

# Productivity in the CHPM

## Funded Research in the CHPM

### **2019-2021**

Hamm Research Foundation Exploratory Grant. *Focal muscle vibration on balance and gait performance with diabetes*. (Total funding: \$99,000 2 years)

Role: Dionne Co-Investigator PI: Wang

### **2019-2020**

Presbyterian Health Foundation (PHF) Seed Grant Program. *Wearable Vibration Therapy to Improve Gait and Mobility in People with Multiple Sclerosis*. (Total Funding: \$49,890).

Role: Dionne Co-Investigator PI: Wang

College of Allied Health Seed Grant. Characteristics of Gait in Youth with and without Vestibular Dysfunction. (Total funding: \$4977.85)

Role: Dionne Co-Investigator/mentor PI: Barbee

### **2019**

Mentorship for the IDeA Network of Biomedical Research Excellence Summer Research Program, (INBRE) Undergraduate research in study, Muscle activation and biomechanics during gait performed by young adult male and female. (Total funding: \$2,200).

Role: Dionne Mentor, Co-Investigator PI: Akins

Mentorship for the NARCH Summer Undergraduate Research Program. Kinetics, Kinematics and Muscle Activation during Geriatric Gait. (Total funding: \$500)

Role: Dionne Mentor, Co-Investigator. PI: Akins

### **2018-2019**

College of Allied Health Seed Grant. Balance and gait performance with diabetes. (Total funding: \$5,000 one year)

Role: Dionne Co-Investigator. PI: Wang

OUHSC VPR CAH Internal funding. *The Effects of First Metatarso- Phalangeal Joint Mobility on the Young Ballet Dancer's Ability to Assume the En Pointe Position*. (Total funding: \$ 2,692 one year)

Role: Dionne Co-Principal Investigator. PI: Veirs

College of Medicine-Pediatrics (internal funding). Health care provider performance of neonatal resuscitation during simulated chest compressions. (Total funding: \$5,000 one year)

Role: Dionne Co-Investigator PI: Shah

### **2017-2018**

Presbyterian Health Foundation Symposium Grant. Physical Stresses: Keeping Us "Alive and Well". (Total funding \$15,554, 50% matching; one year with 1 year no-cost extension)

Role: Dionne Principal Investigator

### **2017**

Mentorship for the IDeA Network of Biomedical Research Excellence

Summer Research Program (INBRE) Undergraduate research in study. *Gait Analysis of a Healthy Man with Transtibial Limb Loss and a Matched Control to Characterize and Compare Gait Performance*. (Total funding: \$1,035, one summer)  
Role: Dionne Co-Investigator PI: Akins

### **2016-2017**

College of Allied Health Seed Grant Award. *Motion Analysis of Work Performance in Men with Transtibial Amputation*. (Total funding: \$4,979).  
Role: Principal Investigator

### **Presentations**

#### **2019**

Lutz K, Veirs KP, Rippetoe J, Haleem AM, **Dionne CP**. *Comparison of Non-Weight Bearing Plantarflexion Range of Motion Using a Standard Goniometer and Motion Capture of Elite Ballet Dancers*. (poster). Performing Arts Medicine Association, 37th Annual International Symposium; June 28 -July 1, 2019; Los Angeles, CA.

Alexander T, Wilson L, **Dionne CP**, Szyld E, Shah B. (April 2019) A novel three dimension motion capture technology to evaluate human performance during simulated neonatal resuscitation.(poster) Pediatric Academic Society Annual Meeting. Baltimore MD.

The University of Oklahoma Health Sciences Center, College of Allied Health Research Day. **Dionne CP**, Veirs KP, Day JD. *Motion Analysis of Gait of a Prosthetic User After Osteomyoplastic Transtibial Limb Loss and An Able-Bodied Control*. The University of Oklahoma Health Sciences Center, Oklahoma City, OK.

The University of Oklahoma Health Sciences Center, College of Allied Health Research Day. Rippetoe J, **Dionne CP**. *Developing a protocol for data analysis in Visual 3D*. Poster. The University of Oklahoma Health Sciences Center, Oklahoma City, OK.

The University of Oklahoma Health Sciences Center, College of Allied Health Research Day. Lutz K, Veirs KP, Rippetoe J, Haleem AM, **Dionne CP**. *Plantarflexion Range of Motion Using Goniometry and Motion Capture of Elite Ballet Dancers*. Oral Presentation: The University of Oklahoma Health Sciences Center, Oklahoma City, OK.

### **PhD Student Dissertations and Presentations- from the CHPM**

#### **Fall 2019**

Kimberly Veirs, MPT, ATC, PhD (c)

Major Advisor: Dionne

#### **Dissertation Topic**

Examination of the Young Ballet Dancer's Ability to Assume En Pointe Position and First Metatarsophalangeal Joint Mobility

#### **Peer-Reviewed Presentations**

2019: The University of Oklahoma Health Sciences Center, College of Allied Health Research Day; OKC OK. *Evaluating Dancers' Foot Biomechanics Using Motion Capture: Literature Review and Methodological Framework for Model Development*.

2019: 70<sup>th</sup> Clinical Symposia & AT Expo. Las Vegas, NV. *Advanced comprehensive athletic trainer assessment of the ballet dancer's foot en pointe*. Oral presentation.

2018: OK-WISE Conference 2018. Oklahoma City, OK. Veirs KP, Rippetoe J, Lutz K, Haleem AM, Dionne CP. *Multi-segment assessment of kinetics and kinematics during barefoot demi-pointe and en pointe in elite female ballet dancers.*

Nana Safoah Twum-Ampofo, PT, MPH, PhD (c)

Major Advisor: Kolobe

Dissertation Topic

Postural sway velocity and sitting acquisition of infants with and without risk for cerebral palsy.