

## **Oluwagbemiga DadeMatthews, MD**

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### **EDUCATION**

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**Auburn University, Auburn, AL** 2018 – July 2022  
Doctor of Philosophy - PhD  
Major: Kinesiology

**Lagos State Univerisity Teaching Hospital, Nigeria** 2012 – 2018  
Associate Fellow Residency  
Major: Family Medicine

**University of Lagos, Nigeria** 2003 – 2008  
Master of Public and International Affairs - MPIA  
Major: Public Policy and International Relations

**Lagos State University College of Medicine, Nigeria** 2001 – 2007  
Bachelor of Medicine and Surgery - MBBS (MD)  
Major: Medicine and Surgery

**University of Lagos, Nigeria** 1995 – 1999  
Bachelor of Science - BS  
Major: Physiology

### **PROFESSIONAL EXPERIENCE**

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**Lousiana State University, Baton Rouge, LA**

**Assistant Professor of Professional Practice** August 2022 – Date

- Teaching faculty for human anatomy, cadaver anatomy laboratory, and medical terminology

**Auburn University, Auburn AL**

**Senior Doctoral Researcher, Neuromechanics Laboratory** August 2018 – 2022

- Conducted human factors research and outreach to assist the United States Armed Forces and tactical athletes to maximize task readiness through improved Warrior physical health, wellness, and technical performance in the Warrior Research Center
- Trained and mentored a diverse team of 3 junior doctoral students, 9 masters students, and 22 undergraduate students in laboratory skills, data collection, and ethical research conduct

- Two undergraduate students were awarded undergraduate research fellowships
- Coordinated laboratory research projects and data collection at the Warrior research Center
- Purchased and maintained laboratory equipment and supplies, set up new equipment, and organized laboratory training sessions for the research team
- Prepared Institutional Review Board documentation and secured approval for research study protocols
- Conducted statistical analysis of clinical and secondary data for scientific communication in posters and manuscripts
- Established and maintained excellent professional relationships with past, present, and potential research collaborators

### **Lagos State University Teaching Hospital, Lagos, Nigeria**

#### **Family Medicine Resident Doctor/ Medical Officer**

January 2012 – July 2018

- Assessed, diagnosed, monitored, and treated hundreds of undifferentiated medical conditions at the general outpatient clinic
- Performed about a hundred routine primary care surgeries with excellent outcomes
- Led a team of over 200 resident doctors from different sub-specialties to provide care for over 20,000 patients from underserved communities
- Coordinated junior residents journal club weekly presentations on clinical cases and current research in internal medicine, surgery, paediatrics, obstetrics, and gynaecology
- Actively participated in clinical trials as a sub-investigator
- Supervised and tutored over 50 medical students and 20 first-year interns while on family medicine residency rotations

### **Health Partners Limited HMO, Lagos, Nigeria**

#### **Regional Manager – Southwest & Lagos**

November 2010 – January 2012

- Managed a multidisciplinary team of 12 clinicians responsible for hospital credentialing and quality assurance reviews on primary and secondary healthcare provider facilities in southwestern Nigeria
- Lead a team of 4 physicians that reviewed and redesigned provider relations and claims processing strategy over a 10-month period resulting in 84% improvement in provider confidence from our post-intervention digital survey.
- Created a unique 24-hour customer response & delight desk that led to the acquisition of a \$1.5 million account (the second largest portfolio in the organization at the time) and increased patient satisfaction from 35% at baseline to over 75% based on a digital customer assessment.

## RESEARCH

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### PUBLISHED WORK

- **DadeMatthews O**, Agostinelli P, Neal F, Oladipupo S, Hirschhorn R, Wilson A, Sefton J. Systematic review and meta-analyses on the effects of whole-body vibration on bone health. *Complement Therapies in Medicine* January 2022
- Lyons, K. D., Parks, A. G., **Dademathews, O. D.**, Zandieh, N. L., McHenry, P. A., Games, K. E., Sefton, J. M. Core and Whole-Body Vibration Exercise Improve Military Foot March Performance in Novice Trainees: A Randomized Controlled Trial. *Military Medicine* July 2021
- Hirschhorn RH, **DadeMatthews OD**, Sefton JM. Exertional Heat Stroke Knowledge and Management Among Emergency Medical Service Providers. *Int. J. Environ. Res. Public Health* May 2021
- Lyons K, Parks A, **Dademathews O**, Zandieh N, McHenry P, Games K, Goodlett M, Murrah W, Roper J, Sefton J. Core and whole-body vibration exercise influences muscle sensitivity and posture during a military foot march. *Int. J. Environ. Res. Public Health* May 2021
- **Arogundade (DadeMatthews) OD**, Lipede AO. Diabetic Foot Syndrome – A case report on auto-amputation. *Book of Abstracts, Nigeria Endocrinology Society Scientific Conference, 2008.*
- Lipede AO, **Arogundade (DadeMatthews) OD**. Male Hypogonadism – A case report. *Nigeria Endocrine Practice, Volume 1, Issue 3, 2007.*
- Adegoke OA, **Arogundade (DadeMatthews) O**. The effect of chronic exercise on lung function and basal metabolic rate in some Nigerian athletes. *African Journal of Biomedical Research.* 2002

### SUBMITTED MANUSCRIPTS UNDER REVIEW

- Philip J. Agostinelli, Kaitlin Lyons, **Oluwagbemiga DadeMatthews**, Jordan Coker, JoEllen Sefton. Types and Frequencies of Whole-Body Vibration Impact Accelerations at Lower Extremity Anatomical Landmarks
- McGinnis KD, **DadeMatthews OD**, Parks AZ, Sefton JM. The Effects of Vibration Type, Frequency and Amplitude on Blood Flow

### PANEL/ ORAL PRESENTATIONS

- **DadeMatthews O**. “Functional Performance and User Satisfaction of Lower Limb Prosthesis Clients” Southeast American College of Sports Medicine (SEACSM) Rapid Research Race 50<sup>th</sup> Annual Scientific Meeting, Greenville, SC. (February 2022)

- Waskowitz R., Memmo P., Zhou S., **DadeMatthews O.**, Seeley B., Bruno C., Sefton J. "Updates in Sports Medicine". Central Connecticut State University 35<sup>th</sup> Annual Sports Medicine Symposium, New Britain, CT. (March 2020)
- Hirschhorn R, **DadeMatthews O.** Recognizing and managing exertional heat stroke in pre-hospital setting. Tactical Athlete Human Factors Summit, Auburn, Alabama. October 2021

## ABSTRACTS & POSTERS

- **DadeMatthews O**, Roper J, Vazquez A, Shannon D, Sefton J. Quality of Life, Device Satisfaction, and Functional Status of Lower Limb Prosthesis Clients. Student Research Symposium, Auburn University, Auburn, Alabama. March 2022 (Poster)
- DadeMatthews A, Lee S, Billingslea W, Moore T, **DadeMatthews O**, Sung Jang H, Pendola A. Environmental Health and Student Achievement. Southeastern Universities Graduate Research Symposium (SUGRS), University of Alabama, Tuscaloosa, Alabama. March 2022 (Poster)
- Agostinelli P, **DadeMatthews O**, Rightmire Z, Neal F, Frick K, Sefton J. Sex Difference on Army Combat Fitness Test Performance in Reserve Officer Training Corps Cadets. Tactical Athlete Human Factors Summit, Auburn, Alabama. October 2021 (Poster)
- Lyons K, **DadeMatthews O**, Parks A, McHenry P, Neal F, Sefton J. Vertical and Side-alternating whole body vibration platform parameters for increased lower extremity blood flow and muscle oxygenation. Tactical Athlete Human Factors Summit, Auburn, Alabama. October 2021 (Poster)
- Agostinelli P, Winkelmann Z, Games K, Hirschhorn R, McAdam J, Lyons K, **DadeMatthews O**, Sefton J. The effect of heat on heart rate variability during exercise in male firefighters. 68<sup>th</sup> ACSM Annual Meeting and World Congress, Washington DC, U.S.A. June 2021 (Poster)
- McGinnis KD, **DadeMatthews OD**, Parks A, Zandieh N, Campbell A, Burns A, Sefton JM. Development of a Work – Rest Protocol for Firefighter Recovery Operations: Improving Firefighter Health and Performance. 5th International Conference on Soldiers' Physical Performance. Québec City, Canada. February 2020. (Oral Poster Presentation)
- **DadeMatthews O.** Plantar Fasciitis and the Kinetic Chain Influence in Military Population. Biomechanics of Sport Injury Poster Series, Auburn University, Auburn, Alabama. June 2019 (Poster)

- Lipede AO, **Arogundade (DadeMatthews) OD**, Ogbera AO. Knowledge and attitude of workers in a soft drink manufacturing company in Nigeria on Diabetes mellitus. Book of Abstracts, 18th Annual meeting of the American Association of Clinical Endocrinologists (AACE); 2009; Houston, Texas, U.S.A (Poster)

## INVITED LECTURES

- “Hidden Dangers: Finding and Working with Sickle Cell Trait” (Focus on Tactical and College Athletes). Central Connecticut State University 35<sup>th</sup> Annual Sports Medicine Symposium. March 2020

## PEER REVIEW ACTIVITIES

- BMC Geriatrics Feb 2022 - Date
- International Journal of Environmental Research and Public Health Oct 2021 - Date
- Medicine & Science in Sports & Exercise Feb 2021 - Date
- International Journal of Therapeutic Massage & Bodywork. Feb 2020 - Date
- Journal of Athletic Training. Jan 2020 - Date

## HONORS/ AWARDS

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- Poster Award, Student Research Symposium, Auburn University 2022
- Winner, Rapid Research Race, American College of Sports Medicine ACSM Southeast Region 2022
- Golden Key International Honor Society Membership Award 2020 - 2022
- Finalist, Three-Minute Thesis Competition, Auburn University 2021
- Graduate Teaching Assistantship, Auburn School of Kinesiology 2018 - 2021
- Graduate Student Travel Award, Auburn School of Kinesiology 2018 - 2021
- International Graduate Assistant Award, Auburn University 2018 - 2021
- Dean's Circle Award, College of Education, Auburn University 2020 - 2021
- Service Award, Graduate Student Council, Auburn University 2020 - 2021

## SERVICE/ OUTREACH

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- Facilitator, Student Help Desk, 50<sup>th</sup> Annual Meeting of South-eastern Chapter of American College of Sports Medicine, SEACSM Feb 2022
- Member, Abstract Review Committee, Students Research Symposium, Auburn University Feb 2022
- Member, Health and Wellness Committee, Auburn University 2021– 2022
- Senator, Graduate Student Council, Auburn University 2019 – 2022
- Member, Students Advisory, Diversity, and Inclusion Committee School of Kinesiology, Auburn University Aug 2020 - Oct 2021
- Member, Faculty Review Committee, Auburn University Aug 2020 - July 2021

- Member, Budget & Finance Committee, Graduate Student Council 2019 - 2020
- Clinical Facilitator, 20th Special Forces Group (Airborne)  
Sports Medicine Training Workshop March 2019

## **TEACHING EXPERIENCE**

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### **Auburn University, Auburn, AL**

#### **Graduate Teaching Assistant/ Instructor**

August 2018 – August 2022

- Medical Terminology 300 level course with 70 students per semester (4 semesters)
- Care and Prevention of Musculoskeletal Injuries 300 level course with 100 students per semester (5 semesters)
- Exercise Science Research 400 level course with 30 students per semester (2 semesters)
- Mastering Personal Health and Fitness 100 level course with 21 students (1 semester)

#### **Guest Lectures**

- Clinical Biomechanics Doctoral Class - Trends in Neuroprostheses Fall 2020
- Exercise Nutrition Doctoral Class - Warrior Performance Optimization Fall 2019
- Special Topics Doctoral Class - Bloodborne Pathogens Summer 2019
- Exercise Genetics Masters/ Doctoral Class -  
Effects of Exercise on Leucocytes and Metabolites Summer 2019
- Clinical Neuroanatomy Masters/ Doctoral Class -  
Examination of the Nervous System Fall 2018

## **PROFESSIONAL DEVELOPMENT**

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- V-A-R Mental Health Training, Active Minds at Auburn University 2022
- Safe Zone, LGBTQ+ Ally Training, Auburn University 2021
- BioRAFT Bloodborne Pathogens Training 2021
- UAB Center for Clinical and Translational Science (CCTS) 2021  
Training Workshops:
  - Clinical Research Orientation Program
  - Case Studies in Team Science
  - Case Studies in Mentoring
  - Telehealth Network Lightning Sessions
  - Translational Research Orientation Program
- Defense Health Agency (DHA) CCSS –  
Exploring Evidence-Based Practice in Modern Medicine Primary Care 2021

- Defense Health Agency COVID-19 Interprofessional Response Training 2020
- M.R.I. Training - Level 1 & 2 2019
- Peripheral Quantitative Computerized Tomography (pQCT) Training 2019
- Ultrasound Training 2018

## **SKILLS**

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- SPSS Statistical Data Analysis
- R Statistical Data Analysis
- Venipuncture
- Laboratory Skills: Enzyme-Linked Immunosorbent Assay (ELISA), DNA Isolation
- Ultrasound: Doppler Blood Flow assessment, and Vessel diameter measurement
- pQCT Scanner
- Delsys EMG and IMU Sensors
- FLIR Infrared Imaging
- Digital Force Performance Platform
- Whole-body Vibration exercise protocols
- Body Composition Measurements
- Qualtrics surveys
- Mobile Physiological Monitoring Systems: Zephyr Bioharness, Equivital
- Anatomical Dissection

## **CERTIFICATIONS**

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- Mental Health First Aid Certification. 2021 - 2024
- Basic Life Support, C.P.R., & First Aid Provider  
American Heart Foundation. 2021 - 2023
- Phlebotomy Training, Auburn University. 2019 - Date

## **LEADERSHIP POSITIONS**

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- Graduate Student Advisor, African Students Association  
Auburn University, Alabama 2020 - 2022
- Southwest Zonal Coordinator, Federal Medical Committee,  
Nigeria Christian Pilgrims Commission (NCPC),  
The Presidency, Federal Republic of Nigeria, Abuja, Nigeria 2015 - 2017
- Member, National Executive Council,  
National Association of Resident Doctors (NARD), Nigeria. 2014 - 2017
- Member, State Executive Council,  
Nigerian Medical Association (N.M.A.) Lagos, Nigeria. 2014 - 2016

- President, Association of Resident Doctors,  
Lagos State University Teaching Hospital, Lagos, Nigeria 2015 - 2016
- Member, Scientific Committee  
Sports Medicine Association, Lagos, Nigeria 2012 - 2016

### **PROFESSIONAL ASSOCIATION MEMBERSHIP**

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- Human Anatomy and Physiology Society (HAPS) 2022
- Association of Military Surgeons of the United States (AMSUS) 2021 - Date
- North American Society for the Psychology of Sport and Physical  
Activity (NASPSPA) 2021 - Date
- Black Biomechanists Association 2021 - Date
- American Physiological Society (APS) 2020 - Date
- Southeast Chapter of the American College of Sports Medicine 2021 - Date
- American College of Sports Medicine (ACSM) 2019 - Date
- International Federation of Sports Medicine (FIMS) 2010 - Date
- Member, FIFA Sports Medicine Network, Africa 2009 - Date
- Member, Nigerian Sports Medicine Association 2009 - Date
- Member, Medical and Dental Council of Nigeria 2008 - Date
- Member, Nigerian Medical Association 2008 - Date