

Bio

PROFESSIONAL EDUCATION

- Post-Doctoral Research Fellowship, Wu Tsai Human Performance, Stanford School of Medicine, Division of Cardiovascular Medicine, *Stanford University* (August 1st, 2022 - Present). Advisor: Matthew Wheeler, MD., Ph.D.
- Doctor of Philosophy in Interdisciplinary Health Sciences, *University of Texas at El Paso* (2021). Concentrations: Strength and Conditioning, Clinical Exercise Physiology, and Sport Biomechanics. Dissertation title: Effects of Different Stretching Modalities on the Antagonist and Agonist Muscles on Isokinetic Strength and Vertical Jump Performance. Link to Dissertation. Advisor: Sandor Dorgo, Ph.D., CSCS,*D., FNCSA.
- Master of Science in Kinesiology with a concentration in Clinical Exercise Physiology, *University of Texas at El Paso* (2014).
- Bachelor of Science in Kinesiology with a concentration in Physical Education (K-12th), *University of Texas at El Paso* (2011). Mentor: Ben Avalos, MS.

ACADEMIC APPOINTMENTS

- Postdoctoral Researcher, Stanford Medicine, Cardiovascular Division, *Stanford University* (August 1st, 2022).
- Adjunct Professor, Kinesiology Department, *University of Texas at El Paso* (August 1st, 2021 - 2022).
- Research Associate, Doctor of Physical Therapy Program, Rehabilitation Science Department, *University of Texas at El Paso* (June 1st, 2021-July 31st, 2022).
- Adjunct Professor, Kinesiology Department, *El Paso Community College* (2018-2021).

Research

Peer-review Publications (n=21; first author=8)

1. Tso, J. V., **Montalvo, S.**, Christle, J., Hadley, D., & Froelicher, V. (2024). Should ECG criteria for Low QRS voltage (LQRSV) be specific for Sex?. *American heart journal*, S0002-8703(24)00022-X. Advance online publication. <https://doi.org/10.1016/j.ahj.2024.02.002> IF=5.099
2. **Montalvo, S.**, Froelicher, V. F., Hadley, D., & Wheeler, M. T. (2024). Digitized Electrocardiography Measurements Support the Biological Plausibility of the Pathological Significance of ST Segments in Athletes. *Clinical journal of sport medicine : official journal of the Canadian Academy of Sport Medicine*, 10.1097/JSM.0000000000001199. Advance online publication. <https://doi.org/10.1097/JSM.0000000000001199>
3. Tang, W. J., Gu, B., **Montalvo, S.**, Dunaway Young, S., Parker, D. M., de Monts, C., Ataide, P., Ni Ghiollagain, N., Wheeler, M. T., Tesi Rocha, C., Christle, J. W., He, Z., Day, J. W., & Duong, T. (2023). Assessing the Assisted Six-Minute Cycling Test as a Measure of Endurance in Non-Ambulatory Patients with Spinal Muscular Atrophy (SMA). *Journal of clinical medicine*, 12(24), 7582. <https://doi.org/10.3390/jcm12247582>.

4. Dietze-Hermosa, M., **Montalvo, S.**, Gonzales, M. P., & Dorgo, S. (Accepted, 10/27/2023). The Impact Of An 8-Week Resisted Sprint Training Program On Ice Skating Performance In Male Youth Ice Hockey Players. *Journal of Strength and Conditioning Research*.
5. Gonzalez, M. P., Montalvo, S., Dietze-Hermosa, M., Gomez, M., & Dorgo, S. (2023). A Comparison of Morphological, Jump, and Sprint Kinematic Asymmetries in Division I Track and Field Athletes. *International journal of exercise science*, 16(1), 1306–1319. [PMC10824295](#)
6. Dorgo, S., Terrazas, L. A., Gonzalez, M. P., Dietze-Hermosa, M. S., & **Montalvo, S.** (2023). Effects of manual resistance versus weight resistance training on body composition and strength in young adults after a 14-week intervention. *Journal of bodywork and movement therapies*, 36, 313–319.
<https://doi.org/10.1016/j.jbmt.2023.06.013>
7. ***Montalvo, S.**, *Martinez, A., Arias, S., Lozano, A., Gonzalez, M. P., Dietze-Hermosa, M. S., Boyea, B. L., & Dorgo, S. (2023). Commercial Smart Watches and Heart Rate Monitors: A Concurrent Validity Analysis. *Journal of strength and conditioning research*, 37(9), 1802–1808.
<https://doi.org/10.1519/JSC.0000000000004482>
*Denotes equal contribution as a first author.
8. Dietze-Hermosa, M. S., **Montalvo, S.**, Gonzalez, M. P., Cubillos, N. R., & Dorgo, S. Differences in sprint profile, sprint completion times, and jumping performance between division i track and field sprinters, throwers, and long-distance runners. *Journal of Physical Education and Sport*, 20, 2076-2085.
doi:http://dx.doi.org/10.7752/jpes.2020.s3280. IF=1.54, Q=2. Link to article: [SemanticScholar](#)
9. **Montalvo, S.**, Conde, D., Sanchez, M., Martinez, P., Trevizo, R., & Ibarra-Mejia, G. (2023). Dynamic stretching improves muscle activation and pain pressure threshold but not isometric hand strength when compared to static stretching. *Journal of Physical Education and Sport*, 23(2), 293-300.
DOI:10.7752/jpes.2023.02035 Link to article: [Journal](#)
10. Tan, E., **Montalvo, S.**, Gonzalez, M. P., Dietze-Hermosa, M., Min, S., & Dorgo, S. (2023). Changes in vertical jump performance and body composition before and after COVID-19 lockdown. *Journal of Human Sport and Exercise*, 18(1), 224–241. <https://doi.org/10.14198/jhse.2023.181.18>
11. Gomez, M., **Montalvo, S.**, & Gurovich, A. N. (2022). Near Infrared Spectroscopy is not a Surrogate of Venous Occlusion Plethysmography to Assess Microvascular Resting Blood Flow and Function. *International journal of exercise science*, 15(2), 1616–1626. PMCID: [PMC9762160](#)
12. **Montalvo, S.**, Gomez, M., Lozano, A., Arias, S., Rodriguez, L., Morales-Acuna, F., & Gurovich, A. N. (2022). Differences in Blood Flow Patterns and Endothelial Shear Stress at the Carotid Artery Using Different Exercise Modalities and Intensities. *Frontiers in physiology*, 13, 857816.
<https://doi.org/10.3389/fphys.2022.857816>
13. Dietze-Hermosa, M., **Montalvo, S.**, Gonzalez, M. P., Rodriguez, S., Cubillos, N. R., & Dorgo, S. (2021). Association and Predictive Ability of Jump Performance with Sprint Profile of Collegiate Track and Field Athletes. *Sports biomechanics*, 1–20. Advance online publication.
<https://doi.org/10.1080/14763141.2021.2000022>

14. **Montalvo, S.**, Conde, D., Gonzalez, M. P., Dietze-Hermosa, M., Ibarra-Mejia, G., & Dorgo, S. (2021). Heart rate percentage as a method for determining intra-set resting during a post-activation performance enhancement exercise to increase vertical jump performance. *Journal of Physical Education and Sport*, 21(5), 2730-2736. doi:<http://dx.doi.org/10.7752/jpes.2021.05363>. IF=1.54, Q=2. Link to article: [Journal](#)
15. **Montalvo, S.**, Gruber, L. D., Gonzalez, M. P., Dietze-Hermosa, M. S., & Dorgo, S. (2021). Effects of Augmented Eccentric Load Bench Press Training on One Repetition Maximum Performance and Electromyographic Activity in Trained Powerlifters. *Journal of strength and conditioning research*, 35(6), 1512–1519. <https://doi.org/10.1519/JSC.0000000000004030>
16. **Montalvo, S.**, Gonzalez, M. P., Dietze-Hermosa, M. S., Eggleston, J. D., & Dorgo, S. (2021). Common Vertical Jump and Reactive Strength Index Measuring Devices: A Validity and Reliability Analysis. *Journal of strength and conditioning research*, 35(5), 1234–1243. <https://doi.org/10.1519/JSC.0000000000003988>
17. Dietze-Hermosa, M.S., **Montalvo, S.**, Gonzalez, M.P., & Dorgo, S. (2021). Association Between the Modified Functional Movement Screen Scores, Fear of Falling, and Self-Perceived Balance in Active Older Adults. *Topics in Geriatric Rehabilitation*, 37, 64 – 73 DOI:10.1097/TGR.0000000000000306. Link to article: [SemanticScholar](#)
18. Dietze-Hermosa, M., **Montalvo, S.**, Gonzalez, M. P., & Dorgo, S. (2021). Physical fitness in older adults: Is there a relationship with the modified Functional Movement Screen™?. *Journal of bodywork and movement therapies*, 25, 28–34. <https://doi.org/10.1016/j.jbmt.2020.11.019>
19. Dietze-Hermosa, M., **Montalvo, S.**, Cubillos, N. R., Gonzalez, M. P., & Dorgo, S. (2020). Association and predictive ability of vertical countermovement jump performance on unilateral agility in recreationally trained individuals. *Journal of Physical Education and Sport*, 20, 2076-2085. doi:<http://dx.doi.org/10.7752/jpes.2020.s3280>. Link to article: [SemanticScholar](#)
20. Dorgo, S., Perales, J. J., Boyle, J. B., Hausselle, J., & **Montalvo, S.** (2020). Sprint Training on a Treadmill vs. Overground Results in Modality-Specific Impact on Sprint Performance but Similar Positive Improvement in Body Composition in Young Adults. *Journal of strength and conditioning research*, 34(2), 463–472. <https://doi.org/10.1519/JSC.0000000000003024>
21. **Montalvo, S.**, & Dorgo, S. (2019). The effect of different stretching protocols on vertical jump measures in college age gymnasts. *The Journal of sports medicine and physical fitness*, 59(12), 1956–1962. <https://doi.org/10.23736/S0022-4707.19.09561-6>

Publications Under Review (total n= 10, total, first author = 2)

1. **Montalvo, S.**, Gonzalez, F., Gruber, L., Gonzalez, M. P., Dietze-Hermosa, M. & Dorgo, S. Analysis of Sprinting Kinematics During Maximal Treadmill and Overground Sprinting. Under review in Journal of Sport Biomechanics
2. **Montalvo, S.**, Gonzalez, M. P., Dietze-Hermosa, M. Martinez, A., Rodriguez, S., Gomez, M., Ibarra-Mejia, G., Tan, E., & Dorgo, S. Effects Of Different Stretching Modalities On The Antagonist And Agonist Muscles On Isokinetic Strength And Vertical Jump Performance. Under review in Journal of Strength and Conditioning.

3. Toledo, H. Sandoval, J., Mancilla, A., Tan, E., & **Montalvo, S.** (2023). Difference in Hamstring Flexibility between Athletes in the Chilean National Wushu Team versus Athletes not in the Chilean National Wushu Team. Under review in the *International Journal of Exercise Sciences*. Preprint: <https://doi.org/10.51224/SRXIV.294>
4. Alvurdu, S., Akarçesme, C., Altundağ, E., **Montalvo, S.** Concurrent validity and reliability of IVMES portable force plate for measuring the vertical jump height. Under review.
5. Terrazas, L., **Montalvo, S.**, & Dorgo, S. Manual Resistance Training and Resistance Training Elicits Neuromuscular Strength Adaptations But Not Body Composition To A 8 Week Exercise Intervention. Under review in the Journal of Sports Sciences.
6. Gurovich, A. N., **Montalvo, S.**, Hassan, F. P., & Gomez, M. Carotid Arterial Compliance at Different Submaximal Cycling Intensities. Under review in the Frontiers in Physiology.
7. Lopez, S., Rodriguez, A., **Montalvo, S.**, & Gurovich, A. N. Ultrasound Imaging Can Surrogate Mechanical Caliper Assessing Skinfolds and Adipose Mass when using a Standardized Protocol. Under review in Medicine & Science in Sports & Exercise.
8. Gomez, M., **Montalvo, S.**, Sanchez, A., Conde, D., & Gurovich, N. A. Effects of Eccentric Cycling Exercise on Blood Flow Patterns. Under review in Research Quarterly for Exercise and Sport.
9. Tan, E., Rio, D., Mancilla, A., Gonzalez, M. P., & **Montalvo, S.** Normative Data for Countermovement Jump in Malaysian Wushu Athletes: Performance and Biomechanical Insights. International Journal of Exercise Science.
10. Tan, E., & **Montalvo, S.** Vertical Jump Height with Artificial Intelligence Through a Mobile Device: a Validity and Reliability Report. Under review in the Journal of Strength and Conditioning Research.

Books

1. **Montalvo, S.** KINE-STATS: a practical statistical approach to common kinesiology research using R. (*In progress*: <https://samuelmontalvo.github.io/Kinestats/>)

Book chapters

1. Rohrer, A., Conde, D., **Montalvo, S.**, Gomez, M., Juarez, J., Ibarra-Mejia, G. (2022). Changes in Lactate After the Completion of Repetitive Cycle Exercises with and without Compression Arm Sleeves. In: Ravindra S. Goonetilleke and Shuping Xiong (eds) Physical Ergonomics and Human Factors. AHFE (2022) International Conference. AHFE Open Access, vol 63. AHFE International, USA. <http://doi.org/10.54941/ahfe1002617>
2. Gomez, M., Conde, D., **Montalvo, S.**, & Ibarra-Mejia, G. (2023). Differences in Circulating Cortisol Levels After Completing Hand Ergometer Exercise With and Without Graded Compression Sleeves

Peer-Review Conference Proceedings (n=63, first author=17)

1. Blumberg, Y., **Montalvo, S.**, Christle, J. W., Haddad, F., De Monts, C., & Duong, T. Recovery in Neuromuscular Disease Individuals. (2023). World Muscular Society.

2. Tang, W., **Montalvo, S.**, De Monts C., Young, D. S., Ataide, P., Ghillogain, N. M. N., Stevens, V., Parker, D., He, Z., Rocha, T. C., Day, J., & Duong, T. Assisted Six Minute Cycle Test (A6MCT): A Feasible and Valid Measurement of Functional and Fatigue Changes in Individuals with Spinal Muscular Atrophy. (2023). World Muscular Society.
3. **Montalvo, S.**, Gonzalez, M., Mancilla, A., Rios, D., & Tan, E. Construction of a National Normative Vertical Jump Performance of Malaysia Wusu Martial Arts. (2023). National Strength and Conditioning Association National Conference.
4. **Montalvo, S.**, Froelicher, F. V., Myers, N., Jonathan, & Wheeler, T. M. (2023). ST Segment Depression in Athletes. American College of Sports Medicine 2023.
5. Gomez, M., **Montalvo, S.**, Sanchez, A., Hassan, P., & Gurovich, N. A. (2023). Biomechanical Characteristics of the Carotid Artery during Aerobic Exercise. American College of Sports Medicine 2023.
6. Sanchez, A., Gomez, M., **Montalvo, S.**, Lozano, A., Arias, S., & Gurovich, A. N. (2023). The Effects of Different Intensities on Eccentric Cycling Blood Flow Patterns at a Concentric Cycling Workload Match. Texas American College of Sports Medicine.
7. Gomez, M., **Montalvo, S.**, Sanchez, A., Hassan, P., Gurovich, A. N. (2023). Biomechanical Characteristics of the Carotid Artery during Aerobic Exercise. 2023 Texas American College of Sports Medicine.
8. Moreno, K., Ferguson, C., Garcia, V., **Montalvo, S.**, & Gurovich, A. The Effects of a Physical Therapy Program and the COVID-19 Pandemic on Student's Health Outcomes. American Physical Therapy Association conference 2023.
9. **Montalvo, S.**, Martinez, A., Gonzalez, M. P., Dietze-Hermosa, M., Arias, S., Hassan, F. P., Lozano, A., & Dorgo, S. Reliability and Validity Analyses of Heart Rate Measures from a Commercially Available Smart-Watch. The National Strength and Conditioning Association 2022 Conference.
10. **Montalvo, S.**, Tan, E. Pok., C. Blood Lactate Production and Vertical Jump Height after a World Competition Routine in Wushu Martial Artists. The National Strength and Conditioning Association 2022 Conference.
11. Lowry, J., Williams, N., Baldwin, C., Allen, W., Laudie, E., **Montalvo, S.**, Gonzalez, M. P., Dorgo, S., & Dietze-Hermosa, M. (2022). Differences in isometric mid-thigh pull peak force production after participation in resisted sprint training. 2022 National Strength and Conditioning Association National Conference Abstract.
12. Williams, N., Laudie, E., Lowry, J., Baldwin, C., **Montalvo, S.**, Gonzalez, M. P., Dorgo, S., & Dietze-Hermosa, M. (2022). Association between biceps femoris muscle activity with maximal ice skating completion times and kinetic profile measures in youth ice hockey players. 2022 National Strength and Conditioning Association National Conference Abstract.
13. Laudie, E., Williams, N., Baldwin, C., Allen, W., Lowry, J., **Montalvo, S.**, Gonzalez, M. P., Dorgo, S., & Dietze-Hermosa, M. (2022). Association between vertical jump performance and maximal ice skating completion times in youth ice hockey players. 2022 National Strength and Conditioning Association National Conference Abstract.
14. Baldwin, C., Laudie, E., Lowry, J., Williams, N., **Montalvo, S.**, Gonzalez, M. P., Dorgo, S., & Dietze-Hermosa, M. (2022). Kinetic profile differences between overground sprinting and maximal ice skating in youth ice hockey players. 2022 National Strength and Conditioning Association National Conference Abstract.
15. Dietze-Hermosa, M. S., Williams, N. B., Lowry, J., Allen, W., Laudie, E., Baldwin, C., Gonzalez, M., **Montalvo, S.**, & Dorgo, S. Differences in Sagittal Plane Joint Angles at Toe-off Between Overground Sprinting and Maximal Ice Skating in Youth Ice Hockey Players. The National Strength and Conditioning Association 2022 Conference.

16. Dietze-Hermosa, M. S., Williams, N. B., Lowry, J., Allen, W., Laudie, E., Baldwin, C., Gonzalez, M., **Montalvo, S.**, & Dorgo, S. Differences in Step Spatiotemporal Variables Between Overground Sprinting and Maximal Ice Skating in Youth Ice Hockey Players. The National Strength and Conditioning Association 2022 Conference.
17. Gonzalez, M., **Montalvo, S.**, Dietze-Hermosa, M. S., Molina, T., & Dorgo, S. A Comparison of the Magnitude of Jump and Sprint Asymmetries in Division I Track and Field Athletes. The National Strength and Conditioning Association 2022 Conference.
18. Gonzalez, M., **Montalvo, S.**, Dietze-Hermosa, M. S., Molina, T., & Dorgo, S. Associations Between Jump Inter-limb Asymmetries and Sprint Profile Measures. The National Strength and Conditioning Association 2022 Conference.
19. **Montalvo, S.**, Tan, E. Pok, C. Neuromuscular Responses to a competitive WUSHU routine during the World Wushu Online Competition. American College of Sports Medicine 2022 Conference..
20. Gomez, M., **Montalvo, S.**, Lozano, A., Arias, S., & Gurovich, A. N. Brachial artery blood flow patterns during eccentric cycling exercise. American College of Sports Medicine 2022 Conference.
21. Arias, S., **Montalvo, S.**, Gomez, M., Lozano, A., Hassan, P. F., & Gurovich, A. N. Differences in Blood-Flow Patterns of the Carotid Artery between two exercise modalities at three exercise intensities. American College of Sports Medicine 2022 Conference.
22. Rohrer, R. A., Conde, A. D., Juarez, L. J., **Montalvo, S.**, Gomez, M., & Ibarra-Mejia, G. Changes in Lactate After the Completion of Repetitive Cycle Exercises with and without Compression Arm Sleeves. 13th International Conference on Applied Human Factors and Ergonomics. 2022.
23. **Montalvo, S.**, Tan, E., & Dorgo, S. Decrease in Vertical Jump Performance after a Simulated Competition Routine with Elite Wushu Athletes. 2021 National Strength and Conditioning Association Conference, Shanghai, China.
24. **Montalvo, S.**, Conde, D., & Mejia-Ibarra, G. (2021). One-minute Of Dynamic Stretching Increases Forearm Pressure Pain Threshold but Not Muscular Function or Strength in Comparison to Static Stretching: 969. *Medicine & Science in Sports & Exercise*, 53(8S), 318.
25. Martinez A., **Montalvo S.**, Gonzalez M.P., Cubillos N., Dietze-Hermosa M., & Dorgo S. The backwards overhead medicine ball throw compared to bilateral broad jump as predictors of acceleration sprint completion times. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021.
26. Del Rio J., Dietze-Hermosa M., **Montalvo S.**, Gonzalez M.P., & Dorgo S. Sprint kinematic performance changes upon returning from a deconditioned period in track and field athletes. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021.
27. Rodriguez S., Dietze-Hermosa M., **Montalvo S.**, Gonzalez M.P., Cubillos N., Martinez E. & Dorgo S. Differences in sprint profile between collegiate sprinters and long-distance runners. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021.
28. Gonzalez M.P., **Montalvo S.**, Dietze-Hermosa M., Cubillos N., Rodriguez S., Ruiz A., Martinez E., Del Rio J. & Dorgo S. Changes in sprint kinematic asymmetries in division I track and field athletes during off-season training. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021.
29. **Montalvo S.**, Tan E., See M., Gonzalez M.P., Martinez A., Dietze-Hermosa M., Cubillos N., & Dorgo S. The influence of fat-free mass on vertical jump performance on elite wushu martial arts athletes: A repeated-measures correlation approach. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021

30. Dietze-Hermosa M., **Montalvo S.**, Gonzalez M.P., Rodriguez S., Cubillos N., Martinez E., & Dorgo S. Best sprint profile predictors of sprint acceleration split times in collegiate track and field athletes. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021.
31. Dietze-Hermosa M., **Montalvo S.**, Gonzalez M.P., Rodriguez S., Cubillos N., Martinez E., & Dorgo S. Differences in sprint profile, broad jump distance, and squat jump performance between sprint and non-sprint track and field athletes. National Strength and Conditioning Association-National Conference. Orlando, FL, July 06-10, 2021.
32. **Montalvo S.**, Gonzalez M.P., Dietze-Hermosa M., Cubillos N., Rodriguez S., Martinez E., & Dorgo S. Bilateral broad jump as a better predictor of sprint acceleration split times than unilateral broad jumps. American College of Sports Medicine – Texas chapter. (Virtual), February 24-26, 2021.
33. Gonzalez M.P., **Montalvo S.**, Dietze-Hermosa M., Cubillos N., Rodriguez S., Martinez E., & Dorgo S. Association between sprint kinematic asymmetries and 30-meter fly sprint completion time. American College of Sports Medicine – Texas chapter. (Virtual), February 24-26, 2021.
34. Rodriguez S., Dietze-Hermosa M., **Montalvo S.**, Gonzalez M.P., Cubillos N., Martinez E., Del Rio J. & Dorgo S. The relationship between broad jump distance and sprint profile in collegiate track and field athletes. American College of Sports Medicine – Texas chapter. (Virtual), February 24-26, 2021.
35. Dietze-Hermosa M., Rodriguez S., **Montalvo S.**, Gonzalez M.P., Cubillos N., Martinez E., Del Rio J. & Dorgo S. The relationship between squat jump performance and sprint profile in collegiate track and field athletes. American College of Sports Medicine – Texas chapter. (Virtual), February 24-26, 2021.
36. Dietze-Hermosa M., **Montalvo S.**, Cubillos N., Rodriguez S. & Dorgo S. Can single-leg jumping performance predict single-leg agility performance? National Strength and Conditioning Association-National Conference. Las Vegas, NV, July 08-11, 2020. [Link](#)
37. Del Rio J., Martinez A., **Montalvo S.**, Dietze-Hermosa M., & Dorgo S. The association between kinematics during backwards and forwards sprinting with completion times during maximal sprinting. National Strength and Conditioning Association-National Conference. Las Vegas, NV, July 08-11, 2020. [Link](#)
38. Martinez A., **Montalvo S.**, Del Rio J., Dietze-Hermosa M., & Dorgo S. Association between backwards sprinting with forwards sprinting, countermovement jump height, and broad jump distance. National Strength and Conditioning Association-National Conference. Las Vegas, NV, July 08-11, 2020. [Link](#)
39. **Montalvo S.**, Gonzalez M.P., Dietze-Hermosa M., Rodriguez S., Cubillos N., Ibarra-Mejia G., & Dorgo S. Association between the pennation angle of the gastrocnemius and reactive strength index. National Strength and Conditioning Association-National Conference. Las Vegas, NV, July 08-11, 2020. [Link](#)
40. Terrazas L., **Montalvo S.**, Dietze-Hermosa M., Rodriguez S., Cubillos N., Bastian D., Martinez Ruiz A. & Dorgo S. The effects of manual resistance training on muscular strength. National Strength and Conditioning Association-National Conference. Las Vegas, NV, July 08-11, 2020. [Link](#)
41. Bastian D., **Montalvo S.**, Gonzalez M.P., Dietze-Hermosa M., Mejia-Ibarra G. & Dorgo S. Effects of Antagonist Stretching on Isokinetic Strength: A Pilot Study. National Strength and Conditioning Association-National Conference. Las Vegas, NV, July 08-11, 2020.
42. **Montalvo, S.**, Tan E, Conde, D., Ibarra-Mejia, G., & Sandor Dorgo, S. Injury Rates among Elite Wushu Kung-Fu Martial Artists and Access to Health Care. American College of Sports Medicine – National Conference. San Francisco, CA, May 26-30, 2020.

43. Dietze-Hermosa M., **Montalvo S.**, Gonzalez M. P., Rodriguez A., Jarquin I. & Dorgo S. Physical Fitness in Older Adults: Is There a Relationship to the Modified Functional Movement Screen? American College of Sports Medicine – National Conference. San Francisco, CA, May 26-30, 2020. [Link](#)
44. **Montalvo, S.**, Dorgo, S., Conde, D., Gonzalez, M., & Ibarra-Mejia, G. (2019). “Heart Rate Percentage as an Intra-Rest Modulator during Training with Post-Activation Potentiation. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019.
45. Dietze-Hermosa M., Dorgo S., **Montalvo S.**, Rodriguez A., & Jarquin I. Association between Modified Functional Movement Screen™ Scores and Fear of Falling in Active Older Adults. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019. [Link](#)
46. Dietze-Hermosa M., Dorgo S., **Montalvo S.**, Gonzalez M. P., Gruber L., & Terrazas L. Difference in modified Functional Movement Screen™ Scores between Males and Female Active Older Adults. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019. [Link](#)
47. **Montalvo S.**, Dorgo S., Gonzalez M. P., & Dietze-Hermosa M. Validity and Reliability of Inertial Measurement System on Reactive Strength Index. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019. [Link](#)
48. Gonzalez M. P., Dorgo S., **Montalvo S.**, Dietze-Hermosa M., Cubillos N. & Caraveo P. The Effects of Manual Resistance Training on Post Activation Potentiation: A Pilot Study. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019. [Link](#)
49. Del Rio, J., Dorgo, S., & **Montalvo, S.** The Influence of Arm Swing on Sprint Velocity And Sprint Kinematics. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019.
50. Gruber, L., Dorgo, S., **Montalvo, S.**, Gonzalez, M., Bastian, D., & Rodriguez, A. (2019). “The Effects of A 2-Week Eccentric Overload Bench Press Training Program On Muscular Strength, Power, Bar Velocity, And Muscular Activation”. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019.
51. Gruber, L., Gonzales, F., Dorgo, S., & **Montalvo, S.** (2019). “Comparison of Stride Length And Stride Frequency Patterns Of Sprint Performance In Overground Vs Motorized Treadmill Sprinting”. National Strength and Conditioning Association-National Conference. Washington, D.C., July 10-13, 2019.
52. **Montalvo, S.**, Gonzalez, M. P., Dietze-Hermosa, M., & Dorgo, S. (2019). "The Effects of Three Post-Activation Potentiation Methods on Muscular Activation of Knee Extensors: A Pilot Study," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 11, Article 92. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss11/92>
53. Rodriguez, A., Gruber, L., **Montalvo, S.**, Gonzalez, M. P., Bastian, D., & Dorgo, Sandor (2019) "Changes to Strength, Muscular Power, and Bar Velocity after 2-Weeks of Eccentric Overload Bench Press Training: A Case Study," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 11, Article 108. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss11/108>
54. Gonzalez, M. P., **Montalvo, S.**, Dietze-Hermosa, M., & Dorgo, S. (2019). "Manual Resistance Training as an Alternative Post-Activation Potentiation Method: A Pilot Study," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 11, Article 101. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss11/101>

55. De La Torre, I. N., **Montalvo, S.**, Conde, D., Ibarra-Mejia, G., & Dorgo, S. (2019). "Increasing Vertical Jump Height using Two Alternative Post-Activation Potentiation Methods," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 11, Article 95. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss11/95>
56. Jarquin, I. A., **Montalvo, S.**, Conde, D., Ibarra-Mejia, G., & Dorgo, S. (2019). "The Effects of Two Post-Activation Potentiation Methods on Muscular Activation," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 11, Article 85. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss11/85>
57. Dietze-Hermosa, M. S., **Montalvo, S.**, Gruber, L., Terrazas, L., Gonzalez, M., & Dorgo, S. (2019). "Scores for the Modified Functional Movement Screen in Active Older Adults," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 11, Article 39. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss11/39>
58. **Montalvo, S.**, Dorgo, S., Sanchez, J. A., Gonzalez, M. P., & Tune, C. H. (2018). The Concurrent Validity of Vertical Jump Measuring Devices. The 2018 National Strength and Conditioning Association Conference. NSCA Abstract (Accepted). To be presented at the 2018 NSCA Conference in July 11-14th in Indianapolis.
59. **Montalvo, S.**, Dorgo, S., Oropeza, N., Jarquin, I. A., Gonzalez, M., Tune, C. H., & Sanchez, J. A. (2018). The Effects of Different Warm-Up Protocols in Vertical Jump Height with College Age Gymnasts. The 2018 National Strength and Conditioning Association Conference. Presented at the 2018 NSCA Conference on July 11-14th in Indiana, Indianapolis. <https://www.eventscribe.com/2018/posters/nsca/SplitViewer.asp?PID=MjA1NTIzNzYzMjE#>
60. Dorgo, S., Perales, J., & **Montalvo, S.** (2018). The Effects of Overground and Treadmill Sprint Training on Body Composition. The 2018 National Strength and Conditioning Association Conference. NSCA Abstract (Accepted). To be presented in the 2018 NSCA Conference in July 11-14th in Indianapolis.
61. Dorgo, S., Perales, J., **Montalvo, S.**, Amador, M., & Bajpeyi, S. (2016). Effects of Treadmill and Overground Sprint Training Modes on Sprint Speed, Body Composition and Aerobic Power. NSCA ABSTRACT.
62. **Montalvo, S.**, Dorgo, S., Tune, H. C., Sapien, A. C., Gonzalez, M. P., & Sanchez, J. A. "Validity of Vertical Jump Measuring Devices," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2: Iss. 10, Article 69. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss10/69>
63. Amador, M., **Montalvo, S.**, Perales, J., Dorgo, S., & Bajpeyi, S. (2016). "The Effects of Two Different Sprint Training Modalities on Sprint Speed, Aerobic Fitness and Body Composition," *International Journal of Exercise Science: Conference Proceedings*: Vol. 2 : Iss. 8 , Article 48. Available at: <https://digitalcommons.wku.edu/ijesab/vol2/iss8/48>

Peer-review local conferences (n=12)

**During my Ph.D. studies and Post-Doctoral fellowship, I have mentored several students at the University of Texas at El Paso, which have presented in local conferences.*

1. Esther Afangideh, Manuel Gomez, **Samuel Montalvo**, Alejandro Sanchez, Josue Reyes, Jorge De Castro, Daniel Conde, Alvaro, N. Gurovich. Biomedical Characteristics of the Carotid artery during Aerobic Exercise. (2023) UTEP DISCOVER 2023: COURI Summer Symposium Abstracts.
2. Alondra Lozano, **Samuel Montalvo**, Manuel Gomez, Sabrina Arias, Progga F. Hassan, Alvaro Gurovich. Differences in Blood-Flow Patterns of the Carotid Artery between three Aerobic Exercise Modalities. (2022) UTEP DISCOVER 2022: COURI Summer Symposium Abstracts.
3. Carlos De La Rosa, Manuel Gomez, **Samuel Montalvo**, Sabrina Arias, Alondra Lozano, Corina Arroyo, Alvaro Gurovich. Early vascular aging, oxidative stress, and mental health in individuals recovering from Covid-19. (2021) UTEP DISCOVER 2021: COURI Summer Symposium Abstracts.

4. Corina Arroyo, **Samuel Montalvo**, Manuel Gomez, Sabrina Arias, Carlos de la Rosa, Alondra Lozano, Alvaro Gurovich. Differences in the carotid artery shear stress between three intensities of the bench press and arm crank. (2021) UTEP DISCOVER 2021: COURI Summer Symposium Abstracts
5. Alondra Lozano, **Samuel Montalvo**, Manuel Gomez, Sabrina Arias, Carlos de la Rosa, Corina Arroyo, Alvaro Gurovich. Comparison of carotid endothelial shear stress across three resistance training modalities and intensities. (2021) UTEP DISCOVER 2021: COURI Summer Symposium Abstracts.
6. Sabrina Arias, **Samuel Montalvo**, Manuel Gomez, Carlos de la Rosa, Alondra Lozano, Corina Arroyo, Alvaro Gurovich. Differences of the carotid artery between three intensities of the back squat and running treadmill. (2021) UTEP DISCOVER 2021: COURI Summer Symposium Abstracts.
7. Caraveo, P., **Montalvo, S.**, Gruber, L., De La Torre, Ibarra-Mejia, G., & Dorgo, S. (2019). "Increases in Muscular Activation using Overload Eccentric Training". UTEP 2019 COURI Symposium.
8. De la Torre, I., **Montalvo, S.**, Gruber, L., Caraveo, P., Ibarra-Mejia, G., & Dorgo, S. (2019). "Changes in Bar Velocity, Muscular Power, and Force during a three-Week Mesocycle Using Supramaximal Eccentric Bench Press Training. UTEP 2019 COURI Symposium.
9. Jarquin, A., **Montalvo, S.**, Gonzalez, M., Dietze-Hermosa, M., & Dorgo, S. (2019). "Validity and Reliability of a Photoelectric Cells Device on Reactive Strength Index Measures. UTEP 2019 COURI Symposium.
10. Gonzalez M. P., **Montalvo, S.**, Jarquin, I. A., Oropeza, S. N., & Dorgo, S. Reactive Strength Index: Validity of Vertical Jump Measuring Devices. COURI Symposium Abstracts, Spring 2018. UTEP DISCOVER 2018: COURI Spring Symposium Abstracts, ID= 1325.
11. Oropeza, N. S., **Montalvo, S.**, Gonzalez, M. P., Jarquin, I. A., & Dorgo, S. (2018). The Effects of Different Warm-Up Protocols on Power Output in College Age Gymnasts. COURI Symposium Abstracts, Spring 2018. UTEP DISCOVER 2018: COURI Symposium Abstracts, Spring 2018, ID= 1333.
12. Jarquin, I. A., **Montalvo, S.**, Gonzalez, M. P., Oropeza, S. N., & Dorgo, S. (2018). Anthropometric Measures Predict Vertical Jump Height and Reactive Strength Index. COURI Symposium Abstracts, Spring 2018. UTEP DISCOVER 2018: COURI Spring Symposium Abstracts, ID= 1340.

Scholarly Lecture Presentations

1. **Montalvo, S.**, Floelicher, V., Hadley, D., & Wheeler, T. M. Computerized Rest ECG Measurements Support the Biological Plausibility of the Pathological significance of ST measurements in Asymptomatic Athletes. 2022 Wu Tsai Human Alliance Performance Symposium. Stanford University.
2. **Montalvo S.** Science and Wushu a 2021 update. University of Nuevo León, Monterrey, Nuevo León, México (Universidad Autónoma de Nuevo León). March of 2021.
3. **Montalvo S.** Wushu and COVID-19 lockdown: an example of Malaysian professional athletes. Buenos Aires, Argentina. November 2020.
4. **Montalvo, S.** Student-Led Exercise Workouts Lead to Improvements in Physical Fitness. Border Learning Conference, 2020.
5. **Montalvo, S.**, Gonzalez, M.P., Dietze-Hermosa, M., Cubillos, N., Bastian, D., Rodriguez, S., & Fernandez, A. Effects of Different Stretching Protocols on Muscular Co-Activation during Vertical Jump: Pilot Study. University of Texas at El Paso, Graduate Expo Symposium. El Paso, TX, Nov 8-9, 2019.

6. **Montalvo, S.** (2018). “The Science of Wushu” (La Ciencia de Wushu). 2^{do} Congreso Internacional Estudiantil en Ciencias Del Ejercicio en la Universidad Autónoma de Nuevo León (2nd International Congress for students in the Exercise Sciences). April 26-27, Monterrey, Nuevo León, México.
7. **Montalvo, S.** Oropeza, N., Jarquin, I. A., Gonzalez, M., Tune, C. H., & Sanchez, J. A. (2018). “Los Efectos Cinematicos y Cineticos de Diferentes Protocolos de Estiramiento en Gimnastas Universitarios” (The Kinematic and Kinetic Effects of Different Warm-Up Protocols in College Gymnasts). 2^{do} Congreso Internacional Estudiantil en Ciencias Del Ejercicio en la Universidad Autónoma de Nuevo León (2nd International Congress for Students in the Exercise Sciences). April 26-27, Monterrey, Nuevo León, México.
8. **Montalvo, S.** (2018). “Measuring the Vertical Jump and Reactive Strength Index”. Healthy Exchange Lecture at the University of Texas at El Paso. March 25, El Paso, TX.
9. **Montalvo, S.** (2017). The ACTN3 and Post-Activation Potentiation: A Possible Genetic Influence. Annual Interdisciplinary Health Sciences Expo 2017 (University of Texas at El Paso).
10. **Montalvo, S.** (2016). A Systematic Review of the Effects of Exercise, Diet, and Combination of Exercise and Diet on Glucose Control in Individuals with Type 2 Diabetes Mellitus. Annual Interdisciplinary Health Sciences Expo 2016 (University of Texas at El Paso).
11. **Montalvo, S.** KIN 5371 Measurement Techniques in Exercise Physiology. Exercise Metabolism. Guest Lecturer. University of Texas at El Paso, 2018.
12. **Montalvo, S.** KIN 4323 Current Issues in Exercise Science. Diet, Exercise, and the Type 2 diabetic population Guest Lecturer. University of Texas at El Paso, 2015.

Teaching Experience

Lecturer, The University of Texas at El Paso (Fall 2021)

- Taught and developed the Strength and Conditioning Program Design KIN 4445 course for senior-level undergraduates.

Graduate Research Associate, The University of Texas at El Paso (2015-2020)

- Provided support and assisted on ongoing laboratory projects for the Fitness Research Laboratory, Clinical Applied Physiology Lab, and the Ergonomics Laboratory. Co-mentored and supervised Ph.D., graduate, and undergraduate students on a variety of research techniques and analyses.

Adjunct Professor of Kinesiology, El Paso Community College (2018 – 2020)

- Created, designed, and taught basic courses in Kinesiology:
 - Foundations of Kinesiology, KINE 1301
 - Weight Training, KINE 2100
 - CPR and AED, KINE 1306

Graduate Teaching Assistant, The University of Texas at El Paso (2017–2020)

- Assisted and Taught Different Laboratories in the Kinesiology Program:
 - KIN 4314 Biomechanics Laboratory. 2018-2019. (Undergraduate)
 - KIN 4442 Geriatrics Programming. 2019. (Undergraduate)
 - KIN 5361 Advanced Biomechanics. 2018.(Masters)
 - KIN 5372 Advanced Exercise Physiology. 2015. (Masters)
 - KIN 5371 Advanced Measuring Techniques in Exercise Physiology. 2016. (Masters)
 - KIN 4321 Current Issues in Exercise Science. 2015. (Undergraduate)
 - KIN 4330 Fitness Program. Labs. 2017-2018. (Undergraduate)
 - KIN 1303 Foundations of Kinesiology. 2017-2018. (Undergraduate)

Physical Education and Health Teacher, Eastwood Knolls International School (2011-2016)

- Worked with the Wellness Department to promote and teach healthy lifestyles and physical activity for students from kindergarten to 8th grade. In addition, we created an after-school program with activities such as martial arts, cheerleading, Tai Chi for teachers, and the PE After-school Club. We also developed and implemented the Elementary Martial Art Programs and Social programs such as Jump and Hops for heart for the American Heart Association and Marathon Kids, in where we fundraised and donated more than \$3,000 to the American Heart Association in 2015.

Physical Education Internship Glen Cove Elementary and Eastwood Middle School (2011)

- Worked with the PE department to educate, instruct, and develop physically educated children. Assisted with After School Programs (Martial Arts Club and Cheerleading), fundraisers, and special school events for teachers. Worked with the Wellness Department to educate, instruct, and develop physically educated students.

Grants Awarded

1. The Effect of Body Position on the Within- and Between-Session Reliability of Isometric Mid-Thigh Pull Asymmetry Measures and Its Relationship with Performance. Amount awarded: \$ 2,558.78. PI: Matthew, P. Gonzalez. Co-PI: Sandor Dorgo, Kelly Cheever, Samuel Montalvo.
2. NSCA National Foundation Grant 2021. Effects of an 8-week resisted sprint training program on-ice skating speed, acceleration, and measures of athletic performance in male ice hockey players. Amount awarded: \$7,279.10. PI: Martin S. Dietze-Hermosa, CO-PI: Sandor Dorgo, Co-I: Samuel Montalvo.
3. UTEP 2021 Travel award. Amount awarded: \$2,200.
4. NSCA National Foundation Grant 2020. Young Strength and Conditioning High School program. Amount awarded: \$25,000. (PI: Emily Horsh, Co-PI: Sandor Dorgo, Co-I: Samuel Montalvo).
5. Dodson grant at the University of Texas at El Paso. (2019). \$1,994.
6. UTEP Graduate School Travel Grant. (2019) \$800.
7. UTEP College of Health Science Travel Award. (2019) \$650.
8. Dodson Grant at the University of Texas at El Paso. (2018) \$2,441.83.
9. UTEP College of Health Science 500\$ travel award to attend the 2018 National Strength and Conditioning Association Conference in Indiana, Indianapolis 2018.

The total amount of funding secured to date:\$43,423.71

Notable Grant Applications (not funded)

1. Healthy Eating and Active Living Initiative (2020). Young Stars Athletic Program. Paso Del Norte Health Foundation. (\$316,298) Role: Co-I (PI: Sandor Dorgo).
2. United States Department of Health and Human Services (DHHS) (2019). The Young Athletic Stars Program—Youth Engagement in Sports: Collaboration to Improve Adolescent Physical Activity and Nutrition. Federal Grant (\$800,000) Role: Co-I (PI: Dr. Sandor Dorgo)
3. National Strength and Conditioning Association Foundation. (2019). The Effects of Antagonist and Agonist Stretching on Vertical Jump Performance (\$14,500). Role: PI.

4. National Strength and Conditioning Association Foundation. (2019). The Role of the ACTN3 Gene on post-activation potentiation. (\$15,000). Role: PI.

Professional Certifications and Memberships

Professional Certifications

- Certified Strength and Conditioning Specialist; recertified with Distinction (NSCA; CSCS,*D).
- Certified Performance and Sport Scientist (NSCA; CPSS)
- Clinical Exercise Physiologist (ACSM-CEP) (*in progress; registered for exam in December 30th of 2023*).
- Clinical Trial Investigator; Clinical Trial Academy, Medical Center of the Americas Foundation.
- Professional Certificate in Data Science by Harvard University using the Harvardx and MOOC platforms.
- EC-12th Physical Education Teacher, Texas Education Agency (2011-2023).
- Case Investigator, Texas Department of State Health Services. (2021-2023).
- Dual X-Ray Absorptiometry Operator (2017 – 2020; recertified 2020-2024).
- Certified Level 2 Anthropometrist by the International Society of Kinanthropometry (ISAK) .
- 2019 Center for the Integration of Research Teaching and Learning (CIRTL), *Advancing Learning through Evidence-Based Teaching*, with Distinction. UTEP Associate Badge.
- CPR and AED instructor certification (2018-present).

Professional Memberships

- National Strength and Conditioning Association (Since 2017)
- American College of Sports Medicine (Since 2017)
- American Society of Human Genetics (Since 2023)
- President of the Ph.D. Program's Executive Student Council at the University of Texas at El Paso (2018-2019)
- Student Representative for the College of Health Science at the Graduate Student Assembly (2018-2019)

Awards

- Awarded the highest Sports Award in Mexico "2011 Luchador Olmeca" by the CODEME (Mexican Sports Confederation), D.F., Mexico. [Link to list of awardees](#).
- 1st Place on Scientific Poster Presentations on the 2nd International Student Congress of Exercise Sciences (2018) at the University of Nuevo Leon (Universidad Autonoma de Nuevo, Leon), in Monterrey, Mexico.
- Nominated for the Sports Hall of Fame in Cd. Juarez, Chihuahua, Mexico for my contribution to the region's martial arts and sports development. I was not awarded due to my return to competitive sports in 2017. [Link](#)

National Media Appearances

- In 2016, I was asked to be in a National tv (Televisa) program called “Sabadazo”. In where I had the opportunity to showcase the sport of Wushu and give a brief talk about the sport, its philosophy, and history. [Link](#)
- In 2013, I was interviewed at a National tv news (TV Azteca) program during my preparation for the 2013 World Combat games to be hosted in the city of St. Petersburg Russia, and the World Games in Cali, Colombia. [Link](#)

Professional Sports Accomplishments

From 2009 to 2018 I competed internationally in the Martial Art sport of Wushu (Kung-Fu). As a member of the Mexico national team, I was sponsored by the Mexican government to compete internationally. And as a result, I earned 5 Pan-American medals, notable positions of 10th place, and 5th place at World Competitions. My participation at international competitions include:

1. 10th World Wushu Championships in Toronto, Canada, 2009.
2. 8th Pan-American Wushu Championships in Buenos Aires, Argentina, 2010.
3. 11th World Wushu Championships in Ankara, Turkey, 2011.
4. 9th Pan-American Wushu Championships in Monterrey, Mexico, 2012.
5. 2013 World Games in Cali, Colombia,
6. 2nd World Combat Games in St. Petersburg, Russia, 2013.
7. 12th World Wushu Championships in Kuala Lumpur, Malaysia, 2013.
8. 11th Pan-American Wushu Championships in Lubbock, Texas, 2015.
9. 12th Pan-American Wushu Championships in Buenos Aires, Argentina, 2018.
10. 13th Pan-American Wushu Championships in Brasilia, Brazil, 2022.

Scholarships and Assistantships

- Research Associate Assistantship. 2015-2016, and 2020. University of Texas at El Paso.
- Teaching Graduate Assistant. 2017-2019. University of Texas at El Paso, Kinesiology Department.

Leadership

Student Mentorship

Student: Michael Sanchez, MS., Ph.D. (candidate).

Main Advisor: Gabriel Ibarra-Mejia, MD., Ph.D.

Role: Dissertation committee member

Dissertation title: Acute changes in Inflammatory Biomarkers Expression Following Surgical Trauma with Use of Compression Garment

Student: Manuel Gomez, BS., M.S

Main Advisor: Alvaro Gurovich, PT., Ph.D.

Role: Thesis committee member

Thesis title: Effects of Eccentric Exercise on blood flow patterns and vascular reactivity.

Under the formal supervision of my mentor, Sandor Dorgo, I was able to assist in the creation and development of the University of Texas at El Paso Fitness Research Lab. As part of the team leader of this laboratory, I mentored undergraduate and graduate on several tasks including idea development and conceptualization of their thesis or individual projects, research design and statistical test selection, data collection, analysis, interpretation of results, along with finalizing their manuscripts and/or abstracts. Additionally, some of these collaborations led to the publications of scientific manuscripts, along with abstracts presented at the National Strength and Conditioning Conference, the

American College Sports Medicine Texas chapter conference, the Graduate research expo at the University of Texas, and the CURI University of Texas at El Paso undergraduate research conference.

Master Students

Manuel Gomez (2021)
Emily Horsch-Martinez
Sergio Rodriguez (2020)
Nicholas Cubillos (2020)
Joshua Del Rio (2019-2020)
Armando Martinez (2020)
Devin Bastian (2019-2020)
Colton H. Tune (2017-2018)
Matthew P. Gonzalez (2017-2020)
Alondra Rodriguez (2018-2020)
Lizeth Terrazas (2018-2020)
Ileana A. Jarquin (2018-2019)
Itzel De La Torre (2019)
Lance Gruber (2019)
Fayon Gonzalez (2019)

Undergraduate Students

Progga F. Hashan (2021)
Jennica Juarez (2021)
Alondra Lozano (2021)
Carlos de la Rosa (2021)
Corina Arroyo (2021)
Sabrina Arias (2021)
Daniella Saucedo (2020)
Emily Benitez (2020)
Raul Trevizo (2020)
Paulina Caraveo (2019)
Matthew P. Gonzalez (2017)
Itzel De La Torre (2018)
Shantal N. Oropeza (2018)
Ileana A. Jarquin (2017)
Jose A. Sanchez (2017)
Cassie A. Sapien (2017)

In addition, I have mentored in some areas two Ph.D. students that have been also my collaborators: Martin, Dietze-Hermosa, and Matthew P. Gonzalez. Finally, I have also mentored an international exercise master's student in his thesis: Juan Carlos Pinalla from the University of Colombia.

Service

Journal Reviewer

1. Journal of Strength and Conditioning Research.
2. Journal of Sport and Health Science.
3. Journal of Bodywork and Movement Therapies.
4. Journal of Men's Health.
5. Journal of Science in Sport and Exercise.
6. German Journal of Exercise and Sport Research.
7. Journal of Cogent Social Sciences
8. Journal of Adapted Physical Education

Volunteer Service

- Abstract reviewer and poster judge for the National Strength and Conditioning Association (Since 2018).
- Assisted in events and provided individual companionship and friendship to older adults in Hospice. 2017. CISMA Company in El Paso, Texas.
- Provided free Martial Arts training for children with socioeconomic needs from 2013-2015. Olympian Fitness Center in El Paso, Texas. [Contact](#).
- Written multiple letters of recommendation for students applying for scholarships, graduate and doctoral programs.

Consulting

- Lead Strength and Conditioning professional for the 720 Martial Arts Academy, LCC. [Contact](#).
- Strength and Conditioning, and Injury Prevention Consultant and Assistant Coach for the Mexico National Wushu (Martial Arts) Team for multiple international and world competitions. [Contact](#)
- Strength and Conditioning, and Injury Prevention Consultant for all competitive fighters (National USA, Pan-American, and World competitors) at International Martial Arts in Laredo, Texas. [Contact](#).
- Consultant of Strength and Conditioning, and Injury Prevention for all age gymnasts at the Olympian Fitness Center. [Contact](#).
- Consultant of Strength and Conditioning, and Injury Prevention for all athletes at Instituto de Wushu Charza, Cd. Juarez Mexico. [Contact](#).

Social media



Website

www.samuelmontalvo.com



GitHub

[@Samuelmontalvo](#)



[@Dr_Montalvo](#)