# Sunghoon Chung, Ph.D., ATC.



Department of Allied Health, Kinesiology & Sport Sciences College of Education, Health & Human Studies Southeast Missouri State University

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### **ACADEMIC POSITIONS**

Southeast Missouri State University, Cape girardeau, MO

Assistant Professor, College of Education, Health & Human Studies 2024–Present

Old Dominion University, Norfolk, VA

Research Assistant, College of Health Science 2020–2024

University of Nebraska at Omaha, Omaha, NE

Research Assistant, Sports Medicine Research Lab 2018–2020

Yonsei University, Seoul, Republic of Korea

Research Assistant, Sports Science and Exercise Medicine Laboratory 2015–2017

# **EDUCATION**

PhD, Kinesiology & Rehabilitation, Old Dominion University 2020 - 2024

Major: Kinesiology and Rehabilitation Sciences

Thesis: "Effects of Balance Training on Spinal Reflexive Excitability

Modulation, Corticospinal Excitability, and Balance Performance in

Individuals with Chronic Ankle Instability"

M.A., Masters of Athletic Training, University of Nebraska at Omaha 2018 - 2020

Major: Athletic Training

Thesis: "Visual Utilization after a Single Session of Virtual Reality-Based

Training in Patients with Chronic Ankle Instability"

M.S., Physical Education, Yonsei University 2015 - 2017

Major: Physical Education

Thesis: "Differences in Postural Control Ability between Individuals with

Functional Ankle Instability, Mechanical Ankle Instability, and

Copers"

B.S., Department of Sports and Leisure Studies, Yonsei University 2008 - 2015

Major: Sports and Leisure Studies

# **RESEARCH INTERESTS**

- Chronic Ankle Instability: Understanding long-term consequences following the initial ankle sprains.
- Neural Excitability: Identifying descending or feed-forward motor control following the injuries.
- **Injury Prevention & Rehabilitation**: Exploring injury prevention and rehabilitation program to modify the neurosignature and performance deficits in patients with lower extremity injuries.

### **SCHOLARY ACTIVITIES**

# **Publications**

- Lebisova Veronika, **Chung S (Corresponding author)**, Kim J, Nava DS, Jang J. (2025) Utility of Blood Flow Restriction Training to Improve Ankle Strength in Patients with Chronic Ankle Instability: A Critically Appraised Topic. Journal of Sport Rehabilitation (In progress)
- Suttmiller AMB, Chung S, Foreman NN, McCann RS. (2024) Comparing the Effects of Progressive Balance and Hip-Strengthening Rehabilitation in Individuals with Chronic Ankle Instability. Journal of Sport Rehabilitation, 1(aop), 1-10
- McCann RS, Squillantini R, Suttmiller AMB, Chung S. (2024) Patient-Reported Outcome Scores of Athletes with Time-Loss and Non-Time-Loss Ankle Sprains. International Journal of Athletic Therapy & Training. International Journal of Athletic Therapy and Training, 1(aop), 1-5.
- Reyes MC, Suttmiller AMB, **Chung S**, Gruskiewicz VM, Johnson KR, McCann RS. (2024) Cross-Education Effects of Balance Training in Individuals with Chronic Ankle Instability. Journal of Bodywork & Movement Therapies, 40, 1263-1268.
- Foreman NN, Suttmiller AMB, Chung S, Gruskiewicz VM, Johnson KR, Reyes MC, McCann RS. (2024). Cross-Education Effects of Hip Strengthening in Individuals with Chronic Ankle Instability. Translational Journal of the American College of Sports Medicine, 9(2), e000252.
- Chung, S., Rodriguez, A., Alijanpour, E., & McCann, R. S. (2023). Effects of A Single Balance Training Session on Neural Excitability in Individuals with Chronic Ankle Instability. Journal of Sport Rehabilitation, 32(8), 847-854.
- Lawry-Popelka, B., **Chung, S.**, & McCann, R. S. (2022). Cross-Education Balance Effects After Unilateral Rehabilitation in Individuals With Chronic Ankle Instability: A Systematic Review. Journal of Athletic Training, 57(11-12), 1055-1061.
- Hamer, T. J., **Chung, S.**, & Rosen, A. B. (2021). Comparison of Biomechanical Factors Before and After UCL Surgery in Baseball Athletes: A Systematic Review With Meta-analysis. Orthopaedic Journal of Sports Medicine, 9(3), 2325967120988736.
- Burcal, C. J., **Chung, S.**, Johnston, M. L., & Rosen, A. B. (2020). Does the method of administration affect reliability of the foot and ankle ability measure?. Journal of sport rehabilitation, 29(7), 1038-1041.

Rosen, A. B., Johnston, M., Chung, S., & Burcal, C. J. (2021). The reliability and validity of a digital version of the Cumberland Ankle Instability Tool. Disability and Rehabilitation, 43(12), 1738-1741.

### In preparation

- **Chung, S.,** & McCann, R. S. (in progress: writing manuscript). The effects of 6-week balance training on spinal reflexive excitability modulation and corticospinal excitability in individuals with chronic ankle instability.
- **Chung, S.,** & McCann, R. S. (in progress: writing manuscript). Neural Excitability of the Soleus Muscle in Individuals with and without Chronic Ankle Instability
- **Chung, S.,** & McCann, R. S. (in progress: writing manuscript). Relationships Between Lumbopelvic Function and Patient-Reported Outcomes in Individuals with Chronic Ankle Instability.

### RESEARCH PRESENTATIONS

- Chung, S., & McCann, R. S. Effects of 6-week Balance Training on Neural Excitability in Individuals with Chronic Ankle Instability. Presented at the 2024 Virginia Athletic Trainers' Association (VATA) Annual Meeting
- **Chung, S.**, & McCann, R. S. Effects of A Single Balance Training Session on Neural Excitability in Individuals with Chronic Ankle Instability. Journal of Sport Rehabilitation. Presented at the 74<sup>th</sup> National Athletic Trainers' Association (NATA) Clinical Symposia & AT Expo. June 2023, Indianapolis, IN.
- Suttmiller AMB, Johnson K, **Chung S**, Ramirez V, McCann RS. Progressive Balance Training and Hip Strengthening Improve Psychosocial Outcomes in Individuals with Chronic Ankle Instability. Presented at the National Athletic Trainers' Association Annual Meeting & Clinical Symposium. June 2023, Indianapolis IN.
- Suttmiller AMB, Johnson K, **Chung S**, Ramirez V, McCann RS. Progressive Balance- and Hip Strength- Training Improve Hip Strength in Individuals with Chronic Ankle Instability. Presented at the Mid-Atlantic Athletic Trainers' Association Annual Symposium. May 2023, Virginia Beach, VA.
- Chung S, Rodriguez A, Alijanpour E, McCann RS. Effects of A Single Balance Training Session on Neural Excitability in Individuals with Chronic Ankle Instability. Presented at the College of Health Sciences Research Day. April 2023, Norfolk, VA.
- Foreman N, Suttmiller AMB, **Chung S**, Ramirez V, Reyes M, McCann RS. Cross Education Effects of Hip Strengthening Amongst Individuals with Chronic Ankle Instability. Presented at the College of Health Sciences Research Day. April 2023, Norfolk, VA.
- Reyes M, Suttmiller AMB, Chung S, Ramirez V, Foreman N, McCann RS. Cross Education Effects of Balance Training Among Individuals with Chronic Ankle Instability. Presented at the College of Health Sciences Research Day. April 2023, Norfolk, VA.
- Foreman N, Suttmiller AMB, **Chung S**, Ramirez V, Reyes M, McCann RS. Cross Education Effects of Hip Strengthening Amongst Individuals with Chronic Ankle Instability.

Presented at the Virginia Athletic Trainers' Association Annual Meeting. January 2023, Harrisonburg, VA.

- Chung S, Lawry-Popelka B, McCann RS. Cross-Education Effects on Balance Performance in Individuals with Chronic Ankle Instability: A Systematic Review. Presented as a free communication presentation at the National Athletic Trainers' Association Annual Meeting & Clinical Symposium. June 2022, Philadelphia PA.
- Chung, S., & McCann, R. S. Bilateral improvement in balance performance following rehabilitation in individuals with Chronic Ankle Instability: A Systematic Review. Presented at the College of Health Science Research Day, Old Dominion University. April 2022, Norfolk, VA.
- **Chung S**, Suttmiller AMB, Johnson KR, McCann RS. Relationships Between Lumbopelvic Function and Patient-Reported Outcomes in Individuals with Chronic Ankle Instability. Presented at the National Athletic Trainers' Association Annual Meeting & Clinical Symposium. June 2021, Online
- Chung, S., & Lee, SY. Characteristics of Static and Dynamic Lower Extremity Posture in Patients with Patellofemoral Pain: A Meta-Analysis, National Athletic Trainers' Association 67th Clinical Symposia & AT Expo. Baltimore, MD. June 2016.

# **Research Mentoring**

# **Old Dominion University**

2020 - Present

Jacob Freeman & Jalanay Gray (Fall 2022 – Present)

Relationship between patient-reported outcomes and corticospinal excitability following balance training in individuals with chronic ankle instability.

Niara Foramen (Fall 2022 – Spring 2023)

■ Cross-education effects of hip strengthening amongst individuals with chronic ankle instability.

Matthew Reyes (Fall 2022 – Spring 2023)

■ Cross-education effects of balance training in individuals with chronic ankle instability.

Avery Rodriguez (Fall 2021 – Spring 2022)

■ Effects of a single-session balance training on spinal reflexive excitability modulation in individuals with chronic ankle instability.

### **RESEARCH SKILLS & TECHNIQUE**

Transcranical Magnetic Stimulation, Biopac Stimulator Module, Vicon Nexus, Delsys Trigno EMG System, Bertec Force Plates, AMTI Force Plates & Balance clinic, SPSS, GE Logiq E Portable Ultrasound Imaging System.

# **TEACHING EXPERIENCE**

### **Southeast Missouri State University**

2024-Present

Assistant Professor

[PE 261] Concept of Injury Management -Spring 2025

[PE 464] Kinesiology -Spring 2025

[PE 341] Physiology of Conditioning -Spring 2025

[TX 697] Applied Clinical Research in Athletic Training - Fall 2024

[PE 263] Concept of Injury Management Lab - Fall 2024

[TS 401] Culturally Responsive Healthcare -Fall 2024

[TS 412] Topics for Healthcare Professionals - Spring 2025 & Fall 2024

# **Old Dominion University**

2020-2022

**Teaching Assistant** 

[AT 691] Gross Anatomy (including cadaver dissection)

- Summer 2022

[AT 604] Clinical Examination and Patient Care – Lower Extremity - Fall 2021

[AT 605] Clinical Examination and Patient Care – Upper Extremity - Spring 2021

[AT 604] Clinical Examination and Patient Care – Lower Extremity - Fall 2020

### Guest lecturer

[AT 604] Clinical Examination and Patient Care – Lower Extremity

- Fall 2021
  - 3 hours of lectures on Hip & Thigh Therapeutic Intervention
  - 3 hours of lectures on Knee Intervention
  - 3 hours of lectures on Lower Leg, Ankle, and Foot Intervention

[AT 605] Clinical Examination and Patient Care – Upper Extremity - Spring 2021

- 3 hours of lectures on Shoulder & Upper Arm Chronic Conditions
- 3 hours of lectures on Elbow & Forearm Chronic Conditions
- 3 hours of lectures on Wrist & Hand Anatomy

[AT 604] Clinical Examination and Patient Care – Lower Extremity

- Fall 2020
  - 3 hours of lectures on Knee Acute Conditions
  - 3 hours of lectures on Lower Leg & Ankle Acute Conditions

Yonsei University 2015–2017

**Teaching Assistant** 

[PED 4201] Comprehensive Skill Test

- Fall 2016: 10 students

[SLS 2001] Junior Seminar

- Spring 2016: 8 students

## **CLINICAL EXPERIENCE**

### Norfolk Public School, Norfolk, VA

2021-2023

Part-time Athletic Trainer

- Primarily responsible for Northside Middle School and Azalea Gardens Middle School to cover practice and games (i.e. Football, Softball, Baseball, Basketball, Volleyball, Field Hockey, Wrestling, Soccer, and Track & Field)
- Provided athletic training duties for high schools of Norfolk Public School to cover practice and games (i.e. Football, Baseball, Soccer, and Field Hockey)

# **Old Dominion University**

2020-2021

University COVID Screener

- Performed nasopharyngeal testing to control the spread of the novel SARS-CoV-19 disease across the University.
- Coordinated the care of individuals who have contracted this highly contagious disease or have come in close contact with another individual who has contracted the disease.

Yonsei University 2015–2017

Volunteer for Yonsei Rehabilitation Center

■ Provided injury prevention, evaluation, treatment, and rehabilitation for athletes in Yonsei University's elite sports teams (i.e. Basketball, Rugby, Soccer, Baseball, and Ice Hockey).

### **GRANTS**

**Sponsor:** Mid-Atlantic Athletic Trainers' Association

Role: Principal Investigator

**Title:** Effects of balance training on neural excitability in people with chronic ankle instability

Status: Funded Amount: \$ 1,000

**Period:** June 2023 – December 2023

Sponsor: Virginia Athletic Trainers' Association

Role: Principal Investigator

#### **Curriculum Vitae**

Updated: 06/21/25

Title: Effects of balance training on corticospinal excitability and spinal reflexive excitability

modulation in individuals with chronic ankle instability

Status: Funded Amount: \$ 1,000

**Period:** August 2022 – August 2023

Sponsor: National Athletic Trainers' Association Research & Education Foundation

Role: Principal Investigator

Title: Effects of a single-session balance training on corticospinal excitability and spinal reflexive

excitability modulation in individuals with chronic ankle instability

Status: Funded Amount: \$ 2,500

**Period:** May 2021 – August 2022

Sponsor: University of Nebraska at Omaha Graduate Research and Creative Activity

Role: Principal Investigator

**Title:** Visual utilization after a single session of virtual reality-based training in patients with chronic

ankle instability. **Status:** Funded **Amount:** \$ 5,000

**Period:** December 2018 – Spring 2020

**Sponsor:** American college sports medicine

Role: Principal Investigator

Title: Effects of a single-session balance training on corticospinal excitability and spinal reflexive

excitability modulation in individuals with chronic ankle instability

Status: Not Funded Amount: \$ 5,000

### FELLOWSHIP/AWARDS

Post-Professional Terminal Degree Student

**Sponsor:** National Athletic Trainers' Association

Amount: \$ 100 Period: June 2024

Nebraska State Athletic Trainers' Association Professional Scholarship

Sponsor: Nebraska State Athletic Trainers' Association

Amount: \$ 500 Period: June 2019

Advantage Scholarship

**Sponsor:** University of Nebraska at Omaha

Amount: \$ 1,800/semester

**Period:** August 2018 – May 2020

Research Assistant Scholarship **Sponsor:** Yonsei University

# **Curriculum Vitae**

Updated: 06/21/25

**Amount:** \$ 3,750/semester

**Period:** May 2015 – December 2016

Internal Scholarship

**Sponsor:** Yonsei University **Amount:** \$ 2,500/semester

**Period:** September 2015 – September 2016

# **CERTIFICATION & LICENSES**

BOC Athletic Training Certification - # 2000040381 2020 - Present VA State Licensed Athletic Trainer - # 0126003475 2020 - Present

# PROFESSIONAL MEMBERSHIP

National Athletic Trainers' Association - # 105549 American College of Sports Medicine - # 899137