

## **JONATHAN S. LEE-CONFER, PH.D.**

*Principal, Director of Biomechanics*



### **Expert Summary**

Dr. Jonathan Lee-Confer, an Assistant Professor at the University of Arizona, holds a Ph.D. in Biokinesiology with a concentration in Biomechanics from the University of Southern California (USC). At USC, Dr. Lee-Confer co-investigated and co-authored the groundbreaking research that led to the development of the ASTM International's F2508 tribometry standard, a key benchmark in the field of slip resistance and safety. His research delved deep into the biomechanics of movement, particularly focusing on how people react when encountering slippery surfaces. This included studying neurological mechanisms responsible for slip detection and the neural coordination of reactive responses.

Beyond his research, Dr. Lee-Confer's contributions extend to public safety and education. As the Secretary General and Chair of the Education Committee for the Arizona Falls Prevention Coalition, he has been instrumental in advancing fall prevention initiatives. His role in co-creating the state-mandated biomechanical training program for caregivers in Arizona as outlined in the Arizona State Senate Bill 1373.

### **Areas of Expertise**

- ✓ Slip, Trip and Fall Analyses
- ✓ Premises Liability
- ✓ Walkway Safety Analysis
- ✓ Tribometer Slip Resistance Testing
- ✓ Code Compliance
- ✓ Injury Biomechanics
- ✓ Motor/Pedestrian Accident Reconstruction

### **Biomechanical Experience**

- ✓ Over a decade of experience in biomechanics
- ✓ Co-author on research for the ASTM International F2508-16e Standard
- ✓ Published in top biomechanical journals
- ✓ Dozens of international and domestic biomechanical presentations for academics and the public
- ✓ Co-authored biomechanical training for Arizona Senate Bill SB1373
- ✓ Over a decade of experience instructing biomechanics at the undergraduate and doctoral level

## CURRICULUM VITAE

**Jonathan S. Lee-Confer, Ph.D., EP-C**

April 2024

### I. BIOGRAPHICAL INFORMATION

#### **PERSONAL INFORMATION:**

Institutional Address: **University of Arizona**  
1670 E. Drachman St., 920C  
Tucson, AZ 85719  
Telephone: (916) 878-6543  
E-mail: [leeconfer@arizona.edu](mailto:leeconfer@arizona.edu)  
ORCID: 0000-0002-2112-9802

Company Address: **Verum Biomechanics**  
3661 N. Campbell Avenue  
Tucson, AZ 85719  
Telephone: (520) 428-4388  
E-mail: [jonathan@verumbiomech.com](mailto:jonathan@verumbiomech.com)

#### **EDUCATION AND PROFESSIONAL APPOINTMENTS**

##### **EDUCATION:**

2021 **Ph.D.**  
*University of Southern California, Los Angeles, CA*  
Department of Biokinesiology (Advisor: Dr. Christopher M. Powers)  
Dissertation Title – The Biomechanical Role of the Upper Extremities  
During the Recovery of a Slip Perturbation  
Funding: American Society of Testing and Materials

2014 **M.S.**  
*California State University, Sacramento, Sacramento, CA*  
Department of Kinesiology (Advisor: Dr. Rodney Imamura)  
Thesis Title – Biomechanical Gait Assessment of an Individual with  
FXTAS: A Case Study

2011 **B.S.**  
*California State University, Sacramento, Sacramento, CA*  
Department of Kinesiology

## **CERTIFICATIONS:**

Exp. 11/2027	<b>Institutional Review Board Members</b> <i>CITI Program</i>
Exp. 11/2027	<b>Social-Behavioral-Education (SBE) Comprehensive</b> <i>CITI Program</i>
Exp. 03/2026	<b>Information Privacy &amp; Security (IPS)</b> <i>CITI Program</i>
Exp. 12/2026	<b>Certified Exercise Physiologist</b> <i>American College of Sports Medicine</i>
Exp. N/A	<b>Occupational Safety and Health Administration 30 General</b> <i>United States Department of Labor</i>

## **ACADEMIC APPOINTMENTS:**

2023-present	<b>Assistant Professor</b> Department of Physical Therapy <i>University of Arizona, Tucson, AZ</i>
2023	<b>Adjunct Professor</b> Department of General Education <i>Arizona College of Nursing, Tucson, AZ</i>
2020-2022	<b>Adjunct Professor</b> Department of Kinesiology College of Health & Human Services <i>California State University, Sacramento, Sacramento, CA</i>
2021-2023	<b>Full-time Faculty</b> Department of General Education <i>Arizona College of Nursing, Tucson, AZ</i>
2020-2021	<b>Adjunct Faculty</b> Department of General Education <i>Arizona College of Nursing, Tucson, AZ</i>
2020-2021	<b>Visiting Scholar</b> Department of Systems & Industrial Engineering <i>University of Arizona, Tucson, AZ</i>
2018-2019	<b>Graduate Teaching Assistant</b> Division of Biokinesiology & Physical Therapy <i>University of Southern California, Los Angeles, CA</i>
2016-2018	<b>Graduate Research Assistant</b> Division of Biokinesiology & Physical Therapy <i>University of Southern California, Los Angeles, CA</i>

2017                    **Lecturer**  
 Division of Biokinesiology & Physical Therapy  
 Division of Occupational Science and Occupational Therapy  
*University of Southern California, Los Angeles, CA*

2016                    **Lecturer**  
 Division of Biokinesiology & Physical Therapy  
 Apple Sports College of Japan  
*University of Southern California, Los Angeles, CA*

2014-2016            **Graduate Teaching Assistant**  
 Division of Biokinesiology & Physical Therapy  
*University of Southern California, Los Angeles, CA*

2013-2014            **Graduate Research Assistant**  
 Department of Kinesiology  
*California State University, Sacramento, Sacramento, CA*

2012-2014            **Graduate Teaching Assistant**  
 Department of Kinesiology  
*California State University, Sacramento, Sacramento, CA*

2009-2011            **Adjunct Instructor**  
 Peer and Academic Resource Center  
*California State University, Sacramento, Sacramento, CA*

**NON-ACADEMIC APPOINTMENTS:**

2020-present        **Founder and Director of Biomechanics**  
*Verum Biomechanics, Tucson, AZ*

2015-2019            **Biomechanical Analyst**  
*University of Southern California, Los Angeles, CA*

2017-2018            **Biomechanical Consultant**  
*Semper Scientific, Mission Viejo, CA*

2012-2013            **Patient Services Representative**  
*Sutter Hospital, Outpatient Physical Therapy, Sacramento, CA*

2011-2012            **Rehabilitation Technician**  
*Kindred Hospital, Richmond, VA*

2009-2011            **Rehabilitation Technician**  
*Asian Community Center Nursing Home, Sacramento, CA*

2007-2008            **Evidence Processor - Intern**  
 Law Practice and Support Division  
*California Office of the Attorney General*

2006-2007                    **Coordinator - Intern**  
Conference of Western Attorneys General  
*California Office of the Attorney General*

**HONORS, AWARDS, FELLOWSHIPS:**

2022                    Received the Research & Science Award from the Arizona Falls  
Prevention Coalition

2021                    Received the Peak Performer Award from the Arizona College of Nursing

2006                    Received the Certificate of Academic Achievement from the Dominican  
University in San Rafael, CA

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

2020-present            American Society of Testing and Materials

2020-present            ASTM Subcommittee F13 Pedestrian/Walkway Safety & Footwear

2020-present            Arizona Falls Prevention Coalition

2014-present            American Society of Biomechanics

2019-present            International Society of Biomechanics

2024-present            Society for Neuroscience

2018-2019              Neural Control of Movement Society

2014-2015              American College of Sports Medicine

2016-2017              European Society of Biomechanics

2014-2015              Biomedical Engineering Society

**II. ADMINISTRATIVE AND SERVICE ACTIVITIES**

**UNIVERSITY AND ORGANIZATIONAL SERVICE:**

**ARIZONA FALLS PREVENTION COALITION:**

2021-present Secretary General  
2021-present Chair of the Education Committee  
2020-present Committee Member

**ARIZONA COLLEGE OF NURSING:**

2021-2023 Member Curriculum Committee Meeting  
2021-2023 Subject Matter Expert for Fundamentals of Biology  
2023 Institutional Review Board - Member

**AMERICAN SOCIETY OF TESTING AND MATERIALS:**

2024-present Vice Chair of Research for the F13.40 Subcommittee for Pedestrian/Walkway Safety and Footwear  
2020-present Committee Member – Voting member  
2020-present Committee Member on F13 Subcommittee for Pedestrian/Walkway Safety and Footwear

**UNIVERSITY OF ARIZONA:**

2023-present Club Advisor for the Physical, Occupational, and Speech Therapy (P.O.S.T.) Association  
2023-present Search Committee for the College of Health Sciences  
2021-present Biomechanics Representative for the Doctoral of Physical Therapy Program Curriculum Focus Group

**UNIVERSITY OF SOUTHERN CALIFORNIA:**

2018-2019 Organizer, National Biomechanics Day  
2017-2018 Student Elect – Biomechanics Representative

**TASK FORCE COMMITTEES:**

2024-current ASTM F-1637-21 Task Force – As leader/chair of this task force, I facilitate monthly meetings with 18 individuals to break apart standard F1637 into new standards that are specific and smaller with the goal of getting the new standards adopted by federal agencies.

- 2023                    ASTM F15.03 Task Force – develop methodologies for measuring the slip resistance of bathtubs with the US Consumer Product Safety Commission. This involves testing methods with the KSS Wessex Pendulum Tribometer and the Mark IIIb tribometer.
- 2023-present        Development of a new ASTM subcommittee within the ASTM subcommittee that will be designed for outreach to governmental agencies to adopt and codify ASTM standards.
- 2021-present        Arizona Senate Bill SB 1373 Task Force – Implement Senate Bill 1373 into educational practice. Managed educational content for health care facilities to distribute to all ~30,000+ Arizona care givers.
- 2016-2020           ASTM F2508-16e Task Force - developed new methodologies for revamping the original F2508 standard, searched and piloted new tiles (E, F, G, & H) to replace original tiles (A, B, C, & D), collect, sort and process data. This research is was officially passed in voting ballots to become the standard in January 2024.

**PROFESSIONAL ACTIVITIES:**

- 2024                    **Lee-Confer, J.S.** (2024). "Selecting the Right Biomechanical Expert: A Lawyer's Guide." *2024 State Bar of Arizona Expert Witness Guide*.

**COMMUNITY SERVICE ACTIVITIES:**

- 2016, 2020-2022    Crafted handwritten post cards and mailed them to individuals who were unsure of whether they would vote in the elections. Conducted phone calls from a phone bank to encourage individuals to exercise their right to vote.
- 2019                    Coordinated and hosted a group of 34 students from diverse background from Miramar Campus High School to participate in National Biomechanics Day and gain hands-on experience with scientific tools related to their high-school course work.
- 2018                    Organized the division-wide participation and engagement support for the annual Swim with Mike event hosted by the University of Southern California.
- 2017, 2018            Hosted summer sessions to provide engaging lectures with high school students and allow them to learn and use biomechanical instrumentation.
- 2014                    Volunteered at the Special Olympics Southern California Plane Pull.

- 2008-2010 Served as summer Camp Counselor for elementary school children afflicted with Type 1 diabetes with the Kaiser Permanente Hospital.
- 2008-2011 Served as volunteer pianist at the Asian Community Center Nursing Home.

### **EDITORIAL ACTIVITIES:**

#### **SCIENTIFIC REVIEW FOR JOURNALS:**

- 2024-present Journal of Geriatric Physical Therapy
- 2024-present Journal of Biomechanics
- 2023-present Scientific Reports
- 2022-present IEEE Transactions on Neural Systems & Rehabilitation Engineering
- 2021-present Applied Ergonomics

### **III. SCHOLARLY ACTIVITIES**

#### **PUBLICATIONS:**

**h-index = 3 (Google Scholar)**

*Asterisks indicate direct student mentee.*

#### **PEER-REVIEWED JOURNAL ARTICLES – ORIGINAL RESEARCH:**

**Lee-Confer, J.S.** (2024) Strength in Arms: Empowering Older Adults Against the Risk of Slipping and Falling – A Theoretical Perspective. *Frontiers in Sports and Active Living*, (Accepted 03/2024)

*Journal Impact Factor (2022): 2.7*

**Lee-Confer, J.S.**, Lo, M.K. & Troy, K.L. (2024) Young adults accelerate their arms significantly faster and earlier than old adults resulting in improved center of mass dynamics during an overground slip perturbation. *Scientific Reports* (In-Review, 03/2024)

*Journal Impact Factor (2022): 5.7*

**Lee-Confer, J.S.** (2023) Strength in Arms: Empowering Older Adults Against the Risk of Slipping and Falling. *sportRxiv*. <https://doi.org/10.51224/SRXIV.361>

**Lee-Confer, J.S.**, Lo, M.K. & Troy, K.L. (2023) Young adults accelerate their arms significantly faster and earlier than old adults resulting in improved center of mass dynamics during an overground slip perturbation. *bioRxiv*. <https://doi.org/10.1101/2023.12.09.570848>



**Lee-Confer, J.S.**, (2023). Overground walking slip perturbations induce frontal plane motion of the trunk indicating that slips are not just a backwards but also a sideways loss of balance. *bioRxiv*.

<https://doi.org/10.1101/2023.11.25.568692>

**Lee-Confer, J. S.**, Finley, J. M., Kulig, K. & Powers, C. M. (2023). Reactive Responses of the Arms Increase the Margins of Stability and Decrease Center of Mass Dynamics During a Slip Perturbation. *Journal of Biomechanics*, 157, 11737

<https://doi.org/10.1016/j.jbiomech.2023.111737>

*Journal Impact Factor (2022): 2.779*

Lim, S., Luo, Y., **Lee-Confer, J.**, & D'Souza, C. (2023). Obstacle Clearance Performance in Individuals with High Body Mass Index. *Applied Ergonomics*, 106, 103879

<https://doi.org/10.1016/j.apergo.2022.103879>

*Journal Impact Factor (2022): 3.940*

**Lee-Confer, J. S.**, Kulig, K., & Powers, C. M. (2022). Constraining the Arms During a Slip Perturbation Results in a Higher Fall Frequency in Young Adults. *Human Movement Science*, 86, 103016

<https://doi.org/10.1016/j.humov.2022.103016>

*Journal Impact Factor (2022): 2.50*



**Lee-Confer, J. S.**, Bradley, N. S., & Powers, C. M. (2022). Quantification of Reactive Arm Responses to a Slip Perturbation. *Journal of Biomechanics*, 110967.

<https://doi.org/10.1016/j.jbiomech.2022.110967>

*Journal Impact Factor (2022): 2.779*

Blanchette, M. G., **Lee-Confer, J.**, Brault, J. R., Rutledge, B., Elkin, B. S., & Siegmund, G. P. (2022). Human Slip Assessment of Candidate Reference Surfaces for Walkway Tribometer Validation: An Update to Standard ASTM F2508. *Journal of Testing and Evaluation*, 50(2). DOI: 10.1520/JTE20210240

*Journal Impact Factor (2022): 1.264*

#### **PEER-REVIEWED JOURNAL ARTICLES – ORIGINAL RESEARCH (In-Preparation):**

**Lee-Confer, J.S.** & Blanchette, M.B. The Influence of Sand-Additives and Coating Application Techniques on the Coefficient of Friction on Douglas Fir Lumber. *Coatings*. (Anticipated Submission Date 07/2024).

**Lee-Confer, J.S.**, Collete, D., & Blanchette, M.B. The Effect of Particle Thickness, Particle Type, and Flooring on Tribological Measurements of Coefficient of Friction. *Safety Science*. (Anticipated Submission Date 10/2024).

**Lee-Confer, J.S.**, Lo, M.K., Finley, J.M., & Powers, C.M. (2023). The effect of arm motion on whole-body angular momentum during a slip perturbation. *Journal of Biomechanics*. (Anticipated Submission Date 10/2024).

**Lee-Confer, J. S.,** Blanchette, M. & Powers, C. M. (2024). Sex-Differences in Friction Demands During Running and Cutting: Implications for Floor Safety Standards for Indoor Sports. *Journal of Testing and Evaluation*. (Anticipated Submission Date 12/2024).

**Lee-Confer, J.S.,** Liu, J., Nagamori, A., & Powers, C. (2024). The spinal cord, not the vestibular system, coordinates and initiates compensatory limb responses during slip incidents: Implications from an individual with a unilateral labyrinthectomy compared to healthy controls. *British Medical Journal*. (Anticipated Submission Date 12/2024).

#### **PEER-REVIEWED INTERNATIONAL CONFERENCE PAPERS:**

**Lee-Confer, J.,** Lee, R.\*, & Powers, C. (2022). Trunk Motion within the Frontal Plane is Induced During a Slip Incident. *World Congress of Biomechanics*, Taipei, Taiwan.

**Lee-Confer, J.,** Lee, R.\*, & Powers, C. (2022). Arm Motion Decreases Whole-Body Angular Momentum in the Frontal Plane During a Slip Perturbation. *World Congress of Biomechanics*, Taipei, Taiwan.

**Lee-Confer, J.,** Kulig, K., Lo, M.\*, & Powers, C. (2022). Arm Movements Reduce Center of Mass Excursion During a Slip Perturbation. *North American Congress on Biomechanics*, Ottawa, Canada.

**Lee, J.,** Asplund, C.\*, Vera, L.\*, Ruegg, S.\*, & Powers, C. (2019). Quantification of Arm Kinematics in Response to a Slip-Induced Perturbation. *International Society of Biomechanics, American Society of Biomechanics*, Calgary, Canada.

**Lee, J.,** Asplund, C.\*, Ruegg, S.\*, Vera, L.\*, & Powers, C. (2019). Are corrective muscle responses during a slip perturbation coordinated by the vestibular system? *Neural Control of Movement Society*, Toyama, Japan.

**Lee, J.,** Dang, K.\*, Cohen, A.\*, & Powers, C. (2017). A comparison of two methods to assess EMG latencies following a slip perturbation. *European Society of Biomechanics*, Seville, Spain.

**Lee, J.,** Dang, K.\*, & Powers, C. (2017). Heel acceleration differentiates fallers from non-fallers following a slip perturbation. *European Society of Biomechanics*, Seville, Spain.

#### **PEER-REVIEWED NATIONAL & LOCAL CONFERENCE PAPERS AND PRESENTATIONS:**

**Lee-Confer, J.,** Helwig, M., Eggert, C., Garcia, D., Martin, R., Neff, A., & Spiess, C. (2024). The effect of grasping light objects on the motor control of the arms during gait. *Society for Neuroscience*, Chicago IL, United States of America (Submitted 04/2024)

**Lee-Confer, J.,** Lo, M.\*, & Troy, K. (2024). Impact of Arm Abduction Acceleration on Center of Mass Dynamics During Slips: A Comparative Study of Older and Younger Adults. *American Society of Biomechanics*, Madison, WI, United States of America (Submitted 03/2024)

**Lee-Confer, J.,** Lo, M.\*, & Troy, K. (2023). Young adults accelerate their arms significantly faster than older adults in response to a slip perturbation. *American Society of Biomechanics*, Knoxville, TN, United States of America.

**Lee, J.,** Scher, I., Stepan, L., & Powers, C. (2019). The Effect of Ski Boots on Utilized Coefficient of Friction. *International Congress on Snow Sports Trauma and Safety*, Squaw Valley, CA, United States of America.

**Lee, J.,** Dang, K.\*, Asplund, C.\*, & Powers, C. (2018). Arm Movements Increase Margins of Stability During a Slip Perturbation. *USC Jacqueline Perry Research Day*. Los Angeles, CA, United States of America.

**Lee, J.,** Imamura, R., Merrier, N., & Shimada, S. (2015). Control of balance during quiet standing in an individual with FXTAS. *Biomedical Engineering Society Conference*. Tampa, FL, United States of America.

**Lee, J.,** Imamura, R., Merrier, N., & Shimada, S. (2014). Fragile X-associated Tremor/Ataxia Syndrome. *Biomedical Engineering Society Conference*. San Antonio, TX, United States of America.

**Lee, J.** Fragile X-associated Tremor/Ataxia Syndrome. *California State University, Sacramento Research Symposium*. Sacramento, CA, United States of America

## **NEWS RELEASES / MEDIA**

2024 “A new perspective to prevent falls in older adults,” University of Arizona, College of Health Sciences. Available as of 02/18/2024: <https://healthsciences.arizona.edu/academics/college-of-health-sciences>

2023 “Slower arm speed may be why older people fall more easily after a slip,” NewScientist. Available as of 12/27/2023: <https://www.newscientist.com/article/2409722-slower-arm-speed-may-be-why-older-people-fall-more-easily-after-a-slip/>

2022 “Now it’s been researched: you stay upright better with your hands free,” HS Tiede. Available as of 12/15/2022: <https://www.hs.fi/tiede/art-2000009176268.html>

2022 “Biomechanics, Now it’s been researched: you stay upright better with your hands free,” Pledge Times. Available as of 12/15/2022 <https://pledgetimes.com/biomechanics-now-its-been-researched-you-stay->

## UNIVERSITY DISSERTATIONS/THESES

**Lee, J.S.** The role of the Upper Extremities in the Recovery of Balance During a Slip Perturbation. (2021). *University of Southern California*. Los Angeles, CA, United States of America.  
<https://digitallibrary.usc.edu/asset-management/2A3BF1WF3JS0>

**Lee, J.S.** Biomechanical gait assessment on a patient with Fragile X-Associated Tremor/Ataxia Syndrome (FXTAS): a case study. (2014). *California State University, Sacramento*. Sacramento, CA, United States of America.

<http://hdl.handle.net/10211.3/122092>

## **GRANTS AND/OR CONTRACTS AWARDED:**

### **EXTERNAL GRANTS (FEDERAL/CORPORATE FUNDING):**

- |                |   |
|----------------|---|
| Pending (2023) | <b>“Comparing bilateral exoskeleton footwear for balance, gait, fear of falling and user acceptance in older adults”</b><br>National Institute of Health - National Institute on Aging, SBIR (PAR-23-231)<br>Role: Co-investigator<br><i>Total Costs: \$240,000</i> |
| 2017-2019      | <b>“Validation of Walkway Tribometers: A Reference Standard”</b><br>American Society of Testing and Materials<br>Role: Co-Principal Investigator<br><i>Total Costs: \$58,700</i>  |
| 2018           | <b>“Validation of Manufactured Ski Boots: Effects of Coefficient of Friction During Locomotion”</b><br>Guidance Engineering<br>Role: Co-Principal Investigator<br><i>Total Costs: \$7,000</i>   |
| 2012-2014      | <b>“Fragile X-Associated Tremor/Ataxia Syndrome”</b><br>Medical Investigation of Neurodevelopmental Disorders Institute<br>Role: Co-Principal Investigator<br><i>Total Costs: \$2,000</i>   |

## **INVITED TALKS:**

- |      |  |
|------|--|
| 2024 | <b>Lee-Confer, J.</b> 5 things you should make sure your biomechanical expert should know. <i>Arizona Association for Defense Counsel</i> , Phoenix, Arizona, United States of America |
|------|--|

- 2023 **Lee-Confer, J.** Reactive arm responses increase the margins of stability and decrease center of mass dynamics during a slip perturbation. *University of North Carolina at Chapel Hill*, Chapel Hill, North Carolina, United States of America
- 2023 **Lee-Confer, J.** Determining the safety of floors to prevent slip and falls – theory, applications, and implementation, *Arizona Falls Prevention Coalition*, Virtual, Arizona, United States of America
- 2023 **Lee-Confer, J.** How biomechanical experts should be measuring the slip-resistance of the floors. *State Bar of Arizona Convention*, Tucson, Arizona, United States of America
- 2022 **Lee-Confer, J.** What does the science say about slips? *Tucson Defense Bar*, Tucson, Arizona, United States of America
- 2021 **Lee-Confer, J.** The Biomechanics of Gait, Slips and Falls. *Columbia University*, New York City, New York, United States of America
- 2021 **Lee-Confer, J.** The Utility of the Arms for Balance During a Slip Perturbation. *Arizona Falls Prevention Coalition*, Arizona, United States of America
- 2019 **Lee-Confer, J.** The Neural Control of the Arms During a Slip Perturbation. *Teikyo University*, Tokyo, Japan

#### IV. TEACHING AND MENTORING ACTIVITIES

##### **COURSES PRESENTED:**

- 2024-present **PSIO 442/542: Biomechanics of Human Movement**  
*University of Arizona*, Tucson, AZ  
Department of Physiology
- 2024-present **PSIO 441: Musculoskeletal Kinesiology**  
*University of Arizona*, Tucson, AZ  
Department of Physiology
- 2023 **PSIO 495T: Musculoskeletal Kinesiology**  
*University of Arizona*, Tucson, AZ  
Department of Physiology
- 2020-2023 **BIO 202: Anatomy & Physiology II**  
*Arizona College of Nursing*, Tucson, AZ

- Department of General Education  
(Student Evaluations = 4.91/5.00)
- 2020-2023      **BIO 201: Anatomy & Physiology I**  
*Arizona College of Nursing, Tucson, AZ*  
Department of General Education  
(Student Evaluations = 5.00/5.00)
- 2020-2023      **BIO 189: Fundamentals of Biology**  
*Arizona College of Nursing, Tucson, AZ*  
Department of General Education  
(Student Evaluations = 4.83/5.00)
- 2022-2023      **PSY 230: Statistics**  
*Arizona College of Nursing, Tucson, AZ*  
Department of General Education  
(Student Evaluations = 5.00/5.00)
- 2023              **MAT 151: College Mathematics**  
*Arizona College of Nursing, Tucson, AZ*  
Department of General Education
- 2020-2022      **KINS 151a: Biomechanics**  
*California State University, Sacramento, Sacramento, CA*  
Department of Kinesiology  
(Student Evaluations = 4.81/5.00)
- 2020-2022      **KINS 151: Kinesiology**  
*California State University, Sacramento, Sacramento, CA*  
Department of Kinesiology  
(Student Evaluations = 4.60/5.00)
- 2018-2019      **PT 556: Disorders of the Musculoskeletal System**  
*University of Southern California, Los Angeles, CA*  
Division of Biokinesiology & Physical Therapy  
(Student Evaluations = 4.43/5.00)
- 2014-2018      **PT 554: Analytical Anatomy (Biomechanics Laboratory Section)**  
*University of Southern California, Los Angeles, CA*  
Division of Biokinesiology & Physical Therapy  
(Student Evaluations = 4.75/5.00)
- 2014-2018      **PT 514: Musculoskeletal Anatomy (Laboratory)**  
*University of Southern California, Los Angeles, CA*  
Division of Biokinesiology & Physical Therapy  
(Student Evaluations = 4.67/5.00)

- 2012-2014      **KINS 151a: Biomechanics**  
*California State University, Sacramento, Sacramento, CA*  
 Department of Kinesiology
- 2012-2014      **KINS 151: Kinesiology**  
*California State University, Sacramento, Sacramento, CA*  
 Department of Kinesiology
- 2009-2011      **BIO 22: Anatomy**  
*California State University, Sacramento, Sacramento, CA*  
 Department of Kinesiology  
 (Student Evaluations = 4.96/5.00)

Workshops and Tutorials Developed/Presented

- 2023              **Developing Your Personal Statement for Grants**  
*Arizona College of Nursing*
- 2022              **How to Study Effectively**  
*Arizona College of Nursing*
- 2022              **How to Craft a Strong Resume**  
*Arizona College of Nursing*
- 2022              **APA Refresher**  
*Arizona College of Nursing*
- 2022              **Using Mendeley to Make APA Formatting Easy**  
*Arizona College of Nursing*
- 2021              **Creating a Blueprint for Your Writings**  
*Arizona College of Nursing*
- 2021              **Writing a Good Introductory Paragraph**  
*Arizona College of Nursing*
- 2021              **How to Conduct a Literature Search**  
*Arizona College of Nursing*
- 2018              **Tribometer Workshop**  
*University of Southern California*
- 2011              **Engaging Students in the Classroom**  
*California State University, Sacramento*
- 2010              **Activity-based Classrooms**

**GRADUATE AND UNDERGRADUATE STUDENTS MENTORED:**

2024-present	Lila Wayman (University of Arizona)
2024-present	Christian Eggert (University of Arizona)
2024-present	Riley Martin (University of Arizona)
2023	Evelyn Miller (University of Arizona)
2021-present	Matthew Lo (University of Arizona)
2021-2022	Rachel Lee (Division of Biokinesiology & Physical Therapy, USC)
2019-2020	Lauren Vera, DPT (Division of Biokinesiology & Physical Therapy, USC)
2019-2020	Sarah Ruegg, DPT (Division of Biokinesiology & Physical Therapy, USC)
2018-2019	Christopher Asplund, DPT (Division of Biokinesiology & Physical Therapy, USC)
2016-2018	Kaylee Dang, DPT (Division of Biokinesiology & Physical Therapy, USC)
2015-2016	Alex Cohen, DPT (Division of Biokinesiology & Physical Therapy, USC)

**V. PROFESSIONAL DEVELOPMENTS**

Conferences

2024	Society for Neuroscience, Chicago, IL, USA
2024	ASTM F13 Subcommittee Meeting, Philadelphia, PA, USA
2024	American Society of Biomechanics, Madison, WI, USA
2024	ASTM F13 Subcommittee Meeting, Louisville, KY, USA
2024	APTAAZ Fall Meeting, Phoenix, AZ, USA
2024	Combined Sections Meeting (APTA), Boston, MA, USA



2023 American Society of Biomechanics, Knoxville, Tennessee, USA

2023 ASTM F13 Subcommittee Meeting, Toronto, Canada

2023 ASTM F13 Subcommittee Meeting, Virtual

2023 Arizona State Bar Convention, Tucson, Arizona, USA

2022 North American Congress on Biomechanics, Ottawa, Canada

2022 World Congress of Biomechanics Conference, Taipei, Taiwan

2022 Arizona College of Nursing Educators Conference, Virtual

2022 ASTM F13 Subcommittee Meeting, Seattle, Washington, USA

2022 ASTM F13 Subcommittee Meeting, Virtual

2022 ATI Champion Training, Virtual

2019 American Society of Biomechanics Conference, Calgary, Canada

2019 International Society of Biomechanics Conference, Calgary, Canada

2019 International Congress on Snow Sports Trauma and Safety Conference, Squaw Valley, California, USA

2019 Neural Control of Movement Conference, Toyama, Japan

2017 USC Dentistry Research Day, Los Angeles, California, USA

2017 European Society of Biomechanics Conference, Seville, Spain

2016 Jacqueline Perry Research Day, Los Angeles, California USA

2015 American Society of Biomechanics Conference, Columbus, Ohio, USA

2015 Dentistry Research Day, Los Angeles, California, USA

2015 Biomedical Engineering Society Conference, Tampa, Florida, USA

2014 American College of Sports Medicine Conference, San Diego, California, USA

2014 Jacqueline Perry Research Day, Los Angeles, California, USA

2014 Biomedical Engineering Society Conference, San Antonio, Texas, USA

Continuing Education

- 2023 The CDC's "STEADI" Toolkit in the Community Setting – Project "VIBE" Valley Initiative to promote Balance among Elders  
Presenter: Tiffany Hughes, Ph.D.
- 2022 Whoa! Reactive balance training as a fall prevention intervention  
Presenter: Michael Madigan, Ph.D.
- 2022 Human Motion Analysis with Wearables for Improved Health and Well-being  
Presenter: Sol Lim, Ph.D.
- 2022 Impact of Ankle-Foot-Orthoses and Functional Electrical Stimulators, on Fall Outcomes in Individuals with Stroke  
Presenter: Claire Honeycutt, Ph.D.
- 2022 Diversity and English Language Learners: Helping Students Succeed  
Presenter: Karin J. Sherrill, RN, MSN, CNE, ANEF, FAADN
- 2022 Concept Mapping I: Why It's Essential for 21<sup>st</sup> Century Nursing Education  
Presenter: Barbara L. Yoost, MSN, RN, CNE, ANEF
- 2022 Cultivating Meaningful and Engaging Online Discussion  
Presenter: Virginia Wangerin, PhD, RN, CNE
- 2021 Contraception Pharmacology Update  
Presenter: Gini Holter, DNP, APRN, FNP-BC
- 2021 Diabetes Mellitus: Pharmacological Management for Type 2  
Presenter: Susan J. Kimble, DNP, RN, ANP-BC, FAANP