

# Ania L. Lipat, Ph.D.

*Curriculum Vitae*

anialauren.lipat@ucf.edu

## Education

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2022 – 2025	Ph.D. Health and Human Performance University of Florida, Gainesville, FL
2017 – 2019	M.S. Applied Physiology and Kinesiology University of Florida, Gainesville, FL
2013 – 2017	B.S. Applied Physiology and Kinesiology University of Florida, Gainesville, FL

## Research Appointments

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2026 – Present	Postdoctoral Scholar Healthy Aging Laboratory College of Nursing University of Central Florida, Orlando, FL
2022 – 2025	Graduate Research Assistant Phenotyping and Assessment in Neuroscience (PAIN) Laboratory Department of Community Dentistry and Behavioral Sciences University of Florida, Gainesville, FL
2021 – 2022	Research Assistant Phenotyping and Assessment in Neuroscience (PAIN) Laboratory Department of Community Dentistry and Behavioral Sciences University of Florida, Gainesville, FL
2017 – 2019	Graduate Research Assistant Applied Neuromechanics Laboratory Department of Applied Physiology and Kinesiology University of Florida, Gainesville, FL
2016	Summer Scholar Neuromotor Behavior Laboratory National Science Foundation University of Delaware, Newark, DE
2015 – 2017	Undergraduate Researcher Orthopaedic Biomedical Engineering Laboratory J. Crayton Pruitt Family Department of Biomedical Engineering University of Florida, Gainesville, FL

### Peer-Reviewed Journal Publications

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- Abbas, M., Cruz, C. J., Tamargo, J. A., **Lipat, A. L.**, Fareed, R., Deaton, L., ... & Cruz-Almeida, Y. (2025). Exploring senescence markers as potential drivers of osteoarthritis pain in aging adults. *Experimental Gerontology*, 112950. <https://doi.org/10.1016/j.exger.2025.112950>
- Lipat, AL**, Peterson, JA, Strath, LJ, Fillingham, RB, Allen, KD, Cruz-Almeida, Y. (2025). The mediating role of physical function on the self-reported pain and cognitive function association. *Journal of Aging and Physical Activity*, 1(aop), 1-7. <https://doi.org/10.1123/japa.2024-0084>
- Lipat, AL**, Peterson, JA, Murillo, BC, Clark, DJ, & Cruz-Almeida, Y. (2023). Pain severity, distribution, and duration are associated with spatiotemporal gait performance in community-dwelling older adults with chronic musculoskeletal pain. *Gait & Posture*, 103, 178–183. <https://doi.org/10.1016/j.gaitpost.2023.05.011>
- Lipat, AL**, Peterson, JA, Clark, DJ, & Cruz-Almeida, Y. (2022). Decreased cognitive function is associated with impaired spatiotemporal gait performance in community dwelling older adults with chronic musculoskeletal pain. *Brain and Cognition*, 159, 105862. <https://doi.org/10.1016/j.bandc.2022.105862>
- Lipat, AL**, Clark, DJ, Hass, CJ, & Cruz-Almeida, Y. (2022). Gait subgroups among older adults with chronic pain differ in cerebellum and basal ganglia gray matter volumes. *Experimental Gerontology*, 163, 111773. <https://doi.org/10.1016/j.exger.2022.111773>
- Schmitt, AC, Baudendistel, ST, **Lipat, AL**, White, TA, Raffegau, TE, & Hass, CJ. (2021). Walking indoors, outdoors, and on a treadmill: Gait differences in healthy young and older adults. *Gait & Posture*, 90, 468–474. <https://doi.org/10.1016/j.gaitpost.2021.09.197>

### Podium Presentations

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- Lipat, AL**, Valdes-Hernandez, P, Cruz-Almeida, Y. (February 2025). A Preliminary Machine Learning Approach to Predict Age Based on Spatiotemporal Gait Parameters. *Institute of Exercise Physiology and Rehabilitation Science Annual Conference*, University of Central Florida, Orlando, FL
- Lipat, AL**, Johnson, AJ, Fillingim, RB, & Cruz-Almeida, Y. (February 2024). Movement-Evoked Pain is Associated with Baseline and Longitudinal Cognitive Function in Individuals with Knee Osteoarthritis. *Institute of Exercise Physiology and Rehabilitation Science Annual Conference*, University of Central Florida, Orlando, FL
- Lipat, AL**, Baudendistel, SB. (April 2018). The Relationship between Baseline Freezing of Gait Severity and Changes in Motor Abilities, Disease Severity, Cognition, and Depression in Parkinson's Disease. *Movement Disorders Grand Rounds*, University of Florida, Gainesville, FL

**Refereed Conference Poster Abstracts**

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**Lipat, AL**, Valdes-Hernandez, P., Cruz-Almeida Y. (April 2025). Older Adults with Knee Osteoarthritis Exhibit Accelerated ‘Gait Age’: A Preliminary Machine Learning Approach. *United States Association for the Study of Pain Annual Meeting*, Chicago, IL

Strath, LJ, **Lipat, AL**, Meng, L, Huo, Z, Foster, TC, Johnson, AJ, Fillingham, RB, & Cruz-Almeida, Y. (November 2024). Making Moves: Epigenetic Aging and its Relationship with Pain and Disability Outcomes in Older Adults. *Gerontological Society of America Annual Meeting*, Seattle, WA

Torchia, R, **Lipat, AL**, Cruz-Almeida, Y, & Hass, CJ. (August 2024). Mechanical Somatosensory Function is Not Related to Obstacle Crossing Performance in Older Adults. *American Society of Biomechanics Annual Meeting*, Madison, WI.

**Lipat, AL**, Clark, DJ, & Cruz-Almeida, Y. (November 2023). Gray Matter Correlates of Anxiety, Depression, and Gait Speed in Older Adults with Chronic Pain. *Gerontological Society of America Annual Meeting*, Tampa, FL

**Lipat, AL**, Peterson, JA, Clark, DJ, & Cruz-Almeida, Y. (April 2023). Higher Pressure Pain Sensitivity May Contribute to Reduced Mobility in Older Adults with Chronic Pain. *United States Association for the Study of Pain Annual Meeting*, Durham, NC

Murillo, BC, **Lipat, AL**, Peterson, JA, & Cruz-Almeida, Y. (May 2022). The Influence of Movement-Evoked Pain on Lower Extremity Physical Function in Older Adults. *United States Association for the Study of Pain Annual Meeting*, Cincinnati, OH

**Lipat, AL**, Dhulipala, S., Ebner, NC, & Cruz-Almeida, Y. (May 2022). Chronic Pain Severity Mediates the Relationship between Age and Stroop Task Performance. *United States Association for the Study of Pain Annual Meeting*, Cincinnati, OH

**Lipat, AL**, Stone, AE, Holmes, HH, & Hass, CJ. (May 2019). The Effects of Muscular Fatigue and Gender on Lower Extremity Kinetics and Kinematics during the Forward Lunge. *American College of Sports Medicine Annual Meeting*, Orlando, FL

**Lipat, AL**, Stone, AE, Holmes, HH, & Hass, CJ. (August 2018). The Effects of Muscular Fatigue and Gender on Knee Kinetics and Kinematics during the Forward Lunge. *American Society of Biomechanics Annual Meeting*, Rochester, MN

Yarmola, EG, Shah, YY, Lakes, EH, **Lipat, AL**, Patel, N, & Allen, KD. (April 2017). CCL2 Detection in a Rat Monoiodoacetate Osteoarthritis Model Using Magnetic Capture. *Osteoarthritis Research Society International World Congress*, Las Vegas, NV

Lakes, EH, Jacobs, BY, **Lipat, AL**, & Allen, KD. (August 2016). Advanced Rodent Gait Analysis for Quantifying Changes in Models of Joint Degeneration. *Gordon Research Conference*, Andover, NH

**Lipat, AL**, Lakes, EH, Kim, SE, Banks, SA, & Allen, KD. (October 2015). Accuracy of Single-Plane vs. Biplane Fluoroscopy in Determining 3D Femorotibial Kinematics. *Biomedical Engineering Society Annual Meeting*, Tampa, FL

### **Research Support**

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NIH Blueprint and BRAIN Initiative Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN) Award (F99/K00)

**PI:** A.L. Lipat

**Title:** Investigating the Roles of Gait Performance and Pain in Cognitive Function and Brain Health in Older Adults

**Status:** Submitted April 2024, Impact Score: 48 (not funded); Resubmitted October 2024, Application administratively withdrawn May 2025

Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research (Parent F31-Diversity)

**PI:** A.L. Lipat

**Title:** Investigating gait subgroup classification as a risk stratification approach for cognitive decline in older adults with chronic musculoskeletal pain

**Status:** Submitted December 2023, Impact Score: 36 (not funded)

### **Teaching Appointments**

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#### **Guest Lecturer (2018, 2024)**

Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, FL

<i>Term</i>	<i>Course</i>	<i>Course Title</i>	<i>Lecture Topic</i>
Fall 2024	APK3220C	Biomechanical Basis of Movement	Projectile Motion
Spring 2024	APK3220C	Biomechanical Basis of Movement	Knee Biomechanics
Spring 2018	APK4120	Clinical Exercise Physiology	Osteoporosis

#### **Biology Adjunct Faculty Member (2021 – 2022)**

Science Department, Valencia College East Campus, Orlando, FL

<i>Term</i>	<i>Course</i>	<i>Course Title</i>	<i>Students Enrolled</i>
Summer 2022	BSC2093C	Human Anatomy and Physiology I	21
Spring 2022	BSC2093C	Human Anatomy and Physiology I	22
Fall 2021	BSC2093C	Human Anatomy and Physiology I	24

#### **Graduate Teaching Assistant (2017 – 2019, 2022)**

Department of Applied Physiology and Kinesiology, University of Florida, Gainesville, FL

<i>Term</i>	<i>Course</i>	<i>Course Title</i>	<i>Students Enrolled</i>
Fall 2022	APK2105C	Applied Human Physiology Lab	78
Spring 2019	APK2100C	Applied Human Physiology Lab	81
Fall 2018	APK2105C	Applied Human Physiology Lab	18

Last Updated: 01/21/2026

Fall 2018	APK2100C	Applied Human Anatomy Lab	23
Summer 2018	APK2100C	Applied Human Anatomy Lab	39
Spring 2018	APK2105C	Applied Human Physiology Lab	80
Fall 2017	APK2100C	Applied Human Anatomy Lab	83

### **Mentorship**

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2025	Ariana Robinson Undergraduate, Expanding Undergraduate Research On the Neurobiology of Aging Program University of Florida, Gainesville, FL
2023 – 2024	Romina Torchia Undergraduate, University Scholars Program University of Florida, Gainesville, FL
2022 – 2023	Bryce Murillo Undergraduate, SF2UF Bridge to the Baccalaureate Program University of Florida, Gainesville, FL
2018 – 2019	Tatiana White Undergraduate, University Scholars Program University of Florida, Gainesville, FL

### **Ad Hoc Manuscript Review**

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*BMC Musculoskeletal Disorders*  
*BMC Public Health*  
*Experimental Gerontology*  
*Frontiers in Aging Neuroscience*  
*Journal of Pain*

### **Honors and Awards**

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2025	Top Student Presenter Institute of Exercise Physiology and Rehabilitation Science Annual Conference, University of Central Florida
2024	Allen, Holyoak, & Varnes Endowed Scholarship College of Health and Human Performance, University of Florida
2023	Biological Sciences Minority Investigator Travel Award Gerontological Society of America
2018	Potter-Chafin Scholarship College of Health and Human Performance, University of Florida

2017	Dr. Linton E. Grinter Ph.D. Fellowship The Graduate School, University of Florida
2015	Travel Award J. Crayton Pruitt Family Department of Biomedical Engineering, University of Florida
2015	Dean's List College of Health and Human Performance, University of Florida

**Professional Affiliations**

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2022 – Present	United States Association for the Study of Pain, Member
2023 – Present	Gerontological Society of America, Member
2018 – 2024	American Society of Biomechanics, Member
2018 – 2019	American College of Sports Medicine Student, Member
2015 – 2016	Biomedical Engineering Society, Member

**Community Outreach**

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2017-2019, 2022	Annual National Biomechanics Day Host University of Florida, Gainesville, FL
2016 - 2017	Director of Workshops Center for Undergraduate Research Board of Students University of Florida, Gainesville, FL