

# **Gioella Nichole Chaparro**

## **CURRICULUM VITAE**

### **EDUCATION**

**Ph.D.**, Kinesiology and Community Health, University of Illinois at Urbana-Champaign, 2018

**M.S.**, Kinesiology (Adapted Physical Activity Concentration), California State University Northridge, Northridge, 2013

**B.S.**, Kinesiology (General Studies Concentration), California State University Northridge, Northridge, 2011

**A.A.**, Liberal Sciences, Los Angeles Valley College, Valley Glen, 2009

### **TEACHING INTERESTS**

Biomechanics of human movement • Kinesiology • Adapted physical activity • Human anatomy and physiology • Fall prevention • Introduction to kinesiology and sport • Motor control and learning • Motor development • Exercise and sports psychology

### **RESEARCH INTERESTS**

- Investigating the biomechanical gait factors influenced by dual-tasking in university students.
- Investigating the biomechanical and physical factors responsible for decreasing the risk of falls in older adults with and without neurological disorders
- Exploring how to decrease the dual-task cost in clinical populations while using neuroimaging devices such as functional-near infrared spectroscopy
- Dual-tasking interventions to decrease the cognitive motor interference in older adults with and without neurological disorders
- Examining the experiences and perceptions of exercise personal assistants while assisting individuals with physical disabilities in an aquatic setting
- Cost-benefit analysis of rehabilitative aquatic exercise programs at the university level

**TEACHING EXPERIENCE**

**California State University, Dominguez Hills, Carson CA** Fall 2018-Present  
Assistant Professor, Kin 301: Kinesiology.  
Two class sections (~60 students per section)

**California State University, Dominguez Hills, Carson CA** Spring 2019  
Assistant Professor (Substitute), Kin 304: Adapted Physical Education.  
One class section (~30 students)

**University of Illinois at Urbana-Champaign, Champaign IL** Fall 2014-Spring 2018  
Teaching Assistant, Kin 355: Biomechanics.  
Two class sections (~25 students per section)

**University of Illinois at Urbana-Champaign, Champaign IL** Fall 2016-Spring 2018  
Teaching Assistant, Kin 107: Adapted Aquatics  
1 class section (~7 students)

**University of Illinois at Urbana-Champaign, Champaign IL** Fall 2016-Spring 2018  
Teaching Assistant, Kin 101: Aerobics  
1 class section (~25 students)

**University of Illinois at Urbana Champaign, Champaign IL** Fall 2016-Spring 2017  
Teaching Assistant, Kin 103: Badminton  
1 class section (~25 students)

**Los Angeles Valley College, Valley Glen, CA** Fall 2013- Spring 2014  
Adjunct Faculty, Health 101  
1 class section (~30 students)

**Los Angeles Valley College, Valley Glen, CA** Fall 2013- Spring 2014  
Adjunct Faculty, Swimming  
1 class section (~30 students)

**California State University Northridge, Northridge, CA** Fall 2011-Spring 2013  
Teaching Assistant, Kin 311: Adapted Land Exercise  
2 class sections (~30 students per section)

**California State University Northridge, Northridge, CA** Fall 2011-Spring 2013  
Teaching Assistant, Kin 313: Adapted Aquatic Exercise  
1 class section (~20 students per section)

**GUEST LECTURES**

**California State University, Northridge, Northridge CA** Spring 2019  
Kin 595: Adapted Physical Activity Graduate Seminar

“Effects of Aerobic Fitness Levels on Prefrontal Cortex Activation Patterns in Older Adults”

**University of Illinois at Urbana-Champaign**, Champaign IL Fall 2016  
Kin 110: Introduction to Health Science  
“Organization, Structure, and Function of the Human Body”

**University of Illinois at Urbana-Champaign**, Champaign IL Fall 2016  
Kin 355: Biomechanics  
“Biomechanics of the Lower Extremity and Axial Skeleton”

**University of Illinois at Urbana-Champaign**, Champaign IL Fall 2015  
Kin 355: Biomechanics  
“Work, Power and Energy”

**University of Illinois at Urbana-Champaign**, Champaign IL Fall 2014  
Kin 355: Biomechanics  
“Muscle Tendon Biomechanics”

#### PEER-REVIEWED JOURNAL PUBLICATIONS

1. **Chaparro GN**, Sosnoff JJ, Hernandez ME. Effects of aerobic fitness on cognitive motor interference during self-paced treadmill walking in older adults. *Aging Clinical and Experimental Research*. 2020; doi: 10.1007/s40520-020-01479-2.
2. **Chaparro GN**, Stine-Morrow EAL, Hernandez ME. Effects of aerobic fitness on cognitive performance as a function of dual-task demands in older adults. *Experimental Gerontology*. 2019; 118:99-105.
3. Hernandez ME, O'Donnell E, **Chaparro G**, Holtzer R, Izzetoglu M, Sandroff BM, Motl RW. Brain activation changes during balance-and attention-demanding tasks in middle- and older-aged adults with multiple sclerosis. *Motor Control*. 2019; 1-20.
4. Dysterheft J, **Chaparro G**, Rice L, Rice I. Investigating the outcomes and perceptions of an inclusive aquatic exercise class for university students with physical disabilities. *Journal of Postsecondary Education and Disability*. 2018; 31(1):41-56.
5. **Chaparro G**, Balto JM, Sandroff BM, Holtzer R, Izzetoglu M, Motl RW, Hernandez ME. Frontal brain activation changes due to dual-tasking under partial body weight support conditions in older adults with multiple sclerosis. *Journal of NeuroEngineering and Rehabilitation*. 2017; 14(1):65. doi: 10.1186/s12984-017-0280-8.
6. Klaren RE, Balto JM, Sandroff BM, **Chaparro G**, Hernandez ME, Motl RW. Preliminary evidence for the effects of aging and multiple sclerosis on cognitive performance: An analysis based on effect size estimates. *Experimental Aging Research*. 2017; 43(4):346-54. doi: 10.1080/0361073X.2017.1333820.

7. Motl RW, **Chaparro G**, Hernandez ME, Balto JM, Sandroff BM. Physical function in older adults with multiple sclerosis. An application of the short physical performance battery. *J Geriatr Phys Ther.* 2016.
8. Hernandez ME, Holtzer R, **Chaparro G**, Jean K, Balto JM, Sandroff BM, Izzetoglu M, Motl RW. Brain activation changes during locomotion in middle-aged to older adults with multiple sclerosis. *Journal of the Neurological Sciences.* 2016; 15:277-83. doi: 10.1016/j.jns.2016.10.002.

#### **PUBLICATIONS IN REVISION, IN REVIEW OR IN PREPARATION**

1. **Chaparro GN**, Sosnoff JS, Hernandez ME. Effects of aerobic fitness on cognitive motor interference during self-paced treadmill walking in older adults; (Submitted).
2. **Chaparro GN**, Dysterheft J, Morales D, Rice L, Rice I. Investigating the beliefs and perceptions of kinesiology students in a service learning environment for students with physical disabilities; (In preparation).
3. **Chaparro GN**, Petruzzello S, Hernandez ME. Effects of aerobic fitness on prefrontal cortex patterns while dual-tasking in older adults; (In Preparation).
4. **Chaparro GN**, Motl R, Hernandez M. Effects of partial body weight support on dual-task walking in older adults with multiple sclerosis; (In Preparation).

#### **RESEARCH EXPERIENCE POST-DOCTORAL:**

California State University, Dominguez Hills, Carson, CA 2019-Present  
Assistant Investigator, Kinesiology Lab, Division of Kinesiology and Recreation  
Assisted with design, recruitment, and data collection for examining the balance confidence and perceptions of balance equipment in healthy adults.

#### **RESEARCH EXPERIENCE PRE-DOCTORAL:**

**University of Illinois at Urbana Champaign**, Urbana, IL 2016-2018  
Research Assistant, Mobility and Fall Prevention Research Laboratory, Department and Kinesiology and Community Health  
Designed the study, programmed E-prime software, and gathered data collection materials for examining factors that may be responsible for improving the dual task cost and the prefrontal cortex activation in middle-aged adults with and without Multiple Sclerosis.

**University of Illinois at Urbana Champaign**, Urbana, IL 2016  
Research Assistant, Wheelchair Biomechanics Laboratory, Department and Kinesiology and Community Health

Designed the aquatic therapy program and ran data collection for examining the perceptions and outcomes of physical assistants in an inclusive aquatic exercise class for university students with physical disabilities.

**University of Illinois at Urbana Champaign, Urbana, IL** 2016

Research Assistant, Wheelchair Biomechanics Laboratory, Department and Kinesiology and Community Health

Designed the aquatic therapy program, ran data collection, and assisted with data analysis for examining the participation of college students with physical disabilities in leisure time physical activities.

**University of Illinois at Urbana Champaign, Urbana, IL** 2015

Research Assistant, Mobility and Fall Prevention Research Laboratory, Department and Kinesiology and Community Health

Designed and gathered data collection materials for examining the prefrontal cortex activation patterns while dual-tasking on a treadmill with and without partial body weight support in older adults with and without Multiple Sclerosis and Parkinson's disease.

**University of Illinois at Urbana Champaign, Urbana, IL** 2015

Research Assistant, Mobility and Fall Prevention Research Laboratory, Department and Kinesiology and Community Health

Designed, gathered data collection materials, recruited participants, ran data collection, and analyzed data for examining the prefrontal cortex activation patterns (using functional near infrared spectroscopy [fNIRS]) while dual-tasking on a treadmill with and without partial body weight support in older adults with and without Multiple Sclerosis and Parkinson's disease.

**California State University Northridge, Northridge, CA** 2014

Research Assistant, Center of Achievement and Brown Center, Kinesiology Department

Designed, gathered data collection materials, recruited participants, ran data collection, and analyzed data for examining the effects of a land-based and aquatic-based exercise intervention on the balance and pain outcomes of older adults with knee osteoarthritis using the NeuroCom Balance Manager.

**California State University Northridge, Northridge, CA** 2011

Undergraduate Research Assistant, Biomechanics Laboratory, Kinesiology Department

Assisted with data collection and motion analysis for examining the knee valgus of female basketball and volleyball high school players using Vicon Motion Analysis.

## WORK EXPERIENCE

**Assistant Professor** Fall 2018-Present

Division of Kinesiology, California State University, Dominguez Hills, Carson, CA

Taught kinesiology lecture and lab classes in the department.

**Teaching Assistant** 2014–2018

Kinesiology Department, University of Illinois at Urbana Champaign, Urbana, IL  
Taught lab discussion and activity classes in the department.

**Adjunct Faculty** 2013 – 2014  
PE Department, Los Angeles Valley College, Valley Glen, CA  
Taught swimming and health for the department.

**Clinical Exercise Specialist** 2013 – 2014  
Center of Achievement and Brown Center, California State University Northridge,  
Northridge, CA  
Supervised students and staff in adapted activity classes in the pool and in the gym.

**Graduate Assistant** 2011 – 2013  
Center of Achievement and Brown Center, California State University Northridge,  
Northridge, CA  
Supervised staff and taught students in adapted activity classes in the pool and in the  
gym.

**Healthy Lifestyle Counselor** 2012 – 2013  
North Valley Family YMCA, Porter Ranch, CA  
Supervised gym area and personally trained clients.

**Pool Manager** 2011 – 2013  
Los Angeles City Department of Recreation and Park, North Hollywood, CA  
Supervised all pool activities and staff, formed schedules, and managed payroll.

**Clinical Exercise Staff** 2009 - 2011  
Center of Achievement and Brown Center, California State University Northridge,  
Northridge, CA  
Assisted and trained clients in the pool and gym area to reach and attain their physical  
goals.

## **HONORS & AWARDS**

Certificate in Foundations of Teaching, University of Illinois at Urbana-Champaign  
(2017)

Magna Cum Laude, Masters of Science Degree, California State University Northridge  
(2013)

Thesis Support Award, California State University Northridge (2012)

Magna Cum Laude, Bachelors of Science, California State University Northridge (2011)

Dean's List, California State University Northridge (2009-2013)

Scholar Athlete Award, Los Angeles Valley College (2009)

## PROFESSIONAL DEVELOPMENT

**California State University, Dominguez Hills, Carson, CA** 2019  
 Participant, High Impact Practices Training and Research Certificate Program  
 Learned about the multiple practices that can be incorporated into a curriculum in order to enhance student learning experiences.

**University of Illinois at Urbana Champaign, Urbana, IL** 2017  
 Participant, Center for Innovation in Teaching & Learning Workshop Series  
 Learned about: active teaching and active learning strategies for deep learning and retention, supporting critically thinking and creative problem solving, best practices for online courses, visual learning and power point presentations.

**University of Illinois at Urbana Champaign, Urbana, IL** 2016  
 Participant, Center for Innovation in Teaching & Learning Workshop  
 Learned about the best practices for grading fairly and efficiently with rubrics.

**University of Illinois at Urbana Champaign, Urbana, IL** 2014  
 Participant, Center for Innovation in Teaching & Learning Workshop  
 Learned about the best practice for visual learning in face-to-face courses.

## MENTORING EXPERIENCE

**California State University, Dominguez Hills, Carson, CA** Summer 2019-Present  
 Undergraduate Student Researchers: P. Granados and C. Rodriguez  
 Research Article Critique: *Effects of Cell-Phone Use on Gait Characteristics (WSKW 2019)*

**California State University, Dominguez Hills, Carson, CA** Spring 2019-Present  
 Advisor for the 3 WINS Fitness Program, CSUDH Division

**California State University, Dominguez Hills, Carson, CA** Fall 2018-Present  
 Advisor for the Division of Kinesiology, Pre-Fitness Director Major option

**California State University, Dominguez Hills, Carson, CA** Fall 2018-Present  
 Advisor for the Kinesiology Student Association (KSA)

**California State University Northridge, Northridge, CA** 2013  
 Peer-graduate Students, Adapted Physical Activity Program  
 Elizabeth Garcia: *The effects of a telehealth exercise program on self-efficacy and adherence in people with Parkinson's disease.*

## ENGAGEMENT

**CSUDH Academic Senate, Representative** Fall 2019-Present

**Western Society for Kinesiology and Wellness (WSKW), Secretary** Fall 2019-Present

**Southwest American College of Sports Medicine**, Student Presentation Judge

Fall 2019-Present

**Western Society for Kinesiology and Wellness (WSKW)**, Student Abstract Reviewer

Spring 2019

**Southwest American College of Sports Medicine Conference**, Student Career Section

Speaker

October 2018

**ASPIRE Program**, The Office of Diversity, Equity, and Inclusion, University of Illinois at Urbana-Champaign, Champaign, IL, Table Talk Discussion Leader 2017

**Brain awareness day**, University of Illinois at Urbana-Champaign, Champaign, IL, Volunteer 2016

**Adapted Physical Activity Program Graduate Student Academic Committee**, California State University, Northridge, Northridge, Member 2013

**100 Citizens Program (Now 3 WINS Fitness)**, San Fernando, Lead group fitness instructor and recruiter 2011-2012

## PROFESSIONAL MEMBERSHIPS

Western Society of Kinesiology and Wellness • North American Federation of Adapted Physical Activity • American College of Sports Medicine • North American Society for the Psychology of Sport and Physical Activity • Gerontology Society of America • Society for Neuroscience

## CONFERENCE PRESENTATIONS

1. **Chaparro G** & Hernandez M. The effects of aerobic fitness on dual-task cost in older adults. Proceedings of the 2019 Annual Conference of Western Society for Kinesiology & Wellness, Reno, NV, October 2019.
2. Granados P, Rodriguez C, **Chaparro G**. Student Poster (Article Critique): Effects of cell-phone use on gait characteristics. Proceedings of the 2019 Annual Conference of Western Society for Kinesiology & Wellness, Reno, NV, October 2019.
3. **Chaparro G** & Hernandez M. The effects of aerobic fitness on cognitive performance while dual-task walking in older adults. Proceedings of the 2018 Annual Conference of Western Society for Kinesiology & Wellness, Reno, NV, October 2018.
4. Hernandez ME, **Chaparro G**, Moon Y, Sosnoff J. The effect of attention and stance on the rambling and trembling components of postural sway in older adults. Proceedings of the 41st Annual Meeting of the American Society of Biomechanics, Boulder, CO, August 2017.



5. Hernandez ME, **Chaparro G**, Motl R. Gait impairments during self-paced treadmill walking in older adults with multiple sclerosis. Proceedings of the 21st IAGG World Congress of Gerontology and Geriatrics, San Francisco, CA, July 2017 (Accepted Late Breaker Abstract).
6. Hernandez ME, **Chaparro G**, Holtzer R, Izzetoglu M, Motl R. Cognitive control of tandem walking in middle-aged to older adults with multiple sclerosis. Proceedings of the 2017 Gait & Clinical Movement Analysis Society, Salt Lake City, UT, May 2017.
7. **Chaparro G**, Piton L, Walker R, Holtzer R, Izzetoglu M, Motl R, Hernandez ME. Effects of dual-tasking and body weight support on prefrontal cortical activation in individuals with Manuel E. Hernandez. Proceedings of the 2016 Annual meeting of the American Congress of Rehabilitation Medicine, Chicago, IL, November 2016.
8. Hernandez ME, **Chaparro G**, O'Donnell E, Holtzer R, Izzetoglu M, Motl R. Brain activation changes during balance and attention demanding tasks in older adults with multiple sclerosis. Proceedings of the 2016 Society for Neuroscience Annual Meeting, San Diego, CA, November 2016.
9. **Chaparro G**, Dysterheft J, Rice L, Rice I. Investigating the outcomes and perceptions of an inclusive aquatic exercise class for university students with physical disabilities. Proceedings of the 2016 North American Federation of Adapted Physical Activity (NAFAPA) Symposium, Edmonton, AL, September 2016.
10. Hernandez ME, **Chaparro G**, Holtzer R, Balto J, Sandroff B, Izzetoglu M, Motl R. Brain activation changes during self-paced gait in older adults with multiple sclerosis. Proceedings of the Federation of European Neuroscience Societies (FENS) Forum 2016, Copenhagen, Denmark, July 2016.
11. Hernandez ME, **Chaparro G**, Balto J, Sandroff B, Motl R. The use of augmented reality on a self-paced treadmill to quantify footfall placement variability in older adults with multiple sclerosis. Proceedings of the 2016 Gait & Clinical Movement Analysis Society, Memphis, TN, May 2016.
12. **Chaparro G**, Moon Y, Wajda D, Sosnoff J, Hernandez ME. Influence of attention on postural control stochastic dynamics in young and older adults. Proceedings of the 68th Annual Meeting of the Gerontological Society of America, Orlando, FL, November 2015.
13. **Chaparro G**, Moon Y, Wajda D, Sosnoff J, Hernandez ME. Influence of attention and stance on postural control stochastic dynamics. Proceedings of the 2015 Society for Neuroscience Annual Meeting, Chicago, IL, October 2015.

14. Walker R, **Chaparro G**, Jean K, Piton L, Passarelli V, Hernandez ME. Effect of partial body weight support on single leg stance times during self-paced walking in healthy older adults. Proceedings of the 2015 Biomedical Engineering Society Annual Meeting, Tampa, FL, October 2015.
15. **Chaparro G**, Lievens C, Stecyk S, Vrongistinos D, Jung T. Comparison of balance outcomes between aquatic and land-based exercise programs in older adults with knee osteoarthritis. Proceedings of the 2014 NAFAPA Symposium, Ann Arbor, October 2014.
16. **Chaparro G**, Lievens C, Stecyk S, Vrongistinos D, Jung T. Outcomes of balance outcomes between an aquatic and land-based exercise program in older adults with knee osteoarthritis. Proceedings of 5<sup>th</sup> International State-of-the-Art Congress on Rehabilitation: Mobility, Exercise, & Sports, Gronigen, The Netherlands, March 2014.
17. **Chaparro G**, Lievens C, Jung T, Stecyk S, Vrongistinos D. The comparison of balance outcomes after an aquatic or land-based group exercise program in older adults with knee osteoarthritis. Proceedings of American College of Sports Medicine, Indianapolis, Indiana, May 2013
18. **Chaparro G**, Jung T, Katase A, Nishiyori R, Romack J, Frehlich S. The influence of concurrent cognitive tasks on motor performance in persons with traumatic brain injury. Proceedings of the North American Society for the Psychology of Sport and Physical Activity, Oahu, Hawaii, June 2012.

## LANGUAGES

Spanish fluency and competency