

FRANCESCA “FRANKIE” WADE

(she/her)

Updated: June 2023

School of Exercise and Nutritional Sciences
San Diego State University
San Diego, CA 92182

EDUCATION

Ph.D.	Kinesiology Pennsylvania State University University Park, Pennsylvania, USA	2020
M.Sc.	Sports Biomechanics Loughborough University Loughborough, Leicestershire, UK	2016
B.Sc. (Hons)	Sport and Exercise Science University of Bath Bath, Somerset, UK	2014

PROFESSIONAL APPOINTMENTS

Assistant Professor	School of Exercise and Nutritional Sciences San Diego State University, San Diego, California, USA	August 2023 -
Postdoctoral Research Associate	Department of Kinesiology & Nutrition University of Illinois at Chicago, Chicago, Illinois, USA	2022 - 2023
Postdoctoral Associate	Department of Applied Physiology & Kinesiology University of Florida, Gainesville, Florida, USA Malcom V. Randall VA Center, Gainesville, Florida, USA	2020 - 2022
Graduate Research Assistant	Department of Kinesiology Pennsylvania State University, University Park, Pennsylvania, USA	2016 - 2020

FUNDING

Awarded but not accepted	University of Florida Claude D. Pepper Older American's Independence Center: Pilot Exploratory Study Proposals Focused on Promoting Mobility & Independence <i>Fear of Falling as an Underlying Mechanism for Age-related Altered Walking Mechanics</i>	2022 US\$71,334
	Role: Primary Investigator	

Completed

Mini Project Grant: Department of Orthopaedics and Rehabilitation, College of
Medicine, Penn State Hershey 2018
Does Achilles Tendon Moment Arm Change Following Total Ankle Replacement? US\$8000
Role: Co-Investigator

HONORS AND AWARDS

Up and Comer Award 2023
American Society of Biomechanics

Harold F. Martin Graduate Assistant Outstanding Teaching Award 2019
Pennsylvania State University

Doctoral Competition, Finalist 2018
American Society of Biomechanics Annual Meeting, Rochester, MN

Domestic Conference Travel Award 2017-18
Department of Kinesiology, Pennsylvania State University

International Conference Travel Award 2018
Department of Kinesiology, Pennsylvania State University

Qualysis Best Podium Award, 2nd Place 2018
American Society of Biomechanics East Annual Meeting, Reading, PA

Rapid Research 90s Competition, 3rd Place 2018
Department of Kinesiology, Pennsylvania State University

Professional Development Endowment 2018
College of Health & Human Development, Pennsylvania State University

Penn State Team, Semi-Finalist 2017
Nike Ease Competition – Novel shoe design for limited dexterity

New Investigator Award, Finalist 2017
International Society of Biomechanics in Sport, Cologne, Germany

Santander Scholarship 2015-16
Loughborough University, UK

Alumni Scholarship 2011-14
University of Bath, UK

ADVISING AND MENTORSHIP

PhD Students

Joy Itodo, UIC †	2023
MS Students	
Doyin Ogundiran, UIC †	2023
Bailey Speight, UF*	2022
Grace Kellaher, UF*	2020-21
BS Students	
Kyle Jarmolych, UF*	2021-22
Joseph Imler, UF*	2021-22
Melyn Jessell, UF*	2020-21
Gabriele Roque, UF*	2020-21
Bryce Daniels, UF*	2020-22
Kim-Anh Vo, UF*	2021-22
Eli Zerpa, UF*	2021-22
Imaan Kashif, UF*	2022
Romina Torchia, UF*	2022
Benjamin McAffrey, UF*	2021-22
Sofia Rodriguez, UF*	2021-22
Kate Balthazar, UF*	2020-22
Marc Pappas, UF*	2020-21
William Tyler Fox, Penn State^	2018
High School Interns	
Ellie Kim, Penn State^	2018-19
Patrick McNutt, Penn State^	2017-18
Kate Rahn, Penn State^	2017-18

† in the lab of Dr. Kharma Foucher; *in the lab of Dr. Chris Hass; ^in the lab of Dr. Stephen Piazza

AWARDS BY MENTEES

HHP Research Symposium Poster Presentation, 1 st Place (Bryce Daniels)	2022
APK Undergraduate Division, University of Florida	

TEACHING EXPERIENCE

Department of Kinesiology & Nutrition, University of Illinois at Chicago Guest Lecturer, KN501 – Journal Club	Spring 2023
<ul style="list-style-type: none"> ● Reviewing pertinent literature in biomechanics ● Discussion style graduate level course 	
Department of Health & Kinesiology, University of Utah Guest Lecturer, KINES3093 – Biomechanics	Spring 2021
<ul style="list-style-type: none"> ● Delivered lecture on moments and their application to injury and rehabilitation ● Upper level Kinesiology course 	
Department of Kinesiology, Pennsylvania State University Guest Lecturer, KINES384 – Biomechanics	2016-20

- Delivered as-needed lectures relevant to undergraduate biomechanics course content
Head Teaching Assistant, KINES384 – Biomechanics 2018-20
- Delivered laboratory course content, held office hours, consulted with instructor on content development, supervised other teaching assistants including review of teaching effectiveness
- Upper level Kinesiology course
Teaching Assistant, KINES384 – Biomechanics 2016-18
- Delivered laboratory course content, held office hours

PUBLICATIONS

Peer-Reviewed Publications

1. Baudendistel, S.T., Schmitt, A.C., Balthaser, K., **Wade, F.**, & Hass, C.J. (2022). The effect of limb selection methods on gait analysis in Parkinson's disease. *Parkinsonism and Related Disorders*. [10.1016/j.parkreldis.2022.10.013](https://doi.org/10.1016/j.parkreldis.2022.10.013)
2. **Wade, F.**, Baudendistel, S., Roper, J., Stone, A., Raffegeau, T., Terza, M., Hass, C.J. (2022) Locomotor adaptation training to prevent mobility disability. *Biomechanics* [10.3390/biomechanics2030031](https://doi.org/10.3390/biomechanics2030031). Associated data published: [10.5281/zenodo.6584790](https://doi.org/10.5281/zenodo.6584790)
3. **Wade F.**, Kellaher, G., Baudendistel, S., Pesquera, S., Ferris, D., Seidler, R. D., Manini, T., Clark, D., and Hass, C. (2022). Kinematic analysis of walking speed transitions in younger and older adults. *Journal of Biomechanics*. [10.1016/j.jbiomech.2022.111130](https://doi.org/10.1016/j.jbiomech.2022.111130)
4. **Wade F.**, Hickox L, Lewis G, Horne A, Aynardi M, Juliano P, Aydogan U, and Piazza S. (2021). Achilles Tendon Moment Arm Changes with Fixed-Bearing Total Ankle Arthroplasty. *Journal of Orthopaedic Research*, 39 (2), 572-579. [10.1002/jor.24922](https://doi.org/10.1002/jor.24922)
5. **Wade F.**, Hickox L, and Piazza S. (2020). Achilles Tendon Moment Arms Are Similar When Computed Using a Single Fixed Axis Versus a Moving Instantaneous Helical Axis. *Journal of Biomechanics* 109, 109907. [10.1016/j.jbiomech.2020.109907](https://doi.org/10.1016/j.jbiomech.2020.109907)
6. **Wade F.**, Lewis G, and Piazza S. (2019). Estimates of Achilles Tendon Moment Arm Differ when Axis of Ankle Rotation is Derived from Ankle Motion. *Journal of Biomechanics*, 90, 71-11. [10.1016/j.jbiomech.2019.04.032](https://doi.org/10.1016/j.jbiomech.2019.04.032)
7. **Wade F.**, Mok KM, and Fong DPT (2018). Kinematic analysis of a televised eversion ankle sprain. *Asia-Pacific Journal of Sports Medicine, Arthroscopy, Rehabilitation and Technology*, 12, 12-16. [10.1016/j.asmart.2018.02.001](https://doi.org/10.1016/j.asmart.2018.02.001)

Publications In Review

1. **Wade, F.**, Daniels, B., Seidler, R., Ferris, D., Manini, T., Clark, D., Hass, C.J. Individual joint contributions to forward propulsion are not related to stability during walking in young or older adults. *Gait and Posture*. [Submitted March 4 2023].

Publications In Preparation (Data collected)

1. Baudendistel, S., Pappas, M., **Wade, F.**, Schmitt, A.C., Au, K., Franz, J., Hass, C.J. Propulsive force in individuals with Parkinson's Disease.
2. **Wade, F.**, Huang C., Foucher, K. Joint contributions to forward propulsion in individuals with lower-limb osteoarthritis.

PRESENTATIONS AND INVITED LECTURES

Invited Talks

1. **Wade F.** Challenges facing international scholars. As part of Diversifying Your Workplace workshop at North American Congress of Biomechanics, Ottawa, CA [Aug 21, 2022].
2. **Wade FE.** These legs are made for walking. Texas A&M Department of Kinesiology Seminar Series, College Station, TX, USA. [Feb 25, 2022].
3. **Wade FE.** Improved methods for measuring Achilles tendon moment arm prospectively applied to total ankle arthroplasty patients. Malcom Randall VA Center, Gainesville, FL, USA. [Jun 24, 2020].
4. **Wade FE.** Achilles tendon moment arm changes with total ankle arthroplasty. Biomedical Engineering Department Seminar, University of Florida, Gainesville, FL, USA. [Aug 27 2020].

Conference Presentations

1. **Wade, F.E.,** Choi, Y., Seidler, R., Ferris, D., Manini, T., Clark, D., Hass, C.J., Christou, E. Altered muscular coherence is evident prior to changes in gait biomechanics. Presented at North American Congress of Biomechanics, Ottawa, CA [Aug 21-25, 2022].
2. **Wade, F.,** Daniels, B., Clark, D., Seidler, R., Manini, T., Ferris, D., Hass, C.J. Distal-to-proximal redistribution of propulsion does not correlate with margin of stability during fast or typical walking. Presented at North American Congress of Biomechanics, Ottawa, CA [Aug 21-25, 2022].
3. **Wade, F.,** Roque, G., Kellaher, G., Baudendistel, S., Pesquera, S., Clark, D., Ferris, D., Seidler, R.D., Manini, T., Hass, C.J. Kinematic analysis of walking speed transitions in younger and older adults. Presented at American Society of Biomechanics Annual Meeting, online. [August 10-13, 2021].
4. **Wade FE,** Hickox L, Piazza S. Choice of rotational axis influences ultrasound-based geometric estimates of Achilles tendon moment arm. Presented at XV International Symposium on 3-D Analysis of Human Movement, Salford, UK. [July 3-6, 2018].
5. **Wade FE,** Lewis G, Piazza S. Estimates of Achilles tendon moment arm with the axis of rotation determined from measured ankle motion versus anatomical landmarks. Presented at American Society of Biomechanics East Coast Meeting, Reading, PA, USA. [Apr 20-21, 2018].

Conference Posters

1. Wade, F., Huang C.-H., Aydemir, B., and Foucher, K. (2023) Do Individuals with lower limb osteoarthritis redistribute propulsion proximally? American Society of Biomechanics Annual Meeting, Knoxville, TN, USA. [Aug 8-11, 2023]
2. Baudendistel, S.T., Schmitt, A.C., Balthasar, K., **Wade, F.E.,** and Hass, C.J. (2022) The effects of limb selection method on gait outcomes related to falling in Parkinson's. North American Congress of Biomechanics, Ottawa, CA [Aug 21-25, 2022]
3. Kellaher, G.K., Balthasar, K., Jessell, M., **Wade, F.,** Schmitt, A.C., Hass, C.J. (2021) Are laboratory-based obstacle crossing mechanics applicable to the real world? American Society of Biomechanics Annual Meeting, Atlanta, GA, USA. [Aug 10–13, 2021].
4. **Wade FE,** Lewis G., Horne, A., Hickox, L., Aynardi, M., Juliano, P., Aydogan, U., Piazza, S. (2020) Changes in the plantarflexion moment arm of the Achilles tendon following total ankle arthroplasty. Accepted to present at American Orthopedic Foot and Ankle Society Annual Meeting, San Antonio, TX, USA (Moved online due to COVID-19). [Sept 9-12, 2020].

5. **Wade FE**, Lewis G., Horne, A., Hickox, L., Piazza, S., Aynardi, M., Juliano, P., Aydogan, U. (2020) Locomotor function and pain in total ankle arthroplasty patients at 6-months follow-up. Accepted to present at American Orthopedic Foot and Ankle Society Annual Meeting, San Antonio, TX, USA (Moved online due to COVID-19). [Sept 9 - 12, 2020].
6. **Wade FE**, Lewis G., Horne, A., Hickox, L., Aynardi, M., Juliano, P., Aydogan, U., Piazza, S. (2020) Changes in the plantarflexion moment arm of the Achilles tendon following total ankle arthroplasty. Presented at American Society of Biomechanics Meeting, Atlanta, GA, USA (Moved online due to COVID-19). [Aug 4 – 7, 2020].
7. **Wade FE**, Lewis G., Horne, A., Hickox, L., Piazza, S., Aynardi, M., Juliano, P., Aydogan, U. (2020) Locomotor function and pain in total ankle arthroplasty patients at 6-months follow-up. Presented at American Society of Biomechanics Meeting, Atlanta, GA, USA (Moved online due to COVID-19). [Aug 4 – 7, 2020].
8. **Wade FE**, Lewis G, and Piazza S (2019). Locomotor function and Achilles tendon moment arm in end-stage ankle osteoarthritis patients. Presented at American Society of Biomechanics/International Society of Biomechanics Meeting, Calgary, AB, Canada. [Jul 31-Aug 4, 2019].
9. **Wade FE**, Hickox L, and Piazza S (2019). Achilles tendon moment arms differ when computed from moving and fixed helical axes of ankle rotation. Presented at American Society of Biomechanics/International Society of Biomechanics Meeting, Calgary, AB, Canada. [Jul 31-Aug 4, 2019].
10. **Wade FE**, Lewis G, and Piazza S (2018). Estimates of Achilles tendon moment arm with the axis of rotation determined from measured ankle motion versus anatomical landmarks. Presented at American Society of Biomechanics Annual Meeting, Rochester, MN, USA. [Aug 8-11, 2018].
11. **Wade FE**, Mok K-M, and Fong DTP. Kinematic analysis of a televised eversion ankle sprain. Presented at International Ankle Symposium, North Carolina, USA. [Sept 15-17, 2017]. Published abstract: British Journal of Sports Medicine 51 (Suppl 1), A31, 2017.
12. **Wade F**, Lewis G, and Piazza S (2017). Ultrasound-based estimates of Achilles tendon moment arm depend on rotational axis and center of rotation choice. Presented at American Society of Biomechanics, Colorado, USA. [Aug 8-11, 2017].
13. **Wade F**, Mok KM, Fong DTP (2017). Kinematics analysis of a televised eversion ankle sprain. In Proceedings of XXXIV International Symposium on Biomechanics in Sports (pp. 176-179), Cologne, Germany. [Jun 14-18, 2017].

ADDITIONAL MEDIA AND OUTREACH

Media

Featured in Member Highlights on Instagram Black Biomechanics Association https://www.instagram.com/p/Cf6i-4BMz_9/	2022
Gratitude Series - Youtube Black Biomechanics Association https://www.youtube.com/watch?v=akw6PjE_cQo	2022
Questions to ask a potential postdoc advisor International Women in Biomechanics Blog	2022

<https://intlwomxninbiomech.wixsite.com/website/post/questions-to-ask-a-potential-postdoc-advisor>

Diversifying your workplace: Challenges of international scholars and researchers 2022
International Women in Biomechanics Blog

<https://intlwomxninbiomech.wixsite.com/website/post/challenges-of-international-scholars-research-collaborations>

Paper of the Quarter: 2022
International Women in Biomechanics Twitter Feature
<https://twitter.com/IntWomenBiomech/status/1542796427591655425>

Outreach

National Biomechanics Day 2022
University of Florida

National Biomechanics Day 2018
Penn State University

PROFESSIONAL TRAINING AND CERTIFICATIONS

Great Teaching Certificate 2022
Center for Teaching Excellence, University of Florida

Fundamentals of Inclusion, Diversity, Equity, and Access Certificate 2022
Center for Teaching Excellence, University of Florida

Certificate of Diversity, Equity, and Inclusion in Pedagogy 2022
Office of Professional and Workforce Development, University of Florida

Certificate in Multicultural Mentoring 2022
The Southeastern Conference, University of Florida, International Mentoring Association

Preparing Future Faculty Program 2022
Office of Graduate Professional Development, University of Florida

200hr Registered Yoga Teacher (RYT200) 2018
Yoga Lab, State College, Pennsylvania, USA

Certificate in Coaching Strength and Conditioning for Sport (QCF), Level 2 2013
1st 4Sport Qualifications, in partnership with England Rugby

PROFESSIONAL SERVICE: DIVERSITY, EQUITY, AND INCLUSION

First Generation Life Coach Mentor 2022

University of Florida Student Affairs	
Organizing Committee Black Biomechanics Association	2020-Present
Communications Committee Black Biomechanics Association	2020-Present
Ally Corner Lead Black Biomechanics Association	2020-Present

PROFESSIONAL SERVICE: SCIENTIFIC FIELD

Editorial Board Member	
Journal of Sports Biomechanics	2022-24
Ad-hoc Reviewer for:	2018-Present
<ul style="list-style-type: none"> ● Scientific Reports ● Journal of Biomechanics ● Gait and Posture ● Journal of Applied Biomechanics 	
Conference Service	
Abstract Reviewer American Society of Biomechanics	2020-23
Awards Committee Member American Society of Biomechanics Annual Meeting	2023
Co-chair, Sports Biomechanics American Society of Biomechanics Annual Meeting	2021
Co-chair, Teninopathy International Society of Biomechanics and American Society of Biomechanics Joint Annual Meeting	2019
Assist Program Chair with Program Organization American Society of Biomechanics Annual Meeting	2017

PROFESSIONAL SERVICE: DEPARTMENT AND UNIVERSITY

Search Committee Chair – Research Coordinator University of Illinois at Chicago	2023
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Student Grant Review, Study Section Member Pennsylvania State University	2019
Kinesiology Graduate Student Association Member Pennsylvania State University	2016-18
Student Representative – Staff Student Liaison Committee Loughborough University	2015-16
Student Representative – Staff Student Liaison Committee University of Bath	2011-14

PROFESSIONAL AFFILIATIONS

International Society of Biomechanics (ISB)	2015-Present
American Society of Biomechanics (ASB)	2016-Present
International Women in Biomechanics	2020-Present
Black Biomechanics Association	2020-Present
International Society of Sports Biomechanics	2015-17