young and old men and women.</i> Direct costs: \$4,000 Role: Pl | 07.2004 - 0 | 8.2004 |
| 16. | American College of Sports Medicine Research Endowment Award Title: Sex differences in muscle fatigue of young and older adults. Direct costs: \$9,750 Role: PI | 07.2002 - 0 | 6.2003 |
| ΙΝΤ | RAMURAL GRANTS (MARQUETTE UNIVERSITY) COMPLETED | | |
| 1. | Institute for Women's Leadership: Marquette University Title: Sex Differences in the Persistent Effects of COVID-19 Direct Costs: \$12,308 Role: Pl | 05.2021 -0 | 9.2021 |
| 4. | R01 Challenge: Marquette University Title: <i>Fatigability of Limb Muscle in Older Adults: Protective Effects of Exercise</i> Direct Costs: \$30,000 Role: PI | 2020- | 2021 |
| 5. | Athletic & Human Performance Research Pilot Award, Marquette University Title: The Role of Vascular Dysfunction in Fatigue in Adults with Prediabetes and Type 2 Diabetes (PI: I Direct and Indirect Costs: \$15,000 | 11.2018-05 K. Lukaszewicz) | 5.2019 |
| | SANDRA K HUNTER CURRICULUM VIT/ | AE October 2023 | 24 |

| | Role: Co-I | |
|-----|--|-------------------|
| 6. | Way Klinger Research Fellowship at Marquette University Title: Neuromuscular Fatigue in People with Type 2 Diabetes Direct Costs: \$150,000 Role: Pl | 07.2014 - 06.2017 |
| 7. | Women's and Gender Studies Collaborative Research Scholarship Title: <i>Gender Bias in Exercise Performance: Physiology or Participation.</i> Direct Costs: \$4,000 Role: Pl | 07.2011 - 12.2011 |
| 8. | Way Klingler Young Scholar Award Title: <i>Brain activation in young and old adults during fatiguing tasks.</i> Direct costs: \$32,000 Role: PI | 07.2007 - 12.2007 |
| 9. | Regular Research Grant and Summer Faculty Fellowship Title: <i>The influence of cognitive stress on fatiguing contractions.</i> Direct costs: \$13,285 Role: PI | 07.2007 - 12.2007 |
| 10. | Faculty Development and Summer Scholarship, College of Health Sciences Title: The role of blood flow in men and women during isometric fatiguing contractions. Direct costs: \$6,000 Role: Pl | 01.2005 - 08.2005 |
| 11. | Way Klingler Summer Faculty Scholarship, College of Health Sciences Title: The influence of vascular conductance in the sex differences of muscle fatigue. Direct costs: \$3,500 Role: Pl | 05.2004 - 08.2004 |
| EX. | TRAMURAL GRANTS CO-INVESTIGATOR AND MENTOR COMPLETED | |
| 1. | NIA Loan Repayment Award to T. Fulton Title: Exercise fatigability in older adults: The protective effects of dietary nitrate supplementation Direct Costs: \$30,371. Role: Primary Mentor (PI: T. Fulton) | 07.2021 – 06.2023 |
| 2. | National Institute of Health R15 [R15HD090265] Title: Exercise Specificity and Fibromyalgia Pain (PI: M. Bement) Direct Costs: \$300,000 Direct and Indirect Costs: \$446,152 Role: Co-I | 09.2016 - 04.2019 |
| 3. | National Institute of Health R15 [1R15NS084130] (PI: Hyngstrom A) Title: <i>Neural Mechanisms of Neuromuscular Fatigue Post Stroke.</i> Direct Costs: \$300,000 Direct and Indirect Costs: \$446,152 Role: Co-I | 04.2014 - 03.2017 |
| 4. | National Institute of Health R21 [R21NS088818] (PI: Hyngstrom A) Title: Impaired Blood Flow and Neuromuscular Fatigue Post Stroke. Direct Costs: \$295,000 Direct and Indirect Costs: \$445,450 Role: Co-I | 07.2014 - 06.2017 |
| 5. | Clinical & Translational Science Institute of Southeast WI Small Pilot Grant for Trainees (PI: Bement M and Stolzman S) Title: Inflammatory Markers, Physical Fitness and Pain in Children. Direct Costs: \$ 49,861 Role: Consultant | 04.2013 – 12.2014 |

| 6. | Clinical & Translational Science Institute of South East WI Mentored K12 Award to Dr Allison Hyngstrom (PI: Hyngstrom A) Title: Mechanisms of Neuromuscular Fatigue and Leg Function Post Stroke. Direct Costs: \$386,930 Role: Co-Mentor | 09.2011 - 08.2014 |
|------------|--|-------------------|
| 7. | Clinical and Translational Science Institute of South East WI Small Pilot Grant (PI: Hyngstrom A) Title: <i>Effects of Altered Perfusion on Neuromuscular Fatigue and Leg Function Post Stroke.</i> Direct costs: \$ 26,204 Role: Co-I | 04.2013 - 04.2014 |
| 8. | Clinical and Translational Science Institute of South East WI Small Pilot Grant (PI: Hyngstrom, A) Title: Mechanisms of Neuromuscular Fatigue Post Stroke. Direct costs: \$45,000 Role: Co-I | 06.2011 - 06.2013 |
| 9. | American Heart Association Clinical Research Program (PI: Hyngstrom, A) Title: Leg Muscle Fatigue and Motor Function Post Stroke. Direct Costs: \$110,000 Role: Co-I | 01.2010 - 12.2011 |
| 10. | Arthritis Foundation (PI: Hoeger-Bement, M.) Title: Exercise Induced Pain Relief in Women with Fibromyalgia. Direct costs: \$150,000 Role: Co-I | 01.2008 - 12.2011 |
| 11. | National Institute of Occupational, Safety and Health Pilot Training Grant University of Illinois Chicago (PI: Yoon, T) Title: Brain Activation and the Stress Response During Motor Performance in Older Adults. Direct Costs: \$20,000 Role: Co-PI and Mentor | 10.2009 - 09.2010 |
| 12. | National Institute of Occupational, Safety and Health Pilot Training Grant University of Illinois Chicago (PI: Vanden Noven, ML) Title: Cognitive Stress and Neuromuscular Fatigue with Aging. Direct Costs: \$20,000 Role: Co-I and Mentor | 10.2008 - 9.2009 |
| 13. | American College of Sports Medicine (PreDoctoral Award for Erin Griffith) Title: <i>Mechanisms of Task Failure with Aging.</i> Direct costs: \$5,000 Role: Marquette PI and Mentor | 07.2007 - 06.2008 |
| 14. | Dr Judith Stitt Women's Faculty Scholar Wisconsin Women's Health Foundation (PI: Johnson, M). Title: <i>Gender Differences in the Role of Robotic Rehabilitation Therapy after Stroke.</i> Direct Costs: \$50,000 Role: Co-I | 10.2006 - 09.2008 |
| 15. | American Pain Society Future Leaders in Pain Management (PI: Hoeger-Bement, M.) Title: Acute Hormonal Fluctuations as a Mechanism for Exercise-Induced Hypoalgesia. Direct Costs: \$20,000 Role: Co-I | 11.2006 - 10.2007 |
| <u>v</u> . | Session Chair at Professional Meetings | |

| American College of Sports Medicine National Annual Meeting, Virtual | 2021 |
|--|------|
| Chair of Highlighted Symposium: Biomechanics and Neural Control of Movement | |
| Title: The Aging Neuromuscular System: Protective Effects of Physical Activity | |
| American College of Sports Medicine National Annual Meeting, Boston, MA | 2016 |
| Chair of Thematic Poster Session: "Fatigue" | |

| European Congress of Sports Science, Amsterdam, Netherlands Chair of three sessions | 2014 |
|--|------|
| International Society for Electromyography and Kinesiology, Brisbane, Australia. Chair of poster session titled "Muscle Fatigue" | 2012 |
| American College of Sports Medicine National Annual Meeting, Denver, CO Chair of 2 - hour Thematic Poster Session: "Skeletal Muscle Fatigue" | 2006 |
| American College of Sports Medicine National Annual Meeting, Denver, CO Co-ordinator and Chair of 2- hour Symposium: "Neural Mechanisms Contributing to Muscle Fatigue" | 2006 |
| American College of Sports Medicine National Annual Meeting, Indianapolis, IN Chair of a 2- hour Symposium: "Muscle Fatigue" | 2004 |
| American College of Sports Medicine National Annual Meeting, St. Louis, MO Co-ordinator and Chair of 2- hour Symposium: "Sex Differences in Fatigue and Performance" | 2002 |
| American College of Sports Medicine National Annual Meeting, Indianapolis, IN Chair of 2- hour Symposium: "Motor Control" | 2000 |

VI. PRESENTATIONS (SEMINARS)

| Α. | INTERNATIONAL PRESENTATIONS (INVITED - OUTSIDE THE USA) | |
|-----|--|--------------------------------|
| 1. | European Congress of Sport Sciences annual meeting, 2023, Paris, France European College of Sport Science 'Sex Differences in Neuromuscular Fatigability and Athletic Performance' | 07.05.2023 |
| 2. | Europhysiology 2022, Copenhagen, Denmark Sponsored by Physiological Society (London) Sex Differences in Neuromuscular Fatigability and Athletic Performance | 09.15.2022 |
| 3. | FINA Congress at the World Swimming and Diving Championships, Budapest, Hungary "Science behind the FINA Gender Inclusion Policy" | 06.19.2022 |
| 4. | The Biological Basis of Elite Performance, Physiology 2022 Conference, University of Nottingham, England Invited Speaker at the Annual conference of the Society of Physiology, UK "Sex Differences in Fatigability and Athletic Performance" | 04.12.2022 |
| 5. | Nottingham Trent University (England) Physical Activity and the Endocrine System Virtual Conference Invited Seminar: Ageing and Muscle Function of Men and Women: The Wonders of Physical Activity! | 07.21.2021 |
| 6. | School of Sport Science, Nottingham Trent University, UK (Virtual) The Female Athlete: Sex Differences in Fatigue and Athletic Performance https://femaleathletepodcast.buzzsprout.com/914179/6748984-bonus-professor-sandra-hunter-on-fatigue-and-the-ph differences-between-men-women | 12.2020 <u>ysiological-</u> |
| 7. | Canadian Society of Exercise Physiologists Annual Meeting, Kelowna, BC, Canada Symposium: 'Fatigue in Special Populations' "Fatigability in People with Type 2 Diabetes and Prediabetes' | 11.08.2019 |
| 8. | University of South Australia, Adelaide, Australia Sansom Institute Seminar: "Age Differences in Performance Fatigability" | 04.18. 2018 |
| 9. | Alliance for Research in Exercise, Nutrition and Activity, University of South Australia, Adelaide, Australia ARENA: "Sex Differences in Performance Fatigability" | 04.19. 2018 |
| 10. | Helping Hand Aged Care Facility, North Adelaide, Australia "Ageing and Fatigue: The Protective Effects of Exercise" | 04.13. 2018 |
| 11. | International Congress of the Association of Physical Activities and Sport Researchers, Dijon, France Invited Speaker: "Sex Differences in Performance Fatigability" | 10.31.2017 |
| 12. | Organization for the Study of Sex Differences Annual Meeting, Montreal, Canada | 05.2017 |

| | Symposium: 'Sex-Specific Mechanisms of Upper Limb Musculoskeletal Disorders" "Sex-Specific Mechanisms of Fatigability" | |
|-----|--|--------------------------------|
| 13. | European Congress of Sports Science Invited Speaker. Vienna, Austria [Invited Speaker at the Annual conference of the European College of Sport Science] "Fatigability Differs with Aging and Task Demands" | 07.2016 |
| 14. | Physiology 2015 Cardiff, Wales [Invited Speaker at the Annual conference of the Society of Physiology, London] "Sex Differences in Skeletal Muscle Fatigue" | 07.2015 |
| 15. | World Congress on Exercise Fatigue (with the American College of Sports Medicine), San Diego, CA Key Note: "Sex Differences in Muscle Fatigability" | 05.27.2015 |
| 16. | European Congress of Sports Science Key Note Speaker. Amsterdam, Netherlands [Invited Keynote Speaker at the Annual conference of the European College of Sport Science] Plenary session: "Sex Differences in Neuromuscular Fatigue and Performance: Why Does it Matter?" | 07.2014 |
| 17. | Canadian Society of Exercise Physiology National Meeting Symposium. Quebec City, Canada "Expanding the Tool Box to Understand Neuromuscular Fatigue: An Integrative Approach" | 10.2011 |
| 18. | Prince of Wales Medical Research Institute, Sydney, Australia Sensorimotor Series. "Muscle Fatigue is Dependent on the Task" | 07.2004 |
| 19. | Prince of Wales Medical Research Institute, Sydney, Australia Sensorimotor Series. "Sex Differences in Muscle Fatigue" | 08.2004 |
| В. | NATIONAL PRESENTATIONS (INVITED - IN THE USA) | |
| 1. | American College of Sports Medicine Annual Meeting and World Congress on Physical Activity and Aging Keynote Presentation: Performance Fatigability with Aging | 05.31.2023 |
| 2. | Edward F. Adolph Distinguished Lectureship of the APS Environmental and Exercise Physiology Section American Physiological Society Summit Performance Fatigability: An Integrative Approach | 04.22.2023 |
| 2. | Integrative Exercise of Physiology Biannual Meeting, Baltimore Co-Sponsored: American Physiological Society and the American College of Sports Medicine Invited Key Note: Sex Differences in Athletic Performance | 09.23.2022 |
| 3. | National Institute of Aging Workshop: Causes & Consequences of Age-Related Changes in Gait Biomechanics and the Metabolic Cost of Walking, Virtual. Invited: Age-Related Changes in Muscle Fatigability: Task Matters | 09.20.2021 |
| 4. | American College of Sports Medicine Annual Meeting, Virtual Invited Seminar: The Aging Neuromuscular System: Fatigability of Limb Muscles, Virtual. | 06.03.2021 |
| 5. | American College of Sports Medicine National Annual Meeting, Virtual Highlighted Symposium: Biomechanics and Neural Control of Movement Title: The Aging Neuromuscular System: Protective Effects of Physical Activity | 06.03.2021 |
| 6. | American College of Sports Medicine Annual Meeting, Virtual Invited Seminar: Sex Differences in Performance: Historical Perspectives | 06.02.2021 |
| 7. | Pennsylvania State University, PSU Noll Seminar, Dept of Kinesiology, Virtual Seminar: "Sex Differences in Human Performance: Power of Big Data" | 02.19.2021 |
| 8. | The Innovation Connection: How Federal Research Benefits Wisconsin, Capitol Hill, Washington DC Hosted by Metropolitan Milwaukee Association of Commerce (MMAC) https://mmacwiassoc.wliinc28.com/events/The-Innovation-Connection-How-Federal-Research-Benefits-Wisconsin-2380 | 09.17.2019 / <u>details</u> |
| 9. | American College of Sports Medicine Annual Meeting, Orlando, Fl Symposium Presentation: "Motor Unit Activity in Leg Muscles of People with Type 2 Diabetes" | 05.31.2019 |
| 10. | University of Utah, Salt Lake City, UT | 03.29.2019 |

| | Seminar: "Sex Differences in Fatigability: Why It Matters!" | |
|-----|--|----------------|
| 11. | Shirley Ryan Abilities Lab, Chicago, Il Ground Round Seminar "Exercise-Related Fatigue with Aging!" | 01.23.2019 |
| 12. | Colorado State University, Fort Collins, CO Colloquium: <i>"Exercise-Related Fatigue with Aging"</i> | 10.19.2018 |
| 13. | American College of Sports Medicine Annual Meeting, Boston, MA Symposium: 'Do Physiological Sex-differences Affect Exercise Performance?" "Sex-differences in Physiological Function: Do they Explain Differences in Exercise Performance?" | 06.04.2016 |
| 14. | Organization for the Study of Sex Differences Annual Meeting, Philadelphia, PA Symposium: "Sex Differences in Neuromuscular Function and Fatigue?" | 05.25.2016 |
| 15. | Ball State University, Human Performance Laboratory, Muncie, IN Seminar Series: "Sex Differences in Muscle Fatigue: Does it Really Matter?" | 08.27.2015 |
| 16. | <i>Musculoskeletal Sex Differences Throughout the Lifespan Research Symposium,</i> Chicago, IL Sponsored by the American Association of Orthopaedic Surgeons and ORR/ORS/CMH-UCD/SWHR "Sex Differences in Muscle Fatigability in Young and Older Adults" | 08.01.2014 |
| 17. | American College of Sports Medicine Annual Meeting, Orlando, FL Symposium: 'The 2-hour Marathon' "Sex Differences in the Marathon: 2 Hours: What is the Comparable Barrier for Women?" | 05.30.2014 |
| 18. | University of Oregon Department of Human Physiology Seminar Series, Eugene, OR <i>"Fatigability of Human Muscles: Sex Matters"</i> | 04.09.2014 |
| 19. | Mid West American College of Sports Medicine Annual Meeting, Merryville, IN Symposium: "Skeletal Muscle Fatigue: Neural contributions and the Impact of Aging" | 11.9.2013 |
| 20. | American College of Sports Medicine Annual Meeting, Indianapolis, IN Symposium: "Neural Contributions to Muscle Fatigue: Task Matters" | 05.31.2013 |
| 21. | American College of Sports Medicine Annual Meeting, Baltimore, MD Symposium: The Exercising Female: An Integrated Approach. "Sex Differences in Muscle Fatigue: Mechanisms of Task Specific Muscle Fatigue" | 06.04.2010 |
| 22. | University of Florida , Department of Health and Human Performance Colloquium, Gainesville, FL "Task Dependence of Muscle Fatigue and Aging" | 03.15.2010 |
| 23. | University of Chicago, Illinois, Chicago School of Public Health "Cognitive Stress, Mental Attentiveness and Muscle Fatigue" | 04.09.2008 |
| 24. | American Physical Therapy Association Section on Research Retreat, Pacific Grove, CA Mechanisms Underlying Disordered Movement: Impairments with Force Generation "Skeletal Muscle Fatigue: Task Specificity and Aging" | 08.09-13. 2009 |
| 25. | Society of the Neural Control of Movement Society, Waikoloa Beach, HI "Central Fatigue: Task Dependence of Muscle Fatigue" | 05.02.2009 |
| 26. | American College of Sports Medicine Annual Meeting, Indianapolis, IN "Neuromuscular Fatigue and Aging Symposium: Consensus and Controversy: Subject Characteristics" | 05.30.2008 |
| 27. | Texas A&M University , College Station, TX Motor Control Symposium, Department of Health and Kinesiology. <i>"Neuromuscular Control of Fatiguing Tasks in Young and Old Adults"</i> | 04.22.2007 |
| 28. | American College of Sports Medicine Annual Meeting, Denver, CO Neural Mechanisms Contributing to Muscle Fatigue Symposium: "Muscle Fatigue and Aging" | 05.31.006 |
| 29. | American College of Sports Medicine Annual Meeting, Indianapolis, IN Current Issues in Muscle Fatigue Symposium: "Sex Differences in Muscle Fatigue" | 06.2004 |

| С. | LOCAL AND REGIONAL PRESENTATIONS (INVITED) | |
|-----|--|------------|
| 1. | Medical College of Wisconsin, Dept of Endocrinology, Grand Rounds Sex Differences in Athletic Performance | 08.03.2023 |
| 2. | Carroll University, Dept. of Physical Therapy, Waukesha Aging and Exercise Performance | 04.04.2023 |
| 3. | Medical College of Wisconsin, Dept of Physiology, Grand Rounds Sex Differences in Fatigability and Athletic Performance | 01.11.2023 |
| 4. | Marquette University: Institute for Women's Leadership Seminar Physical Activity and Pain: Sex-Related Barriers? | 11.03.2022 |
| 5. | University of Wisconsin, Madison, Running Symposium Sex Differences in Running: Running Performance in Men & Women: What's the Difference? | 07.30.2022 |
| 6. | Marquette University, Office of Sponsored Research Programs (for the College of Business) Impactful & Successful Research: The Importance of Why! | 05.11.2022 |
| 7. | Carroll University, Dept. of Physical Therapy, Waukesha Sex Differences in Human Performance | 04.18.2022 |
| 8. | Carroll University, Dept. of Physical Therapy, Waukesha Aging and Exercise Performance | 03.24.2022 |
| 9. | Marquette University, Institute for Women's Leadership Gala Sex Differences in the Persistent Effects of COVID 19 on Physical Function | 03.07.2022 |
| 10. | Marquette University Law School Gender Equity in Sports: Sex Differences in Human Performance | 03.01.2021 |
| 11. | Marquette University, Public Health Equities Fellowship Seminar Long COVID: Persistent Effects of COVID-19 Sex Differences and Underrepresented Populations | 02.21.2022 |
| 12. | Marquette University, Research in Action Leadership Development Program Vision and Mission in Research Centers: AHPRC and the COVID-19 Research Initiative | 01.19.2022 |
| 13. | Medical College of Wisconsin, CTSI Clinical Scholars Symposium 'Building a Research Career' | 11.23.2021 |
| 14. | Marquette University, Institute for Women's Leadership Sex Differences in the Persistent Effects of COVID-19 | 10.19.2021 |
| 15. | Marquette University, Marquette Challenge, Department of Physical Therapy Aging and Exercise Performance | 10.02.2021 |
| 16. | Marquette University, Public Health Equities Fellowship Seminar Sex Differences in Human Performance: Issue of Equity | 04.28.2021 |
| 17. | Marquette University, COVID-19 Research Initiative Lightning Talks Student Research Initiatives During the Pandemic | 04.21.2021 |
| 18. | Marquette University, Institute for Women' Leadership Research Social Impactful Research: The Currency of Success | 04.08.2021 |
| 19. | Marquette University Law School Gender Equity in Sports: Sex Differences in Human Performance | 03.03.2021 |
| 20. | Trifaster Triathlon Club, SE Wisconsin The Aging Athlete | 01.19.2021 |
| 21. | Marquette University, Athletic and Human Performance Research Center and Dept Seminar Sex Differences in Human Performance: Power of Big Data | 11.12.2020 |
| 22. | University of Wisconsin, Milwaukee . Dept of Kinesiology and Human Movement Sciences Sex Differences in the Marathon | 03.04.2020 |

| 23. | Medical College of Wisconsin, CTSI Clinical Scholars Symposium 'Building a Research Career' | 11.12.2019 |
|-----|---|------------------------|
| 24. | Medical College of Wisconsin, 31 st MCW Sports Medicine Symposium 'Physiology of the Aging Adult and Athlete' | 03.14.2019 |
| 25. | Veterans Affairs Medical Center Milwaukee, Dept of Geriatrics, Milwaukee, WI Fatigability and Aging: Mechanisms and the Protective Effects of Exercise | 03.31.2017 |
| 26. | University of Wisconsin, Whitewater Sex Differences in Exercise Performance: Is it all about physiological differences? | 10.30.2016 |
| 27. | Medical College of Wisconsin, Dept of Gynaecology and Obstetrics, Milwaukee, WI Neuromuscular Function in Women Postpartum | 01.20.2016 |
| 28. | Marquette University Board of Trustees, Marquette University, Milwaukee, WI Research in the Athletic Performance Research Center | 02.24.2016 |
| 29. | Marquette University Advancement, Marquette University, Milwaukee, WI Research in the Athletic Performance Research Center | 02.04.2016 |
| 30. | Wisconsin's Women's Health Foundation, Annual Research Breakfast, Janesville, WI The Impact of Research in Women's Health | 1.30.2015 |
| 31. | Marquette Alumni Annual Meeting, Marquette University, Milwaukee, WI Human Performance and Fatigability | 01.24.2015 |
| 32. | CTRH Research Seminar Series, Marquette University, Milwaukee, WI Sex Differences in the Marathon: The comparable 2-hour Marathon for Women | 12.04.2014 |
| 33. | St Johns Retirement Community on the Lake, Milwaukee, WI Aging and Neuromuscular Function: Can we do anything about it? | 11.01.2013 |
| 34. | Marquette University Manresa Faculty Development Seminar & Round Table Secrets of a Faculty Life Work Balance | 11.2012 |
| 35. | CTRH Research Seminar Series, Marquette University, Milwaukee, WI Neuromuscular Fatigue: Does it Matter? | 11.01.2012 |
| 36. | Marquette University, Milwaukee, WI College of Health Sciences Undergraduate Summer Research Program Series: Age Differences and Neuromuscular F | 06.21.2012 Fatigue. |
| 37. | University of Wisconsin - Milwaukee, WI Seminar in the Dept of Kinesiology and Human Movement Sciences: Sex Differences in Neuromuscular Fatigue | 04.09.2012 |
| 38. | CTRH Research Seminar Series, Marquette University, Milwaukee, WI Neuromuscular Fatigue: An Integrative Approach | 12.01.2011 |
| 39. | Marquette College of Health Sciences Alumni & Advancement Event, Washington DC The Aging Brain: Can We Turn Back the Clock? | 11.2011 |
| 40. | Marquette University, Milwaukee, WI Meeting of the Minds Research Seminar. "Strength and Speed Decline with Age: Can this be Reversed with Strength Training" | 09.16.2010 |
| 41. | Marquette University, Milwaukee, WI College of Health Sciences Undergraduate Summer Research Program Series: Aging, Sex Differences and Muscle Fa | 06.23.2010 atigue |
| 42. | Marquette University, Milwaukee, WI College of Health Sciences Undergraduate Summer Research Program Series. <i>Aging and Muscle Fatigue</i> | 06.2009 |
| 43. | Marquette University, Milwaukee, WI College of Health Sciences Undergraduate Summer Research Program Series. <i>Muscle Fatigue in Old Adults</i> | 07.08.2008 |
| 44. | Marquette University, Milwaukee, WI Physical Therapy Department Meeting of the Minds Research Seminar: Neuromuscular Control of Fatiguing Tasks | 08.2007 |

| 45. | Medical College of Wisconsin, Milwaukee, WI Physical Medicine & Rehabilitation Research Ground Rounds: Aging and Neuromuscular Control of Fatiguing Tasks | 7.20.2007 |
|-----|--|------------------------|
| 46. | Marquette University, Milwaukee, WI College of Health Sciences Undergraduate Summer Research Program Series: Mechanisms for Age Differences in Muscle | 5.12.2006 e Fatigue |
| 47. | University of Wisconsin – Milwaukee, WI05Seminar in Human Movement Sciences: Muscle fatigue in Older Adults05 | .09. 2006 |
| 48. | Marquette University, Milwaukee, WI Of College of Health Sciences Undergraduate Summer Research Program Series: <i>Mechanisms for Sex and Age Differences</i> <i>Fatigue</i> | 5.22.2005 in Muscle |
| 49. | Marquette University, Milwaukee, WI Department of Physical Therapy. <i>Muscle Fatigue is Task Dependent</i> | 04.2003 |
| D. | PRESENTATIONS AT DOCTORAL AND POST DOCTORAL LEVEL | |
| 1. | University of Colorado , Department of Kinesiology and Applied Physiology Colloquium, Boulder, CO <i>"Muscle Fatigue is Dependent on the Details of the Task: Who and How?"</i> | 10.2002 |
| 2. | Marquette University, Milwaukee, WI Department of Physical Therapy. "Mechanisms of Task Failure" | 09.2002 |
| 3. | American College of Sports Medicine Annual Meeting, St Louis, MO Sex Differences in Human Performance Symposium: "Sex Differences in the Fatigability of Isometric Contractions in the Adult Neuromuscular System" | 06.2002 |
| 4. | University of Colorado, Department of Kinesiology and Applied Physiology Colloquium, Boulder, CO "The Fatigability of Muscle in Men and Women: The Imagined Sex-Difference?" | 04.2001 |
| 5. | University of Colorado , Department of Kinesiology and Applied Physiology Colloquium, Boulder, CO "Plasticity of Old Muscles: Functional and Morphological Adaptations to Strength Training" | 11.1999 |
| 6. | University of Sydney, Australia. Sports Medicine Australia's Careers Day "The Research Project Manager" | 06.1998 |
| 7. | St George Hospital, Sydney, Australia. Colloquium Series: "Adaptations of Muscle Function and Morphology with Age and Resistance Training" | 11.1998 |
| 8. | Australian Conference of Science and Medicine in Sport, Adelaide, Australia "Physical Activity, Limb Dominance and Muscle Group as Determinants of Strength with Age" | 10.1998 |
| 9. | Australian Conference of Science and Medicine in Sport, Canberra, Australia "Muscle Size and Morphology of Young and Elderly Women: The Effect of 12 Weeks High Resistance Training" | 10.1997 |
| 10. | University of Sydney , Australia Nerve and Muscle in Health, Disease and Exercise:10th Biennial Conference of the Department of Biomedical Sciences. <i>"The Effect of Age on Skeletal Muscle of Women"</i> | 10.1997 |
| 11. | Australian Conference of Science and Medicine in Sport, Canberra, Australia "Effect of High Resistance Strength Training on Functional Capacity of Elderly Women" | 10.1996 |
| 12. | Sports Medicine Australia's Women's in Sport Meeting, Newcastle, Australia "The Exercise and Sports Scientist" | 06.1996 |
| 13. | Australian Conference of Science and Medicine in Sport. Hobart, Australia Muscle Function and Size with Age" | 10.1995 |
| 14. | National Annual Scientific Conference of the Australian Sports Medicine Federation, Brisbane, Australia "Isometric Muscle Function and Reaction Times as a Function of Age" | 10.1994 |
| 15. | Sydney's Royal Women's Hospital, Sydney, Australia Colloquium Series. "Oestrogen Deficiency and Ageing Skeletal Muscle Function in Post-menopausal Women" | 11.1994 |
| 16. | National Annual Scientific Conference of the Australian Sports Medicine Federation, Melbourne, Australia | 10.1993 |

"Muscle Function Tests"

VII. TEACHING

A. COURSE DIRECTOR | GRADUATE

- 1. Applied and Rehabilitative Systems Physiology (CTRH/EXRS 6001, 3 credits) Fall 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2022, 2023 (Guest lecture)
- 2. Fatigue in Health and Disease (CTRH 6450, 3 credits) Spring 2014
- 3. Techniques in the Neural Control of Movement (CTRH 6931, 3 credits) Spring 2015 and 2017

B. COURSE DIRECTOR | UNDERGRADUATE

- 1. Advanced Exercise Physiology Laboratories (EXPH 4195/5195, 1 credit) Fall 2012, 2013, 2014, 2015, 2016, 2017
- 2. Advanced Exercise Physiology (EXPH 4192 and 5192, 4 credits) Fall 2003-2011
- 3. Honors: Mission to Mars (HOPR 3957H, 1 credit) Spring 2017

C. OTHER MAJOR TEACHING RESPONSIBILITIES

1. Readings and Research in CTRH/EXRS Graduate Program (EXRS 6958) Fall 2011-2022: 1-5 students (4-week interval)

2. Independent Study

| Independent Study (EXRS) Spring 2023, 1 student (Opielinski L) | 1 cr |
|--|--|
| Independent Study (EXRS) Spring 2023, 1 student (Linde, J) | 3 cr |
| Independent Study (BISC) Spring 2021, 1 student (Nesburg, R) | 3 cr |
| Independent Studies (EXPH 4995) Fall 2019, 1 student (Beilfuss, R) | 2 cr |
| Independent Study (EXSC 195) Spring 2010, 1 student (Doyle, R) Fall 2009, 1 student (Magennis, K) Spring 2009, 1 student (Cowdy, J) Fall 2005, 1 student (Griffith E) Spring 2005, 2 students (Griffith E, Schlachter K) Fall 2004, 1 student (Griffith E) | 4 cr 1 cr 4 cr 2 cr 2 cr 2 cr |
| Independent Study (PHTH 495) Spring 2005, 1 student (Keller M) Spring 2005, 1 student (Barnes C) | 1 cr 1 cr |
| Independent Study (PHTH 595) Fall 2009, 1 student (Vanden Noven) Fall 2006, 1 student (Keller M) Fall 2005, 1 student (Keller M) Summer 2005, 1 student (Keller M) | 2 cr 3 cr 3 cr 2 cr |

| Independent Study (PHTH 295) | | |
|---|--|--------------|
| Spring 2008, 2 students (Var | | 3 cr |
| Summer 2007, 1 student (Ke | eller M) | 1 cr |
| Independent Study (INPR 4995) | | |
| Spring 2012, 1 student (Sene | efeld J) | 3 cr |
| Spring 2011, 1 student (Sen | , | 3 cr |
| | | |
| Independent Study (INPR 8995) | | 0 |
| Spring 2014, Rita Deering | | 3 cr |
| Spring 2012, Bunyan, S | | 3 cr |
| Fall 2011, Pereira H Summer 2011 Pereira H | | 2 cr 3 cr |
| | | 5 61 |
| Independent Study (CTRH 6995 / | | |
| Fall 2021 David Wrucke | | 3 cr |
| Summer 2016 Andrew Kuplic | | 3 cr |
| Spring 2014 Christopher S | | 3 cr |
| Spring 2012 Reivian Berric | | 3 cr |
| Fall 2012 Stacy Stolzma | an | 2 cr |
| Exercise Science Practicum I (EXP | H 3986, 2 credits) research prac | cticum |
| Fall 2022: 1 student | Quinn, M | |
| Fall 2021: 1 student | Vosters, E | |
| Fall 2020: 1 student | Zirgaitis, G. (honors) | |
| Fall 2019: 1 student | Hendrickson, M | |
| Fall 2018: 1 student | Hart, M (honors) | |
| Fall 2017: 1 student | D'Astice, S (honors) | |
| Fall 2016: 1 student | Adams, M | |
| Fall 2014: 1 student Fall 2013: 1 student | Pashibin, T | |
| Fall 2013: 1 student Fall 2011: 2 students | Tyler Esser | |
| Fall 2009: 1 students | Senefeld J. and Spears V. Stevens, A. | |
| Fall 2008: 1 student | Magennis, K. | |
| Fall 2007: 1 student | Pruse, J. | |
| Fall 2006: 1 student | Daignault, R | |
| Fall 2005: 2 students | McGuire, J. and Stanton, V. | |
| Fall 2004: 2 students | Schlachter, K. and Trott, T. | |
| | | 4' |
| Exercise Science Practicum II (EXP | | acticum |
| Spring 2022: 1 student Spring 2016: 1 student | Anderson, E | |
| Spring 2015: 1 student | Pashibin, T and Kuplic A | |
| Spring 2014: 1 student | Bouressa, R. | |
| Spring 2009: 1 student | Coon, M. | |
| Spring 2006: 1 student | Hennessy, J. | |
| Spring 2005: 1 student | Kufahl, T. | |
| Spring 2004: 2 students | Sanders, J. and Ritland, B. | |
| | | |
| College of Health Sciences - Summe Summer 2021: 2 students | Nesburg, R and Zirgaitis, G | oyralli |
| Summer 2019: 1 students | Hart, M | |
| Summer 2018: 2 students | Yang K and D'Astice S. | |
| Summer 2017: 2 students | Ryan K and Hickok S. | |
| Summer 2016: 2 students | Adams M and Eble C | |
| Summer 2015: 2 students | Pashibin T and Linzmeier C | |
| Summer 2014: 2 students | Pashibin T and Kuplic A | |
| Summer 2013: 2 students | Buzzard A and Boehlke K. | |
| Summer 2012: 2 students | Senefeld J and Elliot N. | |
| Summer 2011: 2 students | Senefeld J and Hoffman M. | |
| | | |

3.

3.

4.

Summer 2010: 2 studentsStevens A* (2nd place) and Kuhn P.Summer 2009: 2 studentsDoyel R and Fiandt C* (2nd place).Summer 2008: 3 studentsFauth M* (1st place), Pruse J, and Skelton KW.Summer 2007: 1 studentBly, SCSummer 2006: 1 studentWendell. S.Summer 2005: 1 studentGriffith, E.

*Awardees of the College of Health Sciences summer undergraduate research presentation day

5. Department of Biomedical Engineering - Summer Undergraduate Research Program

Summer 2006 (co-mentor) Farinella, J. Summer 2007: 1 student Hawe, R.

- 6. Co-ordinator of Meeting of the Minds Departmental Research Seminar (Spring 2007 to Spring 2010)
- 7. Co-ordinator of Summer Graduate Research Journal Club (Summer 2010)

D. GUEST LECTURER | UNDERGRADUATE

1. Introduction to Exercise Science (EXSC 090 and EXPH 101, 2 cr): 1 lecture x 50 mins, Fall 2004, 2005, 2006, 2007, 2008, 2009, 2011-2017.

E. GUEST LECTURER | GRADUATE

- 1. Physiology of Activity (PHTH 7518, 3 cr): 1 lecture x 80 min, Fall 2008, 2009, 2011-2023.
- 2. Tests and Measures (CTRH 6020): 2 lectures x 2 hours each in Fall 2011, Fall 2012, Fall 2013.
- 3. Introduction to Research (PHTH 558, 1 cr): 2 lectures, Spring 2006.
- 4. Applied Kinesiology (PHTH 570, 4 cr): 2 lectures and 2 laboratories each year, Spring, 2003, 2004 and 2005.
- 5. Physiology of Aging (GERT 202, 4 cr): 1 x 3 hour lecture in Spring 2005, Fall 2006, Spring 2008.

VIII. MENTOR

CURRENT FACULTY MENTEES

- Ranjana Mehta, PhD. (Texas A&M ADVANCE Scholars Program) 2015 present Associate Professor in Environmental and Occupational Health, School of Public Health and Industrial and Systems Engineering, College of Engineering, Texas A&M University.
- Ashleigh Smith, PhD. Senior Lecturer, University of South Australia, Adelaide, Australia Dr Smith visited in April 2016 (4 weeks) and November 2016 (2 weeks) with ongoing collaboration. I visited University South Australia for 3 weeks in April 2018.
- Jenya luzzini-Seigel, PhD.
 Assistant Professor Dept of Speech Pathology and Audiology, College of Health Sciences, Marquette University.

CURRENT POST-DOCTORAL LEVEL | MARQUETTE UNIVERSITY NEUROMUSCULAR CONTROL LAB (PRIMARY ADVISOR)

1. Andrew Pearson "Fatigability with Diabetes: Protective Effects of Exercise"

IX. DISSERTATION AND THESIS COMMITTEES

A. CURRENT MENTOR | ADVISOR | COMMITTEE MEMBER

DOCTORAL LEVEL | MARQUETTE UNIVERSITY NEUROMUSCULAR CONTROL LAB (PRIMARY ADVISOR)

Jessica Linde (EXRS program) Sex and Age Differences in Exercise Performance

Lauren Opielinski (EXRS program)

August 2022 – present

July 2023 - present

2016 - present

| 1. | Lauren Sara (CTRH program) "Muscle Function and Fatigability in People with Achilles Tendinopathy" Current position: Postdoctoral Research Fellow, Harvard University, Harvard Medical School (07-2021 - p | PhD, 07.2021 |
|----|---|-----------------------------------|
| DC | CTORAL LEVEL MARQUETTE UNIVERSITY NEURAL CONTROL LAB (PRIMARY ADVISOR) | |
| 6. | Tejin Yoon, PhD Current Position: Associate Professor, Kangwon National University (2018-present) Previous Position: Assistant Professor, Department of Kinesiology and Integrative Physiology, Michigan Technological University (2013 – 2018) | 2006 - 2013 |
| 5. | Hamidollah Hassanlouei, PhD Current Position: Lecturer (2016-present) Tehran University, Tehran, Iran | 10.2014 – 10. 2016 |
| 4. | Vianney Rozand, PhD Current Position: Assistant Professor (09.2017 – present) Jean Monnet University, (University of Lyon), France | 10.2015 – 10.2016 |
| 3. | Jonathon Senefeld, PhD Current Position: Research Assistant Professor, Mayo Clinic, Rochester, MN (2021-present) Previous Position: Postdoctoral Research Associate (2019–2022) Mayo Clinic, Rochester, MN | 05.2018 – 05.2019 |
| 2. | Minhyuk Kwon, PhD Current Position: Assistant Professor (08.2019 – present) California State Polytechnic University-Pomona | 06.2016 – 08.2019 |
| 1. | Timothy Fulton Current Position: Data Analyst Georgia State University | 06.2019 – 08.2023 |
| | PREVIOUS MENTEES ADVISEES ST-DOCTORAL LEVEL MARQUETTE UNIVERSITY NEURAL CONTROL LAB (PRIMARY ADVISOR | K) |
| | | 2022 - present |
| UN | IDERGRADUATE MARQUETTE UNIVERSITY (PRIMARY) | |
| , | David Wrucke (EXRS program) | 2021 - 2023 |
| MA | STERS LEVEL MARQUETTE UNIVERSITY (<u>PRIMARY ADVISOR</u>) | |
| | Nayun Ahn (EXRS program) "Coordination strategies and neuromusculoskeletal capacities during the sit-to-stand task in young and older | 2021 - present |
| | Michael Haischer (EXRS program) "Influence of Maximal Isometric Strength on Joint-Specific Function and Coordination Across Task Demand | 2021 - present Is in Athletes" |
| | Zhilun (Andy) Zhou (EXRS program) "Sex Differences in Fatigability in Stroke Survivors" | 2019 - present |
| DC | CTORAL LEVEL MARQUETTE UNIVERSITY (COMMITTEE MEMBER) Mitra Rouhani (EXRS program) <i>"Muscle Fatigue in People with Multiple Sclerosis"</i> | 2019 - present |
| | Blaine Arney (EXRS program) Fatigability in People with Prediabetes | August 2019 – present |
| | Persistent Effects of COVID-19 on Physical Function | |

| | "Mechanisms of Fatigability in People with Type 2 Diabetes and Prediabetes" Current Position: Research Assistant Professor, Mayo Clinic, Rochester, MN (2021-present) Previous Position: Post-doctoral Research Associate, Mayo Clinic, Rochester, MN (2019-2021) | |
|---|---|--|
| 3. | Christopher Sundberg (CTRH program, Marquette University) "Mechanisms of Fatigue with Aging: Evidence from the whole limb to the single cell in humans" Current Position: Assistant Professor, Exercise Science, Dept Physical Therapy, Marquette University (08-2020 - p Previous Position: Post-doctoral Research Associate, Dept of Biological Sciences, Marquette University, Milwaukee | |
| 4. | Rita Deering (CTRH program, Marquette University) <i>"Neuromuscular Function in Women after Pregnancy"</i> Current Position: Assistant Professor of Physical Therapy, Carroll University, WI (08-2019 - present) Previous Position: Postdoctoral Fellowship: Advanced Women's Health Postdoctoral Fellowship at the University Madison and VA (July 1, 2018 – 2019) | PhD, 12.2017 ity of Wisconsin- |
| 5. | Hugo M Pereira (Interdisciplinary, Marquette University; Fulbright Scholar from Brazil) <i>"Neuromuscular Function and Fatigue with Cognitive Demand in Young and Old Adults"</i>. Current Position: Assistant Professor, Dept. of Kinesiology, University of Oklahoma (Aug, 2018 – present) Previous Position: (2016-2018) Postdoctoral Research Associate, Laboratory of Biomedical Engineering, Dept. of Telecommunication and Control –School of Engineering, University of São Paulo; São Paulo, Brazil | PhD, 05.2015 |
| 6. | Marnie Vanden Noven (Interdisciplinary, Marquette University) "Aging and Neuromuscular Mechanisms of Muscle Fatigue". Current Position: Associate Professor, Belmont University, TN | PhD, 05.2014 |
| 7. | Manda Keller-Ross (Interdisciplinary, Marquette University) <i>"Muscle Fatigue and Motor Output Variability with Acute Stress in Healthy Young Adults and Veterans with Posttraumatic Stress Disorder"</i> Current Position: (March 2015) Assistant Professor, Department of Physical Therapy, University of Minnesota, MN Previous Position: (2011-2014). Postdoctoral Research Fellow, Mayo Clinic, Rochester, MN | PhD, 12.2011 |
| | | |
| DC | OCTORAL LEVEL MARQUETTE UNIVERSITY (COMMITTEE MEMBER) | |
| DC 1. | CTORAL LEVEL MARQUETTE UNIVERSITY (COMMITTEE MEMBER) Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" | PhD, 12 2021 |
| | Saad Alqahtani (EXRS program) | PhD, 12.2020 |
| 1. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" | PhD, 12.2020 a" PhD, 12.2020 |
| 1. 2. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" | PhD, 12.2020 a" PhD, 12.2020 PhD, 12.2019 |
| 1. 2. 3. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) | PhD, 12.2020 a" PhD, 12.2020 |
| 1. 2. 3. 4. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" Sheri Bunyan (CTRH program) | PhD, 12.2020 a" PhD, 12.2020 PhD, 12.2019 |
| 1. 2. 3. 4. 5. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" Sheri Bunyan (CTRH program) "Neuromuscular Fatigue in people with Multiple Sclerosis" Spencer Murphy (Biomedical Engineering) | PhD, 12.2020 a" PhD, 12.2020 PhD, 12.2019 PhD, 09.2019 |
| 1. 2. 3. 4. 5. 6. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" Sheri Bunyan (CTRH program) "Neuromuscular Fatigue in people with Multiple Sclerosis" Spencer Murphy (Biomedical Engineering) "Mechanisms of Impaired Motor Unit Firing Behavior of the Vastus Lateralis after Stroke" Reivian Berrios Barillas (CTRH) | PhD, 12.2020 a" PhD, 12.2020 PhD, 12.2019 PhD, 09.2019 PhD, 10.2018 |
| 1. 2. 3. 4. 5. 6. 7. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" Sheri Bunyan (CTRH program) "Neuromuscular Fatigue in people with Multiple Sclerosis" Spencer Murphy (Biomedical Engineering) "Mechanisms of Impaired Motor Unit Firing Behavior of the Vastus Lateralis after Stroke" Reivian Berrios Barillas (CTRH) "Reflex Gain Effects on Force Regulation and its Clinical Implications" Kathryn Lemley (Interdisciplinary) | PhD, 12.2020 a ⁷ PhD, 12.2020 PhD, 12.2019 PhD, 09.2019 PhD, 10.2018 PhD, 12.2015 |
| 1. 2. 3. 4. 5. 6. 7. 8. 9. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" Sheri Bunyan (CTRH program) "Neuromuscular Fatigue in people with Multiple Sclerosis" Spencer Murphy (Biomedical Engineering) "Mechanisms of Impaired Motor Unit Firing Behavior of the Vastus Lateralis after Stroke" Reivian Berrios Barillas (CTRH) "Reflex Gain Effects on Force Regulation and its Clinical Implications" Kathryn Lemley (Interdisciplinary) "Mechanisms of Isometric Exercise-Induced Hypoalgesia in Young and Old Men and Women" Dominic Nathan (Biomedical Engineering) | PhD, 12.2020 a" PhD, 12.2020 PhD, 12.2019 PhD, 09.2019 PhD, 10.2018 PhD, 12.2015 PhD, 05.2014 |
| 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. | Saad Alqahtani (EXRS program) "Motor Performance and Motor Unit Behavior in Response to Ischemic Conditioning Post Stroke" Abdulaziz Awali (CTRH program) "Influence of Experimental Pain Sensitivity and Cardiovascular Autonomic Function on Exercise-Induced Hypoalgesia Giovanni Berardi (CTRH program) "Pain in People with Fibromyalgia Exercise Induced Analgesia" Ali Alsouhibani (CTRH program) "Exercise induced analgesia" Sheri Bunyan (CTRH program) "Keuromuscular Fatigue in people with Multiple Sclerosis" Spencer Murphy (Biomedical Engineering) "Mechanisms of Impaired Motor Unit Firing Behavior of the Vastus Lateralis after Stroke" Reivian Berrios Barillas (CTRH) "Reflex Gain Effects on Force Regulation and its Clinical Implications" Kathryn Lemley (Interdisciplinary) "Mechanisms of Isometric Exercise-Induced Hypoalgesia in Young and Old Men and Women" Dominic Nathan (Biomedical Engineering) "Development of a Cortical Reach-to-Grasp Model for Feed Forward Neuroprosthesis" Megan Conrad (Biomedical Engineering) | PhD, 12.2020 a" PhD, 12.2020 PhD, 12.2019 PhD, 09.2019 PhD, 10.2018 PhD, 12.2015 PhD, 05.2014 PhD, 12.2010 |

DOCTORAL LEVEL (AS EXTERNAL EXAMINER)

| 1. | Peter Poortvliet (University of Queensland, Australia) "Insights into the mechanisms that underlie neuromuscular adaptation to pain using postural and volitional focused motor tasks" | PhD, 11.2013 |
|--|--|---|
| 2. | Sabine Giesebrecht (University of NSW, Australia) "Activity Dependent Changes in Control of Human Motoneurones". | PhD, 11.2010 |
| 3. | Tejin Yoon (Seoul National University, Korea) <i>"Central fatigue in young and old men and women"</i> . | PhD, 01.2006 |
| 4. | Orawan Prasartwuth (University of Sydney, Australia). <i>"Neural Control of Eccentric Contractions"</i> | PhD, 11.2005 |
| MA | STER'S LEVEL (PRIMARY ADVISOR) | |
| 1. 2. 3. 4. 5. 6. 7. | David Wrucke (EXRS program) Emily Anderson (EXRS program) Mira Atkinson (EXRS program) Lindsey Mirkes (EXRS program) Kevin Ryan (CTRH program) Jose Delgadillo (CTRH program) Andrew Kuplic (CTRH program) | 05.2023 05.2023 05.2023 05.2022 05.2019 05.2019 08.2017 |
| MA | STER'S LEVEL (ADVISOR AND COMMITTEE MEMBER) | |
| 1. | Heidi Hillebrandt (Co-director) University of Newcastle, Newcastle, Australia | 12.2017 |
| 2. | Henry Kuhn (Biomedical Engineering, Marquette University). "Abnormal neuromuscular fatigue and motor performance of the knee extensors post stroke" | 04.2012 |
| 3. | Rubing Xu (Biomedical Engineering, Marquette University). "Design and validation of an MR- compatible upper extremity evaluation system to study brain activation patterns after stroke" | 01.2010 |
| 4. | Debjani Chaudhuri (Biomedical Engineering, Marquette University). "Hip-mediated modulation of spinal reflexes and inhibitory control systems in human spinal cord injury" | 01.2006 |
| 5. | Vaidehi Chaukulkar (Biomedical Engineering, Marquette University). <i>"Hip position dependent reflex responses to nerve stimulation in human spinal cord injury</i> " | 07.2006 |
| 6. | Keneilwe Mmopi (University of Sydney, Australia). "Effects of Performance with Combined Endurance and Strength Training" | 1998 |

UNDERGRADUATE LEVEL (PRIMARY)

| 4 | | 0000 |
|-----|---------------------|----------------|
| 1. | Riley Boyle | 2023 - present |
| 2. | Emory Heath | 2023 - present |
| 3. | Maggie Quinn | 2022-present |
| 4. | Emma Vosters | 2021-2023 |
| 5. | Rachel Nesburg | 2021-2023 |
| 6. | Samantha Kindy | 2021-2022 |
| 7. | Emily Anderson | 2021-2022 |
| 8. | Lindsey Mirkes | 2021-2022 |
| 9. | David Wrucke | 2020-2022 |
| 10. | Rachel Beilfuss | 2019-2022 |
| 11. | Meggie Rose Hart | 2019-2022 |
| 12. | Gretchen Zirgaitis | 2020-2021 |
| 13. | John Lighthart | 2021 |
| 14. | Michael Hendrickson | 2019-2021 |
| 15. | Rachel Weeks | Fall 2019 |
| 16. | Karis Yang | 2017-2021 |
| 17. | Monica Geiser | 2017-2020 |
| 18. | Cassandra Goodrich | 2018-2019 |
| 19. | Sarah D'Astice | 2016 - 2019 |
| | | |

| 20. | Savannah Hickok | 2017-2019 |
|-----------|---|------------------|
| 21. | Elizabeth Clements | 2017-2018 |
| 22 | Kevin Ryan | 2017-2018 |
| | Mitch Adam | 2016-2018 |
| | Jordan Lemens | |
| | | 2016 |
| | Tate Pashibin | 2014-2016 |
| | Christine Eble | 2014-2016 |
| 27. | Andrew Kuplic | 2014-2015 |
| 28. | Courtney Linzmeier | 2014-2015 |
| | Tyler Esser | 2014 – 2015 |
| 30 | Megan Boyle | Fall 2013 - 2014 |
| 31 | Isaac Pierre | Fall 2011 -2014 |
| 32 | Caitlin Fortuna | Fall 2012 -2014 |
| JZ. 22 | Joseph Bartoletti | |
| აა. ექ | | Fall 2012-2014 |
| | Ethan Jedziniak | Spring 2014 |
| | Becky Beroussa | 2012- 2014 |
| | Jonathon Senefeld | 2010-2013 |
| 37. | Anna Buzzard | 2013 |
| 38. | Kelleen Boehlke | Summer 2013 |
| | Vincent Spears | 2011-2013 |
| 40 | Joseph Fleming | 2012-2013 |
| 41 | Alyssa Stevens | 2009-2013 |
| /2 | Nicholas Elliot | 2011-2013 |
| 42. 12 | Nicholas Elliot Ryan Doyel | 2009-2012 |
| 43. | Kelsey Helland | |
| 44. | | Spring 2012 |
| | Katalin Skelton | 2008-2011 |
| | Melanie Hoffman | Summer 2011 |
| | Peter Kuhn | 2010-2011 |
| 48. | Jaclyn Pruse | 2007-2011 |
| 49. | Matthew Coon | 2009 |
| 50. | Claire Fiandt-Widule | 2009 |
| 51. | McKenzie Fauth | 2008-2009 |
| 52 | Kelly Magennis | 2008-2009 |
| 53 | losonh Earinella | 2006-2008 |
| 55. EA | | 2004-2008 |
| 54. | Careb Dhu | |
| 55. | Saran Biy | 2007 |
| 56. | Kelly Magennis Joseph Farinella Erin Griffith Sarah Bly Rachel Hawe | Summer 2007 |
| 57. | Kristine Schlachter | 2004-2006 |
| 58. | Richard Daignault | 2006 |
| 59. | Scott Wendall | 2006 |
| 60. | Jane Hennessy | 2006 |
| 61. | Charnon Barnes | 2004-2005 |
| 62. | James McGuire | 2005 |
| 63. | | 2005 |
| 64. | | 2005 |
| 65. | Tiffany Trott | 2003 |
| | | |
| 66. 67 | Bradley Ritland | 2004 |
| 67. | Jennie Sanders | 2004 |

X. PROFESSIONAL ACTIVITIES AND SERVICE

A. MEMBERSHIPS IN PROFESSIONAL SOCIETIES

1. American College of Sports Medicine Fellow of ACSM (FACSM) Member of Mid-West Regional Chapter 1999 - present 2005 - present 2004 - present

| 2 | . Ame | erican Physic | ological S | ociety | | | | | | | | 200 | 00 - present | t |
|------|---|--|------------|-------------|------------|---|--|--|--|-----------|-----------|---|--------------|----|
| 3 | Society for Neuroscience | | | | | | | | 2002 - present | | | | | |
| 4 | Society for the Neural Control of Movement | | | | | | | | | 200 |)9 – 2012 | | | |
| 5 | . Euro | opean Colleg | je of Spoi | rts Scienc | e | | | | | | | 201 | 3 – present | t |
| 6 | . Inter | rnational So | ciety of E | lectromyc | ography a | nd Kines | siology | | | | | 201 | 1 - present | (|
| в. с | отне | | SSION | | GANIZ | | | | | RVICI | E | | | |
| 1 | . Fellov | w of the Ame | erican Co | llege of S | ports Me | dicine | | | | | | Con | ferred 2005 | 5 |
| 2 | ACSI | /I Program C | ommittee | • | | | | | | | | 202 | 22 - present | t |
| 3 | . Symp | oosium Co-o | rdinator a | and organiz | zer of two | 2-hour sy | /mposium | at the A | CSM nationa | l meeting | js | 200 | 1 and 2006 | 5 |
| 3 | . Edito | rial Services | for Jour | nals | | | | | | | | | | |
| | <u>Editor-in-Chief</u> Exercise and Sports Science Reviews <u>Associate Editor</u> : Medicine and Science in Sports & Exercis <u>Associate Editor</u> : Exercise and Sports Science Reviews Editorial Board: 'Journal of Applied Physiology' Editorial Board: 'Journal of Motor Behavior' | | | | | cise | ise | | | | | 01.2023 - present 07.2013 - present 01.2015 - 12.2022 2007 - 2018 2012 - 2017 | | |
| | Acta F Applie Clinica Clinica Diabe Ergon Europ Europ Exper Exper Exper Journa Journa | Manuscript reviewer for: Acta Physiologica Scandinavica Applied Physiology, Nutrition, and Metabolism Clinical Neurophysiology Clinical Physiology and Functional Imaging Diabetes Ergonomics European Journal of Applied Physiology European Journal of Physiology Experimental Brain Research Experimental Gerontology Experimental Brain Research Journals of Gerontology Journal of Neurophysiology Journal of Neurophysiology Journal of Neurophysiology Frontiers in Neurology | | | | Journa Journa Journa Neuro Neuro Medic Muscl Physic Scano Sports Plos C Fronti | al of Phy al of Spc al of Visu image science ine and Ne cal Thera blogy an linavian 6 Medicir One ers of Ag | orts Science ualized Expe Journal Science in S erve apy d Behavior Journal of M | riments ports and edicine S ience | | nce | | | |
| | тот | | ER OF M | ANUSCE | RIPTS R | EVIEWE | D PER Y | EAR FO | OR PEER R | EVIEW | ED JOUR | NALS | | |
| | 2003 | 14 | 2006 | 16 | 2009 | 32 | 2012 | 30 | 2015 | 51 | 2018 | 21 | 2021 2 | 24 |
| | 2004 | 13 | 2007 | 21 | 2010 | 18 | 2013 | | 2016 | 41 | 2019 | 26 | 2022 | 16 |
| | 2005 | 22 | 2008 | 23 | 2011 | 26 | 2014 | 32 | 2017 | 30 | 2020 | 20 | | |
| | | IT REVIE | | waukee: R | esearch (| Growth Ini | tiative (\$1 | 50K) | | | | | 2009 |) |

- 2. New Zealand Marsden Fund Fast-Start Grant for New Investigators and High Impact Research, \$100K)20093. Canadian National Science and Engineering Research Council (NSERC Discovery Grant, \$250K)2008 2012
- 4. Canadian Michael Smith Foundation (Postdoctoral research scholarship award)
- 5. CTSI SE Wisconsin Pilot Award Program
- 6. American College of Sports Medicine Grant Review Committee
- 7. Australian National Health and Medical Research Council (NHMRC) grant.
 2018
- 8. NIH grant reviewer for R15 AREA Neurosciences study section (ZRG1 MDCN-R) 2013-present

2017

2013-2016

D. EXTERNAL CONSULTATION / PROFESSIONAL SERVICE

| Expert Panellist & Research Consultant, Halmstad University, Sweden Evaluation and recommendations of Biological and Environmental Systems Research Environ | 2013 ment |
|--|-------------------------------|
| FINA: Federation of International Aquatic Sports Literature review on paper (22-page document) on the Sex Differences in Performance and the Science and medical perspective for transgender athlete policy development. | 2022 e Transgender Athlete |
| Data Safety Monitoring Board (Ohio University) Committee member (NIH funded study on immobilization-PI Dr Brian Clark) | Jan 2021- July 2022 |

XI. UNIVERSITY SERVICE

A. UNIVERSITY SERVICE 1. Academic Coach- Marguette Women's Basketball Team Feb 27, 2023 2. **Centers and Institutes Directors Leadership Committee** 2022-2023 3. Institute for Women's Leadership Faculty Council 2021-2023 4. **COVID-19 Research Initiative Steering Committee Chair** 03.2020 - 10-2021 5. 08.2018 - 06.2021 Committee on Research, non-member invited attendee 02.2015 - 06.20216. Associate Dean of Research Council member 7. Academic Misconduct Investigation Committee Spring-Fall 2019 8. Search Committee for the Title IX Director at Marquette Fall 2018 9. Forward Thinking Poster Session and Colloguy Presentation Judge 11.28.2017 Search Committee for the Director of University Advancement (Faculty Representative) 10. August -Sept 2017 Athletic Performance Research Center Leadership Team (Team Lead) Fall 2016 11. 12. Pere Marquette Dinner Emcee 05.30.2015 13. **Innovation Council Review Board** 11.2014 - 05.2015 **Presidential Inauguration Ceremony Steering Committee Member** 05-09.2014 14. Marquette University Strategic Planning Committee 08.2012 - 05.2013 15. 16. University Academic Senate Executive Committee 08.2012 - 05.2013 17. Spring 2011 - 05.2013 University Academic Senate: CHS senator (representative) Gender Resources Center Faculty-in Residence Search Committee 02 - 04.2012 18. Mentor in the Faculty Mentoring Program: Mentor in Dept. of Speech Therapy 2010 - 2012 19. 20. **Committee on Equity** 2008 - 2010 21. Chair of a University Committee: Comprehensive Planning Committee, Marquette Childcare Center 2007 - 2010 a. Chair of Subcommittee for Program Planning b. Chair of Subcommittee for Business Planning 22. Committee on Faculty Women's sub-committee (regular member) 2007 23. Manresa First Year Reading Program Discussion Leader 08.2006 **B. COLLEGE SERVICE** 1. **College of Health Sciences Promotion and Tenure Committee** 2011 - 2016, 2019 Physical Therapy and Exercise Science Representative 2. Marquette Presents: 'Exercise is Medicine' Seminar to the public 01.2014 'Exercise is Medicine and the Effects of Aging.' Organized by the College of Health Science at Marguette University 3. College of Health Science Advancement Presentation to Alumni 11.2011

Washington DC. Presenter of research

| 4. | College of Health Science Advancement and Bellin Health Care Presentation to Alumni Green Bay, WI. Presenter of research | 05.2011 |
|----|---|-------------------|
| 5. | College of Health Science Advancement Emersion Day Marquette University. Presenter of research | 05.2008 |
| 6. | Integrative Neuroscience Research Center Marquette University. Host and organizer of guest speakers | 11.2004 / 11.2006 |

C. PROGRAM | DEPARTMENTAL SERVICE

| | 1. | Graduate Student Advising | 2004- present |
|----|----------------------|--|---------------------------|
| | 2. | Undergraduate Student Advising (each semester): 15-48 students/semester (48 students in | n Fall 2017) 2003 - 2018 |
| | 3. | Faculty Search Committee: Tenure-track Faculty, Department of Physical Therapy | Summer 2016- Spring 2017 |
| | 4. | Faculty Search Committee: Tenure-track Faculty, Program in Exercise Science | Spring 2011 |
| | 5. | Co-ordinator of Graduate Research Summer Journal Club | 06 - 08.2010 |
| | 6. | Co-ordinator of Meeting of the Minds Departmental Research Seminar | 05.2007 - 2010 |
| | 7. | Exercise Science presentation to incoming freshman students and parents | 02.2007 |
| | 8. | Faculty Search Committee: Tenure-track Faculty, Dept. of Physical Therapy | 2006 - 2007 |
| | 9. | Faculty Graduation Speech: Exercise Science Program, Dept. of Physical Therapy | 05.2006 |
| | 10. | Co-ordinator of the Exercise Science Research Day : <i>"Fatigue in Health and Disease"</i> Co-ordinator of a symposium of 6 x 30 min research presentations by graduate and undergrade students in the Exercise Science Program | 11.2004 luate |
| | 11. | Faculty Search Committee: Tenure-track Faculty, Dept. of Physical Therapy | 2004 |
| | 12. | Faculty Search Committee: Non-tenure (clinical Faculty, Dept. of Physical Therapy | 2004 |
| D. | D. COMMUNITY SERVICE | | |
| | 1. | Mentor and Research Supervisor for High School Students 8 high school students from local high schools | Summers 2021 - 2023 |
| | 2. | Board Member on the Council of Elders, Elmbrook Church, Brookfield | Jan 2015 – Dec 2020 |
| | 3. | Mentor and Research Supervisor for High School Student Divine Holy Savior Angels High School | Summer 2011 - Spring 2012 |

XII. AWARDS AND HONORS

| 1. | Edward F. Adolph Distinguished Lectureship of the APS Environmental and Exercise Physiology Section American Physiological Society (APS) Summit, Long Beach, CA, April 20-23, 2023 Performance Fatigability: An Integrative Approach to a Common Problem | 2023 |
|----|---|------------|
| 2. | Institute for Women's Research Honor, Marquette University | 2022 |
| 3. | Outstanding Researcher, College of Health Sciences, Marquette University | 2020 |
| 4. | Visiting Distinguished Thought Leader Award: University of South Australia, Australia Awarded by the University of South Australia, to work with faculty and researchers in the Health Sciences, Pharmacy and Medical Sciences to enhance their research. | 2018 |
| 5. | Nora Finnigan Werra Faculty Achievement Award from the Association of Marquette University Women Alumni | 04.2016 |
| 6. | 'All Star Faculty' Recognition: Marquette University Men's Basketball Game, Bradley Center | 01.20.2016 |

| 7. | Pere Marquette Emcee: Marquette end of Year all University Faculty Awards Ceremony | 4.30.2015 |
|-----|---|-------------|
| 8. | University Excellence in Teaching Award, Marquette University | 05.2014 |
| 9. | Way Klingler Research in Science Fellowship, Marquette University | 04.2014 |
| 10. | Appointed Associate Editor of the Journal titled 'Medicine in Science, Sports and Exercise' | 2014 |
| 11. | National Aeronautics and Space Administration (NASA) and the National Space Biomedical Research Institute Musculoskeletal Workgroup: 2013 Decadal Study workgroup that generated a report on "The Impact of Sex and Gender on Adaptation to Space." | 2013 |
| 12. | Edward Carroll Teacher of the Year Award, College of Health Sciences, Marquette University | 2013 |
| 13. | Dr. Judith Stitt Women's Faculty Scholarship: Wisconsin Women's Health Foundation | 2008 |
| 14. | Way Klingler Young Scholar Award, Marquette University | 2007 |
| 15. | Fellow of the American College of Sports Medicine (FACSM) | 2005 |
| 16. | American Physiological Society Research Career Enhancement Award | 2004 |
| 17. | American College of Sports Medicine Research Endowment Award | 2002 |
| 18. | Research Excellence, Wendy Eye Award, Best Paper on Women in Sport Australian Conference of Science and Medicine in Sport, Adelaide, Australia | 1998 |
| 19. | Best Young Scientist Finalist The American Physiological Society Conference, Vancouver, Canada | 1996 |
| 20. | University of Sydney Postgraduate Research Award Scholarship, Australia | 1994 - 1996 |
| 21. | Young Investigator of the Year Commendation (Basic Science) Australian Conference of Science and Medicine in Sport. Hobart, Australia | 1995 |

XIII. INTERVIEWS AND CITATIONS IN POPULAR MEDIA

| 1. | <i>Runner's World</i> How Tiredness Differs from Fatigue Symptoms By Elizabeth Millard <u>https://www.runnersworld.com/health-injuries/a44481673/tiredness-and-fatigue-symptoms/</u> | 07.11.2023 |
|----|--|----------------------------------|
| 2. | Outside Magazine Can Women Outperform Men in Sports? That's the Wrong Question to Ask By Christine Yu https://www.outsideonline.com/health/training-performance/female-athlete-science-up-to-speed-book-christine- yu/?utm_source=yahoo&utm_medium=OUTSIDE&utm_campaign=discover_rss | 05.12.2023 |
| 3. | 620 WTMJ Interview: a conversation on long COVID with President Lovell https://serve.castfire.com/audio/4098762/4098762_2023-03-09-171002.128.mp3 | 03.09.2023 |
| 4. | <i>WisBusiness,</i> Researchers getting a \$3 million grant to study factors limiting exercise for pre-diabetic patients https://www.wisbusiness.com/2022/thu-am-news-economist-says-state-exports-showing-strong-recovery-california-pordiscusses-supply-chain-trends/ | 10.06.2022 <u>t-director-</u> |
| 5. | Spectrum News 1: <u>What is COVID-19 doing to your body long term?</u> By Megan Marshall | 02.04.2022 |
| 6. | <i>Runner's World</i> Why Has the American Record in the Women's Marathon Stood for So Long? <u>https://www.runnersworld.com/news/a37792757/womens-marathon-american-record/</u> By Cindy Kuzma | 10.01.2021 |
| 7. | Wisconsin Public Radio Interview, Why Walking Is Good For Us https://www.wpr.org/listen/1853831 | 09.22.2021 |
| 8. | TMJ4 TV News: Long Haul Covid-19 Survivors study https://www.tmj4.com/news/coronavirus/marquette-researchers-looking-for-more-long-haul-covid-19-survivors | 07.28.2021 |

| 9. | FOX6 News: Man who was Milwaukee County's 1st COVID case part of MU long haul study (fox6now.com) | 03.29.2021 |
|-----|---|-------------------------------------|
| 10. | WUWM National Public Radio, Lake Effect Program. 'Fit For You: Cold Weather Exercise Tips' Interview with Audrey Nowakowski. | 02.04.2021 |
| 11. | Podium Runner, 'New 10-Year Study Confirms Super Shoe Effect' By Amby Burfoot | 01. 04 2021 |
| 12. | Jobling Globe, Jobling MO, 'Study finds mask mandates result in compliance'. Interview on Mask Mandates journal publication <u>https://www.joplinglobe.com/news/local_news/study-finds-mask-mandacompliance/article_caced507-294e-5bf7-bd87-4b7232449047.html</u> | 11.29.2020 <u>tes-result-in-</u> |
| 13. | WUWM National Public Radio, Lake Effect Program. 'Mask Mandates are Necessary to Slow the Spread Of COVID-19?' Interview with Audrey Nowakowski <u>https://www.wuwm.com/post/marquette-study-shows-mask-mandates-are-necessary-slow-spread-covid-19#</u> | 09.28.2020 stream/0 |
| 14. | Washington Post 'More women gain ground in ultramarathons, and other long-distance races' By Amanda Loudin | 09.26.2020 |
| | https://www.washingtonpost.com/health/women-long-distance-runners/2020/09/25/bffdda10-1871-11ea-a659-7d69641c6ff7_story.html | |
| 15. | You are Marquette. 'Surviving COVID-19' https://stories.marquette.edu/surviving-covid-19-e6b782734aa0 | 08.31.2020 |
| 16. | WUWM National Public Radio, Lake Effect Program. 'Tips for Wearing a Mask While Exercising' Interview with Audrey Nowakowski <u>https://www.wuwm.com/post/tips-wearing-mask-while-exercising#stream/0</u> | 08.04.2020 |
| 17. | Discover Magazine '5 Exercise Myths Debunked by Science' https://www.discovermagazine.com/health/5-exercise-myths-debunked-by-science | 06.13.2020 |
| 18. | Outside magazine 'What the Future of Fast Marathons Looks Like' https://www.outsideonline.com/2413647/marathon-physiology-study- responses?utm_campaign=rss&utm_source=rss&utm_medium=xmlfeed | 05.19.2020 |
| 19. | Swedish TV documentary (Swedish national TV) <u>Bästa träningen - 2. "Utan smärta finns ingen njutning heller" (</u> starting at minute 37) | 05.10.2020 |
| 20. | Federally funded research programs improving human health and safety Wisconsin Business | 09.17.2019 |
| 21. | <i>Elemental</i> 'What Makes Women Strong?' By Starre Julia Vartan https://elemental.medium.com/what-makes-women-strong-2c927bf286ef | 06.10.2019 |
| 22. | <i>The Walrus</i> , 'When Male Runners Lose to Women' By Leyland Cecco <u>https://thewalrus.ca/when-male-runners-lose-to-women/</u> | 05.02.2019 |
| 23. | WUWM National Public Radio, Lake Effect Program. 'Fit For You: Cold Weather Exercise Tips' Interview with Audrey Nowakowski https://www.wuwm.com/post/fit-you-cold-weather-exercise-tips#stream/0 | 01.05.2019 |
| 24. | WUWM National Public Radio, Lake Effect Program. 'Fit For You: Men vs. Women in Endurance Sports Interview with Audrey Nowakowski http://wuwm.com/post/fit-you-men-vs-women-endurance-sports#stream/0 | 07.12.2017 |
| 25. | <i>Motor Impairment Blog, Neuroscience Research Australia.</i> 'Why does motor performance decline with aging?' By Sandra Hunter, <u>https://motorimpairment.neura.edu.au/motor-performance-decline-aging/</u> | 05.04.2017 |
| 26. | Outside Magazine. "Has the 2-Hour Marathon Already Been Broken?" By: Samantha Larson https://www.outsideonline.com/2167951/womens-two-hour-marathon-has-already-been-broken | 04.06.2017 |
| 27. | <i>New York Magazine</i> 'When It Comes to Fitness, Women Have One Pretty Surprising Advantage' By Susan Rinkunas http://nymag.com/thecut/2016/12/womens-muscles-take-longer-to-fatigue-than-mens.html | 12.14.2016 |
| 28. | Health.com 'Here's One Way Women Are Fitter Than Men, According to Science 'By Amanda MacMillan | 12.13.2016 |

| | http://www.health.com/fitness/women-outperform-men-fitness-fatigue | |
|-----|--|------------|
| 29. | Newswise 'Gender Matters When it Comes to Exercise Fatigue' <u>http://newswise.com/articles/gender-differences-matter-when-it-comes-to-exercise-fatigue</u> | 12.02.2016 |
| 30. | WUWM National Public Radio, Lake Effect Program. 'New Study Seeks to Change Postpartum Care for Mothers' Interview with Audrey Nowakowski http://wuwm.com/post/new-study-seeks-change-postpartum-care-mothers | 12.22.2015 |
| 31. | WUWM National Public Radio, Lake Effect Program. 'Fit For You: Aging & Exercise' Interview with Audrey Nowakowski http://wuwm.com/post/fit-you-aging-exercise#stream/0 | 12.08.2015 |
| 32. | Runner's World . What's the Women's Equivalent of a Sub-2:00 Marathon?" by Amby Burfoot. http://www.runnersworld.com/elite-runners/whats-the-womens-equivalent-of-a-sub-200-marathon | 12.23.2014 |
| 33. | Southern California Public Radio, KPCC. "Take Two" Program. Interviewers: Alex Cohen & A Martínez. "Who's the best at running marathons, men or women?" http://www.scpr.org/programs/take-two/2014/08/07/38741/who-s-the-best-at-running-marathons-men-or-women/ | 08.07.2014 |
| 34. | New York Times . "Women Pace Marathons Better than Men Do." by Gretchen Reynolds. <u>http://well.blogs.nytimes.com/2014/08/06/women-pace-marathons-better-than-men-do/?_php=true&_type=blogs&_r=0</u> | 08.06.2014 |
| 35. | Runners World "Why Are Women Runners Less Competitive Than Men?" by Amby Burfoot. http://www.runnersworld.com/general-interest/why-are-women-runners-less-competitive-than-men | 01.02.2013 |
| 36. | Los Angeles Times "Exercise counteracts aging effects: Keeping active won't let you live forever but it can stave off the ravages of time." by Amanda Mascarelli. http://articles.latimes.com/2011/sep/01/health/la-he-aging-physiology-20110901 | 09.01.2011 |
| 37. | Milwaukee Public Radio, WUWM. Lake Effect Program Interviewer: Mitch Teich. "Gender and Muscle Fatigue." http://preview.wuwm.com/programs/lake_effect/lake_effect_segment.php?segmentid=6008 | 06.28.2010 |
| 38. | Runners World. "Age Matters." By Christie Aschwanden. | 01.20.2009 |